



Coordination project



Enhancing EducAtion, TraininG and Communication Processes for Informed
Behaviors and Decision-making ReLAtEd to Ionizing Radiation Risks

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Report from pilot action 1 - POLAND

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Introduction

The role of stakeholders in the EAGLE project is multiple: they took part in all Work Packages cooperating in getting results for improvement of communication, education and information. They participated in the events organized within the frames of the project, in workshops, conferences and contributed to creation of project's outcomes. They will be also the users of these results, too.

Active participation of various groups of stakeholders in the implementation of the EAGLE project's results is an indispensable condition for the success of whole project. At the beginning of the project the group of stakeholders involved in nuclear matters was established in Poland. Through the project website the persons interested in ionizing radiation matters were registered. This allowed to maintain permanent mutual contact and share with them all the results obtained in the frames of the project. Work package 4: "reaching out, involving stakeholders and dissemination of Project results" aimed in sharing all project's result with groups of people who are working in the nuclear, education and information fields, as well as common people who simply are interested in these issues and in the world around us.

Within the frames of EAGLE project, three pilot actions are implemented in practice in three countries (either education or information) in order to test the practical use of the communication material developed in the project, to evaluate its impact, and finally to improve it. The outputs and lessons learnt from these actions, implemented, inter alia in Poland, are directly used for upgrading and preparing the final version of the communication recommendations.

Poland is still one of the few European countries without nuclear power, however diversification of electricity generation structure by introducing nuclear power is one of the key objectives of the document "Energy Policy of Poland until 2030" supplied by Polish Ministry of Economy. The project to develop nuclear energy in Poland was launched in January 2009, which resulted in the adoption of the Program of Polish Nuclear Energy [MINISTRY OF ECONOMY, GOVERNMENT COMMISSIONER FOR NUCLEAR ENERGY, *Program of Polish Nuclear Energy*, Warsaw (2014)] by the Council of Ministers on 28th of January 2014. According to this program at least 2 nuclear

power plants will be built in Poland; the first NPP should start its operation in 2024. According to recent reports, this date is postponed, but further requires intensive information and education activities in order to prepare society to the full acceptance of the decisions taken.

The world renaissance of nuclear energy observed in the beginning of this century was slowed down by unexpected nuclear disaster in Fukushima. Public concerns about the nuclear power revived again and further development of this method of energy production requires proper communication, education and information. The reliable information should be shaped and delivered by the experts, but the role of mass media is very important, as well. Appropriate communication and information should also accompany all the actions towards development of such nuclear facilities like radioactive waste repositories. The greatest fear of the public is caused by geological disposal of high level waste; however the selection of location for near-surface repositories, which is under way in Poland, provokes protests of local communities, too. Nuclear technology development can be a mean to economic development of the country and the way of improving a quality of environment; however, negative effects can't be ignored or undervalued. All these aspects should be discussed in transparent way and the role of the media in communication with the society is crucial. Appropriate approaches in education and information which takes into account the specificity and history of the country (dedicated programs of education and information campaigns based on mental models of perception) can facilitate a quick reach the public and build appropriate risk culture.

1. Approach and methodology

The aim of pilot actions planned within the EAGLE project was testing and the practical use of the communication material, to evaluate its potential impact, and finally to improve it. The action selected for Polish stakeholders was in the area of information, dealing with media. Because nuclear energy for the country is the particular point of interest in Poland now, the subject of information regarding the implementation of this program was chosen for the pilot exercises.

On 02.06.2015 the pilot exercises: «Mass media and the information regarding the implementation of the Polish Nuclear Power Program» were organized at INCT. The main groups of stakeholders: representatives of state administration, institutions involved in the

program of nuclear energy and communication with the society, research institutes and universities, NGO's and mass media, were invited to take part. Altogether, in the meeting 34 persons participated. To deliver the special presentation on the state of implementation of the Program of Polish Nuclear Energy, the director of Department of Nuclear Energy of Ministry of Economy was asked.

Over 40 articles and press releases on the discussed subject were sent to the participants before the meeting for reading and evaluation. The articles were selected from:

#Specialized press: Ekoatom, Atomic Forum, Progress of Nuclear Technology, Energy ...

