

EP&R

Mapping stakeholder engagement in emergency management in Belgium

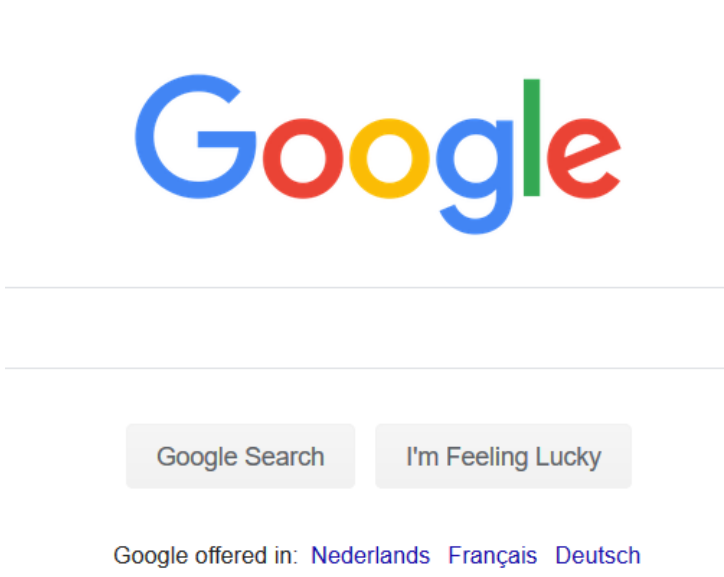
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Case study introduction and data

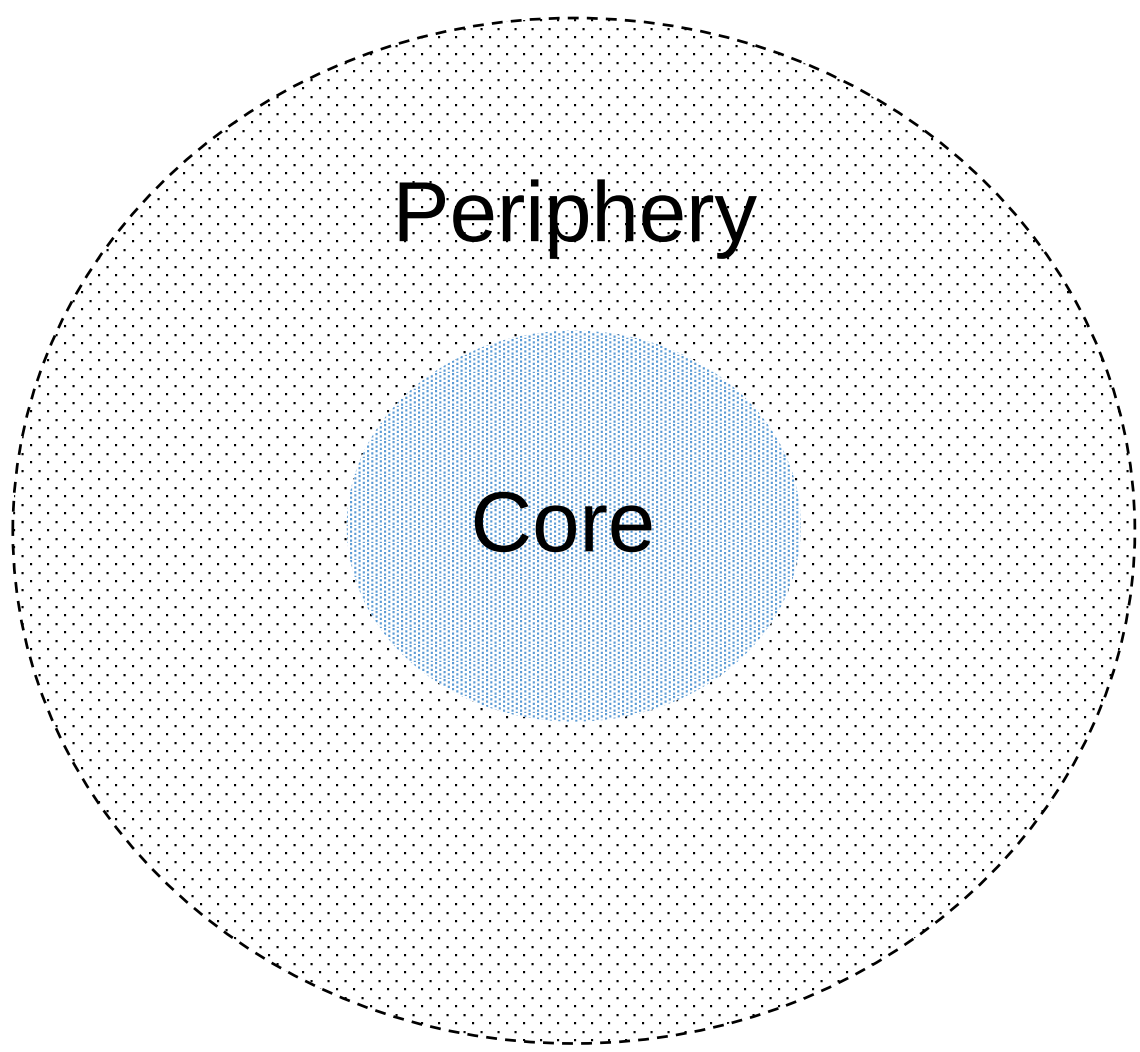
What?

- Gaining insight in the Belgian landscape of stakeholder engagement regarding nuclear emergencies or incidents
 - Identifying the 'core' → dominant forms of engagement
 - Identifying the 'periphery' → unique/deviant forms of engagement
- Looking beyond the dominant core to explore possibilities of stakeholder engagement



How?

- Exhaustive sampling through internet search
 - Example of (translated) search terms: (Emergency plan OR nuclear accident OR radioactivity) AND (participation OR involved OR panel OR debate OR meeting OR workshop OR action OR protest OR network) AND (stakeholder OR citizen OR public)
- Deviant sampling of unique/remarkable/outlier cases



Findings

- Dominance of (revised) **Belgian nuclear and radiological emergency plan**, with a focus on initiatives taken by (federal) authorities to **inform citizens = CORE**
- A variety of 'outliers' which present cases and/or forms of participation which are deviant from this core = **PERIPHERY**



Citizens filing complaints



Restoring a nuclear artwork



Turning basements into emergency shelters

Outliers in terms of	Examples	Incites reflection on
Initiator	- Citizens of neighboring countries filing official complaints to Belgian authorities - Local partnerships on radioactive waste active in EP&R	- Boundaries on who participates - Engaging existing networks and groups of stakeholders
Objects involved	- Citizens taking care of a 'nuclear artwork' - Basements being turned in emergency shelters by market actors	- Engagement through art - Engagement through markets vs commodification of safety
Geography	Little evidence for questions raised by citizens to local authorities in Flanders, as opposed to Wallonia	Geographic contexts of engagement
Opposition to core	Criticism of (earlier versions of) nuclear emergency plan by NGO's	Challenges to and evolutions in 'core'
Medium	'Facebook live' sessions for Q&A organized by federal authorities	Interdependency of medium, stakeholders and engagement



