



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

Grant agreement no: 604521

Coordination project

DELIVERABLE (D4.4)

Reports/ proceedings from the conferences and workshops

Authors: Blanka Koron, Nadja Železnik, Tanja Perko

Date of issue of this report: 08/08/2016

Responsible partner: REC (PP9)

Project co-funded by the European Commission under the Seventh Euratom Framework Programme for Nuclear Research & Training Activities

Dissemination Level: PU - Public

Start date of project: 12/08/2013

Duration: 36 months

DISTRIBUTION LIST

Name	Number of copies	Comments
EC Project Officer	1	Electronically
Co-ordinator (WP-1), SCK•CEN Tanja Perko	1	Electronically (pdf file)
Work package leaders: WP-1: Metka Kralj, ARAO WP-2: Claire Mays, SYMLOG WP-3: Daniela Diaconu, INR WP-4: Nadja Železnik, REC	1 per member	Electronically (pdf file)
Stakeholder Representatives Group	1 per member	Electronically (pdf file)
All project partners	1 per person	Electronically (pdf file)
EAGLE Advisory Board members	1 per member	Electronically (pdf file)
Web-site: http://eagle.sckcen.be		

Project Context

<http://eagle.sckcen.be>

In Europe today, institutions, media and the general public exchange information about ionising radiation (IR) and associated risks. The 2011 Fukushima accident has demonstrated the need for further improving this communication. EAGLE is a coordination project under FP7-EURATOM that aims at clarifying information and communication strategies to support informed societal decision-making.

Education, training and information to the public are key factors in the governance of ionising radiation risks, as are opportunities for dialogue and stakeholder involvement in decision making. EAGLE assesses the current dissemination of ionising radiation information to the public and provides practical guidance tools for best practice to support the ideal of a participative, citizen-centred communication. A network of stakeholders reviews national and international data, tools and methods as well as institutional work in order to identify education, information and communication needs and coordination possibilities at the European level.

To achieve these objectives, EAGLE brings together representatives of nuclear actors, users of ionizing radiation, authorities, mass and social media, and informed civil society, from a range of European countries employing nuclear power or not. The following work packages will be carried out in the three-year project:

- WP1 seeks to improve education, training and information (ETI) material employed in communication about ionising radiation by information sources (industry, experts, authorities, medical field) across EU member states. Tools will be assessed through interviews with heads of nuclear institutions along with protocols and questionnaires given through Euratom national contact points. Upgraded ETI material, activities, and communication strategies will be proposed as a coordinated European approach for practical implementation.
- WP2 engages members of information source institutions and practitioners/representatives of the social and traditional media in a series of national and international virtual dialogues (face-to-face and virtual). These dialogues will consider information transfer and media handling, as well as the context of institutional, media and citizen discussion of ionising radiation and associated risks. The dialogue groups will review existing aids and produce practical guidance tools to improve communication for more informed decision-making.
- WP3 analyses education, training and information (ETI) from the point of view of the final recipients of information – EU citizens. Existing desk research for all EU Member states are analysed along with polls, interviews and the outcome of workshops conducted in select countries. The ‘mental model’ approach will be employed to investigate potential differences between professionals and the public regarding social and cognitive representations of ionizing radiation risks, and identify means to better support informed public decision-making related to this topic.
- WP4 Stakeholder participants have the opportunity to comment and provide feedback on project products through two virtual workshops. Additionally, three pilot actions are implemented in three countries to test, evaluate and upgrade communications products.

Information and results are disseminated among stakeholders and the public on an ongoing basis. Sharing of results and communication are facilitated through the web site, social media tools and the “EAGLE Stakeholder Platform.” EAGLE electronically publishes its recommendations for improving the education, training and communication processes related to ionising radiation. EAGLE holds a final International Stakeholder Conference with members of academia, operators’ regulators, authorities, medical sector, health organizations, consumers, different associations, traditional media, new media, emergency management and the public to exchange experience, methods, and tools developed throughout the project. The event publicizes project results and gathers feedback from stakeholders on employing these tools to better support European citizens’ understanding of ionising radiation.

EAGLE has also a Stakeholder Representatives Group (SRG) and a Stakeholder Advisory Board (SAB). The SRG is a consultation body of representatives from information sources, channels, and receivers from across project countries. The SRG was launched at the first conference “Let’s Communicate about Ionising Radiation” held in Paris, France on 26 November 2013. Subsequently, through virtual workshops and other means the SRG will reflect on the project working documents and results, and provide feedback regarding their relevance and usefulness in practice. The SRG also comment on the communication approach, on the envisaged project objectives and their impact on all stakeholder groups as well as on the dissemination of results. The EAGLE Stakeholder Advisory Board is formed of a range of stakeholders and will help to ensure that the project’s approach is tailored to the diversity of stakeholders involved in communication processes.

The composition of the EAGLE grant consortium is as follows:

Coordinator: SCK-CEN - Studiecentrum Voor Kernenergie

Partner 2: ARAO - Agencija za Radioaktivne Otpadke

Partner 3: IRSN - Institut de Radioprotection et de Sûreté Nucleaire

Partner 4: Regia Autonoma pentru Activitati Nucleare Drobeta tr. Severin ra Sucursala Cercetari Nucleare Pitesti - INR

Partner 5: Institut Symlog

Partner 6: Institut Jozef Stefan

Partner 7: Instytut Chemii i Techniki Jadrowej

Partner 8: Universitatea Politehnica din Bucuresti

Partner 9: Regional Environmental Center for Central and Eastern Europe – REC

Partner 10: Jaroslav Valuch

Contact information

Email: eagle_secretariat@rec-lj.si

Web: <http://eagle.sckcen.be/en>

EAGLE project coordination:

Tanja Perko, Ph.D

Belgian Nuclear Research Centre SCK·CEN

Boeretang 200, B-2400 Mol, Belgium

Phone: +32 14 33 28 51

E-mail: tperko@sckcen.be

Web: www.sckcen.be/

Table of content

Project Context.....	3
Table of content	5
List of Acronyms	5
1. Introduction.....	6
2. Events reports/proceeding	7
Initial project Conference.....	7
Two stakeholder workshops	10
1 st stakeholder virtual workshop.....	11
a. The program and arrangements	11
b. Virtual workshop concept and lessons learned	13
2 nd stakeholder workshop as 1 st International conference – RICOMET 2015	14
a. The arrangements for the conference	14
b. The Conference programme implementation	15
Final project conference as 2 nd international conference - RICOMET 2016.....	18
a. The arrangements for the conference	18
b. The Conference programme implementation	19
3. Conclusions & Recommendations.....	23

List of Acronyms

AB – Advisory Board

EAGLE – Enhancing education, training, communication processes for informed behaviours and decision making related ionizing radiation risk

ETI – Education, Training, Information

IR – ionising radiation

SSH – Social Sciences and Humanities

SRA – Strategic Research Agenda

1. Introduction

According to the Description of work (DoW) within EAGLE project work package 4 was foreseen following events related to dissemination and stakeholder engagements process:

- Initial project conference
- 1st virtual stakeholder workshop
- 2nd virtual stakeholder workshop
- Final project conference

Throughout the project implementation and lessons learned gained some modifications were applied to the events in order to better address the set goals. After the 1st virtual stakeholder workshop the new approach was taken for second workshop, due to technical problems faced at the 1st one. The 2nd virtual stakeholder workshop was then organised as first International conference RICOMET 2015, which came out as a great success. Nevertheless, that its organisation required more work as it was budgeted, the conference outcomes were significant and the idea to continue in this way was also used for final project conference, organised as 2nd international conference RICOMET 2016. In line with project idea to cooperate also with other EU projects, EAGLE managed to attract 4 other EU projects in organisation of RICOMET conferences. Role of stakeholders and their engagement grown from events to events. We managed to attract over 300 stakeholders at our events.

In this document you can read how events were planned and implemented. More content information related to each event can be found in following deliverables available at EAGLE website:

- Initial project conference: 'Let's communicate about IR' – [Deliverable 4.10](#)
- 1st virtual stakeholder workshop – [Deliverable 4.12](#)
- 1st international conference RICOMET 2015 – [Deliverable 4.12](#)
- 2nd international conference RICOMET 2016 – [Deliverable 4.11](#)

2. Events reports/proceeding

Initial project Conference

According to the Description of work (DoW) of EAGLE project the initial project conference was planned to be organized in the beginning of the project with aims to publicly launch the EAGLE project and to present it to the stakeholders, to obtain the key topics, challenges and needs of the public related to ionizing radiation and to establish networks of participants to be involved in the project's activities.

Based on the discussions from the EAGLE kick-off meeting in Slovenia in August 2013 it was decided to organise the conference in Paris at IRSN premises in order to really provide opportunities for as many stakeholders as possible to attend the conference and increase the visibility of IRSN activities on education, training and communication.

The initial project was organised in such a way that, apart from project partners, it would attract a number of relevant stakeholders. Relevant stakeholders in general sense are all actors in EAGLE project who are, or could be affected by the project, or can themselves influence the project, or just have an interest in participating in it. In EAGLE project the stakeholders are very broad: members of information sources, channels and receivers, which in fact include whole societies. For that reason, different stakeholders from all project countries were invited to the event, including representatives from information sources (like nuclear industry, national radioactive waste management organisation, regulatory bodies, and medical implementers), media and civil society.

The EAGLE initial conference entitled **“Let's Communicate about Ionizing Radiation”** was scheduled for 26th of November 2013. The conference program and organising team composed of Ms Tanja Perko (SCK.CEN, the EAGLE co-ordinator); Ms Milena Marega, Ms Blanka Koron and Ms Nadja Železnik (REC CO Slovenia, WP 4 leader), relying also on the input of other EAGLE partners prepared the conference program with a logical structure to address the aims of the conference:

- to launch / present the EAGLE project, and to discuss its aims, envisaged results and impact with our stakeholders;
- on the other hand, to identify and dialogue with the stakeholders the key challenges related to communication on ionising radiation, that are dealt with in the project, and which are being faced with by all of us in our daily professional work;
- last but not least, to attract the stakeholders' interest, and to engage stakeholders in the continuous dialogue during project activities, and also in future use of project results.

Therefore the conference program (see appendix 2 in deliverable 4.10) was divided in 4 parts: first it was aimed to introduce the EAGLE project with emphasis on the stakeholders role in it; than the positions and challenges related to ionizing radiation communication of

different groups as recognised in EAGLE project were to be provided, by addressing the entire process of information transfer, interaction and exchange from sources of information (authorities, experts, NGOs, institutes, users of radiation in medical sector ...), information channels (mass and social network media) and receivers (EU citizens, usually referred as general public). By using moderated discussions within this the three groups of stakeholders challenges, key issues and existing needs were to be obtained than reported to all participants of the conference; and finally the open discussion on the new recognitions and their impacts on the project development and implementation were to be assembled in order to properly orient the further coordination of the project. The conference was to be concluded with some main emphases given by the conference participants' followed by short summary of future research and activities for stakeholders.

In the conference program very active role was given to advisory board (AB) members (composed of 5 members and representing different groups as in EAGLE project – FORATOM, OECD/NEA, EUTERP, ANCCLI, Friends of the Earth Europe) and to other stakeholders from media and general public to present the views on key challenges related to communication on ionizing radiation especially after the Fukushima context. The project leaders of EAGLE work packages 1 (information sources), 2 (media) and 3 (citizens) were responsible to facilitate parallel discussion with interested participants to obtain opinions, comments and proposals regarding leading questions. The project partners were involved in the general discussion on future issues which need to be addressed within the project.

