



Deliverable 8.3

Printed and digital materials' report

Work Package [8](#)



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Authors	Nadja Železnik, Neža Müller (EIMV)

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Executive Summary

Over its five-year duration, the RadoNorm project developed a comprehensive portfolio of printed and digital communication materials to support the dissemination, exploitation, and visibility of its research. Guided by the initial communication and dissemination strategy and related documents, these materials ensured a consistent project identity and enabled effective engagement with scientific, regulatory, and societal stakeholders.

Some key outputs included the project leaflet, poster, and core presentation, complemented by work package-specific brochures, videos, newsletters, and press releases. These resources were regularly updated to reflect progress and tailored to diverse audiences, from the general public to specialised professionals. In addition, support templates and databases were created for internal use, ensuring coherent messaging and efficient reporting.

The RadoNorm website functioned as the central hub for all dissemination, offering open access to deliverables, scientific publications, news, and multimedia content. It was complemented by active use of social media channels (LinkedIn, X, YouTube), which hosted more than 100 videos, including interviews, training events, conference sessions, and research seminars. Altogether, nearly 300 news items were published and promoted online, strengthening the project's presence across Europe and beyond.

A series of major events underpinned RadoNorm's communication strategy. These included annual meetings, PhD/ECR Days, thematic workshops, and joint conferences (notably RICOMET and NORM Symposia). The Showcase Meeting (2025) and Final Meeting (2025) presented the project's main achievements to European policy, research, and stakeholder communities, emphasising implementation pathways and future research needs. The RadoNorm Research Seminar Series (2024–2025) provided a monthly platform to present the latest findings, while RadoNorm partners also contributed extensively to external scientific events such as ERPW, ICRP2022, MIGRATION 2023, ConRad 2023, CARST 2023, EGU 2024, and MARC XI 2025. These engagements broadened the impact of project results, ensured dialogue across disciplines, and reinforced collaboration with international networks.

RadoNorm's communication and dissemination activities successfully raised awareness of radon and NORM, promoted open access to results, and built lasting networks. The project's outputs both digital and printed will continue to serve as a resource for science, policy, and society, supporting the uptake and application of its results beyond the project's lifetime

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Glossary

DMP	Data Management Plan
EC	European Commission
ECR	Early Career Researcher
EIMV	Elektroinštitut Milan Vidmar
EU	European Union
GDPR	General Data Protection Regulation
MS	Milestone
NORM	Naturally Occurring Radioactive Material
PC	Project Coordinator
PDF	Portable Document Format
PhD	Doctorate of Philosophy
PPT	PowerPoint Presentation
RIA	Research and Innovation Action
RICOMET	International Conference on Risk Communication in the Field of Ionising Radiation
SHARE	European Platform for Social Sciences and Humanities research relating to Ionising Radiation
URL	Uniform Resource Locator
WP	Work Package
WPL	Work Package Leader

1. Introduction

The RadoNorm project produced a number of documents which were used for dissemination and communication about the project and project results. In addition, basic templates and other supporting material were developed in order to assure the project's implementation. The deliverable D8.4 "Printed and digital materials' report" provides information on different material and other supporting documents which were developed in the RadoNorm project and were used for communication and dissemination activities.

The basis for material development was given in the D8.1 "Strategy and plan for communication, dissemination and exploitation of results" [1] and in the related updates presented as milestone reports [2, 3, 4]. According to these documents, in the initial phase until month 6, the focus was especially on establishment of the RadoNorm project website, analysis of relevant information resources, identification of communication and dissemination opportunities (activities and channels), stakeholders' mapping and engagement, creation of basic communication and dissemination channels and tools including graphical identity of the project (i.e. project logo, project website, templates for project documents and for project presentations, databases), development of related plans including Data Management Plan and first activities to foster initial knowledge exchange.

In further phases of the RadoNorm project, i.e. in targeted communication and dissemination phase (month 7–36) and in deliverable phase (month 37–60) the emphasis was on more contextual material. In all activities, the central point of dissemination and communication was the RadoNorm website containing a public site for all and an internal site for RadoNorm partners. This deliverable D8.3 "Printed and digital materials' report" summarizes the progress achieved so far in the development of printed and digital materials and assures that all produced material is briefly described, with further link to the RadoNorm website, where all material is available for general public.

2. Overview of RadoNorm material and support

As part of the communication and dissemination activities, RadoNorm material has been prepared including the project's visual identity and logo to be used within different channels and tools depending on the targeted group. The development of material was continuous with new information as the project evolved. The material is also available on the RadoNorm internal website for RadoNorm partners to be used. As in the deliverable D8.1 and related updates, the RadoNorm material is the following:

2.1 RadoNorm Leaflet

The official RadoNorm leaflet was produced to inform about RadoNorm project objectives and expected results as well as the methods which were used. The leaflet was used for online communication and dissemination and also distributed to the different stakeholder networks. The level of detail is at first level generic; therefore, it was intended for most of the stakeholders' network groups. The RadoNorm leaflet is electronic (as PDF), but could also be printed to be used during different events. The RadoNorm leaflet was reviewed and upgraded on a yearly basis to provide information on the RadoNorm development.