Insuffisances des plans d'urgence nucléaire belges : les leçons de la catastrophe de Fukushima n'ont pas été tirées
David Boileau et Mylène Josset
ACRO.eu.org

Greenpeace report on the nuclear emergency plan



Local partnerships meeting with provincial authorities

Conclusions

- Outliers identify relatively unexplored avenues of stakeholder engagement in EP&R, uncovering 'what could be'
- Using a core/periphery frame enables reflexivity on resources, power and dominance + evolutions in their distribution
- Boundaries are fluid: an actor can move from core to periphery, or in the other direction
- Mapping cases through internet searches provides overview of (easily) accessible public information, but does not provide a full overview

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Stakeholder engagement - Nuclear & Radiological Emergency Plan Belgium

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Case study introduction and data

■ Focus:

2018 publication of revised Belgian Nuclear and Radiological Emergency Plan

- Stakeholders and their engagement in developing the revised plan
- Stakeholders and their engagement as prescribed by the revised plan + enacted in practice



■ Data & methods:

- Document analysis
- One-on-one interviews with members of local civil society organizations, provincial and federal authorities
- Focus group on stakeholder engagement in emergency preparedness

Findings

Stakeholder engagement in developing the emergency plan

- Written at federal level, with consultation of stakeholders (e.g. provincial and local authorities, Greenpeace)
- Process not fully satisfactory to all consulted stakeholders
- Bottom-up involvement of local partnerships for nuclear waste
- Formal involvement not necessarily desired by local stakeholders, although they want their voice heard

Stakeholder engagement prescribed in the emergency plan + enacted in practice

- Broad notion of stakeholders: *“every interested party [...] that can be affected by the [...] consequences of the emergency situation, that have to act to limit its consequences, or that participate in the control of the event”*
- Respondents distinguish between:
 - professionally involved stakeholders → knowing and agreeing on their role in an emergency
 - general public → knowing how to cope with an emergency
- Interactive forms of participation: some initiatives taken, but not (yet) fully formalized
- Besides top-down initiatives, also locally initiated campaigns on nuclear emergencies, through local partnerships for nuclear waste
- Emphasis in practice on preparing for crisis phase (what to do), but stakeholder engagement in post-emergency phase also required
- Identified challenges: perceived lack of interest of general public, lack of resources, balance efficiency & involvement in the recovery phase



Conclusions

- Possible bottle-neck at development of and consultation for emergency plan
- Need for transparency and interaction, but beware of hierarchical understandings of stakeholder engagement
- Stakeholder engagement less developed for post-emergency phases
- Integrating EP&R with other risks might overcome resource-related barriers for stakeholder engagement, and streamline involvement

Do you live in an emergency
planning zone?
Get informed



EP&R Information and communication in Slovenia

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Case study introduction and data

TOPIC: EP&R information and communication as prescribed in the BSS directive and transposed to Slovenian legislation are analysed in practice at different levels (national, regional, local) in Slovenia:

- what are available contents, and how do they compare with the information required by the BSS directive,
- where are they available,
- who is involved in the development,
- how is the information communicated to the public,
- responses of different stakeholders (nuclear regulatory authority, civil protection authority, municipalities, other involved institutions, public, ...).

OBJECTIVE: To find out if there are differences between requirements and practice, and what recommendations and/or lessons learned can be pointed out.

METHODOLOGY: Analysis of relevant legal requirements, information available to the public on webpages, review of relevant published documents and a series of interviews with responsible staff and other interested actors to obtain information about the material and its interpretation.

The investigation included desk top analyses of materials and interviews with responsible persons at the Slovenian Nuclear Regulatory Authority, Slovenian Civil Protection Authority, the municipalities Krško and Brežice, and representative of local community which is nearest to the NPP Krško. The obtained data were analysed and compared in order to draw findings and recommendations.

Findings and recommendations

1. The information provision as requested in the BSS directive Articles 70 and 71 are introduced in Slovenian legislation, but in ways which are not very obvious and transparent.

Recommendation 1: System for communication

It would be recommended that a system is established, in which the plans are proactively and regularly communicated to the public in an understandable way. It would be useful to organize a single point of information on a webpage where all information and messages could be uploaded.

Recommendation 2: Gap analysis to build new EP&R plans

It is needed to further discuss the EP&R plans, at all levels, and provide solutions to the issues identified in the gap analysis which would need to be prepared before the new updates. In this context, also the lessons learned from exercises or any other discussions would need to be included.

2. Information about basic facts of radioactivity and its effects on human beings, about various types of emergency and their consequences for the public, about emergency measures envisaged to alert, protect and assist the public and about actions to be taken by the public in the event of an emergency is provided. However, the extent of information is limited and modest, and some particular areas are not covered.

Recommendation 3: Extent of prior information

It is vital to further develop the content of information distributed prior to a nuclear or radiological emergency, as adopted in the BSS directive, Annex XII, Part A. Therefore, a set of round tables, workshops and other events could be established to discuss the content and needs of citizens.

3. The analyses of the results show that some details on what to provide to the members of the public affected in the event of an emergency is requested in the Slovenian EP&R plan (it is not part of legislation). However, there are insufficient details on the extent of information, and not all content is covered. The information should be actively disseminated, and therefore the methods, channels and contents should be developed in advance as much as possible.

Recommendation 4: Extend of information in case of emergency

Further develop the content of the information in case of a nuclear or radiological emergency, as adopted in the BSS Directive, Annex XII, Part B. Therefore, a set of round tables, workshops and other events could be established to discuss the content and needs of citizens.

4. Although the population living in the 10 km zone occasionally receives information, the public survey shows many knowledge gaps, misinformation and wrong concepts. Also, some assumptions for EP&R are perceived as questionable (e.g. who will take care of children in case of an emergency).

Recommendation 5: Local communication

The information for the potentially affected population should be delivered to them constantly, effectively, proactively, and using appropriate understandable language. The best channels would be in the form of discussions or round tables, with possibilities for interaction. Special attention should be given to certain populations which need more information.

5. The stakeholders as perceived by the authorities are mostly limited to official representatives. Only municipalities perceive the local population as their principal stakeholder. However, as the NPP is in operation already for several decades and an emergency could have wider impacts, not limited to the population near the NPP, the need for two-way communication with the potentially affected population should be more underlined at all levels.

Recommendation 6: Communication for different stakeholders

It is very important that all responsible authorities establish communication strategies and programmes in which all stakeholders would be identified, and for each a separate plan of communication would be adopted and then implemented.

6. Some representatives pointed out that there are several advantages of stakeholder engagement, such as providing feedback to improve approaches and materials, obtaining constructive opinions, inputs and new insights, and searching for better solutions. Also, the importance of exercises and lessons learned in such events was highlighted.