To assure wider representation of participants, especially from media and general public, but also from some countries which are not consortium members, some funds were allocated to invite individuals. Each of the country in consortium (Belgium, Poland, France, Slovenia and Romania) was asked to invite 3 national stakeholders to participate and contribute to the discussions, possibly with proactive attitude in topics related to ionizing radiation (1 from information sources, 1 from media (classical or social media) and 1 from general public) in order to make the event very interesting. Additionally, the funds were also available for participants from EU countries which were not part of the consortium and could contribute significantly to the conference. The invitation for the conference (see appendix 1 in deliverable 4.10) was sent via e-mail to project partners with the request to spread information to their networks, to the AB members, to end users which signed the EAGLE letter of intent (31 associations, institutions or individuals), the invitation was posted on EAGLE web page and on local partners' web pages.

The initial conference attended 51 participants, 24 coming from sources of information, 17 representing general public and 10 coming from media sector. As expected the maximum number of participant were coming from France where was the location of the event.

Through the conference related communication, the interested public was broadly informed about all aspects of the project. The project partners gained the stakeholders' initial feedback related to substantial questions and issues that are dealt with in the project. Contacts and working relations were established with many stakeholders and also with other relevant EU project partners, and with EC experts. The EAGLE stakeholder network was launched as well as the foundation for the Platform for Communication on Ionizing Radiation.

The conference outputs have been used by EAGLE partners to identify new approaches in education and useful training and information instruments, as well as to foster dialogues among different stakeholder categories to examine needs and solutions aiming to bridge the gap in the public understanding of these topics (which is the main aim of EAGLE project).

Apart to that the conference discussions brought to a better common understanding of communication on IR among project partners and key stakeholders, with established new connections related to project partners' professional work, and with several mutual recognitions within participants (e.g. the need for adjusted information material for the specific target groups, or even individually oriented information, and use of different communication channels, providing the information on scientific origin of ionizing radiation as natural phenomena which is used in human life, building of trust between information sources and public by providing true and complete information so they would be able to decide, establishing pro-active and continuous relationships with journalists to transfer the relevant information, by using more media trained information sources).

These recognitions are especially relevant for EAGLE project partners, who will integrate and consider them as an input for the project work. But we believe that the conference was useful not only for project partners, but also for our external colleagues – our stakeholders, who are dealing with the same professional dilemmas and challenges at their everyday professional work.

Two stakeholder workshops

In order to enable project visibility, dissemination of results and active participation of stakeholders in the project implementation, a systematic and participatory approach has been developed within EAGLE project. At national level, the different interested stakeholder groups are directly involved in work on how to improve the education, training and information (ETI) activities of information sources (Work Package – WP1), in activities to understand the media reality and concerns (WP2) and analyses of perception of the receivers of ETI (WP3). For more effective communication at the project level a Stakeholder Consultation Group (SCG) was established at the beginning of the project and is still opened to all interested participants to join. The main role of SCG is to reflect the project working documents and results, to comment and advice regarding their relevance and usefulness in practice. Its role is also to comment the communication approach, so that envisaged project objectives will be achieved, that the impact will be beneficial for all stakeholder groups, and most important – that the project results will be well exploited by key stakeholders. The SCG consist of representatives of each stakeholder group (information sources, media channels and receivers) from all project countries and also broader (other EU countries) and was established at early stage of the project. Currently there were more than 140 members of SCG, who are active participants and who confirm their interest for involvement. Besides, the EAGLE project has established a wide e-mail contact database of representatives from different institutions, informed civil societies and media representative who are regularly informed on different project activities and motivated to become members of SCG. The described communities serve as a target audience for activities within EAGLE project.

The important actions according to the Description of work (DoW) within EAGLE project are two stakeholder virtual workshops at the project level. Their description is given bellow:

“The 1st stakeholder virtual workshop:

At the stage of the finalization of the analytical part of the EAGLE project the results of critical reviews, especially the gaps, needs and relevant issues in each stakeholder group and in each partner country will be summarized, and the materials for the stakeholder workshop will be prepared. The SCG will reflect on the materials and will prepare their comments and suggestion regarding the relevance (gaps and needs) of the working documents.

The 2nd stakeholder virtual workshop:

Based on the identified gaps, needs and open critical thematic issues, the SCG will provide comments and suggestion for a common approach regarding communication, so called Communication Recommendations that will tackle the education, training and information needs in three stakeholder groups. For each stakeholder group (respectively information sources, media - transmitters and receivers) the communication objectives will be defined, and following those, the recommendations and guidelines for education, training and information activities will be developed. These Recommendations will be prepared based on the input and previous work in all WPs (WP1, WP2, WP3) in close cooperation among all project partners.

Both stakeholder virtual workshops will be implemented at international level. The SCG members will provide their opinions and suggestions related to the project actions. SCG will meet also in person - at initial and at final project conferences (international stakeholder Conference)."

The two virtual workshops were organised to fulfil the described objectives and to attract, apart from project partners, also a number of relevant stakeholders. Relevant stakeholders in general sense are all actors in EAGLE project who are (or could be) affected by the project, who can influence the project, or just have an interest in participating in it. Within the EAGLE project stakeholder groups are very broad: members of information sources, media channels and receivers, which in fact include whole societies. For that reason, different stakeholders from all project countries, and broader, from EU member states were invited to the events, including representatives from information sources (like nuclear industry, national radioactive waste management organisation, regulatory bodies, and medical implementers), media and civil society.

