

M05172017

## **Minutes**

# **EIGHT GENERAL ASSEMBLY OF THE NERIS PLATFORM**

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**Location:** Lisbon, Portugal

**Date:** Wednesday, 17 May 2017

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**Participants:** See list attached

## **1. OPENING OF THE EIGHT GENERAL ASSEMBLY**

The Eight NERIS General Assembly was held at the occasion of the third NERIS Workshop in Lisbon, Portugal, on 17th May 2017.

Thierry Schneider opens the General Assembly at 1:30 pm, as President of the NERIS Platform. The list of participants is provided in Annex 1. The proposed agenda is adopted (see Annex 2).

## **2. ANNUAL REPORT**

Thierry Schneider reports on the main activities of the NERIS Platform for the year 2016. The annual report presents more in details the NERIS activities for 2016.

### **▶ New membership and withdrawals**

- In 2016, 1 new organisation joined the NERIS Platform as member (UBB - University Babes-Bolyai (Romania))
- Due to revision of their activities, 2 supporting organisations decided to withdraw from the NERIS Platform (KWR - Watercycle Research Institute (Netherlands) and IKE - Institute of Nuclear Technology and Energy Systems (Germany)).

### **▶ In terms of activities, it has been noticed:**

- The efforts and the implication of the NERIS Management Board members to the coordination of the Platform.
- The NERIS Platform jointly organised with the other RP Platforms the first European Radiation Protection Week in Oxford from 19 to 23 September 2016. At this occasion, the NERIS Platform organised a special sessions dedicated to the lifting of countermeasures.
- NERIS also strengthened its involvement in the coordination of radiation protection research at European level by being involved in the Management Board of the OPERRA Project and being member of the Executive Board and Management Board of the CONCERT Project.
- An effort has been made by NERIS members to disseminate and promote the work achieved by the NERIS community: publication of NERIS TP proceedings (Radioprotection, Vol. 51 – HS N° 1 – 2016), publication of the main outcomes of PREPARE project (Radioprotection, Vol. 51 – HS N° 2 – 2016) and publication of the NERIS Workshop 2015 proceedings (available on NERIS Website).

Thierry Schneider also emphasised the main challenges for the NERIS Platform in the coming years. The main points highlighted are described hereafter.

### **▶ Joint research at European Union level**

- Importance of reinforcing the research community on Emergency and Recovery issues at the EU level
- Promote the involvement of different organisations and favour representativeness of the different EU countries in research activities

### **▶ Visibility and strategy**

- Need to publish papers on the updated SRA
- Develop and publish the NERIS roadmap
- Promote the publications on current NERIS activities in the open literature and the NERIS web page
  - On working groups, users group, E&T
  - On research projects (finished and on-going projects)
  - Short statements related to interesting developments – make the web page more attractive

▶ **Interaction with the other research platforms**

- OPERRA, COMET, CONCERT projects:
  - A successful process for the development of NERIS research activities
  - Significant interactions with other platforms for the development of research including topics related to Social Sciences and Humanities
    - Several multidisciplinary projects
    - Sharing objectives with other platforms
- ERPW: an opportunity to have common workshop sessions
  - Challenging topics such as evacuation with different considerations
  - Do not prevent to have our own NERIS workshop

▶ **NERIS Platform organisation**

- Discuss the current means and structures if they are appropriate
- Development of the NERIS long-term roadmap in relation to the common roadmap developed under CONCERT
- Try to find mechanisms to support funding outside EU research programme in RP

▶ **Consolidate the connection with organisations involved in the management of Chernobyl and Fukushima accidents**

- Maintain interaction with colleagues from Belarus, Ukraine and Russia to ensure the follow up and management of the consequences of the accident
- Strengthen and expand the cooperation established with Japanese colleagues
  - Possible interaction through the research projects
  - Possible invitation to the workshops
  - Possible cooperation on E&T (request from University of Hiroshima)

