

The 15th International Congress of the International Radiation Protection Association

The Society for Radiological Protection (UK) Workstreams on Communicating Radiation Risk - Developing tools and guidance for the profession

Amber Bannon^{1*} and Peter Bryant¹

¹*The Society for Radiological Protection, DS009, Dartington Hall, Devon, TQ9 6EN, United Kingdom*

*Corresponding author's e-mail: amber.bannon@environment-agency.gov.uk

Abstract. This paper provides an overview of the ongoing workstreams within the Society for Radiological Protection (SRP) on the topic of communicating radiation risk. It includes a summary of the workshops held to date and the resultant guidance document that has been produced, entitled “Guide to Communicating Radiation Risk in Support of Action Before, During and After a Radiation Emergency”. The guide is currently being reviewed prior to publication on the SRP website. This paper also outlines the next steps and topics to be considered by SRP for future risk communication guidance documents.

KEYWORDS: Radiation Risk¹, Communication², Emergency Preparedness³, Radiological Incident⁴, Public Engagement⁵, Outreach⁶

1 INTRODUCTION

Across the Radiation Protection Profession and its allied fields, the communication of “Radiation Risk” is an important skill. Achieving effective risk communication is however becoming an increasingly challenging task given the often negative public perception of radiation and conflicting views presented online and by both media and social media. There is a wide range of people to communicate with, in a variety of scenarios, including members of the public living close to a nuclear licensed site, patients receiving medical treatment or diagnosis, those working with radiation, those involved with planning for emergencies, which also presents a challenge to the skills of those trying to deliver key messages.

The introduction of social media has enabled rapid communications to a much wider audience, but it has also allowed self-proclaimed experts to voice their opinions, often presenting conflicting views and causing confusion.

Radiation Protection professionals and communication specialists must rise to this challenge to support and promote timely, meaningful messages to those that require expert input.

The following paper will provide an overview of the previous and ongoing work streams within the Society for Radiological Protection (SRP) to address these issues, including where the developed tools can be found for use by those working in the field of Radiation Protection.

2 DISCUSSION

2.1 Progress to date

The Society for Radiological Protection (SRP) held its annual conference in May 2019 which featured a workshop with a focus on “Communication of Radiation Risk in the Modern World”. The workshop included technical talks and views from media specialists. The workshop was well attended, and the feedback was promising with attendees requesting follow on workshops, and the development of subject specific guidance for Radiation Protection professionals.

Invited speakers, with Radiation Protection or communication backgrounds, gave presentations at the start of the workshop to stimulate the later discussion sessions. These presentations included “Lessons Learnt from Fukushima” by Hiroko Yoshida, IRPA, “From Media Appearances to Engagement and Outreach” by Mike Wood, University of Salford, and “Communicating via Social Media and to Government, Local Authorities and the Public” by Martyn Butlin, EDF Energy.

The participants were then split into 3 groups to discuss case studies and identify what they believed were the key points to be considered when:

- Communicating to the Public after a Nuclear / Radiological Incident
- Communicating Radiation Protection to Government / Local Authorities
- Communicating as part of Public Engagement Activities e.g. STEM

The workshop was well attended, and the feedback was promising with attendees requesting follow on workshops, and the development of subject specific guidance for Radiation Protection professionals.

The output of this workshop can be found in [1].

As a result, in summer 2019 SRP started a work stream aimed at developing a series of short, specific user guides for the communication of radiation risk in certain scenarios, such as in support of Outreach activities, Emergency Preparedness or planned Medical Exposures.

In 2019, the UK introduced a revision to its emergency planning legislation to bring its domestic regulations in line with the 2013 Euratom Basic Safety Standards Directive. This contains new requirements for emergency planning in particular, defining a radiation emergency, establishing a different basis and responsibilities for determining emergency planning zones, including the addition of Outline Planning Zones, and defining an emergency worker.

Although the risk profile on the sites impacted by the new regulations has not changed, the new regulations had the potential to change the current Detailed Emergency Planning Zones (DEPZ) due to the different basis for determining the zone. A DEPZ is a defined zone around a site where it is proportionate to pre-define protective actions which would be implemented without delay (e.g. within a few hours) to mitigate the most likely consequences of a radiation emergency. These potential changes could raise concerns for the public, noting that there is no actual change in risk and simply a change in the modelling approach and methodology for determining the DEPZ. However the public may question whether they were being adequately protected before or if there is a substantial increase in radiological risk. It was therefore decided that the first of the SRP guidance documents to be developed would be a “Guide to Communicating Radiation Risk in Support of Action Before, During and After a Radiation Emergency”.