#Popular science press: Knowledge and Life, World of Science, World of Knowledge ...

#Ecological Magazines: Eko and we, Environment, Waste and Environment ...

#Other magazines and newspapers ...

#Internet Portals: gazeta.pl, onet.pl, money.pl, TVN24 ...

The articles formed the basis for discussion about the actual state of information about nuclear energy in Poland and the role of mass media in implementation of the Program. The introduction into the subject and further discussion were also two presentations: about the EAGLE project and about the articles on ionizing radiation published in Poland in 2014-2015. The discussion was moderated by the moderator. The invited journalists were asked to present their experiences and the most interesting situations from their work when they informed the public about ionizing radiation, nuclear power energy and other applications of radioactivity. The discussion was recorded and then the conclusions based on the statements of the participants were formulated. As the example of good practice in the way of shaping beliefs on nuclear energy the movie Pandora's Promise was recalled in appropriate presentation of the representative of PGE-EJ1, the company which presented this film in Poland.

2. Evaluation and the impact, lessons learnt

The participants of the event assessed the current state of information on the basis of the papers that were disseminated before the meeting, published in the years 2014-2015. All papers presented to the audience were divided into categories:

- * Information papers;

- * Scientific and popularizing descriptions;
- * Statements of supporters and opponents of nuclear energy, debates between them;
- * Results of surveys;
- * Statements of authorities and experts.

Among these categories of papers, the every-day information prevails; the next common categories are statements of supporters and opponents and the surveys. The lack of good, reasonable popularizing articles, as well as honest debates between proponents and opponents of nuclear energy is observed in all types of the media. The main drawback of the present communication with the society via media is considered in the deficiency of permanent journalists who are specializing in the issues of ionizing radiation and nuclear energy.

The interest in the Program of Polish Nuclear Energy is big and people expect more information about its implementation, the potential technologies and expected benefits for the country and the society. Special attention is given to the safety aspects related to the NPP operation and radioactive waste disposal. The Polish citizens expect more information from the government, from companies and institutions involved in the Program; however the role of media is also significant. They should not only act as information, but also educational sources. The mass media ought to be a transmission belt between the experts and the public, especially in crisis situations. Special attention in discussion was paid to the influence of disasters in nuclear power plants like Chernobyl and Fukushima accidents and the safety issues in future NPPs.

The meeting resulted in many interesting observations and statements; the discussion was lively interesting and inspiring. The pilot action was an opportunity to exchange opinions on the state of public education, the state of knowledge about ionizing radiation and implemented Program of Polish Nuclear Energy. It revealed gaps in education, information deficiencies and showed good practices. Final conclusions were written and distributed to the participants.

The main findings of the meeting were as follows:

- The media are not interested in daily communication; their interest is raised solely in crisis situations. Issues related to nuclear power do not appear every day, as they have no direct impact on our everyday life;
- There are no authors specializing in ionizing radiation among journalists;
- Still only great disasters (Chernobyl, Fukushima) are the reason for raising questions about the safety and the validity of the construction of new nuclear power plants;

- Most articles are information and educational materials - there is very little public interest journalism;
- Periodicals must be cheap, therefore articles are published without any comments, and often the information is simply taken from other media. There seems to be no need for commentators; it is the common opinion that it is not necessary to explain anything to the public;
- There are very few supporters of Nuclear Power among the journalists dealing with ecology and environment. The role and mission of a journalist should be the reconciliation of both opponents and supporters of nuclear power.
- However, there is no platform where the opinions of the other side could be presented, knowledge could be extended with the facts from other sources or comments of the authors;
- The media believe that the experts should be more active in reaching out to mass media and initiate contacts with the media themselves;
- Quicker developments under the Polish Nuclear Power Program could contribute to occurrence of subjects related to nuclear power in the mainstream media;
- The lack of reliability of the provided information was pointed out, along with the bias in the articles and lack of sufficient knowledge and sensitivity among some journalists. Publications presented in specialist journals are reliable; other articles not so much.
- Selection of guests or interviewees is of vital importance. The statements of renowned nuclear power experts are often treated equally seriously as those of environmental activists lacking specialist knowledge.
- There is insufficient financing for the production of attractive radio and TV programs that might compete with other productions;
- In order to increase the level of media publications, more training should be organized for journalists, together with their participation in specialist conferences and study visits.
- The level of knowledge about the use of ionizing radiation and the hazards related thereto may be raised by the publication of brochures or books written by good journalists, and their distribution in schools among teachers and residents of future localities of the nuclear power plant, free of charge.