In this report, which presents the delivery under work package 4 on the reaching out, involving stakeholders and dissemination of project results, the summaries of the two workshops are given. It includes the program and arrangements for each of theme, the overview of the presentations and discussions upon which the recommendations are given. The results of the workshops will be used for further work of the EAGLE project as planned in the work program.

1st stakeholder virtual workshop

a. The program and arrangements

According to the partners' agreement the EAGLE 1st virtual stakeholder workshop was implemented on Wednesday, October 29th 2014 between 14:00 and 16:00 (CET). The workshop organising team was composed of Ms. Tanja Perko (SCK.CEN, the EAGLE co-ordinator), Ms. Milena Marega, Ms. Blanka Koron and Ms. Nadja Železnik (REC CO Slovenia, WP 4 leader) with the aim to address the objectives as defined from DoW. The inputs of other EAGLE partners were looked at and the logical structure of the programme was prepared in order to address the following aims of the workshop:

- to brief participants about interesting results and main recognitions from the analytical work in EAGLE project after one year of work,
- to present critical reviews, especially the gaps, needs and relevant issues in each stakeholder group and in each partner country,
- to get the reflection and feedback from SCG on the materials which were prepared and to collect their comments and suggestions regarding the relevance of identified gaps and needs within prepared materials,
- to share participants' views on how to improve the communication about ionising radiation with the general public,

- to improve the communication about ionising radiation (IR) with the general public in the future, and
- to discuss with participants, the issues and challenges that emerged, related to more efficient communication on IR.

The conference program (see appendix 1 in deliverable 4.12) was divided into 2 parts: in the first part the results were presented by project coordinator and work package leaders. Ms. Tanja Perko, SCK CEN, welcomed participants and made brief introduction about the EAGLE project achievements and themes. Ms. Nadja Železnik, REC Slovenia, (also a moderator of the workshop) presented objectives and agenda of the workshop. Ms. Metka Kralj, Agency for Radioactive Waste, Slovenia, presented possible ways for improving the education, training and communication on IR by the information sources. Ms. Claire Mays, Institute SYMLOG, France, addressed critical issues about information related to ionising radiation which is transmitted in the traditional mass media and new social media. Ms. Daniela Diaconu, Institute for Nuclear Research, Romania, presented new insights gained from the critical review of the actual situation in education, training and information for the recipients and the status of citizens' satisfaction and concerns.

After the initial presentations the second part of the moderated workshop started with discussion among workshop participants. The discussion was framed by following topics:

1. How effective is the communication lead by information sources;
2. What to do to improve the communication efforts of information sources and reach the public;
3. How can authorities learn new ways of communicating under uncertainty, especially in crises situation and form ongoing relationships with journalists;
4. How can all the traditional actors adapt to the new context of tweets, blogs, and democracy of expression;
5. How to communicate science to the public;
6. What to do to improve knowledge about ionizing radiation among population.

The invitation (see appendix 2 in deliverable 4.12) was distributed to EAGLE Stakeholder Consultation Group by e-mail (160 stakeholders at that time). They were asked to reply to invitation with confirmation e-mail in order to get the access to the on-line virtual workshop. Based on confirmation e-mails they got the on-line access and technical information how to connect to the system. For active participation at the Workshop only internet connection was needed and smart device with screen, speaker, microphone and camera.

The invitation was accepted by 44 stakeholders from 160 invited and they got login details for the EAGLE 1st on-line Stakeholder Workshop. In planned time they clicked on the provided link (to join the meeting), entered their names and provided pass-codes as guests.

All together 60 persons, stakeholders (members of SCG) and EAGLE project partners participated at the workshop. The EAGLE project partners were presented in the room at Brdo pri Kranju, having also that period an annual project meeting. The list of participants is given in the (see appendix 3 in deliverable 4.12).

b. Virtual workshop concept and lessons learned

The virtual workshop idea was planned in order to save time and reach cost efficiency. Neither travel costs nor additional time for travel were spent which is much more convenient for otherwise very busy stakeholders. The idea was to buy the professional software for virtual conference, which would enable an active role (writing, speaking, and video sharing) of all participations. Therefore, the professional licence / software Adobe Connect Meeting for 100 active participants was bought in order to have enough technical capacity. The technical support team arranged and set all technical requirements. The software enabled also video recording, so the workshop was recorded.

The project partners/ main speakers where located in one room, where also a video and voice support were set. Professional IT support team was also organized in order to set everything and tested the settings. The online log-in process of stakeholders and first part of the workshop the system worked well, the participants also wrote some questions in this phase. After presentation part, the line was open for participants. If they wanted to speak, they pressed the button (raise hand) and the moderator gave them opportunity to speak. Unfortunately, we could not hear any of the participants; therefore, the moderator asked them to communicate via written questions. The IT support team tried to find solution, but with no success.

After the workshop, the IT team made the analysis what went wrong, and also contact the software provider Adobe, and asked them for help. The final conclusions were, that in spite that we bought the licence for 100 active participants, in reality the software was never exposed to more than 30 active participants.

Based on lessons learned we decided not to have the second stakeholder workshop as virtual workshop, but to rather organise classical event (meeting in person).

Due to above explained technical problems, the participants and other SCG members where asked after the workshop to share their opinions and thoughts about the leading questions with us. The workshop discussion was prolonged for 2-weeks using electronic discussion.

The workshop was video recorded and the video is available on YouTube (<https://www.youtube.com/watch?v=Q4AQN7YunFA>).