2.2 RadoNorm Poster

The **RadoNorm poster** (A0 format) has the similar content as leaflet but was prepared in PowerPoint format in order to be used more for different events. The content could be more oriented for different professionals, like scientific community and researchers, authorities and implementers. The RadoNorm

poster is also in electronical form (as .ppt or .pdf) so it could be also modified for the particular purposes and printed.

2.3 RadoNorm Presentation

The RadoNorm presentation is a form of presentation about RadoNorm project and consists of approximately 15 slides in PowerPoint. It was prepared to be used for the events where participants promoted RadoNorm and the results from beginning. It was continuously updated and enriched with the latest results from the project so it could serve for continuous communication and dissemination activities within RadoNorm.

2.4 WPs Brochures/Leaflets

The WPs brochures/leaflets are forms of material with more specific content devoted to the particular scientific areas which are covered by WPs 2 to 6. In addition, the WP7 leaflet was prepared promoting the activities in the WP on trainings, mobility programme and doctoral and postdoctoral activities. Such brochures and leaflets were intended for the professionals.

2.5 WPs Videos

The WPs videos were recorded as short movies about each WP narrated by WP leaders. They present the WPs objectives and planned results in a short 2-3-minute video or as important presentations at different events. The WPs videos feed the social media, especially YouTube as modern and attractive inputs about the project and expected results. These contributions were recorded and used continuously as part of the project material. In a section on RadoNorm “researchers in a spotlight”, the RadoNorm researchers who contribute to the objectives and achievements in the project are presented (as videos and link to YouTube channel). “Researchers in a spotlight” featured regular news and was based on the interviews with more visible researchers or those who developed a new achievement. Moreover, the presentations at the 4th annual meeting and final meeting were recorded and videos of presentations and panel discussions are available on the YouTube channel¹.

2.6 RadoNorm e-Newsletter

The bi-annual RadoNorm e-newsletter was developed as a main source of information about updates and news in the project, like results in WPs, past and upcoming events, publications, trainings, etc. The content for each of the issues reflects and incorporates the latest developments in the project as well as recent or upcoming dissemination activities; success stories; presentations, workshops; reports, publications and media interest, etc. The e-newsletter was published on the website, promoted also by other social media and distributed to the RadoNorm contact database. Altogether, 10 issues were developed, every 6 months. In order to achieve a broader distribution and facilitate the engagement of as many stakeholders as possible, the RadoNorm partners were encouraged to distribute the newsletters to their contacts who may be interested in the project. A specific option for subscription to the list of newsletter recipients, has been included on the RadoNorm website.

2.7 RadoNorm Press Releases

As a tool for important news, the RadoNorm press releases were published on RadoNorm on-line channels, but also to be distributed to stakeholder groups, in particular to media, or to other identified groups. It was expected that such releases, especially if properly prepared (use of understandable language, interesting information, supported by photos, graphs, videos or other material) would be re-published and with this increase the impact of RadoNorm.

The RadoNorm material was developed to a certain extent during the first year of the project, first the basic leaflet information, poster and slides (until month 6) and later the newsletters, WPs brochures /

¹ <https://www.youtube.com/playlist?list=PLmTvmSnkOYOSDLRyhH2LrwSVePYiFQ-WJ>

leaflets and videos (until month 12). In the third year of the RadoNorm, material was continuously developed, based on the first issues, but also by taking into account evolution of the project. All participants and WP leaders contributed to the RadoNorm material development with news about their work package.

2.8 Support material

Different templates have been made available to consortium partners via the project's internal repository to be used for milestones, deliverables, presentations (PPT), meeting minutes, calendar information, news information in order to have a homogeneous strategy and approach to execute dissemination activities as well as to report on them. The received calendar and news entries were uploaded on RadoNorm website and then also published on RadoNorm social media.

The following material and other supporting information have been developed and is available for the RadoNorm participants on the internal RadoNorm website:

- Deliverable template,
- Milestone template,
- Presentation template (different formats),
- Meeting template,
- Calendar input template,
- News template,
- Monitoring template,
- RadoNorm partners database,
- RadoNorm stakeholder database.

Other documents and material are also available for project partners as internal information, like general information about the project (with Grant Agreement, Consortium Agreement, issued periodic reports), project meetings (annual meetings, board meetings), material devoted to individual WPs and all published milestones.