3. Recommendations and suggestions

The implementation of the Program of Polish Nuclear Energy creates very big challenge for the whole country and Polish society. It requires commitment of all groups of stakeholders and organized well-structured actions from implementer, investor and information sources. They should closely cooperate since the goal is common.

The cooperation and permanent contacts between media and experts should exist. More debates, more presentations of different points of view will result in consolidation of opinions and views of the public. The counterparts presenting views in debates should be carefully chosen. This will built trust and credibility of mass media.

The state of existing knowledge about ionizing radiation and nuclear energy is not sufficient in Polish society. The means of communication with the public should be broaden and improved.

The production of attractive radio and TV programs that might compete with other productions is very important.

More educational actions and trainings towards media could result in formation of the group of journalists who would be able to meet challenges of the new tasks related to the implementation of modern technology in the country and properly inform the public.

4. Minutes of the meeting held at the Institute of Nuclear Chemistry and Technology on June 2, 2015.

Mass media and the information regarding the implementation of the Polish Nuclear Power Program - Pilot exercises

Institute of Nuclear Chemistry and Technology

Warszawa, ul. Dorodna 16

June 2, 2015

Participants: representatives of information sources and the media

The meeting was opened by *Grażyna Zakrzewska-Koźtuniewicz* from the Institute of Nuclear Chemistry and Technology, Coordinator of the EAGLE program. She welcomed the guests: representatives of the media as well as the stakeholders representing information sources. The meeting was attended by representatives of the media:

- Dorota Truszczak - journalist of the First Program of the Polish Radio, head of the "Knowledge and Education" division, interested in the widely construed nuclear power issues for many years;
- Wiktor Niedzicki- journalist cooperating for many years with the Polish Radio and Polish Television; author of many popular science programs;
- Jacek Zyśk - editor in chief of magazines associated with environmental protection: "Środowisko" ["Environment"], "Odpady i środowisko" ["Waste and Environment"] and "Prawo i Środowisko" ["Law and Environment"].
- Stanisław Latek - editor in chief of "Postępy Techniki Jądrowej" ["Progress in Nuclear Technology"], journalist, previously a longtime employee and spokesman of the National Atomic Energy Agency;
- Paweł Żbikowski - representative of the electronic media, Internet portal "nuclear.pl", popularizing nuclear technology for several years now;

- Krzysztof Rzymkowski - editor of an online periodical "Ekoatom", Secretary General of the "Stowarzyszenie Ekologów na Rzecz Energii Nuklearnej – Polska" ["Association of Environmentalists for Nuclear Power - Poland"] (SEREN), whose goal is to objectively inform the general public about nuclear power and its impact on human health and the environment;
- Marek Bielski - editor-in-chief of the "Urządzenia dla energetyki" ["Equipment for power industry"], the initiator of such periodicals as "ProAtom", editor of "Przegląd Techniczny" ["Technical Digest"] and "Przegląd Energetyczny" ["Power Digest"].

After the presentation of the journalists *Grażyna Zakrzewska-Kołodziej* presented the objectives and assumptions of the EAGLE project as well as the activities which have been executed last year, from the time of the last meeting which took place on June 9, 2014.

The EAGLE project assumes a dialog between: information sources (e.g. institutions, such as the National Center for Nuclear Research, National Atomic Energy Agency, Institute of Nuclear Chemistry and Technology, Radioactive Waste Management Plant) and the media, which contact the sources and present the information to the public. It is carried out by 10 partners from different countries and it is coordinated by the SCK-CEN Institute from Belgium.

