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EJP-CONCERT

European Joint Programme for the Integration of Radiation Protection Research

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D7.12 – 4th Annual report on E&T initiative funded under Task 7.3, including participant feedback and recommendations for next calls

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Abstract

The aim of Task 7.3 is to organise open calls for targeted E&T activities where particular topics or scientific areas are identified either through platform SRAs or through dialogue with stakeholders as requiring development or dissemination.

A summary and feedback analysis of the courses sponsored by CONCERT during the period from 1 June 2018 to 31 May 2019 are given. The process of administering the fifth CONCERT E&T call and the outcome is presented.

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4th Annual report on E&T initiatives funded under Task 7.3, including participant feedback and recommendations for next calls
1 June 2018 – 31 May 2019

The purpose of Task 7.3 of CONCERT is to organise calls for Education and Training initiatives targeting topics that are recognised as important to support the research efforts undertaken by the platforms participating in CONCERT.

Courses held during the reporting period

During the reporting year, there were 3 courses held from Series 3, and 8 courses from the 4th series. There were a total of 186 participants, of whom 35 were from outside the EU. The courses are listed in Appendix 1 below.

Each of the course organisers was asked to provide feedback from the students on the courses, partly for their own benefit in improving the course for future editions, and also for the benefit of T7.3 in gauging how well the courses were performing, and to be able to make judgements about applications for repeating the courses. The template suggested for feedback is given in Appendix 2 below. It collects demographic data, so that we can assess whether the courses are being taken up by the intended target groups, as well as course quality data. The feedback survey has been offered to the organisers by Balázs Madas (MTA-EK) in online form using SurveyMonkey. A brief summary of feedback from each course is given in Appendix 3 below.

Based on the high proportion of the participants who graded their course as either very good or excellent (min. 70%, max. 100%, mean 88%), we can have some confidence that the courses sponsored by CONCERT are of very high quality. They attract a range of students from high school, through university to professional scientists, from mainly EU states, but nearly 20% from non-EU. The admission policy is that places are first offered to applicants from the EU, then offered to non-EU applicants if places are available. Some courses have been repeated each year since the start of DoReMi (2011) and the fact that they still have no problem filling them each year is a clear indication that there is a continuing demand for them.

Two other significant facts that stand out are:

- The very high number of participants in each course who felt they benefited from the opportunities for networking and making contacts either with fellow students or course presenters that could be of use collaborations or placements (min. 85%, max. 100%, mean 95%).
- The high number of students who could only attend the course because of the subsidy of the course fee by CONCERT (min. 35%, max. 85%, Mean 65%).

Both indicate the value of the format of 1-2 week courses that are sponsored so that students can attend at minimal cost.

Fifth call for E&T courses

The call held during the reporting period was the 5th and final in the series. It opened on 1 April 2019 and closed 30 April 2019. The text of the call is here: http://www.concert-h2020.eu/en/Calls/ET_Call_2019. The text was unchanged from the previous call (except that all courses needed to be completed by 31 May 2020, when CONCERT ends) and included the encouragement to incorporate the use of major European infrastructures, as in the previous call. Following a review of the budget allocated to Task 7.3, the maximum available funding for the EC contribution to courses was set at 125,000 €.

There were 14 applications, with requests for EC funding of a total of 176,655 €. This meant that as in the previous call it was necessary to score each application so that the choice of proposals to be funded could be made on merit. As stated in the call, the scoring was carried out by the Education and Training Committee, with equal weight given to each of:

- Relevance and value of the topic and coverage to the aims of CONCERT
- Intended participant group
- Quality of course content and expected learning outcomes including introduction to the major infrastructures of the field
- Expertise of the host institution
- Practicality of the course arrangements

The total scores out of 25 ranged between 16.0 and 24.25. There was greatest variation in the category of relevance to the aims of CONCERT. Low scores were given either because the topics were not relevant to the interests of the research platforms, or because the course was more concerned with operational radiation protection than research. The highest-ranked 10 applications were approved by the CONCERT Executive Board for funding.

As in the previous call, two institutions submitted more than one application. However, 2 of the applications from one of the institutions were ruled ineligible because the courses were only 3 days long (and the call was for courses of 1-3 weeks), and 2 of the applications from the other institution could be funded without excluding any of the other applicants.

Again, in spite of the request for incorporation of major EU infrastructures into course programmes, there were no applications that had any proposals relating to any of the infrastructures listed in AIR²D² (Access to Infrastructures Radiation protection Research Documented Database) as maintained by CONCERT WP6. All but one of the applications were repetitions of courses previously funded by CONCERT, so the outcome was not unexpected.

