140th COMARE MEETING, Thursday 6th March 2025.

COMMITTEE ON MEDICAL ASPECTS OF RADIATION IN THE ENVIRONMENT

Online meeting

Present Chair: Professor John Harrison

Members: Professor Amy Berrington de Gonzalez

Professor Russell Foster

Dr Geoff Heyes Dr Mark Hill Dr Ray Kemp Dr Mark Little Dr Colin Martin

Dr Susan McCready-Shea

Dr Richard McNally
Professor David Read
Professor Graham Smith
Professor James Smith
Professor Malcolm Sperrin
Professor David Sutton
Dr Samantha Terry

Professor Mireille Toledano

Dr Chris Westcott

Assessors: DESNZ

DHSC DoH NI EA FSA NDA ONR PHS SEPA SG UKHSA WG

Secretariat: Dr Emma Petty (UKHSA)

Mrs Samantha Watson (UKHSA)

Open Session

1. Welcome & declarations

- 1.1 <u>The Chair</u> welcomed members and assessors to the 140th COMARE meeting and noted that the meeting would be split into open and closed sections for minuting purposes.
- 1.2 Apologies were received from Professor Lesley Rhodes, Professor Stewart Martin, and assessors from Scottish Government and NHS Scotland.
- 1.3 <u>The Chair</u> noted that Professor Stewart Martin will complete his term on the Committee in June. Professor Martin was thanked for his work on the committee. Thanks were also given to the current HSE assessor, who will finish his work with COMARE this summer.
- 1.4 <u>The Chair</u> reminded attendees about confidentiality and the need to disclose any relevant interests to the Chair either now or before relevant items.

2. Minutes of the 139th COMARE meeting

- i. Minutes, actions & matters arising
- 2.1 <u>The Chair</u> asked for comments or corrections to the minutes from the 139th meeting. No comments were raised, and the minutes were approved without amendment. The minutes of the open session will be posted on the COMARE webpage, while the minutes of the closed session will remain confidential.

[Action: Secretariat]

2.2 The Chair reviewed the actions and ongoing matters from the 139th meeting and noted that progress is being made in finding a home for the National Registry of Childhood Tumours (NRCT) and the Oxford Survey of Childhood Cancers (OSCC) databases. Dr McNally reported that the necessary permissions still need to be arranged for the NRCT database. There is possible further work following the completion of the Thyroid Cancer study, which will require the use of the registry. Dr Hill reported that the OSCC patient information has been retrieved and a submission made to Oxford to hold the data and for its use. The UKHSA assessor reported that thyroid study data is now held by NHS Digital and that UKHSA or DHSC could report back on the current status.

[Action: UKHSA/DHSC]

2.3 <u>The Chair</u> offered to write to those involved in Oxford to emphasise the importance of these databases from COMARE's perspective, and to include a letter of support received from the SSK in Germany.

[Action: The Chair]

2.4 <u>The Chair</u> also brought attention to an action on the ICRP Recommendations Subgroup (IRS) to provide an NEA report on radiological protection in situations of armed combat. The report is now available and will be discussed at the next IRS meeting.

3. Committee matters

i. Correspondence

3.1 <u>The Chair</u> noted that no FOI requests had been received since the last meeting. A Parliamentary Question was asked on 14th January 2025 on sunbeds with an answer published on 20th January. It noted that DHSC had commissioned COMARE to consider the available evidence.

3.2 <u>The Chair</u> mentioned that several email enquiries had been handled by the secretariat since the last meeting. Members requested further information on one of the enquiries and were advised that an investigation is being conducted by SEPA on this matter.

ii. 2024 Annual Report & COMARE Work Programme 2025-2026

3.3 The Chair asked members for comments on the 2024 Annual Report and COMARE's Work Programme for April 2025 – March 2026. No comments were raised. It was noted that the ICRP Recommendations Subgroup and the EMF and Health Subgroup will be renamed as working groups for consistency, to reflect the long-term nature of their work. The 2024 Annual Report and the 2025-2026 Work Programme will be placed on the COMARE webpage.

[Action: Secretariat]

3.4 The Chair asked for suggestions of any areas of interest that may be considered by COMARE in future work programmes. A report on cancer risks at low doses of ionising radiation was suggested and it was noted that an UNSCEAR report on radiation and cancer is expected this year but will not specifically focus on low dose radiation. The Chair suggested that a project proposal might be drafted once the cardiovascular report is completed.