Grażyna Zakrzewska-Kołodziej presented the packages of activities under the project. Tasks completed last year were discussed, including:

- detailed analysis of information and training materials after the Fukushima disaster (as part of the WP1 package); a survey was conducted among the information sources regarding the culture of information;
- dialog groups were created, two meetings were organized with representatives of the media (as part of the WP2 package);
- curricula for higher schools and universities were analyzed, on the basis of surveys, analyses were conducted of the mental perception models of the risk of ionizing radiation (as part of the WP3 package);
- a group of stakeholders registered on the website of the Project was created (as part of the WP4 package).

Grażyna Zakrzewska-Kołodziej also informed about the upcoming RICOMET conference, which will take place on June 15-17 in Slovenia. The conference will include 60 presentations and will be attended by ca. 100 participants, including 5 participants from Poland.



The meeting at Institute of Nuclear Chemistry and Technology: presentation of the project results and discussion

Due to the high level of interest in the progress of the Polish Nuclear Power Program, the organizers invited *Zbigniew Kubacki* as a speaker - Nuclear Power Department Director in the Ministry of Economy. He presented the Polish Nuclear Power Program, which is a part of the "road map" for the development of power industry in Poland. He also presented the scope of the program, its legal environment and economic justification for the introduction of nuclear power to the "Power mix" of the country. The Polish Nuclear Power Program was widely

discussed: it was subject to social and cross-border consultations. At the beginning of 2014 it was adopted by the Council of Ministers. *Zbigniew Kubacki* also presented the activities accompanying the implementation of the nuclear program, e.g. preparation of the National Plan for the Management of Radioactive Waste and Spent Nuclear Fuel and the Human Resources Development Plan, works on elaboration of the model of financing the construction of the nuclear power plant, as well as the analysis of the Polish industry's involvement in the construction of the nuclear power plant. The presentation raised great interest; there were many questions concerning the program itself, as well as information and educational policy of the Ministry regarding the program.



The meeting at Institute of Nuclear Chemistry and Technology; presentation of the status of Program of Polish Nuclear Energy

The next point of the meeting involved *Sylwester Sommer's* presentation from the Institute of Nuclear Chemistry and Technology entitled "Evaluation of press articles concerning ionizing radiation published in 2014-2015 in Poland", which constituted an introduction to the discussion on the information on nuclear radiation operation, addressed to the general public. The presentation paid special attention to publications relating to the Polish Nuclear Power Program. First, *Sylwester Sommer* provided its own breakdown of information sources into: specialist press, popular science press, ecological periodicals, newspapers and magazines and

Internet portals. *Dorota Truszczak*, journalist from the Polish Radio, pointed out that this breakdown lacks radio and television, which are the media that are most generally received. *Sylwester Sommer* explained that the ionizing radiation publications he selected were analyzed in terms of frequency of their appearance and their reliability. The conclusions of the analysis are as follows: articles on the topic of radiation were sufficiently frequent; they presented quite reliable information and spoke positively about the atom and nuclear technology applications. The speaker also noted that there are no specialized authors of articles.

After this short introduction, a discussion was held about the presented materials, which the participants of the meeting received earlier. Representatives of the media were asked to give their opinion on the analyzed mass media reports. *Dorota Truszczak* took the stage first and pointed out that the articles relating to nuclear energy or ionizing radiation stand out only in crisis situations or in the event of disasters. As regards the reliability and accuracy of the information - only printed specialist magazines and periodicals may be trusted. The subject of nuclear power is not present in people's every-day lives, such topics as RES are more visible, since they have direct impact on our everyday lives (heat pumps, solar panels installed in private homes, etc.). People do not see the benefits of nuclear power. Moreover, the memory of Chernobyl is still alive in people's memory (more than Fukushima, which is very far from Poland and its consequences have not affected our country). Mainstream media do not touch upon this issue and if it is in fact present, it is only in the form of questions like "When will the first nuclear power plant be built in Poland?". *Dorota Truszczak* pointed out that the increase in the number of reports about nuclear power plants in electronic media may contribute to filling information gaps in traditional media. The experts or other information sources should also be more open - for example journalists should be invited to conferences, the information regarding different events related to nuclear power should be more actively and more frequently presented to the media. Actions of the Ministry of Economy are also vital - faster pace of activities within the framework of the Polish Nuclear Power Program. This could contribute to the greater presence of subjects related to nuclear energy in the mainstream media.