Appendix 1

Courses funded by CONCERT during the reporting period

This project has received funding from the Euratom research and training programme 2014-2018 under grant agreement No 662287.

Series 3, 2017-18

28 May – 8 Jun 2018 Modelling radiation effects from initial physical events. University of Pavia, Italy
Organiser: Andrea Ottolenghi andrea.ottolenghi@unipv.it

11 – 29 Jun 2018 NORM (Naturally Occurring Radioactive Material) in work and natural environment: identification, exposure assessment and decision making process. Central Mining Institute, Katowice, Poland
Organiser: Boguslav Michalik b.michalik@gig.eu

25 Jun – 6 Jul 2018 Space Summer School (space radiation, medicine and life sciences). SCK•CEN (Belgian Nu-clear Research Centre), Belgium
Organiser: Marjan Moreels mmoreels@sckcen.be

Series 4, 2018-19

13 – 24 Aug 2018 Summer School in Radiobiology. SCK•CEN (Belgian Nuclear Research Centre), Belgium
Organiser: Sarah Baatout sbaatout@sckcen.be

21 Jan – 1 Feb 2019 Radiation epidemiology, dosimetry and radiation protection concepts of ICRP. Helmholtz Center, Munich Institute for Radiation Protection, Germany
Organiser: Werner Rühm werner.ruehm@Helmholtz-muenchen.de

11 - 22 Feb 2019 Two-week training course on radiation-induced effects with particular emphasis on genetics, development, teratology, cognition, cancer as well as space-related health issues. SCK•CEN (Belgian Nuclear Research Centre), Belgium
Organiser: Sarah Baatout sbaatout@sckcen.be

18 – 22 Feb 2019 Emergency and recovery preparedness and response. National Center of Radiobiology and Radiation Protection, Bulgaria
Organiser: Nina Chobanova n.chobanova@ncrrp.org

11 – 15 March 2019 Radiation Protection: Basics and Applications. Forschungszentrum Jülich, Germany
Organiser: Ralf Kriehuber r.kriehuber@fz-juelich.de

15 – 19 Apr 2019	EURADOS-CONCERT School on uncertainty in biological, physical, and internal dosimetry following a single exposure. Institut de radioprotection et de sûreté nucléaire (IRSN), France Organiser: Sophie Ancelet sophie.ancelet@irsn.fr
23 Apr – 3 May 2019	Assessment of long-term radiological risks from environmental releases. Technical University of Denmark, Risø Campus, Denmark Contact: Kasper Andersson kgan@dtu.dk
29 Apr - 10 May 2019	Cellular effects of ionising radiation – introduction to radiation biology Acronym: CELOD, Stockholm University, Sweden Organiser: Andrzej Wojcik andrzej.wojcik@su.se

Appendix 2

CONCERT Course Evaluation

Course title:

Date:

1. Background questions:

In which country do you currently live?	
What is your level of education?	BSc ☐ MSc ☐ PhD ☐ Other ☐ (specify)
What is your present position?	Student ☐ Post-doctoral researcher ☐ Research scientist ☐ Radiation protection expert ☐ Other ☐ (specify)
What is your area of specialisation?	Radiation biology ☐ Non-radiation biology ☐ Physics ☐ Radiochemistry ☐ Radioecology ☐ Epidemiology ☐ Radiation protection ☐ Other ☐ (specify)
Why did you do this course?	Credit towards a degree:☐ Supplementary to degree course work ☐ Continuing professional education ☐ Other ☐ (give details)
Would you have been able to do this course if it had not been sponsored?	No I could only do it because it was free:☐ Yes I could have support to pay: a nominal fee ☐ the full cost ☐

2. General questions about the course

Do you feel the course was well organised?	Badly ☐ ☐ ☐ ☐ ☐ Well
Was the accommodation satisfactory?	Bad ☐ ☐ ☐ ☐ ☐ Good
How would you rate the overall quality of the course?	Bad ☐ ☐ ☐ ☐ ☐ Good
Was the course too elementary or advanced for your level of knowledge?	Too elementary ☐ ☐ ☐ ☐ ☐ Too advanced
How much do you feel you learnt from the course?	Very little ☐ ☐ ☐ ☐ ☐ A lot
Would you have preferred more or fewer lectures?	Fewer ☐ ☐ ☐ ☐ ☐ More
Would you have preferred more or less practical work?	N/A ☐ Fewer ☐ ☐ ☐ ☐ ☐ More
Should other topics have been included?	No ☐ Yes ☐ (Please specify)
Were there topics you feel were not needed?	No ☐ Yes ☐ (Please specify)
Do you have any other general comments you would like to make? (Did you benefit from the networking? Did you make useful contacts for possible future research/study opportunities?)	No ☐ Yes ☐ (Please specify)

