



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 662287.



EJP-CONCERT

European Joint Programme for the Integration of Radiation Protection
Research

H2020 – 662287

D 7.11 – 3rd Annual report on E&T initiative funded under Task 7.3, including participant feedback and recommendations for next calls

Lead Author: Vere Smyth (UniPv)

With contributions from: Andrzej Wojcik (SU), Geza Safrany (NRIRR),
Andrea Ottolenghi, Giorgio Baiocco, Cesare Danesino, (UniPv), Michèle Coeck (SCK•CEN),
Mike Atkinson (HMGU), Balázs Madas (MTA-EK)

Reviewer(s): CONCERT coordination team

Work package / Task	WP 7	T 7.3
Deliverable nature:	Report	
Dissemination level: (Confidentiality)	Public	
Contractual delivery date:	Month 36	
Actual delivery date:	Month 36	
Version:	1	
Total number of pages:	13	
Keywords:	Education training	
Approved by the coordinator:	Month 36	
Submitted to EC by the coordinator:	Month 36	

Disclaimer:

The information and views set out in this report are those of the author(s). The European Commission may not be held responsible for the use that may be made of the information contained therein.

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 reporting period are given. The process of administering the fourth CONCERT E&T call and the outcome is presented.

<End of abstract>

3rd Annual report on E&T initiatives funded under Task 7.3, including participant feedback and recommendations for next calls

1 June 2017 – 31 May 2018

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 5 courses held from Series 2, and 11 courses from the 3rd series. 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 the response data 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, 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 a few from non-EU (including China, Japan and USA). 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 demand for them.

Two other significant facts that stand out are:

- ***The very high number of participants 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.***
- ***The high number of students who could only attend the course because of the subsidy of the course fee by CONCERT.***

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

Reviewing the feedback shows that some modifications can be made to this process as well, in order to remove some of the ambiguities in the questions. The template will be modified for the next lot of courses.

Fourth call for E&T courses

The call held during the reporting period was the 4th in the series. It opened on 1 April 2018 and closed 30 April 2018. The text of the call is here: http://www.concert-h2020.eu/en/Calls/ET_Call_2018. The text was unchanged from the previous call, 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 138,000 €.

There were 15 applications, with requests for EC funding of a total of 181,842 €. This meant that for the first time in the series 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 ranged between 10.5 and the possible 25. There was greatest variation the category of relevance to the aims of CONCERT. Low scores were given either because the topics were not relevant or because the course was more concerned with operational radiation protection than research. When listed in order of total score, the first 10 were offered the requested funding, and the 11th offered part funding, up to the total available.

Two institutions submitted more than one application. This raised the question whether there should be a limit of one per institution, or whether funding should be awarded purely on merit. However this could not be applied to the current call, because it would mean changing the rules. The topic will be discussed when WP7 is reviewed at the ERPW 2018 meeting in October 2018.

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. The failure of this strategy will be discussed at the next WP6 meeting.

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 2, 2016-17

- 22 May – 2 Jun 2017** Modelling radiation effects from initial events
University of Pavia, Italy
Organiser: Andrea Ottolenghi Andrea.Ottolenghi@unipv.it
- 6 – 16 June 2017** Assessing risk to humans and the environment
NMBU, Oslo, Norway
Organiser: Deborah Oughton deborah.oughton@nmbu.no
- 19 – 23 June 2017** 'Late Phase' Nuclear Accident Preparedness and Management
RIR, Gomel, Belarus
Organiser: Pascal Crouail crouail@cepn.asso.fr
- 19 - 23 June 2017** EURADOS-CONCERT School on uncertainty analysis processes for retrospective dosimetry and associated research
IRSN, Paris, France
Organiser: Sophie Ancelet sophie.ancelet@irsn.fr
- 3 – 7 July 2017** Uncertainty analysis in low dose radiation epidemiology
CREAL, Barcelona, Spain
Organiser: Elisabeth Cardis ecardis@creal.cat

Series 3, 2017-18

- 14 – 25 Aug 2017** Summer School in Radiobiology (August 2017). SCK•CEN (Belgian Nuclear Research Centre), Belgium
Organiser: Sarah Baartout sbaatout@sckcen.be
- 30 Oct – 10 Nov** Molecular Mechanisms of Radiation Carcinogenesis. Helmholtz Center Munich Institute for Radiation Biology, Germany
Organiser: Michael Rosemann Rosemann@Helmholtz-muenchen.de
- 5 – 9 Feb 2018** Emergency and recovery preparedness and response. National Center of Radiobiology and Radiation Protection, Bulgaria
Organiser: Nina Chobanova n.chobanova@ncrrp.org