2nd stakeholder workshop as 1st International conference – RICOMET 2015

Proceedings can be found at: <http://ricomet2015.sckcen.be>

Special Section related to RICOMET 2015 was published in the **Journal of radiological protection**, vol. 36, no. 2. 14 RICOMET scientific papers were peer-reviewed and published. Free access is guaranteed for 6 months. Visit <http://iopscience.iop.org/issue/0952-4746/36/2>.

a. The arrangements for the conference

Based on lesson learned with the virtual workshop the members of EAGLE project partners decided to rather organise a conference, and invite stakeholders to participate in person. In order to reach as much stakeholders as possible we decided to have a common event with two other topic related projects OPERRA - Open Project for the European Radiation Research Area and PREPARE - Innovative integrated tools and platforms for radiological emergency preparedness and post-accident response in Europe. The International Conference RICOMET - Risk Perception, Communication and Ethics of Exposures to Ionising Radiation, was held from 15th to 17th of June 2015 in Brdo Estate, Slovenia.

The conference was an opportunity for extensive exchange of results from the scientific research, FP7 projects related to ionizing radiation and discussions on public communication, risk perception and ethics in the field of all nuclear applications (e.g. industry, medicine, security), natural radioactivity (e.g. radon, food) and radiological protection (in nuclear and radiological emergency management, low doses, communicating uncertainty, mass media communication, public understanding of ionizing radiation, EU research needs ...).

The conference attracted different stakeholders from international level: from experts for public communication, media representatives and journalists, researchers from social sciences, humanities and natural science, radiation protection officers, practitioners from nuclear medicine, nuclear power plant operators, other nuclear industry professionals, nuclear safety authorities, project partners, but also NGOs and representatives from civil society.

The organising team was established to take care about organisational and content related activities. Main tasks were covered by Dr. Tanja Perko, Belgian Nuclear Research Centre (SCK-CEN), Belgium, Chair of the Organising Committee; Dr. Pavel Gabriel Lazaro, University Politehnica of Bucharest (UPB), Romania, Chair of the Scientific Program Committee, and Ms. Blanka Koron, Regional Environmental Centre (REC), Slovenia - Head of the Conference Secretariat.

The webpage was created (<http://ricomet2015.sckcen.be/>) in order to support organisation of the event and to cover publicity needs. The invitation to the conference was sent out to more than 2000 e-mail stakeholder addresses in early March 2015 (see appendix 5 in deliverable 4.12). The online registration was open till end of May.

More than 120 persons from all over the world attended the conference. List of participant is available at the end of the document as in appendix 6 in deliverable 4.12.

There were papers collected related to public communication, risk perception and ethics in the field of all nuclear applications (e.g. industry, medicine, security), natural radioactivity (e.g. radon) and radiological protection (in nuclear and radiological emergency management, low doses, communicating uncertainty, mass media communication, public understanding of ionizing radiation, EU research needs in the fields ...). Papers were presented as oral or poster presentations. Focus was on papers presenting the result from topics related research, analyses, policy and strategy including examples of action plans and national approaches, nuclear governance, and emergency preparedness and response management.

Received papers, agenda, list of participant and list of contributors were published in the RICOMET Book of Abstracts which is available at

http://ricomet2015.sckcen.be/~media/Files/Ricomet2015/Book_of_Abstracts_final.pdf.

Selected papers presented at the conference will be peer reviewed and, upon acceptance, will be published in the special section of Journal of Radiological Protection

(<http://iopscience.iop.org/0952-4746/>) with 1.319 impact factors for 2013.

The programme (see appendix 7 in deliverable 4.12) and public presentations from the RICOMET are available on conference web-page <http://ricomet2015.sckcen.be/>.

b. The Conference programme implementation

The programme of the three-day conference was divided in several plenaries, pre – meetings, discussion groups, round table and poster presentation. After opening speech of Mr Bruno Schmitz, Head of Unit for Fission Energy, Directorate - General Research & Innovation Europe Commission in the first plenary session, the welcome words were given by chair of the Conference and EAGLE project coordinator Ms. Tanja Perko, by Ms. Sisko Salomma on behalf of OPERRA project coordinator and by Mr. Wolfgang Raskob, PREPARE project coordinator, briefly describing the projects, their aims and current outcomes.

After welcome words, the second plenary focused on PREPARE project presenting communication of innovative integrated tools and platforms for radiological emergency preparedness and post-accident response in Europe and traditional media reports in the context of the Fukushima nuclear accident. Next session was third plenary where reflection in group discussion was carried out on the use of traditional media in the context of the Fukushima nuclear accident and experiences of journalists who reported from and about Fukushima. The first day was concluded with plenary no 4 on social media in the context of the Fukushima nuclear accident, with challenges and opportunities in nuclear emergencies on providing objective and prompt information against rumours. At the end of the day a special focus group discussion was held on framing and counter framing of nuclear

technologies presenting the research on how society see nuclear technologies as part of PhD research and continue throughout all three days.

Early in the morning of the second days of the conference debriefings of the first day for invited only occurred. The official day started with plenary no 5 on the use of social media in the context of the Fukushima nuclear accident discussing the ethical challenges for internet research, and presentation on social media and use of tweeter about Fukushima accident. Facilitated discussion with audience and special guests was focused on reflection of social media role in nuclear and radiological emergencies. One session was devoted to brief presentation of posters which included topics such as the importance of risk perception in effective communication, integration of social sciences into radiation protection research, communicating safety culture, mechanisms for building of social consensus and what media channels influence health related risk perception. All together seventeen posters were exhibited at the main hall and authors had an opportunity to present them to the interested public during the brakes. Facilitated round table on dialogues with journalists reporting about ionising radiation issues in general (not only emergencies) was carried out with two main sub-topics: Results of discussions with journalists from Poland, Slovenia, Romania and France reporting about ionizing radiation, and reflection from special guests: journalists reporting about ionizing radiation across the world. In the afternoon, there were three parallel sessions followed with reporting from them. First session addressed quality of information, the role and process of mass media in public information in the context of emergency and post-emergency. The second one focused on quality of information, the role and process of mass media in reporting of risks and benefits of ionizing radiation in daily life. The third one dealt with public understanding of ionizing radiation, emphasizing the challenges and solutions for improving of approaches to communicate the ionizing radiation and was part of the national workshops within EAGLE project. The second day closed with a round table on future European research agenda for communication, risk perception and ethics in radiological protection which was including also results of OPPERA investigations.

