



Improving Education, Training and Communication with the Public on Ionizing Radiation

Nadja Železnik

EAGLE project REC Slovenia

http://eagle.sckcen.be

Conference on Human Resources Development for Nuclear Power Programms: Building and Sustaining Capacity; Vienna, 12-16/5/2014

Context for project

- Use of ionizing radiation is wide.
- But perception in public mainly negative.
- Nuclear experts believe in power of education and propaganda. Efficacy of different measures for changing general public
- What is really needed?
 - investigation in EAGLE project

negative attitudes toward NPP, survey in Slovenia 2013







Enhancing educAtion, traininG and communication processes for informed behaviors and decision-making reLarEd to ionizing radiation risks



- FP7-EURATOM project, 7 EU counties, 3 years project
- Goals:

EAGLE:

- Assess the current education, training and information (ETI) process and real needs e.g. preparation of information on ionizing radiation, dissemination of information to the public and public understanding.
- Establish a network of stakeholders in order to identify education, information and communication needs and coordination possibilities at the European level supported by web-based Platform.
- Provide practical guidance and tools for best practice to support the ideal of a participative, citizen-centered communication.
- Stakeholders:
 - Information sources
 - Media
 - Public





Work in EAGLE - 1

- WP 1: Improving ETI and communication
 - Collection of ETI material and activities from the information sources across EU and analyses of the obtained information.
 - Lessons learnt from Fukushima accident.
 - Preparation guidelines for good ETI and communication practices at the level of information sources.
- WP 2: Move towards mutual understanding with media
 - Understanding of media work and needs regarding ionizing radiation (standar and new media).
 - Agreed recommendation and guidelines for developing media relations for ionizing radiation.



Work in EAGLE - 2

- WP 3: Informed decision making process for public
 - Understand the public perception of ionizing radiation
 mental model approach will be employed.
 - Improve the material from information sources by involving public to address the whole needed information (4 national workshops in Romania, Poland, Slovenia in France).
 - Address also some other important factors which are connected with informed decision making (trust, rules and procedures, process, ...).





Work in EAGLE - 3

- WP 4: Reaching out and involving people:
 - Web page: http://eagle.sckcen.be/, blog, twitter.
 - Joining the Stakeholder Network: registered for EAGLE Platform and receiving all relevant EAGLE information.
 - Joining also Stakeholder Consultation Group means getting involved in mutual learning and sharing of knowledge.
 - Internacional EAGLE conferences (November 2013, Paris, 2016)
 - 1st stakeholder virtual workshop in 2014 to review the analytical work in WPs.
 - 3 pilot actions in Slovenia, Poland, Romania to test practical use of material prepared.
 - EAGLE stakeholder Platform on web.





Results: ETI and communication

- Data Collection Protocol:
 - Web-based questionnaires,
 - Individual interviews on communication culture,
 - Samples and descriptions of ETI materials and communication activities.
- The report on ETI materials and activities will be will be discussed with stakeholders, especially the SCG.
- Information sources:
 - Scientific channels, written information and connection with nuclear industry,
 - Honest/true about nuclear industry (the whole message),
 - Use of trusted source of information (e.g.doctors).



Results:Journalists

- Critical review of how information in the case of the Fukushima accident was transmitted in the mass media:
 - societal communication about risks has become more complex, extensive and multi-directional,
 - previous nuclear accidents have largely contributed to this societal movement,
 - new media appear to reinforce this movement, as they speed, decentralize and diversify information provision while offering platforms for direct citizen participation, expression and feedback.
 - greater challenges for institutions whose mission includes communication with the public about IR risks in particular,
 - dynamic offers opportunities for moving closer to a citizencentered ideal of risk communication.



The words of journalist - editor

- Information held back do not know not only hiding,
- Time factor communicate the uncertainty
- Challenges to find the good sources in authorities.
- Specialized journalist no longer due to changing realities of media.
- Social media tools more important
- The challenges of reporting after nuclear accident unreliable, incomplete, poor information, evolving situation.
- No prepared and available nuclear specialists to provide answers to questions of public concern (on the impact of the accident on public health, food consumption, other impacts) during the nuclear accident.
- Problems of preparing the articles: information source, national language, time pressures, evolving of situation.