- 19 – 23 Feb 2018** Radiation Protection: Basics and Applications. Forschungszentrum Jülich, Germany
Organiser: Ralf Kriehuber r.kriehuber@fz-juelich.de
- 5 – 16 Mar 2018** Assessment of long-term radiological risks from environmental releases: modelling and measurements. Technical University of Denmark
Organiser: Kasper Andersson kgan@dtu.dk
- 12 – 16 Mar 2018** EURADOS Training course on Application of Monte Carlo Methods for Dosimetry of Ionizing Radiation. Karlsruhe Institute of Technology, Germany
Organiser: Bastian Breustedt Bastian.breustedt@kit.edu
- 12 – 23 Mar 2018** 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 Baartout sbaatout@sckcen.be
- 19 – 23 Mar 2018** Monitoring and dose assessment for internal exposures. National Center of Radiobiology and Radiation Protection, Bulgaria
Organiser: Rositza Totzeva r.totzeva@ncrrp.org
- 16 – 20 Apr 2018** Preparedness and response for nuclear and radiological emergencies. SCK•CEN (Belgian Nuclear Research Centre), Belgium
Organiser: Catrinel Turcanu cturcanu@sckcen.be
- 16 – 27 Apr 2018** InterRad - Interdisciplinary Radiation Research. Bundesamt für Strahlenschutz, Germany
Organiser: Maria Gomolka mgomolka@bfs.de
- 23 Apr – 4 May 2018** 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 <input type="checkbox"/> MSc <input type="checkbox"/> PhD <input type="checkbox"/> Other <input type="checkbox"/> (specify)
What is your present position?	Student <input type="checkbox"/> Post-doctoral researcher <input type="checkbox"/> Research scientist <input type="checkbox"/> Radiation protection expert <input type="checkbox"/> Other <input type="checkbox"/> (specify)
What is your area of specialisation?	Radiation biology <input type="checkbox"/> Non-radiation biology <input type="checkbox"/> Physics <input type="checkbox"/> Radiochemistry <input type="checkbox"/> Radioecology <input type="checkbox"/> Epidemiology <input type="checkbox"/> Radiation protection <input type="checkbox"/> Other <input type="checkbox"/> (specify)
Why did you do this course?	Credit towards a degree: <input type="checkbox"/> Supplementary to degree course work <input type="checkbox"/> Continuing professional education <input type="checkbox"/> Other <input type="checkbox"/> (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: <input type="checkbox"/> Yes I could have support to pay: a nominal fee <input type="checkbox"/> the full cost <input type="checkbox"/>

2. General questions about the course

Do you feel the course was well organised?	Badly <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Well
Was the accommodation satisfactory?	Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good
How would you rate the overall quality of the course?	Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good
Was the course too elementary or advanced for your level of knowledge?	Too elementary <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Too advanced
How much do you feel you learnt from the course?	Very little <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A lot
Would you have preferred more or fewer lectures?	Fewer <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> More
Would you have preferred more or less practical work?	N/A <input type="checkbox"/> Fewer <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> More
Should other topics have been included?	No <input type="checkbox"/> Yes <input type="checkbox"/> (Please specify)
Were there topics you feel were not needed?	No <input type="checkbox"/> Yes <input type="checkbox"/> (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 <input type="checkbox"/> Yes <input type="checkbox"/> (Please specify)

Specific evaluation of the course

Lectures (if you missed a lecture leave blank)	
Topic: ... Lecturer: ...	Content: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good Presentation: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good
Topic: ... Lecturer: ...	Content: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good Presentation: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good
Topic: ... Lecturer: ...	Content: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good Presentation: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good
Topic: ... Lecturer: ...	Content: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good Presentation: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good
Practical sessions (if you missed a session leave blank)	
Session number #	Content: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good Organisation: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good Usefulness: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good
Session number #	Content: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good Organisation: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Good Usefulness: Bad <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 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 <input type="checkbox"/> Yes <input type="checkbox"/> (Please specify)	

Appendix 3

Feedback from the courses:

1. Modelling radiation effects from initial events. University of Pavia, Italy

21 participants. 57% from EU countries, 43% local. All post grad, 33% post-doc. 60% physicists, 25% biologists, 75% CPD. Only 25% could have done it at full cost. 90% well organised. 70% accommodation satisfactory. 80% VG or excellent. 95% benefitted from networking. 80% useful future contacts. Majority (>70%) said lecture content and presentation was very good or excellent.

2. Assessing risk to humans and the environment. NMBU, Oslo, Norway

20 participants. 9 from Norway, 6 EU, 5 non-EU. 73% MSc, 18% PhD. Specialisation from a wide range of biological and ecological sciences. Of the respondents, 45% used the course as credit to a degree, 64% CPD. Only 1 would have been able to pay full cost. 90% graded the course as very good or excellent. 90% said they benefitted from the networking and made contacts useful for the future.

3. 'Late Phase' Nuclear Accident Preparedness and Management. RIR, Gomel, Belarus

No feedback provided.

4. EURADOS-CONCERT School on uncertainty analysis processes for retrospective dosimetry and associated research. IRSN, Paris, France

30 applications for 19 places. (2 non-EU). Specialisation: 37% radiation biology, 43% physics, 5% biostatistics/mathematics, 5% chemistry, 5% molecular biology, 5% medical dosimetry. Half were PhD students or post-docs. 60% CPD. Only 16% could have covered full cost. 74% rated the overall course as very good or excellent. 79% said they benefitted from the networking. 85% made contacts useful for the future.