Many materials, developed in the frame of the RadoNorm, are available also on the public RadoNorm website, and were usually also distributed to participants attending events, activity, organised stakeholder networks, and other interested registered parties to obtain the information:

- The material developed during the projects and other events². The material includes the project information from annual meetings, online meetings, special events for doctoral students, and also material developed by partners in the frame of other events.
- Newsletters³, developed every 6 months intended for the subscribers, stakeholder network and also general public.
- Published News⁴ where basic information about the project achievements is provided with also links for more information. The News information was spread in parallel on the RadoNorm social media (LinkedIn and Twitter accounts, and also video).
- There are also other publications visible to all⁵ and include project deliverables, scientific papers, other documents and videos developed in the frame of projects.
- Special modern part of website includes short video recordings of interviews with RadoNorm researchers⁶ who contribute to the objectives and achievements in the project. Researchers in

² <https://www.radonorm.eu/event/event-material/#245-379-wpfd-2022-event-material>

³ <https://www.radonorm.eu/newsletter/>

⁴ <https://www.radonorm.eu/news/>

⁵ <https://www.radonorm.eu/publications/>

⁶ <https://www.radonorm.eu/researchers-in-a-spotlight/>

a spotlight production was in the hands of RadoNorm PhD students, who are engaged as part of the RadoNorm project.

- Information and different material developed for the activities in RadoNorm, organised in the frame of different WPs7. These enabled the activities' leaders to openly communicate with the target audiences and assure opportunities work stakeholder's engagement.

All RadoNorm partners were involved in exchange of information on dissemination and communication activities and used the developed material. The WP8 served as the central point for the coordination of all related activities. All dissemination and communication proposals from WPs members were transferred by WPLs and then to the WP8 leader because all WPLs are members in WP8. The final approval of material was given by the project coordinator (PC and also WP1 leader).

3. Online communication and dissemination

The online communication and dissemination were carried out with regular updates of the website and online information repository, along with news and updates released on social media platforms. The communication and dissemination material are based on the outputs from Task 8.3, but also some individual social media news was prepared according to the D8.2 report, which also includes social media communication and the dissemination strategy and plan.

3.1 RadoNorm Website

The main communication and dissemination tool of RadoNorm project targeting all audiences is a public website. The RadoNorm website was registered in the "eu" domain with intuitive URL to increase the hit rates. It is the main channel for the provision of information and updates about the RadoNorm project and serves as a repository for all public deliverables of the project and other project's results as part of the open access policy (green open access).

It has public area, external for anybody to be able to connect and non-public area intended for internal communication and dissemination between project partners which is protected with login and password. The non-public area is intended for common file-sharing, for the collection of the various reports produced during the project as well as a central element of the communication between Consortium partners. All reports, deliverables, results and relevant material were accessible to all project partners at all time.

The website was regularly updated with on-going activities (about the progress in WPs), public reports/deliverables, publications, upcoming events (3 categories: RadoNorm, related to RadoNorm, internal for RadoNorm partners), scientific meetings and workshops, as well as trainings, courses and PhD and postdoctoral activities. The News section⁸ was updated two times per month, for the period from 1-15 and from 15-30/31 of the month, if there were any news. All participant and WPLs were expected to contribute to feed the RadoNorm website with news about their work package (like issue of an important deliverable and other results, reach of an important milestone, new training or event related to the WPs).

⁷ <https://www.radonorm.eu/activities/>

⁸ <https://www.radonorm.eu/news/>

An important change was adopted for appearance of RadoNorm News on the homepage of the RadoNorm website, which was then seen at the top of the page as presented in Figure 1. The news is a focal point of the information at the website with most relevant and important information about the projects, evolution of activities and also different participation and presentations made.