▶ **Interaction with European and International organisations**

- Main challenges for the next European Radiation Protection Research Week and ICRP Symposium to be held in Paris on October 2017
- Common session and contact to be established with different organisations

▶ **Engage dialogue and consultation**

- Open the dialogue with stakeholders from various origins on NERIS activities and SRA
- Promote consultations on NERIS documents within a broader community
- Use the results of researches to favour the engagement of different stakeholders in Emergency and Recovery preparedness

▶ **Towards harmonisation of Emergency and Recovery approaches in Europe**

- Vision adopted at the creation of NERIS and expected to be achieved by 2020
  - Reinforced by the feedback from Fukushima accident
- Transposition of EURATOM Directive create a new situation calling for reinforcing the common approaches on Emergency and Recovery issues

**The annual report of the NERIS Platform for 2016 is adopted by the General Assembly.**

### 3. FINANCIAL ISSUES

Wolfgang Raskob, Treasurer of the NERIS Platform, presents the main figures of the financial results for 2016.

#### 3.1. Results of 2016

The following tables present, for 2016, the expenses, mainly related to the secretariat activities, and the resources provided by the fees of the supporting organisations. The total of the expenses is 38.5 k€ and the total of the resources is 42.7 k€. This leads to a positive result for 2016 of 4.2 k€.

The participants validate the financial results for 2016.

NERIS 2016 OPERATING COSTS									
NERIS COSTS	Items	Workload days	Workload days paid	Daily cost VAT excluded €	Total cost VAT excluded €	Total cost VAT included 20% €	T&S and others €	Subtotal F €	Total €
<b>NETWORK SECRETARIAT (CEPN)</b>									
<b>NERIS Steering Group &amp; Management</b>	General management (manager)	2	1	1500,00	1500,00	1800,00	163,05	1963,05	
	Assistance (junior researcher)	15	10	680,00	6800,00	8160,00		8160,00	
<b>NERIS Workshops (ERPW 2016)</b>	Workshops organisation (manager)	2	1	1500,00	1500,00	1800,00		1800,00	
	Workshops organisation (junior researcher)	3,5	1	680,00	680,00	816,00	1089,45	1905,45	
<b>WG &amp; sub-network management</b>	Management (manager)	1	1	1500,00	1500,00	1800,00		1800,00	
	Assistance (junior researcher)	3	2	680,00	1360,00	1632,00		1632,00	
<b>NERIS Newsletters</b>	Editorial board (senior researcher)	0	0	980,00	0,00	0,00		0,00	
	Realisation (junior researcher)	5	3	680,00	2040,00	2448,00		2448,00	
<b>NERIS website</b>	Maintenance, upgrading (senior researcher)	4	1	980,00	980,00	1176,00		1176,00	
	Maintenance, upgrading (junior researcher)	3	0	680,00	0,00	0,00		0,00	
	Coordination with european platform (senior r	2	1	980,00	980,00	1176,00			20884,50
<b>Others</b>	Auditor certification						500,00	500,00	
	Web domain (neris.eu), stamp, banking...						165,04	165,04	
<b>Reception</b>	Lunches, dinner (AB, SG, Workshop)						0,00	0,00	
							0,00	0,00	
									665,04
<b>Contacts with intl. Organisations</b>	Management (manager)	7	6	1500,00	9000,00	10800,00		10800,00	
								0,00	
<b>CONCERT European project</b>	CONCERT Projects (manager)	3	0	1500,00	0,00	0,00		0,00	
	RICOMET + ICRP WG						3645,86		
<b>SHAMISEN European project</b>	Oslo meeting						328,87	328,87	
									11128,87
<b>NERIS COST for coordination</b>	<b>subtotal 1 - subtotal 2</b>	<b>50,5</b>	<b>27</b>		<b>26340,00</b>	<b>31608,00</b>	<b>5892,27</b>		<b>37500,27</b>
<b>Contribution CREAL 2015 extourne</b>							-1000,00		-1000,00
<b>Contribution to RPW 2016</b>							2000,00		2000,00
<b>NERIS COST for support</b>							1000,00		1000,00
<b>TOTAL NERIS COORDINATION</b>		<b>50,5</b>	<b>27,0</b>			<b>31608,00</b>	<b>6892,27</b>		<b>38500,27</b>