5. Uncertainty analysis in low dose radiation epidemiology. CREAL, Barcelona, Spain

22 participants, 6 non-EU. 90% with MSc or PhD. Specialisation: 56% epidemiologists, 17% radiobiologists, 13% physicists. 90% CPD. Only 23% could have paid full cost. 73% very good or excellent. 100% benefitted from networking. 90% made contacts useful for the future.

6. Summer School in Radiobiology (August 2017). SCK•CEN (Belgian Nuclear Research Centre), Belgium

22 participants, 14 from Belgium, 1 non-EU. Last year of secondary school. Most doing it because they were "interested". Only 15% could have paid full cost. 94% very good or excellent. 100% benefitted from networking. 100% made contacts useful for the future

7. Molecular Mechanisms of Radiation Carcinogenesis. Helmholtz Centre Munich Institute for Radiation Biology, Germany

Feedback received from 7 participants; total number of participants not known. 3 from Germany, 1 non-EU. Mix of BSc, MSc, and PhD levels from the areas, of radiation biology, physics, and genetics.

More than half doing the course for CPD. Only 1 would have been able to pay full cost. Everyone rated the overall course as very good or excellent. 100% benefitted from networking. 100% made contacts useful for the future.

8. Emergency and recovery preparedness and response. National Centre of Radiobiology and Radiation Protection, Bulgaria

15 participants, all from Bulgaria. 5 provided feedback. All BSc and MSc, no PhD. All CPD. Only 1 could have covered full cost. Overall rating spread from fair to excellent. 60% benefitted from networking. 80% made contacts useful for the future

9. Radiation Protection: Basics and Applications. Forschungszentrum Jülich, Germany

15 applications for 12 positions. 9 from Germany, 1 from Greece, 1 from Spain and 1 non-EU. 1 post-doc, the rest students studying for MSc or PhD. Half from nuclear engineering background. 75% CPD. Only 1 able to pay full cost. 90% rated the course very good or excellent overall.

10. Assessment of long-term radiological risks from environmental releases: modelling and measurements. Technical University of Denmark

14 participants. More than half from Scandinavia, the rest EU. All but 1 MSc or PhD. 3 students, the rest working in nuclear/radiation safety and taking the course for CPD. 2 biology, the rest physical sciences. Only 1 was prepared to pay a full fee, but over have said they could pay a nominal fee. All but 1 graded the course very good or excellent overall.

11. EURADOS Training course on Application of Monte Carlo Methods for Dosimetry of Ionizing Radiation. Karlsruhe Institute of Technology, Germany

11 participants. All were following the basis module and 5 continuing with application module 1, 6 with application module 2. All but one participant (from Canada) were from EU countries. Most participants are already working as research scientists or radiation protection experts and followed the course as part of their continuing professional education. 2 of the participants were PhD students. All participants graded the course very good or excellent overall. The high percentage of practical work on their own laptops was well received by the participants. Many participants mentioned the opportunity to make contacts as one benefit of the course.

12. 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

38 participants. 50% from Belgium, 3 from non-EU countries. 20% BSc, 40% MSc, 30% PhD and 10% high school. 35% radiation biology, most of the remainder from other biological sciences. 50% CPD, 5 claiming credit points towards a degree. Only 2 able to pay full cost, 77% could only attend because it was free. 79% gave very good or excellent to the course as a whole. 90% benefited from networking and 87% made contacts useful for the future.

13. Monitoring and dose assessment for internal exposures. National Centre of Radiobiology and Radiation Protection, Bulgaria

13 participants, all from Bulgaria except 1 from non-EU. 70% MSc 15% PhD. 23% radiation biology, 38% physics, 30% radiochemistry. 70% CPD. 92% could only do the course because it was free. 100% rated the overall course as very good or excellent. 100% benefited from networking and 90% made contacts useful for the future.

14. Preparedness and response for nuclear and radiological emergencies. SCK•CEN (Belgian Nuclear Research Centre), Belgium

21 participants: (11 young researchers with CONCERT grant). The overall course was given an average rank of 4.8 out of 5.

15. InterRad - Interdisciplinary Radiation Research. Bundesamt für Strahlenschutz, Germany

29 applications were received, 2 from non EC countries (Switzerland and Kasachstan). The whole 2 week course including experimental laboratory session were offered to 12 participants sponsored by CONCERT from 12 different countries (Croatia, France, Czech Republic, Romania, Spain, Netherlands, UK, Poland, Slovakia, Germany, Finland and Belgium). Participants range from PhD students to postdocs to senior scientists. Their fields were Biochemistry, Biostatistics, Engineering, Biology, Epidemiology, Chemistry, Physics or medical sciences. 8 additional students were offered the possibility to take part on the lectures on their own costs. 4 of the additional 8 students visited all the lectures. Additional 3 internal scientists took also part on the lectures. Organisation and Quality of the course were graded on average to 4.9 out of 5. Feedback of all of the students rated the course as very good or excellent.

16. Cellular effects of ionising radiation – introduction to radiation biology Acronym: CELOD, Stockholm University, Sweden

17 participants sponsored by CONCERT together with 16 internal students. 8 Germany, 4 Poland, 1 Denmark, 1 UK, 3 non-EU. 100% rated the overall course as very good or excellent.