

Virtual Expert Mission to Portugal on Radon Action Plan

Olga German, IAEA
6 – 9 October 2020
Virtual event



4. Communication strategy



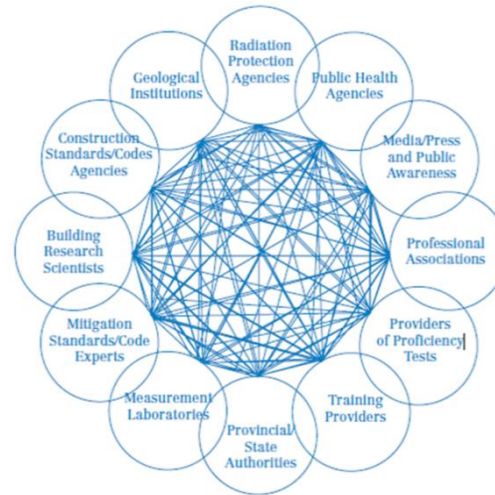
General Safety Requirements (GSR) Part 3

Requirement 50: Public exposure due to radon indoors

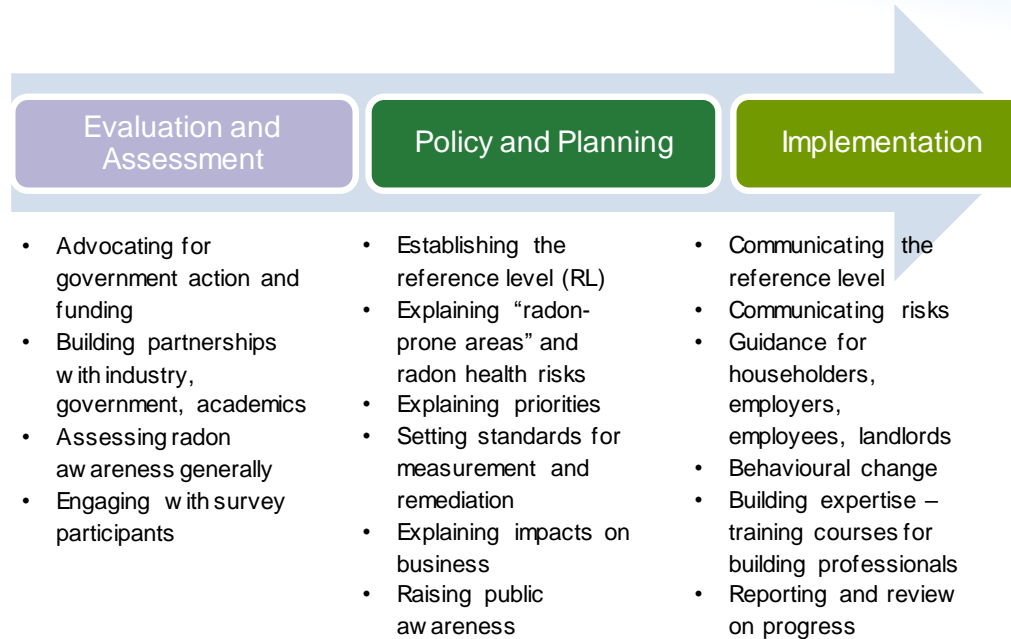
The government shall **provide information** on **radon** indoors and the **associated health risks** and, if appropriate, shall establish and implement an action plan for controlling public exposure due to radon indoors.

Why communicate?

- Provide information (GSR Part 3 Requirement 50)
- Support the individual actions of the National Radon Action Plan (NRAP)
 - Public audience
 - Other audiences
 - Multiple messages
 - Multiple media
 - Long timescale



National Radon Action Plan – Phases of communication



National Radon Action Plan: Communication Strategy



1. Identify the interested parties (target audiences)
2. Define the communication goals for each audience
 - Generally raise awareness or motivate to action?
3. Define the message for each audience
4. Define the best medium (or media) for each audience
 - e.g., direct personal, website, social media, radio, trusted professionals, etc.
5. Communicate frequently
6. Get feedback, and review strategy

Identify interested parties – some examples

Public

Householders
Employers
Employees/unions
Landlords

Building Industry

Builders, architects, etc.
Solicitors, insurers, etc.
Radon measurement companies
Radon remediation companies
Representative organisations

Governmental

Local authorities
Health professionals
Central
government/agencies
Regulatory body

Researchers

Geology
Civil engineering
Radiation protection
Epidemiology

Define Communication Goals

- Overall, the goal of the communications strategy = goal of the (national) radon action plan
- Communication (sub) goals linked to NRAP actions/goals
- Potentially different communication goals for each audience/action
- Goals – that are specific, measurable, attainable – leading and lagging



Define the message for each audience

Overall: One coherent and consistent message, underpinned by tailored messages

Audience segmentation: To achieve engagement, you must appeal differently to different audiences

Partners

- What is their role and responsibility?
- What is their motivation? Can you identify potential “wins”?

Public

- What are their fears and preconceptions (obstacles)?
- What is their current level of awareness?
- Are there age and gender differences?