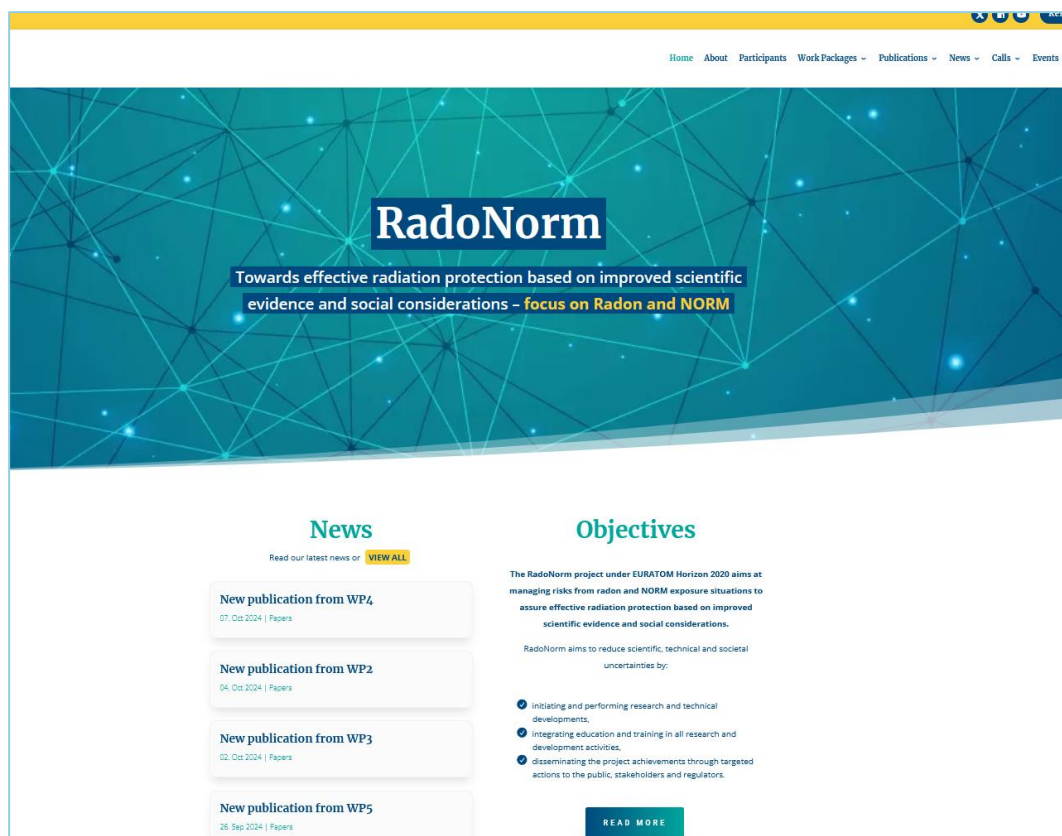


Figure 1 – RadoNorm website for news and updates

In this period together 296 news articles were published on the website, and further promoted on the social media accounts on LinkedIn and X. In addition, other activities, related to the WPs were published and promoted on the website, like NORM e-Survey⁹ on behalf of WP2 Exposure and WP5 Mitigation, and citizen science¹⁰ on behalf of WP6, Measurement performance of electronic radon monitors for WP2 Exposure¹¹, and RadoNorm Research Seminars¹² as a platform where consortium members and stakeholders come together to discuss the relevance of the latest findings and their potential applications in society.

The RadoNorm project delivered a number of milestones and deliverables which were developed during the project within each of the WPs. The adopted and approved deliverables are publicly available on the public RadoNorm website in the Publications/Deliverables webpage¹³. With such an approach, the Green Open Access is assured for all interested with the aim to make research outputs more transparent

⁹ <https://www.radonorm.eu/norm-e-survey/>

¹⁰ <https://www.radonorm.eu/activities/radonorm-citizen-science/>

¹¹ <https://www.radonorm.eu/performance-testing-of-electronic-radon-monitors/>

¹² <https://www.radonorm.eu/activities/research-seminar-series/>

¹³ <https://www.radonorm.eu/publications/deliverables/>

and their use more efficient. Milestone reports are not public, but they are available on the internal RadoNorm website¹⁴ for each of the WPs, and available for all RadoNorm participants.

Scientific articles/papers were also uploaded to the public RadoNorm website under Publications/Scientific papers¹⁵ to assure Open Access policy as soon as possible (and in line with General Agreement of RadoNorm). Some other publications and videos are also available.

Website hits, page views and deliverables/documents' downloads were monitored in order to measure the impact of the RadoNorm website. The collected information was used anonymously (without the personal data of the users) for the purpose of the RadoNorm project.

3.2 RadoNorm Contact Database

One important tool for communication and dissemination activities, as well as for some actions within WPs (like pilot testing in WP6 or discussion of results with particular network for WP 2 to 6), was the RadoNorm Contact Database, which has been developed as supportive tool and was regularly maintained. The database enabled active stakeholders' engagement and in it the stakeholders' data, both internal and external were collected. The collection of data about stakeholders' network groups respected Regulation (EU) 2016/679 of the EU Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR). The RadoNorm Privacy policy (published at RadoNorm website¹⁶) with regards to data protection management was applied. The Database was structured to provide possibilities for effective interactions and engagement of stakeholder groups as defined in milestone report MS96 [5], so it includes following data: name, email, institution, stakeholder group and country. It is complemented also with some more precise information for categorization like responsibility, geographic zone, sector, main interest and similar. The Contact Database is available on internal RadoNorm website for RadoNorm participants.

For reporting, monitoring and evaluation of the communication and dissemination activities in the RadoNorm project, the collection of appropriate data was organised also on internal RadoNorm website available for project participants. The results of communication/dissemination activities were reported after they were implemented, including the feedback obtained during the implementation on the potential improvements and modifications.