Krzysztof Rzymkowski pointed out that the lack of a social discussion on the ionizing radiation and nuclear power in the media is mainly related to the lack of funds intended for this purpose. He provided an example of his own periodical, which from the onset is facing financial

problems. There is a low interest in the information provided by means of specialist media among the institutions responsible for the nuclear power program.

Jacek Zyśk joined the discussion stating that most journalists dealing with the environmental protection oppose nuclear power plants. Currently emotions around the nuclear power plant have fallen; some environmentalists believe that the decision has been made and nothing can be done while others think that the nuclear power plant will not be built as the government will not find the funds to support the investment and no commercial company would be able to finance such an investment on its own. A review of the press releases indicates that information and educational materials prevail, but there is very little journalism. The role and mission of a journalist should be the reconciliation of both opponents and supporters of nuclear power. The selection of guests or interviewees is also of vital importance. Arguments against the nuclear power sector presented in discussions include e.g. enormous initial costs, unresolved problem of highly active waste, power plant safety and the doubt in the possibility to solve problems relating to the increase of demand for electricity, as the percentage share of nuclear power in the "power mix" is minimal. The arguments for nuclear energy include i.a.: activation of regions, reaching out to the climate policy. The journalist noted that the experts should be more active and should step forward with the initiative to make a presence in the media.

Another journalist who joined the discussion was *Paweł Żbikowski* who stated that quite often sector-oriented sites reaching a wide circle of recipients give information without verifying their reliability, while specialist articles are directed to small groups of recipients.

Stanisław Latek presented comments on the reports published in mass media - comments were prepared by *Wiktoria Niedzicka* who was absent during this part of the meeting. He believes that these reports usually constitute a summary or a quote of an official presentation, where there is no place for presenting the other side of the story, for providing information from other sources or comments of the authors. Another issue that *Wiktoria Niedzicka* pointed out is the bias in the articles and equal treatment of experts and environmental activists (often the opinion of an outstanding expert is presented against the opinion of a young and inexperienced "ecological activist" who lacks adequate knowledge in this regard). According to the journalist, social organization acting for the benefit of the nuclear power sector should include a unit which would immediately detect journalistic dishonesty and loudly protest against it in the media. The next comment by *Wiktoria Niedzicka* referred to the lack of reliable explanation of the causes and

effects of the failure in Chernobyl or in Fukushima (generally journalists publish unproven legends). The journalist noted that the articles rarely mention ionizing radiation; the topic is generally absent from every-day journalism. He believes that the problem should be mentioned from time to time, as so many people are afraid of the "mythical radiation". However, for this purpose, it is necessary to organize trainings for journalists, study visits to other countries, scholarships for the best journalists to write reliable articles. Wiktor Niedzicki proposed the publication of brochures or books written by good journalists and promotion of such publications in schools by distributing them to teachers and residents of potential future nuclear power plant locations, free of charge.

Grażyna Zakrzewska-Kołodziej asked the journalists to explain the poor choices in the selection of persons to take part in discussions regarding nuclear power: e.g. confrontation of a young, inexperienced ecologist with a renowned expert. In reply, *Dorota Truszczak* expressed the opinion that the reasons include insufficient knowledge and lack of sensitivity on the part of journalists. She believes that the authors of such texts or programs are not really interested what message actually reaches the audience and what the meaning of that message will be.

Stanisław Latek made a presentation where he analyzed several articles, among others from such periodicals as "Środowisko" ["The Environment"] ("The Atom is falling apart"), or from online portals such as Onet.pl ("Belarus is building a nuclear power plant. 20% of the works already complete. ") , wysokienapiecie.pl ("Atom: safe or not? Question about the nuclear power plant in Poland") and many other. When analyzing the titles and completeness of information, the presence of the graphic elements, he stated that an attractive, controversial title does not always reflect the contents of the article and the facts of the case. Short and concise form of those texts makes completeness impossible. Pictures and other graphic elements are most often incorrectly selected.