Recommendation 7: Establish conditions for constant feedback

Stakeholder engagement might bring many advantages for better EP&R, therefore it is very important to establish ways to collect feedback in a continuous way. This can be achieved with discussions, collection of opinions, surveys, reports from exercises, drills, and other activities.



EP&R

Drills and exercises practice at different levels related to the nuclear accident at Slovak NPPs

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Case study introduction and data

Objectives: find out whether there are differences between requirements and practice, and what recommendations and/or lessons learned can be pointed out based on:

- Testing, reviewing and revising emergency response plans, taking into account lessons learned from past emergency exposure situations and the results of participation in emergency exercises at national and international level (INEX4 exercise, national civil protection exercises and other emergency preparedness and response activities),
- Exercising the arrangements for establishing contacts with other Member States which may be affected, in order to share the assessment of the exposure situation and to coordinate protective measures and public information (INEX5 exercise),
- Scenario-based workshops and exercises aimed at assigning responsibilities regarding the implementation of strategies for the management of existing exposure situations, and aimed at ensuring appropriate coordination between relevant parties involved in the implementation of remedial and protective measures. Providing as appropriate for the involvement of stakeholders in decisions regarding the development and implementation of strategies for managing exposure situations (European Handbooks on recovery management development and implementation).

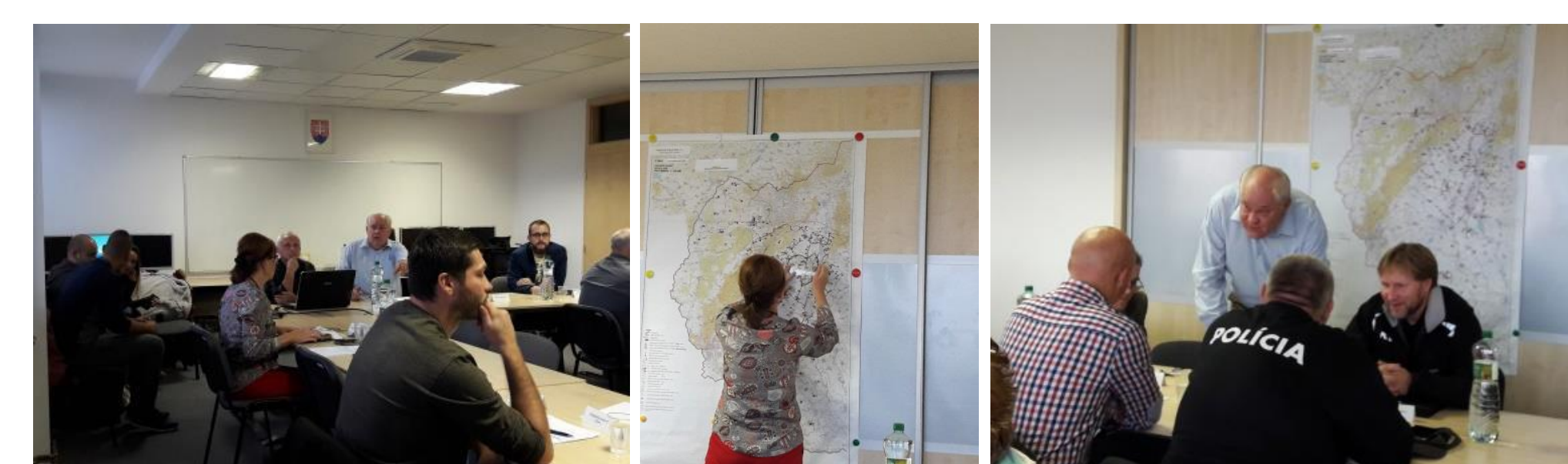


Figure 1. Regional Crisis Staff - table top exercise



Figure 2. Helpers preparation and briefing - secondary school students



Findings

- It is essential to develop a new/updated National Emergency Plan, which was not revised since 2003 in the area of nuclear or radiological accident; this is needed also for other possible accident/event, not only nuclear/radiological. The revised National Emergency Plan should explicitly include the responsibility of and interaction with stakeholders regarding the development and implementation of strategies.
- Institutional stakeholders might not recognize the urgency or need for allocating resources or participating in a dialogue on the longer term phases.
- Most stakeholders (even those having roles and responsibilities in case of a nuclear emergency) lack previous experience with post-accident issues and knowledge about radiation protection.
- Roles and responsibilities in the longer term (post-emergency) are not clearly identified, which hampers reflection on strategies to cope with a hypothetical accident.
- The Slovak stakeholder panel shows that stakeholders are able to work together, communicate problems, and absorb newcomers to the working groups.
- Good practices of the scenario-based workshops and exercises need to be systematized, in order to assigning responsibilities for the implementation of management strategies for existing exposure situations, and in order to ensure appropriate coordination between relevant parties, providing -as appropriate- for the involvement of stakeholders in decisions regarding the development and implementation of strategies.
- The conclusions from the INEX5 exercise regarding the development of a methodological directive of the Ministry of Interior needs to be put in practice, as well as the use of the handbooks for management of contaminated inhabited areas, food production systems and drinking water.

Conclusions

■ Establish a legal framework for public policies on post-accident management

A bottom-up approach took place in the development of the EURANOS Recovery Handbooks in Slovakia, and stakeholders including local actors have been initiators of the demonstration of the Handbook's use within the international and national projects; their wider implementation is difficult without giving that activity legal status and establishing a legal framework for public policies on post-accident management.

■ Provide local actors and other stakeholders with access to expertise on nuclear and post-accident issues: expert-local actors partnership

Not all actors with roles and responsibilities in emergency and post-accident management have specific radiation protection knowledge, which is needed for the development of a common understanding of the issue. Therefore continued engagement of previously participating stakeholder representatives and engaging local actors in education and training activities, exercises and cooperative projects is needed.

■ Integrate nuclear emergencies in more general disaster preparedness and response frameworks

The availability of resources for local actors to engage in preparedness and post-accident issues via educational activities and exercises starting from the kindergarten through engagement with schools up to the local and professional institutions and organizations, will strengthen acceptance of nuclear preparedness in the light of general emergency preparedness and civil protection. Collaboration with local elected representatives and engaging with local stakeholders and local radiation protection and civil protection experts enables sustainable emergency preparedness processes.

■ Develop strategy and prepare communication with all types of stakeholders

Creating a community of local and national actors familiar with accident and post-accident issues in the preparedness phase, using agreed communication tools and channels, is essential for rapid action in case of an emergency. Identifying vulnerabilities and uncertainties in the preparedness phase and creating opportunities for collaboration and engaging with media, spokespersons and journalists in the preparedness phase (e.g. via round table discussions, exercises and trainings) enables to be better prepared regarding communication on different issues related to radiation protection and post-accident issues.