3.3 Social Media

In addition to the internet website, also other online tools were established for the communication and dissemination activities of RadoNorm project as in H2020 Social media guide for EU funded R&I projects [6]. The following web based social media were formed:

- **X** @RadoNorm¹⁷,
- **LinkedIn** (RadoNorm.eu)¹⁸ and
- **YouTube** (RadoNorm)¹⁹.

The RadoNorm LinkedIn and X links have been well used in this period. The total number of LinkedIn connections is currently more than 1848 individuals or groups, and on X there are more than 200 followers.

¹⁴ <https://www.radonorm.eu/private-area/radonorm-documents/#35-302-wpfd-milestones>

¹⁵ <https://www.radonorm.eu/publications/scientific-papers/>

¹⁶ <https://www.radonorm.eu/privacy-policy/>

¹⁷ <https://x.com/RadoNorm>

¹⁸ www.linkedin.com/in/radonorm-eu-b0205a1bb

¹⁹ <https://www.youtube.com/channel/UC6yCORiPX5DXgmu5AaGLn9Q>

The YouTube channel was regularly populated with new videos about the project (more than 100 videos were uploaded on the channel). The information includes presentations from the PhD open days, video recordings from the RICOMET conference and RadoNorm events, some videos about radon and NORM contributed by the partners, interviews with key researchers in RadoNorm, and lately, the Research Seminars.

4. RadoNorm Events

A number of RadoNorm events were organized as part of the project. One scientific RadoNorm event per year (in total 5 events) was organized at the end of each project year. Additionally, online RadoNorm events were organised once a year to attract also related target audiences (like, younger generation, other related scientific communities, building professionals, citizen science members). For all such events materials were collected and were uploaded on the specific RadoNorm website²⁰, available for general public.

For monitoring purposes, all communication and dissemination activities were followed-up on and collected in the database at the internal RadoNorm website. The following information is available: Type of activity, Main leader, Title, Date, Location or publication, Network group involved, Size of audience and Countries addressed.

The main events organized as part of RadoNorm project are (in chronological order):

4.1 RadoNorm Kick Off Meeting

The RadoNorm Project held its project Kick-Off meeting²¹ virtually on the 9 – 10 September 2020. The official start date of the project was announced to be 1 September 2020 with a duration of 60 months. This was the first opportunity for approx. 170 people representing the 56 partners coming from 22 EU member states and associated countries to gather online to introduce the project and lay the foundation for future cooperation. The greatest expectation of the involved partners at the meeting was to clearly understand the responsibilities in this multidisciplinary project with nine work packages and many intertwined tasks. This goal was successfully achieved with the support of very motivated and well-prepared presenters. The meeting included presentations about the scope, framework and timeline of RadoNorm, and a detailed description of each Work Package. All presentations are available at the RadoNorm public webpage.

4.2 RadoNorm Liquid NORM

In February 2021, RadoNorm hosted the online workshop “Liquid NORM – Sources, Impact Assessment and Treatment”²², bringing together researchers, industry representatives, and regulators to address challenges linked to liquid streams containing Naturally Occurring Radioactive Material (NORM).

The first session mapped the issue by identifying the main sources of liquid NORM, such as industrial wastewater from oil, gas, mining, and water treatment sectors. Presentations examined how these materials enter the environment, potential exposure pathways for workers and the public, and the related radiological and chemical risks. Regulatory aspects were also reviewed, underlining the need for more consistent European guidance.

²⁰ <https://www.radonorm.eu/event/event-material/>

²¹ <https://www.radonorm.eu/event/event-material/#245-283-wpfd-kom>

²² <https://www.radonorm.eu/event/event-material/#245-246-wpfd-liquid-norm-feb-2021>

The second session focused on treatment and mitigation strategies, ranging from conventional water treatment to advanced removal or stabilisation processes. Case studies illustrated practical solutions, while discussions highlighted the importance of balancing technical feasibility, environmental safety, and economic factors.

The workshop combined expert talks with interactive discussions, offering a clearer picture of current management practices and pointing towards future research and policy needs for sustainable handling of liquid NORM.

4.3 RadoNorm – PhD/ECR Day

On 15th of April first PhD and Early Career Researcher event²³ was organized in which students shortly report about the objectives of their work, the plan for research and current progress. In total 10 students presented their activities in different institutions which are related to five Work Packages of RadoNorm. All the presentations were recorded and are available on the RadoNorm YouTube channel.

On 21st of May RadoNorm organized its second PhD and Early Career Researcher event²⁴ in which students shortly report about the objectives of their work, the plan for research and current progress. In total 13 students presented their activities in different institutions which are related to five Work Packages of RadoNorm. All the presentations were recorded and are available on the RadoNorm YouTube channel.