The guide was developed via a workshop held in November 2019 involving 15 attendees, including representatives from UK Government, regulators, media specialists (including ex journalists, social media specialists, and specialists involved in communicating post actual incidents such at the Litvinenko poisoning), nuclear operators, UK defence operators, radiation transport specialists and local authorities. It provides a framework for developing a communication strategy, including preparing any messages and tools for communicating these messages, prior to an emergency occurring. It is hoped this will help to ensure that a consistent message is communicated, throughout all stages of an emergency. The guide does not provide the exact communication strategy, nor the exact messages that need to be communicated, since each radiation emergency and the key stakeholders involved will vary greatly.

It is during normal business that the greatest opportunities are found to build trust with relevant stakeholders. Trust, once lost, is hard to regain. Access to information is crucial as people want to make informed decisions; understanding and addressing their concerns and beliefs during “peace” time, will help to allay fears and ultimately reduce the risks associated with misunderstandings and conflicting messages.

Therefore the guide aims to:

- Enable people to make their own informed decisions, as ultimately individuals will decide for themselves if they feel safe, and
- Ensure people feel informed to decide on the actions they wish to take, such as adopting appropriate countermeasures, when required.

The guide acts as a prompt to ensure that the right people, with the right skills, are involved in developing the communication strategy, including the importance of early engagement with communication and media specialists, in developing the engagement plan and messages. This will help ensure that messages remain clear, readily understandable and inclusive, minimising the potential of assuming a level of pre-existing understanding, and alienating the audience.

An essential checklist has been included within the guide to facilitate the development of a communication strategy. This includes suggestions for establishing a stakeholder forum to build trust and understand stakeholders' needs so that the communication strategy can address these, as well as the methods that could be used to disseminate the key messages, especially if it is a collaborative strategy with partner organisations. A key element is reviewing the effectiveness of the communications and addressing any issues in a timely manner; suggestions for both refining messaging and assessing their effectiveness are provided within the guide.

The output of this workshop can be found in [2] (currently undergoing review prior to publication on the SRP website).

2.2 Next Steps

There has been a delay in the formal agreement and publication of the “Guide to Communicating Radiation Risk in Support of Action Before, During and After a Radiation Emergency” due to the impacts of Covid-19. SRP is hopeful that it can be finalised and published on its website very shortly. The feedback from its publication will then inform the production of the next planned risk communication guide, covering the impacts of the 5G network. This is as a direct result of the number of enquiries that SRP has received on this topic.

3 CONCLUSION

Communicating Radiation Risk is an important part of radiation protection. This is an increasingly difficult task due to the negative public perception of radiation and conflicting views presented by both media and social media.

The SRP Workshop on “Communicating Radiation Risk in the Modern World” identified a number of factors that should be considered but this was only the starting point. Based on feedback from the workshop further work was needed to develop guidance for communicating radiation risk under different scenarios. This guidance must be short and succinct (no more than 10 pages per scenario) to maximise usability and should be developed taking on board views of not only radiation protection experts but communication and media specialists.

Given the recent update to the UK Radiation Emergency Preparedness and Public Information Regulations, SRP ran a further workshop to develop the first of its guides, entitled “Communication of Radiation Risk in Emergency Preparedness”. This guide is awaiting final review and agreement from workshop participants prior to publication on the SRP website.

SRP is developing plans to run more workshops to address other scenarios where risk communication is vital, developing these guides in collaboration with key partners in industry, regulation and government.

4 ACKNOWLEDGEMENTS

SRP would like to acknowledge the contributions to the various external parties involved in the production of the guidance and previous workshops, including: UK Government, the Environment Agency, EDF Energy, the Office for Nuclear Regulation, RadSafe, Japanese Health Physics Society and the International Radiation Protection Association.

5 REFERENCES

- [1] P. A. Bryant, H. Yoshida, M. Butlin, M. Wood, K. Raines, A. Bannon, S. Hunak, SRP Workshop on “Communication of Radiation Risk in the Modern World”, Journal for Radiological Protection (2019).
- [2] The Society for Radiological Protection in collaboration with EDF Energy, the Office for Nuclear Regulation, Sellafield, AWE, the Environment Agency, Public Health England, and the Department for Business Energy & Industrial Strategy, “Guide to Communicating Radiation Risk in Support of Action Before, During and After a Radiation Emergency.”