EP&R

Steering Committee for the Management of Post-Accident Situation (CODIRPA): a Step-by-step and Sustainable Process of Stakeholder Involvement

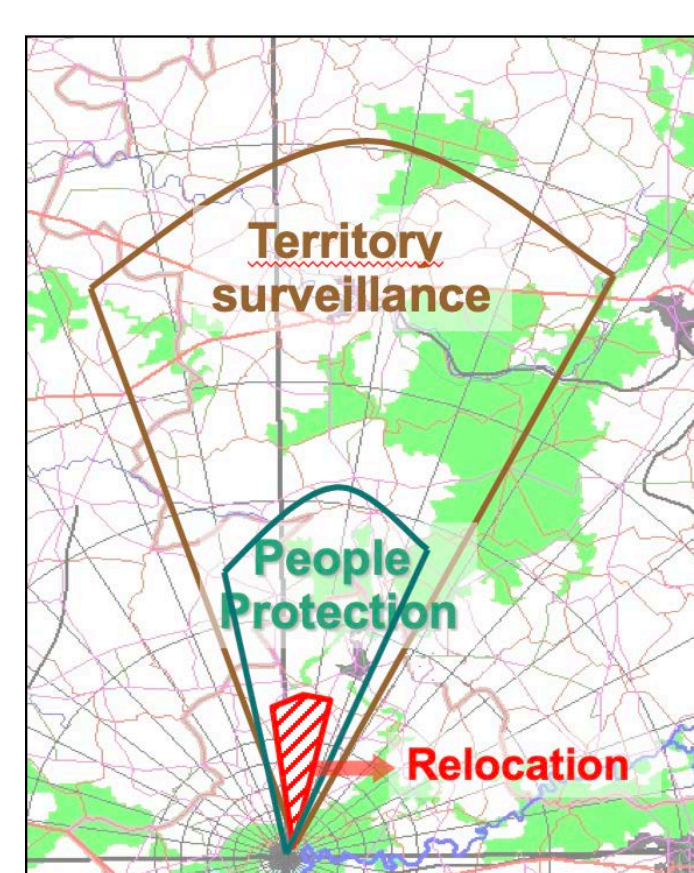
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Case study introduction and data

- Steering Committee launched by ASN in 2005
- **16 topical WGs** with a membership of institutional and non-institutional representatives
 - 300 participants, 20 non institutional organizations
- 2 pluralist committees in charge of the elaboration of the policy for the transition phase, and for the late phase of nuclear accident
- Integration of the practical experience regarding the management of post-accident situations (Chernobyl and, later, Fukushima)



•1st Phase (2005-2007):

- Progressive involvement of non-institutional experts
- Co-construction at the national level** of the first elements of the policy with a pluralistic participation

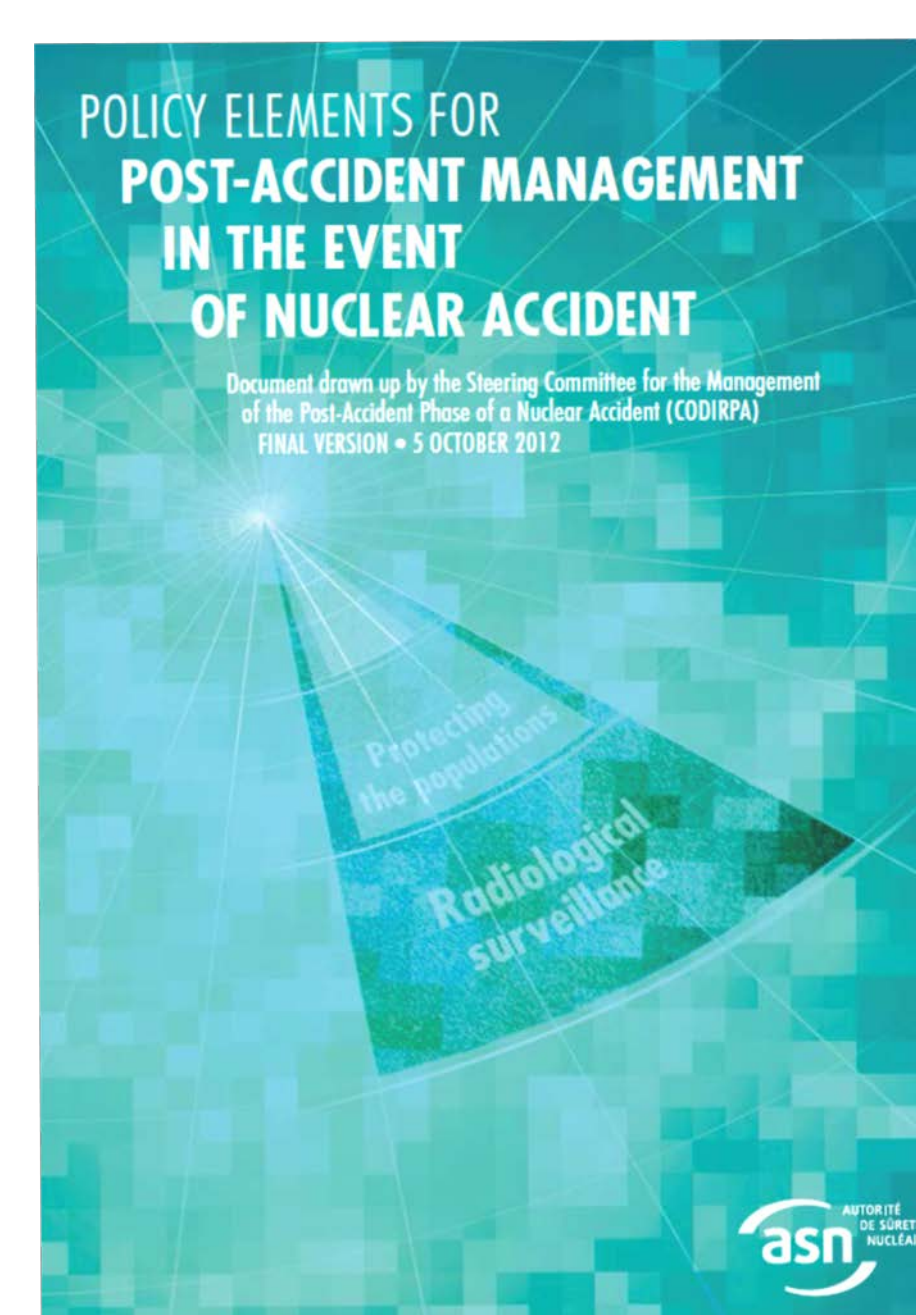
•2nd Phase (2008-2010)

- Consultation at the local level** with municipalities, prefectures and civil society - NGOs, Local Commission of Information, health professionals



•3rd Phase (2010-2011)

- Co-construction at both national and local levels:**
- Local Emergency Response Plans, Exercises, Guidelines



•4th Phase (since 2012)