4.4 RadoNorm – 1st Annual Meeting

RadoNorm project held its first Annual Meeting²⁵ on 6 – 7 September 2021. The programme was very intensive and comprehensive. The first day was intended for the RadoNorm members only. Detail presentations about the progress of the last 12 month of the project's work packages and first results were given. The second day was an open event to which all interested RadoNorm stakeholders were also invited. A summary of the RadoNorm work and results were presented and discussed. In addition, the position of stakeholders, involved in RadoNorm project, were given and will serve as inputs for further fine-tuning of RadoNorm activities. In a panel discussion feedback from the Advisory Board was collected. Although the COVID-19 pandemic and consequent measures limited the possibility to meet in person, this has not prevented the dialogue and cooperation from continuing. The first annual took place in the form of a virtual meeting, gathering online in average over 120 participants.

In conjunction with the RadoNorm 1st Annual meeting a workshop as part of the RICOMET 2021 and RadoNorm WP6 activity was held on 8th of September 2021. All presentations and available recordings are also available at the RadoNorm public webpage²⁶.

4.5 RadoNorm – 2nd Annual Meeting

The RadoNorm Project held its 2nd Annual Meeting (AM)²⁷ in Munich, Germany on 5 – 7 October 2022. This was the opportunity for RadoNorm partners to gather to report about the RadoNorm results and progress of the 24 months since the start of the project. The two-and-a-half-day programme was an intensive and comprehensive hybrid event, where 205 participants took part either online or in-person. The participants consisted of members of the consortium as well as stakeholders and advisory board members (external participants).

²³ <https://www.radonorm.eu/event/event-material/#245-255-wpfd-1st-phd-ecr-day-april-2021>

²⁴ <https://www.radonorm.eu/event/event-material/#245-263-wpfd-2nd-phd-ecr-day-may-2021>

²⁵ <https://www.radonorm.eu/event/event-material/#245-287-wpfd-1st-annual-meeting-1646828526>

²⁶ <https://www.radonorm.eu/event/event-material/#245-301-wpfd-ricomet-2021-8-10-09-2021>

²⁷ <https://www.radonorm.eu/event/event-material/#245-380-wpfd-2nd-annual-meeting>

Internal meetings took place on the first day (5th October) within work packages (WPs) and between WPs. The 6th and 7th October featured scientific presentations from the work packages where the WPs 2, 3, 4, 5 and 6 oriented their talks according to three overarching topics: “Measurements”, “Risks and Health Effects” and “Mitigation”. A stakeholder discussion closed the proceedings on the final day. All presentations and available recordings are also available at the RadoNorm public webpage.

4.6 10th International Symposium on Naturally Occurring Radioactive Material (NORM) + RICOMET 2022

The 2022 NORM Symposium marked the 25th anniversary of the NORM Symposia, with the theme “25 years of NORM Symposia. Future: residues applied in a circular economy”. It was held in parallel with the RICOMET 2022 sessions from 10 – 12 May 2022 in Utrecht, The Netherlands.

The RICOMET sessions²⁸, co-organised with RadoNorm WP6, focused on societal aspects of ionising radiation in various applications, including medical uses, nuclear energy production, radioactive waste management, emergency preparedness, response and recovery, and the decommissioning of nuclear installations. Abstracts were presented on topics such as factors influencing perceptions, expectations and behaviours; holistic approaches to governance; responsible research and innovation; stakeholder engagement; risk and health communication; and radiological protection culture.

4.7 RadoNorm – 3rd Annual Meeting

The RadoNorm Project held its 3rd Annual Meeting (AM)²⁹ in Ustroń, Poland on 18 – 21 September 2023. This was the opportunity for RadoNorm partners to gather to report about the RadoNorm results and progress of the 36 months since the start of the project. The three-and-a-half-day programme was an intensive and comprehensive hybrid event, where 193 registered participants took part either online or in-person. The participants consisted of members of the consortium as well as stakeholders and advisory board members (external participants).

Internal meetings took place on the first two days (18th and 19th September) within WPs and between WPs. The 20th and 21st September then featured scientific presentations from the work packages where the WPs 2, 3, 4, 5 and 6 oriented their talks according to three overarching topics: “Health”, “Environment” and “Society & Radiological Protection”. Each session featured a panel discussion involving experts in the field, including stakeholders. A final panel discussion was also organised by the RadoNorm Early Career Researcher (ECR) Council to discuss their future in radiological protection. This year, posters were also featured in the programme, allowing light to be shed on topics that could not be covered in oral presentations. All presentations are available at the RadoNorm public webpage.

4.8 RICOMET 2023

As in previous years, RadoNorm was co-organiser of the RICOMET 2023 conference³⁰. From 30 August to 1 September 2023, the RICOMET conference on social science and humanities research in ionising radiation was held at the Tabloo visitor centre in Dessel, Belgium. The event gathered more than 100 social science researchers and key stakeholders to discuss societal, ethical and socio-technical aspects of ionising radiation.