NERIS 2016 RESOURCES				
NERIS RESOURCES	Members of NERIS - supporting organisations			Fees €
	1 Belgium	SCK-CEN	Belgian Nuclear Research Center	1000,00
	2 Czech Rep.	SURO	National Radiation Protection Institute	1000,00
	3 Denmark	DTU	Technical University of Denmark	1000,00
	4 Denmark	PDC	Prolog Development Center	1000,00
	5 Finland	STUK	Radiation and Nuclear Safety Authority	2000,00
	6 France	MUTADIS	Mutadis	1000,00
	7 France	CEPN	Nuclear Evaluation Protection Center	1000,00
	8 France	IRSN	Institute for Radiological Protection and Nuclear Safety	2000,00
	9 Germany	BFS	Federal Office for Radiation Protection	2000,00
	10 Germany	KIT	Karlsruhe Institute of Technology	1000,00
	11 Germany	IKE	University of Stuttgart	1000,00
	12 Greece	GAEC	Greek Atomic Energy Commission	2000,00
	13 Greece	DEMOKRITO	National Center for Scientific Research DEMOKRITOS	1000,00
	14 Ireland	EPA	Environmental Protection Agency	2000,00
	15 Italy	UNIMI	University of Milan	1000,00
	16 Netherland	KWR	Watercycle Research Institute	1000,00
	17 Norway	NRPA	Norwegian Radiation Protection Authority	2000,00
	18 Norway	NMBU	Norwegian University of Life Science	1000,00
	19 Poland	NCNR	National Centre for Nuclear Research	1000,00
	20 Portugal	IST	Technical Institute of Lisbon	1000,00
	21 Portugal	APA	Agencia Portuguesa do Ambiente	2000,00
	22 Spain	UPM	Technical University of Madrid	1000,00
	23 Spain	CIEMAT	Ciemat	2000,00
	24 Spain	TECNATOM	Tecnatom	2000,00
	25 Slovakia	VUJE	Nuclear Power Plants Research Institute	2000,00
	26 Switzerland	OFSP	Swiss Federal Office of Public Health	2000,00
	27 United Kingdom	PHE	Public Health England	2000,00
	28 United Kingdom	RISCU	University of Warwick	1000,00
Total fees				40000,00
Others	Concert project			2491,82
	OPERRA SHAMISEN project			246,65
				2738,47
TOTAL NERIS RESOURCES				42738,47
RESULT	NERIS resources - NERIS costs			4238,20

### 3.2. Proposal for 2017

For 2017, Wolfgang Raskob underlined the preliminary estimates for the expenses and resources mentioning that resources associated with fees are reduced because of the 2 withdrawals of IKE and KWR. However, this will be balanced by the expected positive results of the NERIS workshop in Lisbon.

Thierry Schneider also pointed out that CONCERT project contains dedicated resources to support the travel costs of NERIS members to attend meeting related to the preparation of the NERIS SRA and Roadmap. In this way, Thierry Schneider invited NERIS members to contact NERIS Secretariat if they need some funding for their travel costs (organisations not members of CONCERT are eligible for this funding from NERIS).

For 2018, the same fees for the supporting organisations are proposed.

