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

Nadja Železnik

EAGLE project
REC Slovenia

http://eagle.sckcen.be
Context for project

- Use of ionizing radiation is wide.
- But perception in public mainly negative.
- Nuclear experts believe in power of education and propaganda.
- What is really needed?
  - investigation in EAGLE project
EAGLE: Enhancing education, training and communication processes for informed behaviors and decision-making related to ionizing radiation risks

• FP7-EURATOM project, 7 EU counties, 3 years project
• Goals:
  – 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 (standard 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, ...).
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 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).
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 citizen-centered 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.
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.”

Source: SCK•CEN Barometer 2013, Turcanu C. & Perko T.
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”

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<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td><strong>What kind of risks?</strong></td>
<td></td>
<td>The risks are low.</td>
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<tr>
<td><strong>What are their effects?</strong></td>
<td></td>
<td>The risk from nuclear compared to xy industry is very small.</td>
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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 www.eagle.sckcen.be and become a member of the EAGLE network.