The programme included a dedicated session on social science and humanities research related to Naturally Occurring Radioactive Materials (NORM), highlighting RadoNorm’s contributions in this area.

²⁸ <https://www.radonorm.eu/event/event-material/#245-387-wpfd-norm-x-ricomet-2022>

²⁹ <https://www.radonorm.eu/event/event-material/#245-440-wpfd-3rd-annual-meeting>

³⁰ <https://www.ricomet.eu/ricomet-2023/>

Another session addressed research on radon. Additionally, a half-day workshop focused on NORM in geothermal installations, with discussions centred on stakeholder engagement and public communication challenges. These sessions provided an opportunity to examine key issues relevant to both research and industry practice.

4.9 RadoNorm – 4th Annual Meeting

The RadoNorm Project held its 4th Annual Meeting (AM)³¹ in Ljubljana, Slovenia on 10 – 13 June 2024. This was the opportunity for RadoNorm partners to gather to report about the RadoNorm results and progress since the start of the project, in particular of the last year. The three-and-a-half-day programme was an intensive and comprehensive hybrid event, where 173 registered participants took part either online or in-person. The participants consisted of members of the consortium as well as stakeholders and advisory board members (external participants).

Internal meetings took place on the first two days (10th and 11th June) within work packages (WPs) and between WPs. The 12th and 13th June then featured scientific presentations from the work packages where the WPs 2, 3, 4, 5 and 6 oriented their talks according to three overarching topics: “Fundamentals”, “Recommendations” and “Applications & Implementation”. Each session featured a panel discussion involving experts in the field, including stakeholders.

This year, the RICOMET 2024 conference³², organised by the SHARE platform, was running in parallel to the RadoNorm AM at the same venue on the 10th and 11th June. This encouraged a lot of participation from WP6 members and members of the other WPs could simultaneously join RICOMET sessions. The RadoNorm citizen science projects were spotlighted during RICOMET, underscoring their importance in encouraging radon testing and remediation in the communities where they were active.

Since a large proportion of RadoNorm Early Career Researchers (ECRs) were concluding their PhDs or postdoctoral contracts in 2024, special attention was given in the meeting to highlight their importance and role in the success of RadoNorm. As such, a networking event was organised by the RadoNorm ECR Council on the evening of the 10th June to encourage networking between ECRs and senior scientists.

4.10 RadoNorm Showcase Meeting

On 27 March 2025, RadoNorm organised its Showcase Meeting³³ at the Institute of Natural Sciences in Brussels, bringing together representatives from the European Commission and international bodies in radiation protection to discuss the main achievements of the project. The discussions focused on the potential implementation of these achievements and on identifying future research needs arising from the project’s progress.

The event was attended by notable speakers, including Slovenian Member of the European Parliament Vladimir Prebilič, who presented experiences in raising radon awareness in the Municipality of Kočevje, Slovenia; Deputy Head of Unit for Euratom Research Domenico Rossetti, who outlined the European Commission’s Research Actions in Radiation Protection; and Florian Rauser, Vice President of the Federal Office for Radiation Protection (BfS).

Three panel discussions addressed the themes of health effects & risks, exposure & mitigation, and risk communication & societal aspects, underlining the significance of RadoNorm’s contributions to both

³¹ <https://www.radonorm.eu/event/event-material/#>

³² <https://www.ricomet.eu/#programme>

³³ <https://www.radonorm.eu/event/event-material/#245-523-wpfd-radonorm-showcase-meeting>

research and practical implementation in radiation protection. Presentations from the meeting are available on the RadoNorm website.

4.11 RadoNorm – Final Meeting

The RadoNorm Project held its Final Meeting (FM)³⁴ in Budapest, Hungary on 3 – 5 June 2025. This was the opportunity for RadoNorm partners to gather to report about the RadoNorm results and progress since the start of the project, in particular of the last year, and to get an overarching picture of what has been achieved. The two-and-a-half-day programme was a comprehensive hybrid event, where 161 registered participants took part either online or in-person. The participants consisted of members of the consortium as well as stakeholders and advisory board members (external participants).

Internal meetings took place on the first day (3rd June) within work packages (WPs) and between WPs. The 4th and 5th June then featured scientific presentations from the work packages to the theme of “Sustainable radiation protection for radon and NORM”. Here, WPs 2, 3, 4, 5 and 6 oriented their talks according to three topics: “Health and Beating Cancer”, “Environmental Risks” and “Measures to Protect People”. To encourage discussion of the latest results, there were considerably more panel discussions incorporated into the programme, with each session featuring multiple discussions involving external experts who could discuss potential implementation of the results. In addition to scientific talks, time was also given to the RadoNorm Early Career Researchers (ECRs) to reflect on their experiences over the five years of RadoNorm and look into what perspectives lie in store for them following the end of the project. All presentations are available at the RadoNorm public webpage.