**The participants of the NERIS General Assembly validate the proposed budget for 2017 as well as the conservation of the fees amount.**

NERIS 2017 OPERATING COSTS									
NERIS COSTS	Items	Workload days	Workload days paid	Daily cost VAT excluded €	Total cost VAT excuded €	Total cost VAT included 20% €	T&S and others €	Subtotal F €	Total €
<b>NETWORK SECRETARIAT (CEPN)</b>									
<b>NERIS Steering Group &amp; Management</b>	General management (manager)	2	1	1400,00	1400,00	1680,00	200,00	1880,00	
	Assistance (junior researcher)	15	10	600,00	6000,00	7200,00		7200,00	
<b>NERIS Workshops (NERIS 2017+ERPW)</b>	Workshops organisation (manager)	2	1	1400,00	1400,00	1680,00		1680,00	
	Workshops organisation (junior researcher)	7	6	600,00	3600,00	4320,00	500,00	4820,00	
<b>WG &amp; sub-network management</b>	Management (manager)	1	1	1400,00	1400,00	1680,00		1680,00	
	Assistance (junior researcher)	3	2	600,00	1200,00	1440,00		1440,00	
<b>NERIS Newsletters</b>	Editorial board (senior researcher)	0	0	980,00	0,00	0,00		0,00	
	Realisation (junior researcher)	5	4	600,00	2400,00	2880,00		2880,00	
<b>NERIS website</b>	Maintenance, upgrading (senior researcher)	4	1	980,00	980,00	1176,00		1176,00	
	Maintenance, upgrading (junior researcher)	3	0	600,00	0,00	0,00		0,00	
									22756,00
<b>Others</b>	Auditor certification						500,00	500,00	
	Web domain (neris.eu), stamp, banking...						200,00	200,00	
<b>Reception</b>	Lunches, dinner (AB, SG, Workshop)						0,00	0,00	
	Workshop organisation - Neris 2017						8000,00	8000,00	
									8700,00
<b>Contacts with intl. Organisations</b>	Management (manager)	6	5	1400,00	7000,00	8400,00		8400,00	
					0,00	0,00		0,00	
<b>European project</b>	CONCERT Projects (manager)	5	1	1400,00	1400,00	1680,00	6000,00	7680,00	
	SHAMISEN project (manager)	3	0	1400,00	0,00	0,00	6000,00	6000,00	
									22080,00
<b>NERIS COST for coordination</b>	<b>subtotal 1 - subtotal 2</b>	<b>56</b>	<b>32</b>		<b>26780,00</b>	<b>32136,00</b>	<b>21400,00</b>		<b>53536,00</b>
Contribution ALLIANCE/JCRR							1000,00		1000,00
Contribution to RPW 2017							2000,00		2000,00
<b>NERIS COST for support</b>							<b>3000,00</b>		<b>3000,00</b>
<b>TOTAL NERIS COORDINATION</b>		<b>56,0</b>	<b>32,0</b>			<b>32136,00</b>	<b>24400,00</b>		<b>56536,00</b>

NERIS 2017 RESOURCES				
NERIS RESOURCES	Members of NERIS - supporting organisations			Fees €
	1 Belgium	SCK-CEN	Belgian Nuclear Research Center	1000,00
	2 Czech Rep.	SURO	National Radiation Protection Institute	1000,00
	3 Denmark	DTU	Technical University of Denmark	1000,00
	4 Denmark	PDC	Prolog Development Center	1000,00
	5 Finland	STUK	Radiation and Nuclear Safety Authority	2000,00
	6 France	MUTADIS	Mutadis	1000,00
	7 France	CEPN	Nuclear Evaluation Protection Center	1000,00
	8 France	IRSN	Institute for Radiological Protection and Nuclear Safety	2000,00
	9 Germany	BFS	Federal Office for Radiation Protection	2000,00
	10 Germany	KIT	Karlsruhe Institute of Technology	1000,00
	11 Germany	IKE	University of Stuttgart	0,00
	12 Greece	GAEC	Greek Atomic Energy Commission	2000,00
	13 Greece	DEMOKRITO	National Center for Scientific Research DEMOKRITOS	1000,00
	14 Ireland	EPA	Environmental Protection Agency	2000,00
	15 Italy	UNIMI	University of Milan	1000,00
	16 Netherlands	KWR	Watercycle Research Institute	0,00
	17 Norway	NRPA	Norwegian Radiation Protection Authority	2000,00
	18 Norway	NMBU	Norwegian University of Life Science	1000,00
	19 Poland	NCNR	National Centre for Nuclear Research	1000,00
	20 Portugal	IST	Technical Institute of Lisbon	1000,00
	21 Portugal	APA	Agencia Portuguesa do Ambiente	2000,00
	22 Spain	UPM	Technical University of Madrid	1000,00
	23 Spain	CIEMAT	Ciemat	2000,00
	24 Spain	TECNATOM	Tecnatom	2000,00
	25 Slovakia	VUJE	Nuclear Power Plants Research Institute	2000,00
	26 Switzerland	OFSP	Swiss Federal Office of Public Health	2000,00
	27 United Kingdom	PHE	Public Health England	2000,00
	28 United Kingdom	RISCU	University of Warwick	1000,00
<b>Total fees</b>				<b>38000,00</b>
<b>Others</b>	Concert project			4214,25
	OPERRA SHAMISEN project			4500,00
	Workshop NERIS - Lisbon			10000,00
				18714,25
<b>TOTAL NERIS RESOURCES</b>				<b>56714,25</b>
<b>RESULT</b>	<b>NERIS resources - NERIS costs</b>			<b>178,25</b>