Marek Bielski joined the discussion by expressing an opinion that we glorify true experts and underestimate the readers, particularly the young ones. The journalist pointed out the cognitive dissonance, which is formed when the experts are presented opposed to environmentalists and each side presents the arguments at a different level of culture. *Marek Bielski* noted that there is a need to change the perception of readership statistics, as one copy of a technical, specialized periodical is usually read by several people, so the readership statistics of such articles is not as low as supposed.

Then, *Grażyna Zakrzewska-Kottuniewicz* invited the other participants of the meeting to speak. The participants of the discussion included among others *Wojciech Głuszewski* from the Polish Nuclear Society (PTN) and *Bogumiła Mysłek-Laurikainen* from the National Center for Nuclear Research, *Klaudia Imach* from the Nuclear Power Department in the Ministry of Economy. The representative of the Ministry of Economy pointed out that the Ministry always reacts to the false information on the nuclear power.

Jacek Michalik from the Institute of Nuclear Chemistry and Technology joined the discussion asking about public interest journalism concerning the energy security in Poland. *Jacek Michalik* gave the example of the British, who renewed their nuclear power sector, accepted the French reactor, and found a way to finance a nuclear power plant. In Poland, however, in spite of a decision on the construction of the power plant, there is no further action in this direction. After this statement a hot debate started regarding the adoption of the Polish Nuclear Power Program and the decision on the construction of the nuclear power plant. According to *Jacek Zyśka*, public interest journalism is an almost extinct form of journalism. He was supported by *Wiktoria Niedzicki* who noticed that the periodicals must be cheap, therefore, the articles are printed without any comment, sometimes being simply information transcribed from other media. *Wiktoria Niedzicki* pointed out to the huge role that commentators used to have on the radio and in television. They explained the causes of a given event and its implications for people. Currently, there is no need for commentators - it is generally believed that it is not necessary to explain anything to people. According to the journalist smarter programs are superfluous, because apparently people are bored by such programs. *Dorota Truszczak* joined in noting that the managers of the media are usually graduates of humanities subjects who are currently not interested in diversification of their topics, are not open to social needs and the decisions on the type of submitted information in a given magazine, newspaper or portal, etc. is made arbitrarily by the editors.

Wiktoria Niedzicki pointed out that the large commercial groups which want to draw the attention of the media to specific topics organize conferences, scholarships, study visits for journalists. *Dorota Truszczak* reminded the participants of scientific programs which are broadcast on TV and which popularize knowledge in very interesting way. She pointed out, however, that such a short program is usually backed a large institution which sponsors it.

The discussion was joined by *Klaudia Imach* who informed about the planned workshops for journalists, which shall be carried out by the Ministry of Economy within the framework of communication improvement. The workshops will be executed without enormous costs to be incurred and their content was determined with the participation of the journalists who proposed the subjects they are most interested in.

The second part of the meeting was opened by the presentation of *Wiktor Niedzicki* entitled "My encounters with the atom". In his presentation, the journalist listed his educational programs, among others in the National Radioactive Waste Landfill in Rózan, prepared after the Chernobyl failure, in the Loviisa nuclear power plant and in the Institute of Atomic Energy in Świerk (inside the reactor). The journalist said that if the proposal is interesting, people gladly take part and will be eager to come and see nuclear facilities. *Wiktor Niedzicki* is of the opinion that we should gradually introduce people to ionizing radiation. It is worth showing that the solutions, inventions developed by the scientists have practical applications, useful for humans. It must be done in an accessible or sometimes even playful manner.

He was seconded by *Marek Bielski* who added that approximately 70% of the information on the technology is not understood by the recipients, which means that any funds spent for that purpose are used inefficiently. What we need is a true, understandable popularization of science, but it requires will and good preparation of the authors, along with financial means.

Kinga Frąckiewicz (the "Small laboratory") , a teacher, joined the discussion noting that the children in preschools and primary schools are open and interested recipients of information, who gladly take part in games related to radiation and its effects. Adults are less open to receive information on this subject, as they do remember the failure in the Chernobyl.