[Action: COMARE]

3.5 The work of the ICRP Task Group 91, focussing on dose and dose rate effectiveness factor (DDREF), was discussed. A consultation on the ICRP report is expected to open soon. Members commented on the relevance of DDREF and related factors to low dose radiation and it was agreed that this is an interesting topic that the committee should return to in relation to cancer risks at low doses.

4. Updates to the Committee:

i. Contaminations Working Group

- 4.1 The Chair of the CWG, Professor Read, presented a summary of the CWG meeting from the previous day. It was reported that the 2024 Sellafield beach monitoring programme covered 118 hectares against the target of 105 hectares, recovering 42 particles and nine larger objects. None of finds required intervention through the Environment Agency protocol. The 2025 programme commenced in February. The CWG were informed that new technologies are being investigated to reduce the cost of monitoring. A team from the University of Bristol will be invited to present their work on the Esk Estuary to the CWG.
- 4.2 An update was given to the CWG on the Magnox Swarf Storage Silo (MSSS). Retrieval of the swarf is considered a priority, and Sellafield Ltd are looking to optimise the actions and reduce the overall volume of waste. Liquor levels are being assessed and the CWG were advised on the options being considered. The Environment Agency are positive about the work being done.
- 4.3 Work at the Low Level Waste Repository (LLWR) was also discussed at the CWG meeting, noting that the time scale to complete the capping of vault 8 has been extended. The CWG were advised that the situation at the LLWR has changed in recent years and the volume of waste going into vaults has been reduced.
- 4.4 <u>Professor Read</u> noted that seven finds on the Dounreay foreshore and one find on Sandside beach were reported to the CWG. The working group were informed of the potential for sediment resuspension from the laying of power cables to offshore windfarms. A report is expected from the Particles Retrieval Advisory Group (Dounreay) (PRAG(D)) later in the year on the monitoring activity at Dounreay between 2012 and 2021.

4.5 <u>Professor Read</u> reported on the monitoring at Dalgety Bay following completion of the remediation. In 2024, 55 radium contaminated objects were found with a total activity of 750 kBq. All of these were at or near the surface, which was not unexpected because of disturbance during the remediation work. Assuming that SEPA's criteria for verification monitoring are met, a closure report will be completed later this year.

ii. Authorisations Working Group

- 4.6 The Chair of the AWG, Professor Sutton, reported that since the last meeting the working group had responded to one consultation from EA on 'Regulation of solid radioactive waste disposal facilities: proposed guidance', regarding near surface and geological disposal facilities. The submission from AWG had noted that the consultation documentation contained some inconsistencies and omissions and would benefit from more explanatory text. The working group are currently considering a similar consultation from SEPA. The detailed responses for both consultations would be shared with the committee at the next meeting. The EA assessor thanked the AWG for their comments and reported that the finalised documents will be published in March 2026, allowing time to consider all of the submitted comments.
- 4.7 Members discussed the identification of geological disposal sites; the work of CoRWM on this issue was also discussed.

iii. EMF and Health Subgroup

- 4.8 The Chair of EAHS (now EAHWG), Dr Kemp, reported that there are a large number of publications in this field, with significant public interest. The EAHWG considered over 40 publications for the last meeting. Several systematic reviews have been published, which show a general consensus, but there are a limited number of good reviews that move understanding forward, especially with changing technology. A paper from the Bundesamt für Strahlenschutz was flagged, which noted that with mobile phones, home Wi-Fi, 5G, and connectivity on transport systems etc, it is more difficult to understand public exposures. The EAHWG considered papers on both epidemiological studies and experimental studies, noting that potential mechanisms are suggested but are often theoretical.
- 4.9 The EAHWG are proposing to draft a summary position paper on electromagnetic fields and human health. This would include reference to the long history of research in the field, issues of public concern with EMF and issues of scientific concern. This proposal was well received by the Chair and committee members.