Define the medium for each audience/message

- Audience Segmentation
 - Age profile
 - Professional or not
 - Level of concern
- Identify trusted media or sources
 - Doctors/medics, architects, church
 - Local media, supported by national media
 - Social media platforms
 - Champions and celebrities
- Website – “one stop shop” – authoritative and trusted source
- Published guidance leaflets and notes



<http://www.iaea.org>

Communicating with partners

Elected representatives, decision makers

- Direct communication
- Responsibilities to protect
- Long-term health benefit and cost benefit
- Role on NRAP co-ordination committee?



Radon services

- Direct communications and through industry publications
- National approach, consistent standards
- Business opportunity
- Input to technical sub-groups or NRAP co-ordination committee?

Construction industry

- Direct communication and through industry publications
- Liability issues in radon prone areas
- Training and standards for radon prevention and remediation
- Input to technical sub-groups or NRAP co-ordination committee?

Communicating with the public (1)



Assess radon awareness

- Use a pre-radon survey questionnaire
- Request permission for detailed follow-up to the survey
- Market research – telephone, on-line
 - National and regional picture
 - Gender and age differences
 - Socio economic groupings
- Design surveys that can be repeated – to track trends over time

Communicating with the public (2)

- Use focus groups to test messages, guidance, web content, etc., before release
- Use focus groups to identify public concerns about radon

- Ask the public what motivates them to act/not act (obstacles to action)
- Find groups who didn't act and ask them why

- Use this information to:
 - focus the message(s)
 - tailor the message(s) for the target audience(s)

Communicating with the public (3)

- Present the facts simply and honestly
- Use accessible language
- Use images and [animations](#) (example)
- Address the obstacles to action



“Radon is a cancer-causing gas that may build up in your home”

“You can test for radon and protect yourself and your family”

“Do a radon test now; it is easy and not expensive”

Ethical dilemma – strong message must be coupled
with strong solutions

Communicating with the public (4)

- Use media that “talks” to the audience
 - Younger audience – social media
 - Parents – parenting magazines, blogs, websites
 - Homeowners - DIY magazines, blogs, websites
- Champions and real-life stories
 - “real and ordinary” people in video/TV/radio to normalise radon
 - Celebrity champions can alienate large sections of a community
- Local stories, backed by national reports
 - National press, TV and radio – serious issue
 - Local press and radio – a real and relevant issue



Communicating with the public (5)

- Trust in the message is key to progress
- Use endorsements from health authorities
- Use trusted communicators to spread the message
 - Local spokespeople
 - Medical professionals, architects, and engineers
 - Links with other campaigns provide relevance and credibility
 - Anti-smoking
 - Energy efficiency
 - Air quality
 - School environmental campaigns
 - Workplace well-being



- Provide a telephone help-line

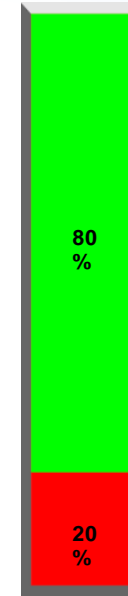


Radon Risk Perception

Information on Risk ≠ Action

In the public perception:

- 20% of homes with high radon = 80% of homes are “safe” = my home is “safe”
- Radon is natural = radon is safe
- Radon is unknown/unfamiliar = message not trusted
- No media reports of death due to radon = message not trusted
- Authority is unknown/unfamiliar = message not trusted
- My neighbour is not concerned = I am not concerned
- Long term health risk = defer action to future
- Fear of loss of property value = defer (or avoid) action
- I have lived in my home for 20 years and I am healthy = I have no problem



Raising public awareness and changing behaviour

- Health awareness programmes have relatively low success in individual behavioural change (<5%)
- Radon awareness programmes have similar success rates
- Real progress comes through regulation or government-backed schemes
- Context is important
 - Raise and maintain awareness
 - Make radon “normal”

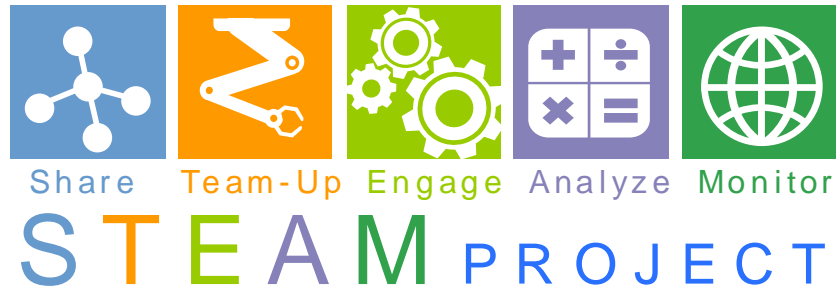


TC projects (examples of activities)