In the further part of the meeting the scope of participation of Polish representatives in the RICOMET conference was discussed. It included a discussion of the two topics:

- Trust - verification of information sources; the development of the risk culture;
- Nuclear industry promotion and citizen-focused risk communication;

After the presentation by *Grażyna Zakrzewska-Kołodziej* there was a discussion on providing the information about the risk associated with widely conceived nuclear power to the general public. It was pointed out that in everyday situations we are constantly exposed to some risk. It was noticed that the notion of risk is used only because the society is interested in such risks

and it is a social need that must be satisfied. *Wiktor Niedzicki* expressed an opinion that sometimes experts unnecessarily refer to the risks, and their existence and volume is unnecessarily exaggerated. *Paweł Żbikowski* stated that when we talk about nuclear power we unnecessary focus on protections and failures.

Katarzyna Iwińska, sociologist from Collegium Civitas also presented an opinion during the discussion stating that the supporters of nuclear power plants are usually the highly educated managers and this is not the actual reflection of the whole Polish society, rather a sort of an "intellectual ghetto". The experts must reach out to the general public and those who are exposed to information chaos. Nuclear power must be presented in a positive light, but issue of risk cannot be omitted. The notion of "risk society" has often been used lately, which results from the excess of information, both positive and negative - however people usually tend to only remember the crisis situations. *Katarzyna Iwińska* believes that the specialists and journalists could try to provide information on the ionizing radiation in a positive way, but the knowledge should be presented in a more attractive way.

Dorota Chandavoine from PGE-EJ1 joined the discussion, pointing to those things which the people who live in the vicinity of the location of the nuclear power plant fear most. These persons are not scared of the risks related to failures, ionizing radiation or radiation impact on the environment - they are rather afraid of changes in their vicinity and things that await them in connection with the construction of the Power Plant (will I lose my plot? my pension house? will I have enough money to go by?).

Dorota Chandavoine hosted a presentation entitled "Pandora's Promise - another way to shape opinions about Nuclear Power", which was an analysis of a documentary film constituting the impulse for the discussion on the impact of nuclear power on the environment. The film was directed by Robert Stone, in the past a well-known opponent of nuclear energy, who changed his views and is currently one of its hottest supporters. *Dorota Chandavoine* presented the main elements of film to the participants and also informed about the screenings planned in various Polish cities, also in potential locations of the nuclear power plant, as well as with the planned screenings in the Polish Television.



The meeting at Institute of Nuclear Chemistry and Technology: mental models of ionizing radiation – Eagle tasks.

The meeting was closed by the presentation delivered by Wojciech Głuszewski from *Polish Nuclear Society (PTN)*, entitled "Irradiated or radioactive - or how to write diligently on nuclear power topics" with a subtitle: "Is the ionizing radiation contagious?" The presentation aimed to show examples of misunderstandings related to the use of ionizing radiation and the threats relating thereto, often resulting from the lack of knowledge, also among journalists writing about radiation. Misconception of the phenomena related to the impact of radiation, incorrect information, often unconsciously repeated many times, lead to an informational chaos and misleading risk assessments. Journalists most often draw their knowledge from other reports published in mass media, often incorrectly translating the texts or duplicating errors. Cooperation among the media and information sources - renowned experts - may be one of the ways to avoid this.

The meeting was summed up by *Grażyna Zakrzewska-Kottuniewicz*. She thanked the participants for their input into the discussion and mentioned that detailed information about the EAGLE project may be found on the project website (<http://eagle.sckcen.be>).