- Integration of post-Fukushima accident experience**



Findings

Keys of success of the stakeholder engagement process

- The **absence of a prior structuration of activities**: WGs were created step by step, to address the questions raised by stakeholder
- The **accessibility and openness** to any member in the WGs
- The construction with time of a **common language**, a **mutual understanding** between all members of the WGs, creating a climate of respect and trust
- The **strong involvement of the President of ASN**, personally chairing the plenary sessions
- The **strong implication of TSOs**
- The **search for consensual decisions and orientations** of the works (co-construction process)

Challenges associated with the involvement of some NGO's

- Availability of their members
- Ageing of members and difficulties to involve young generations
- Financing issues

Conclusions

- An important first step in preparing for the management of nuclear post-accident situations
- A similar approach could also be useful with regard to the preparation of the emergency phase management (eg. for the elaboration of the PPI perimeters)

Challenges associated with a long-term process

- Feeling of **weariness** of some participants, together with **redundancies of the subjects** discussed in the WGs
- Difficulties to have a **renewal and rejuvenation of participants**
- **Need to find new modalities and methodologies of implication**
 - Local meetings on specific thematic, involving the relevant actors
 - Exercises, territorial microprojects on a specific issue related to post-accident management/preparedness, etc., with the implication of regional branches of ASN, and new actors in different regions
- **Need to involve new stakeholders**, specially at local level, and/or representing actors not yet involved but who have a major role to play in post-accident management.

EP&R Stakeholder Participation in Nuclear and Radiological Emergency Preparedness and Recovery in Spain: Benefits and Challenges

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Case study introduction and data

Enhancing the involvement of stakeholders, including the general population, in case of nuclear or radiological emergencies is a pending issue on the agenda. The need for- and benefits of- involving affected populations were already observed in the aftermath of the Chernobyl and Fukushima accidents (Alexander, Burt, & Nisbet, 2005; Brown et al., 2016; Monteiro Gil et al., 2017; Liutsko & Cardis, 2018); as was the important role of mass media in emergency and risk communication (Gallego et al., 2017; López-Asensio et al., 2018; Prezeli et al., 2016). In Spain, the first steps towards working with stakeholders in issues of nuclear or radiological emergencies were provided by a joint effort between research institutions (CIEMAT and UPM) and governmental authorities (CSN and DGPCEE), in the framework of European Projects (eg. EURANOS, 2004). Other institutions (ISGLOBAL and SEPR) joined later on.

Findings

Challenges for improving stakeholder participation in EP&R (Emergency Preparedness and Recovery) in Spain:

- More explicit & clear roles (organizational chart with all relevant stakeholders involved)
- Timely, adequate & transparent communication between different stakeholder' groups
- Reducing the gap between theory and practice by working together to simplify emergency plans, with clear priority on human lives
- Enhancing preparedness by including as many stakeholders as possible (NGOs, journalists, general public) in activities related to communication and education/training on basic radiation protection
- Improving radiation protection training (resources and motivation) among professionals involved in emergencies

Good practices in stakeholder engagement:

- The first efforts to bring different stakeholders together in Spain were positively assessed by the participants, who stated: "It is easier to communicate when you meet the people in person"
- Some organisations such as the Red Cross shared positive experiences regarding communication with the general public, and their role in clarifying messages and alerting on possible misinformation
- When working with the general public, information selected to be transmitted should consist of clear and concise messages
- Other good practices include training and information courses by the University of Valencia, addressed to all first responders (firemen, health workers, civil protection, environmental agencies) with 2-3 editions per year

Conclusions

Spanish research institutions, governmental authorities and other professional societies, with support from European projects, have played an important role in organising workshops and other actions related to the engagement of relevant stakeholders in Emergency Preparedness and Response to nuclear accidents in Spain. These joint exercises helped to create a network between different stakeholders that are not used to working together but should do so in case of a nuclear or radiological emergency. Joint participation in preparedness activities should lead to a better understanding between them and allow a more efficient response in case of a real emergency situation. Remaining challenges include providing an adequate basic knowledge on radiation and radiation risks and safety to other stakeholders such as other authorities involved, mass media, NGO and general public.



EP&R Preparedness to nuclear and radiological emergencies management at the level of hospitals

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Case study introduction and data

TOPIC: This case study addresses the involvement of hospitals in the management of radiological or nuclear emergencies at local or international level. Learning from radiological incidents and near misses as an important part of radiological protection (RP) culture development started before Fukushima in Careggi and Niguarda hospitals in Lombardy. Since no nuclear power plant operates in Italy, the scenarios considered were incidents in industrial and medical facilities, during transport of radioactive material, or malevolent use of radioactive material. This case study focused on the role of RP culture in hospitals' response in the case of the Fukushima accident.

Italian people returning from Japan after the accident, independently of the area in which they were in Japan, decided to go directly to the hospitals, considered the main centres for public health in case of an emergency. Other people who were worried about environmental contamination, not in Japan but directly in Italy, contacted hospitals to express their concern or simply ask for information.

OBJECTIVES: To analyse the role of radiation protection culture in hospitals for the preparedness to emergency situations, in terms of setting up the organizational structure procedures, the work-flow and the communication of final results.

METHODOLOGY: The analysis is based on i) documents produced by local and regional health institutions including procedures regarding technical and communication aspects related to assisting people potentially exposed to radiation, and ii) contributions to a number of events and congresses regarding the role of hospitals and their contribution in the response to a nuclear emergency.

FINDINGS

The case study showed that in the event of an emergency: i) people with health concerns go to the Emergency room of hospitals; ii) they prefer to arrive independently at the hospital, in order to have more information and reassurance; iii) health care centres have to be ready to receive people also in case of nuclear or radiological emergencies.

Professionals from hospitals were engaged in dosimetric evaluations and communication of doses to the interested people (including journalists), and provided them information on the significance of the dose level, which was different than the level in medical exposures.

RP culture supported the response of hospitals in those circumstances, for instance in dealing with radionuclides different from those commonly used in hospitals for radiopharmaceuticals, and having a different level of radioactivity. RP culture also helped decision making, at organisation and individual level, and the communication with people coming to the hospital for measurements and the evaluation of exposure.

CONCLUSIONS

There is a need to translate the competences of medical physicists and other professionals operating in hospitals into easy-to-use procedures in case of an emergency.

Training programmes should be developed for hospital staff on procedures and protocols to be applied in an emergency situation, with dedicated exercises; this needs to be continuous and tailored to the specific roles in emergency response.

Aspects related to situations of radiological or nuclear emergencies should be included into the RP culture in hospitals.