4.12 RadoNorm Research Series

The RadoNorm Research Seminar Series³⁵ was a monthly online event that highlighted the latest results of the RadoNorm project. Held every second Wednesday, the one-hour seminars provided a platform where consortium members presented implemented research and engaged in discussion with participants from across Europe.

From its launch in 2024, the series addressed a wide range of topics, reflecting the project’s multidisciplinary scope. Presentations covered the environmental impact of radon mitigation in buildings, the cellular effects of radon exposure, and the role of radon in health spas. Later seminars explored dose assessment methods for naturally occurring radioactive materials (NORM), the combined effects of ionising radiation and chemical pollutants in wildlife, new dose coefficients for radon intake in children, and spatial variation of radon levels in housing and workplaces. The series concluded in July 2025 with the presentation of the European Radon Behavioural Atlas³⁶, a unique database of responses from more than 17,000 people across Europe. This resource offered valuable insights into public knowledge, attitudes, and behaviours regarding radon, supporting more effective national Radon Action Plans. Through these seminars, RadoNorm created a dynamic forum for sharing knowledge, bridging scientific, technical, and societal perspectives, and informing both policy and practice in radiation protection.

5. Other events with RadoNorm participation

Between 2022 and 2025, RadoNorm partners took an active role in numerous international conferences and professional meetings, ensuring the project’s results were widely shared and discussed across

³⁴ <https://www.radonorm.eu/event/event-material/#245-526-wpfd-radonorm-final-meeting>

³⁵ <https://www.radonorm.eu/event/event-material/#245-451-wpfd-radonorm-research-seminars>

³⁶ <https://radonbehaviouratlas.wixstudio.com/radonorm>

disciplines. Material used for presentation is available online³⁷. At ERPW 2022 and ICRP2022, RadoNorm contributed to the European and international debate on radiation protection, while later that year PhD student presented innovative communication research at ECREA 2022 in Aarhus.

In 2023, the consortium's presence grew further. Partners from France and Germany co-organised the MIGRATION 2023 conference, which explored radionuclide movement in aquifers. That same year, results were also presented at ConRad 2023 in Germany and at CARST 2023 in Canada, where regulatory approaches and data-sharing practices were highlighted. In addition, during ERPW 2023 in Dublin, RadoNorm hosted a workshop comparing the performance of 13 budget radon monitors, bringing together manufacturers, users, and researchers for constructive dialogue.

The project remained visible in 2024 and 2025. At the EGU General Assembly 2024 in Vienna, partners showcased research in the "Radioactivity in the environment" session, while results were also shared at the IAEA ENVIRONET meeting. In 2025, RadoNorm research featured at the MARC XI Conference in Hawaii, where Gianni Vettese presented radioanalytical developments, and at a Citizen Science Workshop in Brussels, where the project's Citizen Science Incubator was introduced as a model for involving the public in monitoring radioactivity.

Through this active engagement, RadoNorm ensured that its findings reached scientific, regulatory, and societal audiences, strengthening collaboration and supporting evidence-based approaches to radiation protection across Europe and beyond.

6. Conclusions

Over its five years, RadoNorm has developed an extensive set of printed and digital materials to support communication, dissemination, reporting, and monitoring activities. General tools such as the leaflet, poster, and presentation were complemented by targeted outputs including WP-specific brochures, videos, newsletters, and press releases. Internal templates and databases ensured consistent messaging across the consortium and enabled effective engagement with stakeholders.

The RadoNorm website, together with active LinkedIn, X, and YouTube channels, served as the central hub for information sharing, offering open access to deliverables, publications, and multimedia content. These platforms, combined with regular updates and varied formats, have successfully reached scientific, regulatory, and public audiences.

Major events such as annual meetings, RICOMET conferences, and the Showcase Meeting, played a crucial role in presenting results, gathering feedback, and fostering collaboration between research, policy, and societal actors. Dedicated sessions on societal, ethical, and technical aspects of radon and NORM further highlighted the multidisciplinary scope of the project.

Through these activities, RadoNorm has raised awareness of radon and NORM, promoted open access to scientific outputs, and built lasting networks that will continue to support the uptake and implementation of project results beyond its lifetime.

³⁷ <https://www.radonorm.eu/event/event-material/>

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- [2] Milestone 92: Updates of Strategy and plan for communication, dissemination and exploitation of results, August 2021
- [3] Milestone 92: Updates of Strategy and plan for communication, dissemination and exploitation of results, November 2022
- [4] Milestone 95: Printed and digital materials' report, February 2021
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