Specific evaluation of the course

Lectures (if you missed a lecture leave blank)	
Topic: . . . Lecturer: . . .	Content: Bad ☐ ☐ ☐ ☐ ☐ Good Presentation: Bad ☐ ☐ ☐ ☐ ☐ Good
Topic: . . . Lecturer: . . .	Content: Bad ☐ ☐ ☐ ☐ ☐ Good Presentation: Bad ☐ ☐ ☐ ☐ ☐ Good
Topic: . . . Lecturer: . . .	Content: Bad ☐ ☐ ☐ ☐ ☐ Good Presentation: Bad ☐ ☐ ☐ ☐ ☐ Good
Topic: . . . Lecturer: . . .	Content: Bad ☐ ☐ ☐ ☐ ☐ Good Presentation: Bad ☐ ☐ ☐ ☐ ☐ Good
Practical sessions (if you missed a session leave blank)	
Session number #	Content: Bad ☐ ☐ ☐ ☐ ☐ Good Organisation: Bad ☐ ☐ ☐ ☐ ☐ Good Usefulness: Bad ☐ ☐ ☐ ☐ ☐ Good
Session number #	Content: Bad ☐ ☐ ☐ ☐ ☐ Good Organisation: Bad ☐ ☐ ☐ ☐ ☐ Good Usefulness: Bad ☐ ☐ ☐ ☐ ☐ Good
Do you have any other comments you would like to make about the course content? Do you have suggestions for other course topics?	No ☐ Yes ☐ (Please specify)

Appendix 3

Feedback from the courses:

1. Modelling radiation effects from initial physical events. University of Pavia, Italy
Organiser: Andrea Ottolenghi

25 participants. 80% from EU countries, 28% local. 93% post grad, 26% Postdoc. 47% physicists, 47% radiation biologists,. 73% CPD. Only 40% could have done it at full cost. 90% well organised. 100% accommodation satisfactory. 70% VG or excellent. 86% benefitted from networking. 82% useful future contacts. Majority (>70%) said lecture content and presentation was VG or excellent.

2. NORM (Naturally Occurring Radioactive Material) in work and natural environment: identification, exposure assessment and decision making process. Central Mining Institute, Katowice, Poland
Organiser: Boguslav Michalik

11 participants (one cancelled in last minute), from: Kuwait, Angola, Algeria, UK, Ecuador, Estonia, Belgium, Austria, Italy, Canada and Poland. 36.4 % from EU, 63.6% outside EU. Specialization from a wide range: natural sciences (physics and chemistry), Health and Safety and engineering. 27.3 % from industry, 18.2 from regulatory bodies, 54.5 % from universities (both students as well as lecturers). 85% said they could only do the course because it was free. In the course evaluation according to the internal questionnaire, 100% said the course fulfilled their expectations. All participants said they had benefitted from the networking and contacts made.

3. Space Summer School (space radiation, medicine and life sciences). SCK•CEN (Belgian Nu-clear Research Centre), Belgium
Organiser: Marjan Moreels

13 participants, 3 from Belgium, 4 non-EU. 75% graduates. 23% physics, 23% biology, 54% “other”. 54% doing the course for CPD. Only 15% could have paid full cost. 92% very good or excellent. 100% benefitted from networking. 100% made contacts useful for the future

4. Summer School in Radiobiology. SCK•CEN (Belgian Nuclear Research Centre), Belgium
Organiser: Sarah Baatout

21 participants, 11 from Belgium, All EU. Last year of secondary school. Most doing it because they were “interested”. Only 14% could have paid full cost. 90% very good or excellent. 85% benefitted from networking. 100% made contacts useful for the future

5. Radiation epidemiology, dosimetry and radiation protection concepts of ICRP. Helmholtz Center, Munich Institute for Radiation Protection, Germany
Organiser: Werner Rühm

11 participants. 5 from Germany, 2 from outside the EU. 80,3% post grad. 64% physicists, 36% radiation biologists, 45% CPD and 36% supplementary to university course work. Only 1 could have done it at full cost; 5 could only do it because it was free. 80% rated the overall quality of the course VG or excellent. All participants benefitted from networking; all but 1 felt they had made useful future contacts.