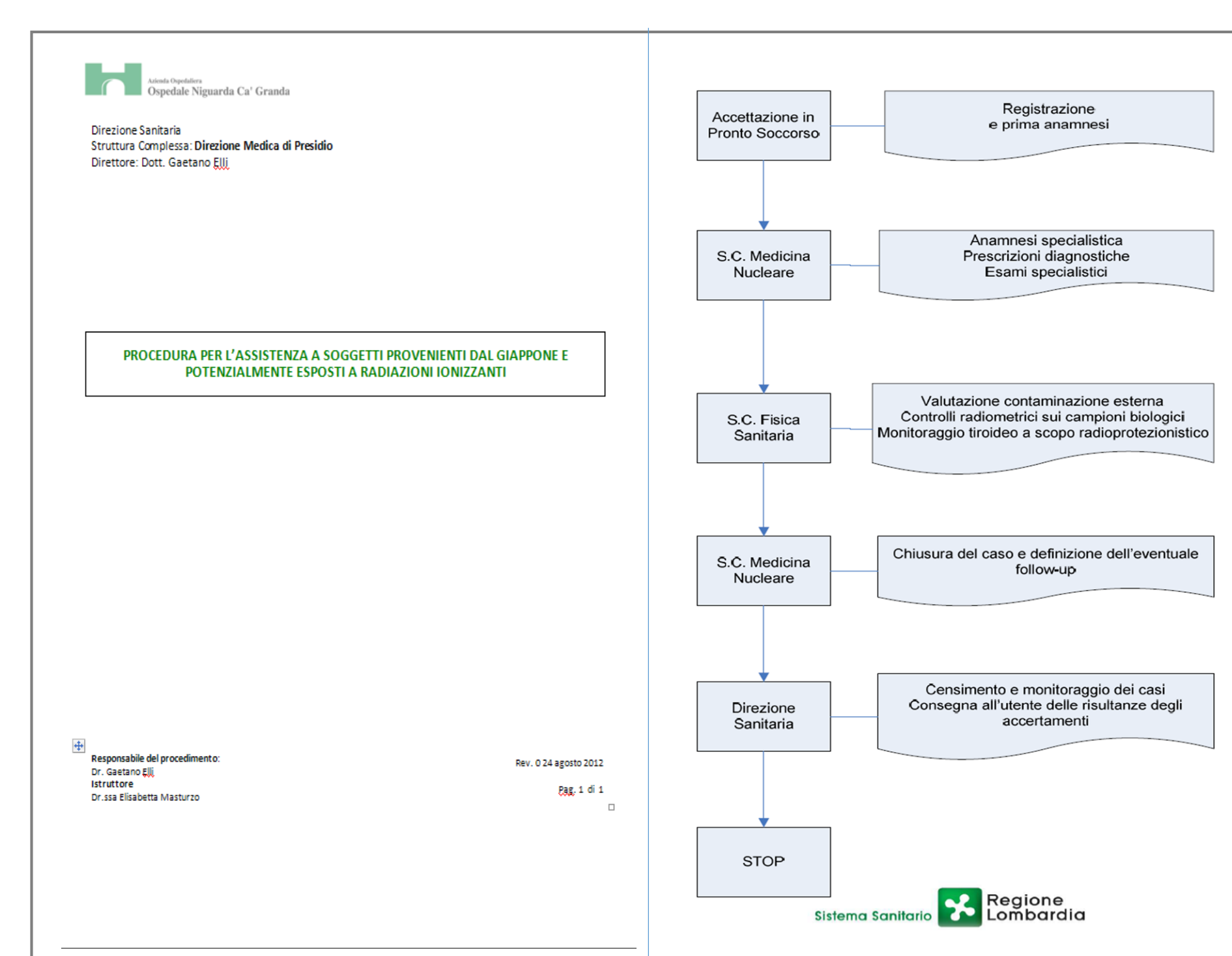


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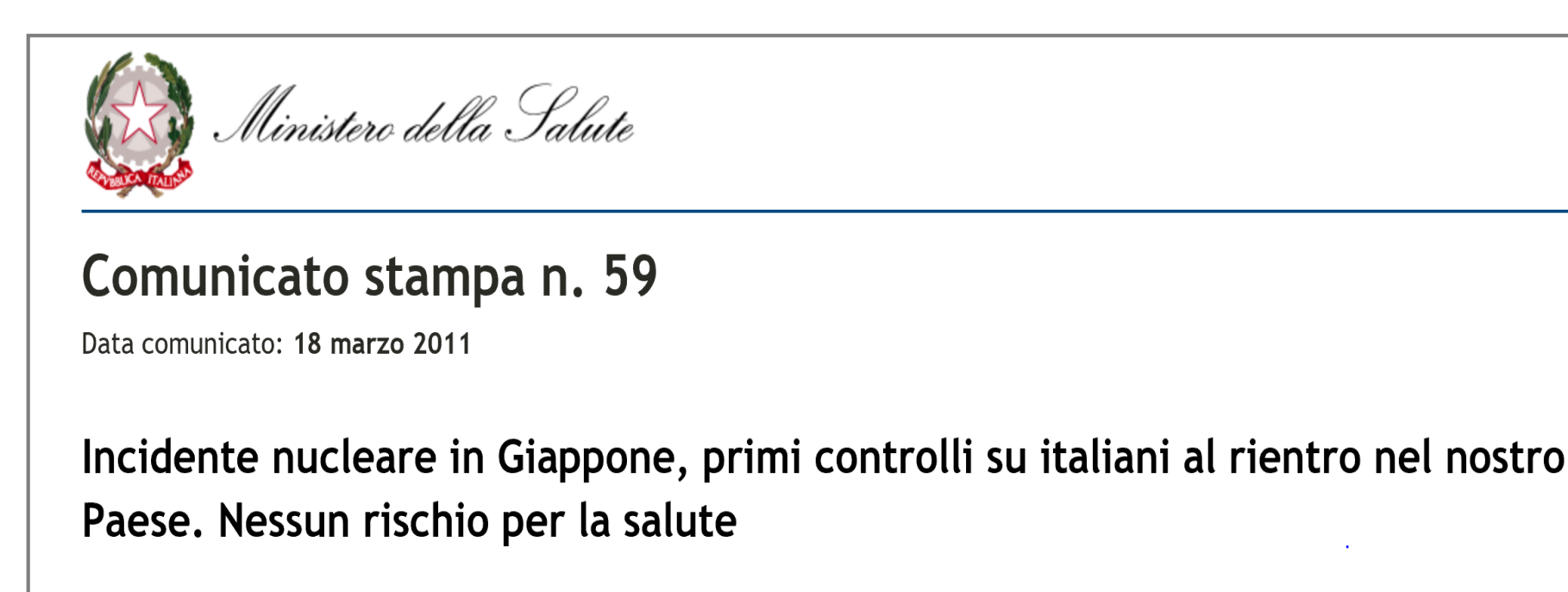


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The Health Physics structures of well defined Hospitals provided scientific and technical supports for dosimetric and radiometric aspects, and carried out external and internal contamination measurements and assessments.



March, 2011 different hospitals prepared documents for specific procedures to assist subjects coming from Japanese area and potentially exposed to ionising radiations, e.g. the *Niguarda Ca' Granda Hospital* in Milan.



March 2011, the *Italian Ministry of Health* issued a note to harmonize the procedures for the assistance to people coming from Japan.