- RW for decision-makers on development of regulations and implementation of national radon plans. Completed in Austria. 14-17 January 2019 [EVT1805066](#)
- RTC on Radon remediation. Postponed from 2018. Completed in Sweden 13-17 May, 2019 [EVT1900344](#)
- RW to enhance the competence of national authorities in implementing radon communication strategies through practical exercise. Completed in Serbia 4-6 June, 2019 [EVT1807170](#)
- RW on risk communication and project planning. Completed Uzbekistan, 7-10 October 2019 [EVT1900494](#)
- SRW for building professionals to share best practices for reducing concentrations in buildings (15 participants, 2 IEXs, 5 days), 2021; for Russian speaking countries, Planned 24-29 August, 2020 [EVT1807179](#)
- RTC on radon remediation for building professionals, Planned in Croatia 5-9 October, 2020 [EVT1907202](#)
- RWS meeting of the STEAM project group for next step planning Planned in Turkey 15-17 December, 2020 [EVT1907199](#)
- Expert missions to Romania, Kazakhstan, Cyprus, Bulgaria, Croatia, Moldova, Portugal
- National TC projects on radon in Azerbaijan, Cameroon, Moldova, Serbia, Bosnia, Albania, South Africa

Joined Radon Population Opinion Survey



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STEAM project background



- Initiated in October 2019 under RER9153,
 - Based on the national Romanian experience of public survey performed 2017-2019,
 - No financial contribution from RER9153 apart from workshop planned for 2020,
 - 24 (out of 32) European countries,
 - To be finished by 2021.
-
- Objective: to use the methodology, tools and competence of the Romanian project on public survey for the public opinion survey regarding the level of public knowledge about radon in other participating Member States.

Webinars

11 webinars related to radon and thoron



13 November 2019

Thoron in the environment



30 October 2019

Management of radioactivity in drinking water including radon



30 July 2019

Protecting workers from radon – experiences from Austria



26 February 2019

Prevention and mitigation methods related to indoor radon and natural radionuclides in building materials



12 December 2018

Radon in groundwater



22 October 2018

Communicating radon risk – Ireland's experience



26 September 2018

Why do children need to learn about radon?



28 June 2018

Development of educational resources on radon for health care providers



25 April 2018

Radon management in buildings: applied research on building characterization and protection



5 April 2018

Communication and advocacy through real estate

Training material



Radon training material

Module 1 What is radon and its health effects

Module 2 Requirements in the International Basic Safety Standards

Module 3 Establishing a Radon Action Plan

Module 4 Representative radon surveys

Module 5 Radon measurements

Module 6 Radon communication

Upcoming e-learning on communication of risks and radiation protection: Radiation Safety Compass




Radiation Protection of the Members of the Public

0% OF EXHIBITS SEEN

- RADIATION PROTECTION OF THE MEMBERS OF THE PUBLIC
- RADON
- Before you start
- **Key messages**
- Language
- Communication tips
- IAEA resources

Exhibit 2 of 7

Key messages



In this section, communicators can find key messages about each topic – messages that the public should hear and understand. These can be adjusted and integrated into general communication strategies, specific communication plans, or targeted communication activities.

Communicators need to tailor these messages to their national circumstances.

Videos

- Based on the safety guidance
- Disseminated through website, YouTube and mainly social media
- <https://www.youtube.com/watch?v=FsKBVUPYfog>



Training courses on radon risk communication

Serbia June 2019

Uzbekistan October 2019

Idea #3

Goal: influence the parents,
motivate them to measure
radon – in schools, kinder
gardens and homes.

Campaign: **“Kids are treasure.
Please measure.”**

Medium:

- Billboards
- Radio
- Brochure, comic book
- Creative video



5. Radon measurements



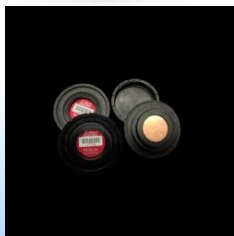
IAEA and EC requirements

Requirement	IAEA GSR Part 3	Directive 2013/59/Euratom
Rn in dwellings	300 Bq/m ³	300 Bq/m ³
Rn at workplaces	1000 Bq/m ³	300 Bq/m ³
Rn in building and construction materials	<i>Not specified</i>	<i>Annex XVIII “strategy ... for preventing radon ingress ... including identification of building materials with significant radon exhalation”</i>
Radionuclides in building and construction materials	Annual effective dose ≤ 1 mSv	Annex Activity index $I < 1$ $I = C_{Ra226} / 300 + C_{Th232} / 200 + C_{K40} / 3\ 000$ <i>(tool to assure ≤ 1 mSv/a)</i>
Gamma radiation from building and construction materials	<i>Not specified</i>	Annual effective dose ≤ 1 mSv

Radon measurements - many at a time



Remember this pic when we talk of radon mitigation



Additional measurements – optional



When and why control construction materials



Pictures provided by Mark och miljökontroll AB

Gamma and NORM measurements



Need

- Accredited methods according ISO 17025 and laboratory capacity
- Quick reliability and repeatability of measurements
- High testing capacity
- Low investment cost and low price per test
- Possibility for testing in situ and/or final product
- Minimum time loss – crucial for the industry



Guidance

- What is regulated – what to measure
- Where to measure – technical specification
- How long to measure – methodology
- Can we assure quality of this technique?

Thank you!