PROGRAM OF THE MEETING

- 10.15:10.30 Presentation of participants
EAGLE project: goals, performed activities and results
Grażyna Zakrzewska, coordinator of activities under the EAGLE project, Institute of Nuclear Chemistry and Technology
- 10.30:10.50 Polish Nuclear Power Program; informational and educational tasks -
Zbigniew Kubacki, Director of the Nuclear Power Department in the Ministry of Economy
- 10.50:11.50 Evaluation of articles concerning ionizing radiation published in 2014-2015 in Poland
Introduction - Sylwester Sommer, Institute of Nuclear Chemistry and Technology, Center for Radiobiology and Biological Dosimetry
Journalists' opinions
Discussion
- 11.50:12.40 Presentation of journalists' experience and examples of their own stories regarding nuclear energy or ionizing radiation - moderator:
Stanisław Latek, Nuclear Power Progress, Institute of Nuclear Chemistry and Technology
Journalists will be asked to present their experiences and most interesting situation in their experience with informing about the ionizing radiation, nuclear power sector, etc.
- 12.40-13.30 Lunch break
- 13.30:14.30 Usefulness of materials provided to journalists by information sources - preparation for a panel at the RICOMET conference -
moderator: Grażyna Zakrzewska
- Trust - verification of information sources; development of

risk culture

- Language and form of the message
- Nuclear industry promotion and citizen-focused risk communication

14.30: 15.00 Pandora's Promise - another way to shape opinions about Nuclear Power -

Dorota Chandavoine, PGE-EJ1

Discussion

15.00:15.15 Irradiated or radioactive - how to write diligently on nuclear power topics - *Wojciech Głuszewski, Polish Nuclear Society (PTN), Institute of Nuclear Chemistry and Technology*

15.15:15.30 Summary; closure of the meeting

LIST OF PARTICIPANTS

Lp.	Name	Affiliation
1	Abramowska Anna	Institute of Nuclear Chemistry and Technology
2	Bielski Marek	Journalist, „Urządzenia dla energetyki" ("Devices for power"), "Przegląd Techniczny" ("Technological Review")
3	Bogusz Małgorzata	National Centre for Nuclear Research
4	Burakowska Agnieszka	National Centre for Nuclear Research
5	Chandavoine Dorota	PGE-EJ1
6	Ciupiek Krzysztof	Central Laboratory for Radiological Protection
7	Frąckiewicz Kinga	"Małe Laboratorium" (Little Laboratory) http://malelaboratorium.pl/
8	Gajda Dorota	Institute of Nuclear Chemistry and Technology
9	Głuszewski Wojciech	Institute of Nuclear Chemistry and Technology, Polish Nuclear Society
10	Imach Klaudia	Ministry of Economy, Department of Nuclear Energy
11	Iwińska Katarzyna	Collegium Civitas
12	Kiegiel Katarzyna	Institute of Nuclear Chemistry and Technology
13	Kubacki Zbigniew	Ministry of Economy, Department of Nuclear Energy
14	Latek Stanisław	Institute of Nuclear Chemistry and Technology, journal: "Postępy Techniki Jądrowej" (Progress of Nuclear Technology)
15	Miśkiewicz Agnieszka	Institute of Nuclear Chemistry and Technology
16	Mysiek-Laurikainen Bogumiła	National Centre for Nuclear Research
17	Niedzicki Wiktor	Journalist, freelancer
18	Olszewska Wioleta	Institute of Nuclear Chemistry and Technology
19	Pacyniak Iwona	Central Laboratory for Radiological Protection
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21	Pytlarczyk Paweł	Ministry of Economy, Department of Nuclear Energy
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24	Sieczkowski Marek	National Centre for Nuclear Research
25	Sommer Sylwester	Institute of Nuclear Chemistry and Technology

26	Szołucha Monika	(Environmentalists for Nuclear Energy – EFN)
27	Szycko Paulina	National Atomic Energy Agency
28	Truszczak Dorota	Polish Radio, I Program
29	Zakrzewska-Końtuniewicz Grażyna	Institute of Nuclear Chemistry and Technology, Polish Nuclear Society
30	Zyśk Jacek	Journalist, journals: "Środowisko" (Environment), "Odpady i środowisko" (Waste and Environment), "Prawo i środowisko" (Law and Environment)
31	Żbikowski Paweł	Internet portal "nuclear.pl"
32	Kuciel Grzegorz	Radioactive Waste Management Plant
33	Celiński Łukasz	Radioactive Waste Management Plant
34	Jacek Michałik	Institute of Nuclear Chemistry and Technology