EP&R

Actions undertaken to improve and strengthen emergency and post-accident preparedness and recovery management at all levels

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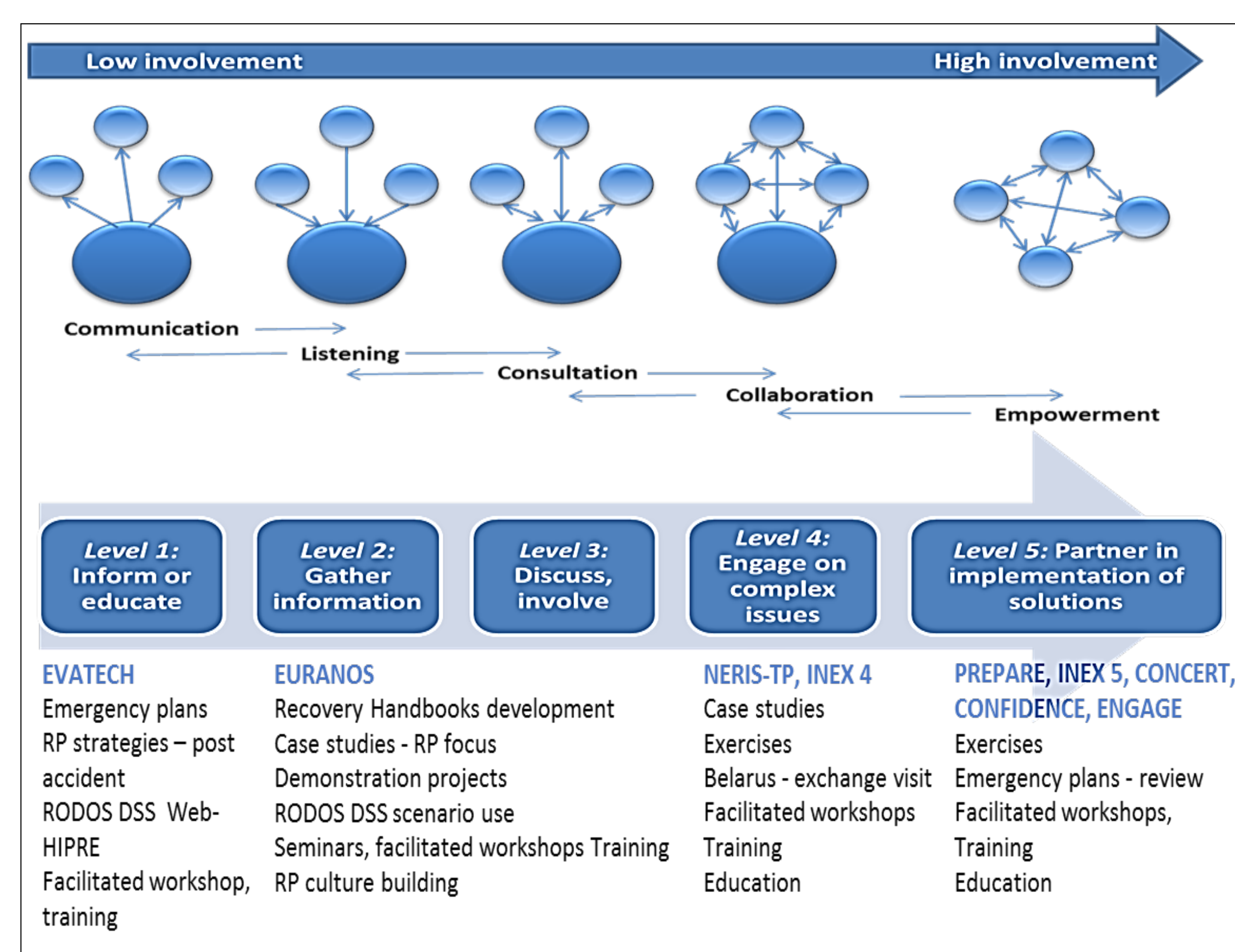
Case study introduction and data

The process of building radiation protection (RP) culture has been studied through analyzing the following actions: a workshop with a stakeholder panel on decision analysis regarding clean-up actions in inhabited areas, training courses on decision-making in emergency management, seminars and workshops to elaborate handbooks which assist in the management of the recovery phase, technical visits to Belarus, national and international (INEX) exercises.

Target stakeholders:

- stakeholders involved in the emergency preparedness and response and decision-making process at all levels (local, regional, national),
- stakeholders involved in implementing the radiological protection system at all phases in case of a nuclear accident (early, transition and recovery) .

Aim: Enable professionals in the RP field and other stakeholders to build a dialogue, to share knowledge, a common language and experience in order to enhance the efficiency of the decision-making process associated with the implementation of the radiological protection system, and to answer the concerns of all stakeholders.



Findings

- An essential role in developing radiation protection culture is situated at the level of advisors - national authorities, regional and local decision makers and their persistent effort and their tireless and relentless work.
- The evaluation of exercises becomes an issue for the government, and reviewing and following recommendations activated the process.
- The national exercises become more important in the process, and the establishment of working groups and commissions in different areas has been started with a focus (inter alia) on building radiation protection culture.
- The capability of target stakeholders to interact with radiation protection professionals improved through active participation in a range of different projects.
- The capability to implement radiation protection actions increased after technical visits to Belarus (to the area affected by Chernobyl) and after the Fukushima accident. First responders such as police forces have been equipped with personal dosimeters after the INEX4 exercise and following the Fukushima accident.
- Willingness to be involved in radiation protection decision-making or to implement radiation protection actions grows as more information is received during seminars, and through working in topical groups and multidisciplinary teams during facilitated workshops and training courses.
- Sharing of common knowledge and common views become a reality among the stakeholders. The need to prepare and conduct annually workshops or seminars, as well as practical exercises, was expressed at each common activity. It was also suggested that this is key to making the process sustainable.



Conclusions

- **RP culture improved the decision-making process** by elaborating the local and regional emergency plans, taking into account new developments and results of international and national projects.
- **RP culture development made it possible to run national exercises**, and enabled the involvement of a wide range of stakeholders and thus a review of the national emergency and recovery management plans. **Stakeholder engagement has grown in parallel with growing RP culture and vice-versa.**
- The **systematic and sustainable stakeholder involvement** and **RP culture development at local and regional level** have been promoted.
- The **importance of practical experimentation** to understand the meaning of the RP culture components has been **stressed**. This implies:
 - The need to have **governmental priorities and support** in the form of personal and financial resources,
 - The need to have **RP culture developed also at governmental level**, such that bottom-up initiatives have a real impact and do not disappear just at the last level of decision making,
 - The need for a **regulatory framework to support and justify actions, to motivate public and professionals to participate,**
 - The need for **multi-disciplinarity in building and disseminating RP culture, in wider communities**, not only close to the NPP or nuclear facility site,
 - The need for engaging with **experts who are recognized by the public.**

EP&R

Steering Committee for the Management of Post-Accident Situation (CODIRPA): Actions undertaken to disseminate RP Culture

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Case study introduction and data

“Les Ateliers de la Radioprotection”