Results:Public

- Public opinion survey was conducted among a representative sample of the Belgian adult population:
 - Although people perceive IR risks as rather high, they express sufficient confidence in the authorities for the actions taken to protect the population against these risks.
 - Trustworthiness and competence are among the most important influencing factors. The most trusted are scientists and IAEA experts; the least appreciated are the journalists and the government.
 - In 2014, almost one third of the Belgian respondents still follow information related to the Fukushima accident.
 - Traditional media (TV, newspapers and radio) have been and remain the principal information sources used by people to inform themselves, also about the accident in Fukushima.





Low knowledge about ionising radiation

"Exposure to radiation will always lead to radioactive contamination."

"Radioactive waste is produced only by nuclear power plants."



"Vegetables grown near a nuclear power plant cannot be safely consumed because of radioactivity."



Public views:

- Normal and accident info: general interest is impact on health, food, safety of children.
- The need for personal decision based on facts.
- Work not only on knowledge, but also to other issues like trust.
- Appropriate level of information to provide during normal state, introduce it in curriculum for schools.
- Role of civil society to improve the trust.





What would the public like to know about the IR? Health risks, food, kids

• "I want to decide myself based on sufficient and correct information"

Yes	Νο
What kind of risks?	The risks are low.
What are their effects?	The risk from nuclear compared to xy industry is very small.



Source: EAGLE deliverable D4.10, Zeleznik N. et al.

How to communicate with you (the public)? Challenges

- Main phenomena (connected with natural sciences) are not enough introduced at the level of primary and secondary school.
 Train the teachers
- Low trust in the authorities and industry. Transparency
- High polarisation between nuclear lobby and NGO's.
- Low understanding between information sources, media and public.

Source: EAGLE deliverable D4.10, Zeleznik N. et al





In general, are you satisfied with the public information related to ionising radiation provided by the following actors? The Nuclear industry



Conclusions

- The interest for better communication and information exists from all stakeholders – information sources, journalists and the public.
- Stakeholders are resources to identify problems, gaps, needs, improve understanding and even orient the research.
- One of the solution is to include empathy besides the facts and knowledge.
- Information are full of contradictions which stays for a long time and is very difficult to build the confidence.



Let's communicate about ionizing radiation

Go to <u>www.eagle.sckcen.be</u>

and become a member of the EAGLE network.



Enhancing educAtion, traininG and communication processes for informed behaviors and decision-making reLatEd to ionizing radiation risks



Home Objectives Organisation Workpackages Deliverables Contact

The EAGLE project

Latest News

Home

2014-02-11 <u>Results of</u> the EAGLE public opinion research in <u>Belgium available</u>

2013-12-18 EAGLE Initial Conference steers at broader approach to communication

2013-10-15 EAGLE presented at the MELODI workshop

More News...

Upcoming Events





The EAGLE project is a Euratom FP7 "coordination action" of 3 years, launched under the work programme 2012 which will help **identify and disseminate good practices in information and communication processes related to ionising radiation**.

For this purpose, the consortium intends to review national and international data, tools and methods as well as institutional work in order to identify education, information and communication needs as well as coordination possibilities at European level. Moreover, EAGLE will foster a move towards the ideal of citizen-centred communication, including a participative component.

The approach taken is based on an interactive exchange of information and opinions concerning risks, and risk communication among the risk assessors, risk managers, mass media, informed civil society and other interested parties usually referred to as stakeholders.

> Click to join our network

The project will bring together representatives of nuclear actors, users of ionizing radiation, authorities, journalists, social media consultants, and informed civil society. Eagle will gather stakeholders at conferences, workshops, dialogue groups and pilot actions with a goal to generate a better understanding of different perspectives, perceptions and information needs on ionizing radiation.

Consequently, a platform on communication related to ionizing radiation will be founded with the mission to establish a forum for dialogue and exchange of communication material between all European organizations, institutions, associations and people taking part in decision-making related to ionizing radiation.