The third day of the conference was devoted to presentation of the papers from different participants, including the partners of the FP projects and also from all other interested individuals. The papers were presented in four parallel sessions on education, training and information on ionizing radiation, on communication about nuclear energy, on communication and risks perceptions in radiation protection in medicine and on communication and stakeholder involvement in waste management and decommissioning. After a break there were two additional parallel sessions on communication on nuclear emergency, and on perception of ionizing radiation risks. In the afternoon the workshop on meaning of ethics for radiological protection research and research policy was held. The conference was concluded with closing plenary where all chairs of the sessions presented lessons learned from three days, the key challenges to take forward, and the key recommendations / solutions.

In the scope of the EAGLE project two events have been performed with the aim to enable project visibility, dissemination of results, life discussion on the approaches to improve

current communication practices and to give possibilities for active participation of different stakeholders.

The first event was virtual workshop performed at the stage of the finalization of the analytical part of the EAGLE project after the end of first year of the project implementation. It enabled the stakeholders to critically review the results, especially the gaps, needs and relevant issues in each stakeholder group and in each partner country. Besides the project partners also the members of Stakeholder Consultation Groups, consisting of representatives of each stakeholder group (information sources, media channels and receivers) from all project countries and also broader (other EU countries) were invited to actively participate and commented the developed studies. The discussion brought a set of recommendations and suggestions how at different levels the education, training and communication activities can be improved. They include the opportunities for improvement of communication process, the information content and context, the work with media, the education activities, the interaction with general and specific public, and also address the main weaknesses or requirements of different specific groups. It can be seen that not only one group (as defined in EAGLE project) would be responsible for fulfilment of the recommendations and suggestions. The approaches should be included in overall national communication strategies on IR including responsible authorities, different ministries, implementing organisations, industry, research institutions, other users of IR, media and also organised civil society (like local partnerships and NGOs).

Due to the technical problems with the virtual workshop (although the appropriate software was bought) and limited interaction possibilities of registered participants, the EAGLE project management board decided to organise the international conference to enable all different stakeholders to participate, to exchange the view and present the results of different research or analyses. The 2nd stakeholder virtual workshop was therefore international conference entitled RICOMET and included also two other EU projects in the scope: PREPARE, devoted to better preparedness in case of nuclear and radiological emergency, especially the long lasting recovery, and OPERRA aimed at building a legal and logistical structure to administer future EU calls for projects in radiation protection. The RICOMET conference was devoted therefore to many different aspects of ionizing radiation applications, from energy production, applications and use in medicine, industry and research, radioactive waste management and interaction with public, and emergency preparedness and response. The participants were coming from different background, from institutions responsible for communication on ionizing radiation, from media and also presenting different groups of general and specific publics (like local communities with nuclear facilities, NGOs...). The presented topics were addressing the complete and diverse aspects of communication on ionizing radiation, sharing the information of all three EU projects' results and discussion the conclusions, but also providing opportunity for all other participants to express their views, present the results of their work and also give the opinion about the existing problems.

Based on the two events the recommendations how to improve communication activities of and for different stakeholders are collected. The task to improve communication is very

complex and demanding and will require a lot of efforts from information sources, as one of the most responsible actors when speaking about the communication activities on ionizing radiation. But in changing the communication culture and strategies also other 2 groups should be involved: the media and public, especially the one who wants to be involved. This is continuing task and should be promoted on all levels, national, regionally and internationally. It is believed that the coordination of the efforts should be performed by state representatives as the main promotor of the nuclear and radiation safety.

Final project conference as 2nd international conference - RICOMET 2016

Proceedings can be found at: <http://ricomet2016.sckcen.be>

a. The arrangements for the conference

Based on success of the first international conference – RICOMET 2015, the organisation team with support from other decided to organise the final project conference as a second RICOMET conference – RICOMET 2016. Similar as last year, the conference connects four EU projects in order to reach as much stakeholders as possible and to create synergies even for life after project. The conference was organized under the auspices of following projects:

- **EAGLE:** Enhancing Education, Training And Communication Processes For Informed Behaviors And Decision-Making Related To Ionizing Radiation Risks
- **OPERRA:** Open Project for the European Radiation Research Area
- **CONCERT:** European Joint Programme for the Integration of Radiation Protection Research
- **PLATENSO:** Platform for Enhanced Societal Research related to nuclear energy in Central and Eastern Europe

The Second International Conference on Risk Perception, Communication and Ethics of Exposures to Ionising Radiation were held from 1st to 3rd of June 2016 in Bucharest, Romania.

RICOMET 2016 intends to continue the dialogue started by RICOMET 2015 on social and ethical issues, as well as encourage stakeholder and public participation in nuclear science, technology and innovation.

The **focal points** of this year's conference were:

- Creating a Strategic Research Agenda on Social Sciences and Humanities in Radiation Protection,
- Policy making related to different applications of ionizing radiation.

Social science and humanities met technical platform representatives such as NERIS, EURADOS, ER-ALLIANCE and MELODI to discuss a trans-disciplinary approach to future research in the radiation protection field. Policy decision makers were given the opportunity to engage in dialogues with various stakeholders including experts and representatives of informed civil society.

The dialogue between the various stakeholders was facilitated and guided towards the goal of an improved radiological risk governance.

