

International conference **Radon and Society: from Knowledge to Action** Paris, 11 and 12 April 2013

What has IRSN, as public expert, learnt from the conference?

For many years now, scientists have known that radon exposure in human habitats is a health hazard and have been endeavouring to make both the public and the authorities aware of the risk. But despite the authorities' mounting efforts, there have been few concrete initiatives to date.

How can we move from knowledge to action? This was the focus of the international conference co-organised with the Norwegian Radiation Protection Authority (NRPA), which gave the 150 delegates, local stakeholders, experts and authorities a forum for sharing their hands-on experience of preventing radon hazards. The lively discussions showed contrasting situations from one country to another.

But beyond the different approaches, IRSN noted four main points from the very rich debate:

- **there are real barriers to addressing radon hazards in buildings;**
- **prescriptive regulations do not appear to be the best tactic, at least not in France, due to lack of community support and the fact that the regulatory and legislative landscape is already very complex;**
- **it is possible to tackle the problem without using restrictive regulations, by raising public awareness, fostering local expertise in the matter and getting local stakeholders involved;**
- **setting the right conditions can facilitate action on the ground.**

The first **barrier** to overcome is the fact that radon hazards, though proven, are just one of many such hazards. The second difficulty is that homes belong to the private sphere and their occupants may be so afraid of the risk that they would rather not know exactly what risks they face in their house. They may also be worried about the cost of remediation or a drop in the value of their property. The third difficulty is that measuring the exposure hazards in a home takes a long time (from several days to several weeks) and measurements cannot be taken all year round. Lastly, there are still very few building contractors aware of the risk and trained in remediation techniques, and their enthusiasm is dampened by the fact that the market is limited.

The lack of community support and the complex regulatory landscape in France mean that prescriptive regulations are not the most appropriate tactic. There are already numerous building standards and regulations and many citizens are sceptical about bringing in yet another prescriptive regulation. Making radon measurement

compulsory (and what type of measurement?) is no guarantee that remediation work would actually be carried out. It would also require painstaking interweaving with other public policies, such as the policy aimed at reducing energy consumption in the home.

It is, however, possible to address the situation without bringing in compulsory measures, as the many achievements presented over the two-day conference show. The first step is to raise public awareness. How this is done depends on the local context, but these prevention campaigns take time to be effective: time and perseverance are the keys to success. Campaigns should build up step by step, create a ripple effect through concrete actions even if limited to begin with, then gradually expand. Such actions encourage competent local stakeholders to emerge and take an active role. Involving community players, such as local associations, is essential in this area; it lends credibility to the initiative and allows a proliferation of human resources and reaches a wider audience. The Quebec Lung Association, which managed to harness a network of pulmonologists, is a case in point.

It is a long road from awareness to actual measurement, and still longer road from measurement to remediation. **What factors will facilitate action on the ground?** The first factor is the involvement of the regional authorities, who help raise public awareness, are sometimes involved in measurements and building diagnoses, and can put homeowners in contact with professionals. Providing integrated approaches is another success factor. When they are part of an overall quality-of-life issue (indoor air quality, including radon, sound and heat insulation), integrated approaches make the ensuing improvement work more consistent and more effective. Including radon risk prevention in a housing renovation scheme, whether in Montbéliard or in Nantes, contributes to its success. When these approaches are factored in from initial awareness-raising through to measurement and remediation, they reassure both the occupants and the building owners, who sense that, once the measurement is done, the local authorities will be ready to guide and assist them if the diagnosis reveals a major problem. Building contractors also have a crucial role to play since, as one delegate pointed out, we need to make mitigation a mainstream practice. Experience in Switzerland and Bavaria has shown that it is possible to train professionals and give them long-term support, even if the local authorities have to assume the costs of their training.

What can IRSN - the expert in radiation risks - learn from these discussions for its work on preventing radon hazards in homes?

First of all, the most effective approaches are **multi-partner and multi-industry approaches**, as the representative from the World Health Organization (WHO) pointed out right from the beginning of the conference. If we, as experts in radiological hazards, are to be truly effective, we need to step beyond the world of radiation protection and play a part in these broader approaches. We need to take every opportunity to build a dialogue with housing renovation stakeholders, especially when it comes to indoor air quality and energy efficiency. Moreover, **integrated approaches** that span awareness-raising through to remediation make it easier to launch concrete initiatives in the regions.

IRSN is keen to support such initiatives: it wants to devote itself to harnessing the full range of local stakeholders, help them identify local competencies, and make its knowledge and expertise available to all of the local stakeholders. It is already actively involved in this sort of initiative, for example in Franche-Comté. Another goal of IRSN's involvement in these field initiatives is to identify the best practices that help with running effective prevention campaigns, and share them throughout France. This conference shows how much we stand to gain by encouraging stakeholders to share their best practices. IRSN is determined to be a part of this, with its partner, NRPA.