- **WHO:** Around **16 high schools** from France (11), Belarus (1), Japan (1), Germany (1), Moldavia (1) and Ukraine (1)
- **WHAT:** Development of **practical RP culture for high school students**
- **HOW:**
 - Addressing **practical aspects of RP** during the school year (radon, medical, nuclear, environment, ...)
 - Building projects with the **support of RP experts**
 - **Annual meeting** of all students and professors
- **RESULTS:** overall understanding of the complexity of a post-accident situation, through notably **exchange of experiences with high school students and professors from Belarus, Ukraine and Japan**

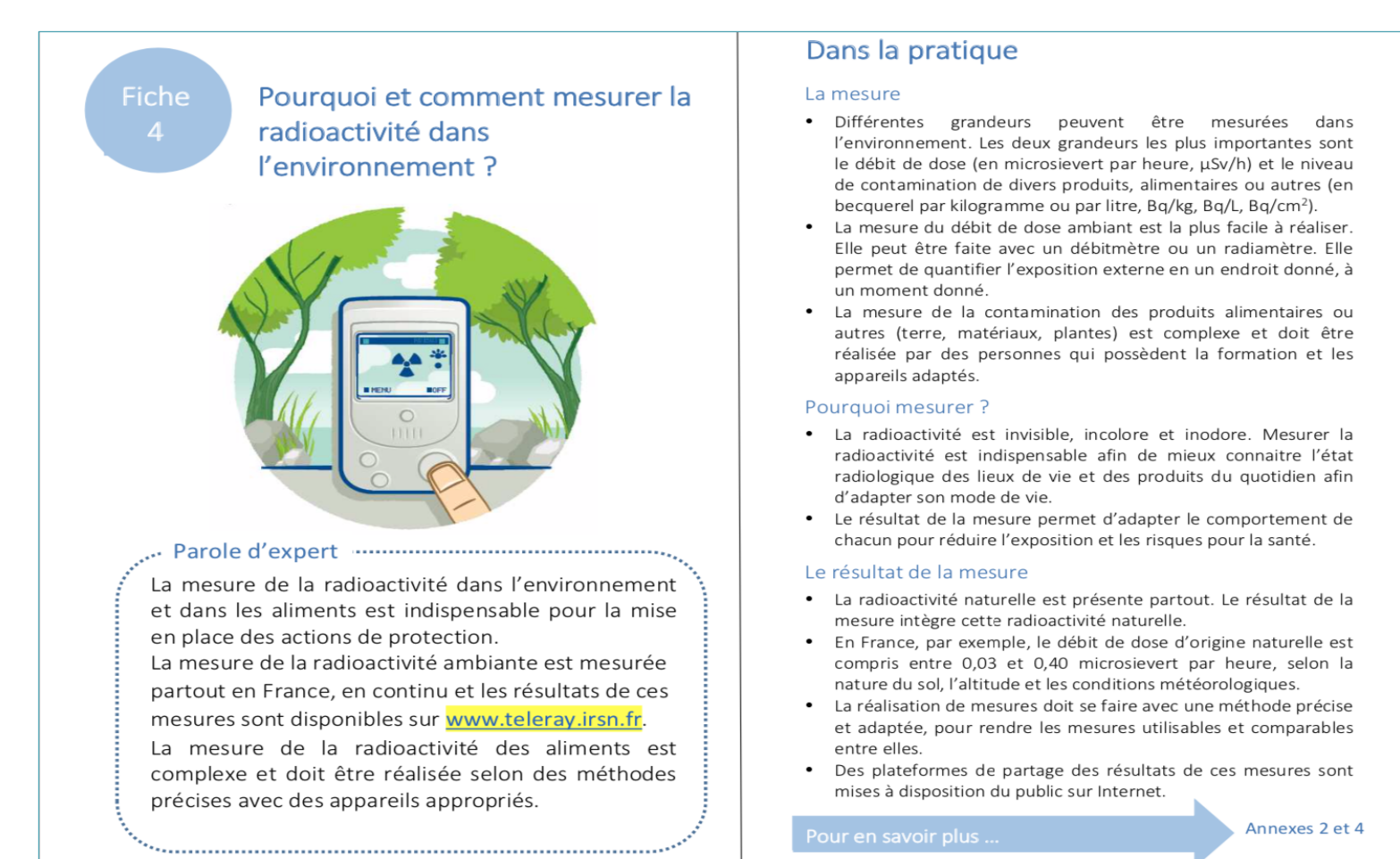


Working Group on Guidance for Population

- **WHO:** **Members from civil society** (farmer, cheese producer, teacher, parents of children), **NGOs** (Consumer protection, environment protection, promotion of decent living conditions), **experts in radiation protection** (IRSN, ASN, CEPN, Health Regional Agencies), **Local Commission of Information around NPPs**.
- **WHAT:** Elaboration of a document intended for people who are wondering about the possibility of staying or not living in a territory affected by a nuclear accident
- **HOW:** **Identification of questions raised by the population largely relying on feedback and experience** from Chernobyl and Fukushima (visits to Belarus and/or Japan and testimonies from local people)
- **RESULTS:** **28 thematic sheets** which answer many questions about everyday life and **6 annexes** that allow to deepen the topics covered in the sheets

Working Group on Questions and Answers for Health Professionals

- **WHO:** **Pluralistic group** steered by a Regional Health Agency
- **WHAT:** to **raise the competence of local health professionals** on radiological protection or on environmental health issues in order to help them to answer population concerns and worries in a post-accident situation context either in local information centers, or in their day-to-day activities (dialogue between patient & medical doctor)
- **HOW:** Collection by a group of local health professionals of about 200 questions that could be asked by patients and also health professionals in case of emergency or post-accident situation
- **RESULTS:** **Answers to these questions** by a group of experts, and final validation with the group of local health professionals (to be published on a website)



- *Worries and concerns about children and pregnancy*
- *Generic pathologies*
- *Iodine and thyroid*
- *Food-stuff management*
- *Social relationships*
- *Animals*
- *Occupational risks*
- *Actions to be taken*



Findings

- **Main elements contributing to a practical RP culture for stakeholders that are involved in the preparedness phase or in the direct management of post-accident situations, include the following topics:**
 - Identifying and addressing the concerns of the population
 - Understanding the characterization of a radiological situation and the environmental contamination
 - Identifying the source of individual exposure in contaminated areas
 - Identifying protective actions (collective and individuals), evaluate / understand their effectiveness and consequences
- **Need to be connected to concrete experience** to better catch the complexity of post-accident situations with experts, but also other stakeholders: national and local authorities, health professionals, local population, local elected people, specific professionals, etc.

Conclusions

- The aim of RP Culture is to **help the people to take informed decisions** and **not to justify exposures** to ionizing radiation
- RP Culture related to EP&R is **part of a process of global understanding of the complexity of the situation** to allow everyone to take decisions by themselves and to contribute to a collective process of optimisation of the situation, with the support of authorities and experts