6. Two-week training course on radiation-induced effects with particular emphasis on genetics, development, teratology, cognition, cancer as well as space-related health issues. SCK•CEN (Belgian Nuclear Research Centre), Belgium
Organiser: Sarah Baatout

23 participants. 33% from Belgium, 3 from non-EU countries. 7 MSc, 7 PhD and 2 high school. 50% radiation biology, 20% physics. 45% CPD. Only 3 able to pay full cost, 35% could only attend because it was free. 95% gave very good or excellent to the course as a whole. 95% benefited from networking and made contacts useful for the future.

7. Emergency and recovery preparedness and response. National Center of Radiobiology and Radiation Protection, Bulgaria
Organiser: Nina Chobanova

The course was attended by 16 specialists working in Emergency Medical Centers. There were 11 medical doctors, 3 nurses and 2 paramedics. All the participants expressed their opinion about the course and sent them in the specified way and the general opinion is that the course has been successful.

8. Radiation Protection: Basics and Applications. Forschungszentrum Jülich, Germany
Organiser: Ralf Kriehuber

10 participants. 4 from Germany, 1 from Finland, 1 from Netherlands, 1 from Switzerland/CERN, 1 from Poland, 1 from Portugal, and 1 non-EU. Level of education was 2 PhD and 8 MSc. Present position were six students, 2 radiation protection experts, one Postdoc and one occupational health and safety officer. Six of the participants had a background in nuclear engineering, two in physics/medical physics, one in radiation biology and one in radiology. 90% CPD. Only two able to pay a nominal fee. The practical work was very well received by the participants. Many participants mentioned the opportunity to make contacts/networking as one major benefit of the course. 90% of the participants rated the course excellent overall.

9. EURADOS-CONCERT School on uncertainty in biological, physical, and internal dosimetry following a single exposure. Institut de radioprotection et de sûreté nucléaire (IRSN), France
Organiser: Sophie Ancelet

24 participants: 15 from EU, 2 from Japan, 2 from Argentina, 1 from Russian Federation, 4 from IRSN. (Two participants cancelled at the last minute.) We filtered the applicants depending on the adequacy of their main research field with the course topic. Preference was given to PhD students and young scientists from Eastern and Southern European countries. 28% of the participants were PhD students and 72% were MSc. The participants came from 4 main areas of specialisation: 11% from radiation biology, 79% from physics, 21% from radiochemistry, 5% from biostatistics/mathematics. 47% said they could only do the course because it was free.
94% of the participants rated the overall quality of the course as excellent (50%) or very good (44%) and 6% as good. 72% of the participants felt they learnt a lot from the course.
All participants felt the course was well organised. 72% of them considered the organization of the course was excellent and 22% as very good. Nearly 88% of the participants considered as fine the proportion of time devoted to lectures (compared to 74% for the previous edition of the School). 55% of the participants would have preferred more practical work and 39% considered it was OK. 94% said they benefitted from the networking and contacts made.

10. Assessment of long-term radiological risks from environmental releases. Technical University of Denmark, Risø Campus, Denmark Contact: Kasper Andersson kgan@dtu.dk

11 participants (3 persons sent apologies within 2 weeks of the course start, and could not at that stage be replaced from the waiting list). 4 of the participants were from Nordic countries, while 6 were from other EU countries, and 1 was from Korea. All MSc or PhD, except one BSc (doing a masters degree while working for the Irish radiation protection authority). 3 PhD students and one MSc student, the others working in radiation protection and related research taking the course for CPD. About half of the participants would have been prepared to pay a fee. All graded the course in the two top categories.

11. Cellular effects of ionising radiation – introduction to radiation biology Acronym: CELOD, Stockholm University, Sweden
Organiser: Andrzej Wojcik

There were in total 21 participants. 12 were funded by CONCERT, 4 covered the costs by themselves, and 5 students were from the Stockholm University. The participants came from the following countries: Bulgaria (1), Canada (1), France (1), Germany (2), Italy (1), Japan (4), Norway (1), Poland (2), Romania (1), South Africa (2), and Sweden (5). Participants ranged from MSc students to postdocs to senior scientists. Their fields were Biology, Biostatistics, Physics and Chemistry. Overall, the organisation and quality of the course were graded on average to 4.6 out of 5.