[Action: EAHWG]

iv. ICRP Recommendations Subgroup [COMARE 25-IRS-Min-1]

- 4.10 The Chair of the IRS (now IRWG), Dr McCready-Shea, informed members that the working group met on 13th February 2025 to discuss updates by ICRP. A new consultation opened in January 2025 on imaging in radiotherapy and closes at the end of May. The report is an important and comprehensive document, but it is not linked to new ICRP recommendations and is not being considered by the IRWG. The IRWG flagged the consultation with other stakeholders.
- 4.11 Other ICRP consultations are anticipated for this year; one on pregnant female mesh type reference computational phantoms and one on radiation dose to patients in diagnostic nuclear medicine. The report from Task Group 91 on low doses and low dose rates is also expected soon. The IRWG were advised that the EU Harmonic project, the first European registry of paediatric cancer patients treated with modern radiotherapy, closed in November 2024 and the data has now been analysed.
- 4.12 <u>Professor G Smith</u> provided an update on the task group on radiation protection in armed conflict, set up by the Nuclear Energy Agency. The task groups is finalising its scope and the

activities planned for the current year. An update will be provided to the IRWG at its next meeting.

[Action: Professor G Smith]

v. UKHSA update - Radon (postponed from previous meeting)

- 4.13 The UKHSA assessor presented an update to the committee. This included work with the HSE regarding the HSE's radon policy; the 21st annual Radon Forum held at the UKHSA's Chilton centre in November 2024 and the radon website; contributions to online training courses including those for the European Radon Association and the IAEA; laboratory services; and international collaborations, including EU groups such as EURADOS.
- 4.14 The UKHSA assessor reported that a second edition of the National Radon Action Plan went out for public consultation at the end of 2023, and a revised edition is currently waiting for final approval. There are some changes in the action plan compared to the previous version. These include promoting consideration of radon in programmes on climate change, where building changes for energy efficiency can potentially increase radon levels because of reduced ventilation, increasing radon visibility with indoor air quality stakeholders, and raising awareness of radon exposure when working from home.
- 4.15 A study on electronic radon integrating monitors was mentioned. Planning has begun for a new national survey of radon and gamma exposure in the UK. The aim is to obtain radon and gamma measurements in 5000 different households and for outdoor gamma measurements in around 2500 locations. Measurements are planned over one year to reduce the influence of seasonal variations. Members discussed radon exposure in other settings, such as exposure of the public in non-residential buildings.

vi. Light & Health Scoping Exercise

- 4.16 The Chair of the Light and Health Subcommittee (LAHS), Professor Foster, gave a presentation on work on the effects of artificial light on human health. This provided a detailed background to the topic and the types of evidence being considered by the subcommittee.
- 4.17 <u>Professor Foster</u> presented a draft project proposal from the LAHS. It is proposed to produce a short report with the aim of reviewing what is known and what still needs to be understood to allow us to provide evidence-based guidelines regarding the impact of artificial light on human health. This work follows on from the House of Lords 2023 report on the effects of light and noise, and is focussed on artificial light at night, and effects on circadian rhythm and cognition. Members discussed the type of light that would be covered in the project, the suppression of melatonin and the variation in sensitivity across the population.
- 4.18 The committee members raised no comments on the draft proposal from the LAHS. The document will now be submitted to DHSC for approval to proceed with the project.

[Action: Secretariat]

vii. UV Sunbeds Scoping Exercise

4.19 The Chair noted that Professor Rhodes has sent her apologies for the meeting. He advised members that a UV Sunbeds Subcommittee (USS) had been formed, chaired by Professor Rhodes, to consider whether the 13th COMARE report should be updated. The USS is cochaired by Professor Brian Diffey and includes assessors from DHSC and the devolved administrations because of their interest in this topic and differences across the UK in approaches on the control of sunbed use. The USS met on 14th February 2025 and a second meeting is planned for May. It is expected that a draft project proposal will be presented to committee members at the next meeting in July.

[Action: USS]

5. Information papers.

5.1 <u>The Chair</u> noted that the selection of non-ionising information papers had been discussed under item 4.iii. Three of the ionising radiation information papers were flagged to members: two on risks associated with living in proximity to nuclear power plants, and an editorial paper by Richard Wakeford on risks estimated form studies of radiation workers.

6. AOB.

6.1 The Chair asked members if for any other items for discussion. No items were raised.

Closed Session

- 7. Studies in progress
- i. SAHSU update
- 7.1 The minutes for this item was considered as reserved business as it concerns pre-publication material.
- 8. COMARE Subcommittee reports
- i. Cardio-/cerebrovascular effects
- 8.1 The minutes for this item was considered as reserved business as it concerns pre-publication material.

Close of the meeting

<u>The Chair</u> thanked members for their attendance and contributions to the meeting. The next COMARE meeting will be held online on 8th July 2025. It was proposed that the 2026 meetings could move to two in-person meetings (March and November) and one online meeting (July). Members agreed to the proposal.

The Chair then declared the meeting closed.