The organising team was established to take care about organisational and content related activities. Main tasks were covered by Chair of the Organising Committee, Daniela Diaconu, RATEN ICN, Romania; dr. Tanja Perko, Belgian Nuclear Research Centre (SCK-CEN), Belgium Chair of the Scientific Program Committee, and Ms. Blanka Koron, Regional Environmental Centre (REC), Slovenia - Head of the Conference Secretariat.

The webpage was created (<http://ricomet2016.sckcen.be/>) in order to support organisation of the event and to cover publicity needs. Additionally, the information was also spread by engaged projects channels as well as published on relevant platforms. Additionally, the invitation to the conference was sent out to more than 2300 e-mail stakeholder addresses in February 2016. The online registration was open till end of May.

More than 90 persons from all over the world attended the conference. List of participant is available at the end of the document as Appendix 3 as part of the Book of Abstracts.

There were papers collected related to public communication, risk perception and ethics in the field of all nuclear applications (e.g. industry, medicine, security), natural radioactivity (e.g. radon) and radiological protection (in nuclear and radiological emergency management, low doses, communicating uncertainty, mass media communication, public understanding of ionizing radiation, EU research needs in the fields ...). Some papers were presented as oral or poster presentations. Focus was on research papers, review papers, policy oriented papers, nuclear governance, and emergency management.

Received papers, agenda, list of participant and list of contributors were published in the RICOMET 2016 Book of Abstracts.

Public presentations are available on conference web-page <http://ricomet2016.sckcen.be/>.

b. The Conference programme implementation

The programme of the three-day conference was divided in several plenaries, pre – meetings, discussion groups, round table and poster presentation.

After welcome words by Daniela Diaconu, INR, Chair of the organising committee; Ioan Ursu, ANCSI, National Authority for Scientific Research and Innovation, Romania; and by project coordinators of CONCERT, Thomas Jung, BFS, Germany; OPERRA, Jean-Rene Jourdain, IRSN, France; PLATENSO, Kjell Andersson, KARITA Research, Sweden and EAGLE, Tanja Perko, SCK•CEN, Belgium, the nomination of “The RICOMET declaration committee”

was announced by EAGLE Advisory Board member, Edward Lazo, OECD-NEA, France. To participants was introduced the corner for collecting SSH ideas - "My ideas for Social Sciences and Humanities (SSH) Strategic Research Agenda (SRA)", where they posted their ideas, comments, etc. during the conference.

After welcome words, the EC representative of the Magdalena Gadomska presented European Commission view on EURATOM Research and Training Programme.

In the second plenary the results and future perspectives of FP7 EAGLE was presented by WP leaders in following topics: how to improve communication and coordination of information sources related to ionising radiation; recommendations and guidelines for developing media relations for communication about ionising radiation; guide for good practices for public communication, education, training and information; and collected solutions for improved risk governance in the field of IR.

The discussion was continued in three parallel reflection workshops aiming to get reflected input from participants on given presentations and achieve an agreement for the EAGLE final deliverables and recommendations. First workshop group discussed how to improve communication and coordination of information sources, the second group reflect recommendations and guidelines for developing media communication and the third group of participants discussed about guides for good practices for public communication, education, training and information.

Summary of the reflection workshops and conclusions from each workshop were presented at the plenary to all participants.

During the all the days the poster where hanged in the lobby in front of the main conference room, but also each poster was presentations orally in short to the participant in plenary. The poster arrangement enabled participants an active interaction also during the breaks. Presented were 11 posters with following titles:

- Biological dosimetry in Europe is it necessary according to emergency responding authorities?
- Low dose of radiation risk in Polish media space and in Polish Nuclear Energy Program versus recently updated results of INWORKS
- The utility of the concept of mental models related to ionizing radiation in the process of the Polish nuclear power program (PNPP) development
- Socio-economic impact and perception analysis of the nuclear power plant Programme in Poland
- Value frames of nuclear technology acceptance
- Developing a research strategy on nuclear related social, societal and governance issues in Hungary
- Strategic aspects of the social research in the development of the Romanian nuclear sector
- Local partnerships: achieving stakeholder consensus on short-lived waste disposal in Belgium
- Citizen-based radiation measurement in Europe: supporting informed decisions regarding radiation exposure for emergencies as well as in daily life
- NUCLEU2020 – A network of H2020 National Contact Points (NCP)

- Civil society involvement in public information about nuclear activities in Romania

The third plenary offered to the participant's insight into FP7 PLATENSO results and future perspective. Presented were a status of SSH research on nuclear energy; PLATENSO network and Virtual Information Centre and developed strategies and scenarios which were and introduction to the moderated open discussion.

In the afternoon of the first day 5 parallel sessions were held on research in the field of protection social sciences and humanities related to ionizing radiation. In session the four presentations addressed integration of social sciences and humanities in radiation protection research and discussion was moderated. Session two addressed issue of rising education, training and communication about ionizing radiation, meanwhile in third session they presented and discussed about societal ethical and economic aspects of nuclear emergencies. Decision making and nuclear policy was the topic of the fourth session. How to address stakeholders and public engagement in decision related to nuclear technologies was presented and discussed in fifth session.

In the late afternoon, EAGLE Advisory Board Meeting (AB) with Management Committee was held with aim to obtain the feedback and recommendation from AB members.

The whole second day of the conference was dedicated to integration of social sciences and humanities in radiation protection research, with implications for practice. In the morning the plenary was about what, why and how of integrating social sciences and humanities into radiation protection research, presented were the science, values and societal response by examples of RP decision making where social sciences and humanities (SSH) could help. Additionally, an overview on how strategic research agendas were created in different platforms was shared with participants. From the WU H2020 CONDERT project was presented the process of developing the Strategic Research Agenda (SRA) for SSH.

To provide some practical insights how to integrate the SSH the moderated round table discussion with management representatives of the MELODI (Multidisciplinary European Low Dose Initiative), ALLIANCE (European Radioecology Alliance), NERIS (European Platform on preparedness for nuclear and radiological emergency response and recovery) and EURADOS (European Radiation Dosimetry Group) platforms about integration of SSH in their domain was held. The next focus was to broadening and deepening search of SRA for SSH in radiation protection with presentation of the potential and the challenge to expanding technical democracy as well as culture, practice and justification: Issues for the humanities/social sciences in medical radiation protection. Intrigued participants were then invited to participate at open space workshops to collect the input for SRA in SSH in Radiation protection, collected inputs from several groups were then briefly presented to all participants.

The second day agenda was concluded with presentation of the proposal for a Platform for social sciences and humanities in research related to ionising radiation by founding members in order to collect the response and idea from the public.

On the third day the main idea was to move from the conceptual work closer to policy and decision making. In moderated morning discussion the representatives of the MELODI, ALLIANCE, NERIS and EURADOS reflected the responses from the workshops. The following

plenary address if can civil society directly influence decision making and policy. Representative from Nuclear Transparency Watch presented citizen control over nuclear safety and policy. Good practice how ANCCLI changes the game in French nuclear accident preparedness with new model for civil society engagement in governance of ionizing radiation risk was presented. Additionally, former president of Slovenian parliament explained his perspective of policy actor in ionizing radiation risk policies. The section was concluded with idea of new history of nuclear energy in its interaction with civil society. The participants were then provoked by question if civil society can directly influence decision making and policy, e.g. where and how can those outside the usual shape of authority can shape the policies and decisions; where and even how must they be shaped by society and how can SSH research support this actions.

In light of RICOMET 2015 results its declaration was presented and openly was discussed what should be in this year declaration.

As nowadays one of the hottest topic is a terrorism, also the last session was dedicated to radiological terrorism as when can ionizing radiation invade the public space. In case of bombs, which are public behavioural intentions and information needs. Presented was also how important is to share the goal of minimising harm to the public with right communication, therefore presented where journalists' recommendations to the authorities.

The three-day conference where concluded by short reflections on the main topics on the last days and with conclusions that such common events are needed and that it would be great if the third RICOMET would be organised.

Through the conference related communication, the interested public was broadly informed about all aspects of the EAGLE project. The project partners gained the stakeholders' further feedback related to substantial questions and issues that are dealt with in the project. Contacts and working relations were stimulated with many stakeholders and also with other relevant EU project partners, and with EC experts. The EAGLE stakeholder network was again given opportunity to propose and suggest further inputs for the elaboration of all final results of the project.

The conference outputs were used by EAGLE partners to finalize the reports related to the recommendations of new approaches in education and useful training and information instruments, as well as to foster dialogues among different stakeholder categories to examine needs and solutions aiming to bridge the gap in the public understanding of these topics (which is the main aim of EAGLE project).

Apart to that the conference also gave the opportunity for the presentations of the ionizing radiation research and investigations in different European countries and provided the occasion for discussions and exchange of views among the participants. The news results on various social science and humanities research related to ionizing radiation would also serve as a basis for proposal of establishment of new European Platform for the integration of Social Sciences and Humanities (SSH) in research related to Ionizing Radiation (IR). The proposal development is coordinated by the committee from the founding members and will be further discussed within Oxford Radiation Protection Week.

As a result of the RICOMET 2016 conference also the special conference declaration is under development with common position of participation projects and which will be sent to all relevant stakeholders across the Europe. It will emphasises that more opportunities for dialogue among natural scientists, researchers in social sciences and humanities, civil society organisations, and other stakeholders should be created, also within the European research programmes in the frame of EURATOM.

3. Conclusions

Series of implemented events provided required inputs and expected promotion, additionally even arrange the frame for some future actions. Events enabled project visibility, dissemination of results and active participation of stakeholders in the project implementation though systematic and participatory approach which includes also well design actions. At national level, the stakeholder groups were directly involved in events and actions under WP1-3.

The importance of the stakeholders for project success was already presented at the Initial Project Conference. Stakeholders' roles and their desirable contributions were later on considered as preconditions for all events, since their needs were presented and addressed. They as end-users of the project results helped to co-create them - the solutions and proposals for improved communication, education and information activities. Events had an important role in interaction with stakeholders.

From the point of view of implementation of different events, it was very important that the proposals and consortium partners were flexible in order to react on lessons learned during the first actions and has a determination to put more efforts in order to organised bigger and more complexed events.

The initial project conference was organised similar to other project conferences. Completely new approach was taken in second event - the first stakeholders workshop was organised virtually, and unfortunately due to high number of online participants who had possibility to fully interact, the professional system engaged for the purpose with capacity of 100 active members crashed with only over 40 active participants.

Leading from this experience and some other similar practices, the second workshop was organised differently. The stakeholder workshop was transform into international conference RICOMET 2015 where over 120 stakeholders met in person. Due to the success of this conference the final project event was organised as second international conference RICOMET 2016.

It was clear that stakeholder engagement is much more fruitful if it is organised physically. Virtual arrangements via internet supported technology proved to be excellent for small groups and only for very short simple events which last for few hours. Whenever the event is set very interactively and is very rich in content then it is much better that it is organised

physically. At those events can participants easily interact and also networking momentum is much bigger. Although that a conference requires more organisational and logistical work it is worth to implement them.

We need to point out the option of video streaming of event which can be very useful also for stakeholders which cannot participate in person otherwise. Additionally, the video record can be available online later on. It is recommended to include this proposal in future projects.

The proceedings from events can be tracked at events main webpages mentioned in relevant sections.