## **4. REVIEW OF THE PLATFORM ACTIVITIES**

### **4.1. Activities of the NERIS Working Groups**

#### **▶ Working Group on ICRP recommendations**

Wolfgang Raskob presented the activities of the Working Group on ICRP recommendations. He mentioned that a meeting with the ICRP Task Group dedicated to the update of Publication 109 and 111 on emergency and recovery has been held in Paris on April 2016 allowing to provide preliminary comments on this update. The summary of this meeting is available on the NERIS Website, on the WG ICRP dedicated webpage.

For 2017, Wolfgang Raskob explained that WG ICRP will contribute to the ICRP meeting next October in Paris, at the occasion of the ICRP Symposium.

#### **▶ Working Group on Contaminated Goods**

Sylvie Charron presented the activities related to the Working Group on Contaminated Goods (ConGoo). She reminded that the work implemented within this WG was initially conducted in the framework of PREPARE WP3. In September 2016, during the ERPW16 in Oxford, The WG ConGoo as such has been reactivated. All partners agreed to continue the reflection involving stakeholders on the management of contaminated goods.

Sylvie Charron specified that a new WG ConGoo meeting is scheduled at the end of the 3rd NERIS Workshop (19 May 2017). The objective of this meeting is notably to see how to interact with stakeholders' panels organised in the framework of European projects CONFIDENCE and TERRITORIES and to provide initial feedback from Fukushima current situation.

#### **▶ Working Group on Information, Participation and Communication**

Eduardo Gallego presented the first-year-activities of the Working Group dedicated to 'Information, Participation and Communication'. He reminded that this WG was created in January 2016 with the idea to continue the work implemented in the framework of PREPARE WP6. First actions, agreed during the meeting in Oxford in September 2016, was to:

- ▶ Establish a forum within the analytical Platform
- ▶ Draft and edit easy-to-read leaflets with key messages from PREPARE WP6 and WP3
- ▶ Develop new sections on the NERIS website with relevant deliverables

E. Gallego invited all volunteers to be part of this NERIS WG and to help with the work in progress. E. Gallego proposed also a new meeting during the future NERIS Workshop in 2018.

Thierry Schneider underlined the fact that the WG on Information, Participation and Communication integrates the objectives of the former WG on Local Stakeholder, which has no more activities. Some participants in the assembly asked to save the database entered in the former WG Local SH.

Thierry Schneider declared that this issue will be addressed and that leaders of this former WG will be implicated in order to save and maintain the work done so far. The members of the General Assembly agreed to withdraw the WG on Local Stakeholder.

Thierry Schneider also proposed to dedicate more time to the presentation of the strategy developed within each NERIS WG during the next General Assembly in 2018.

### **4.2. Activities of the RODOS Users Group**


Florian Gering presented the activities of the RODOS Users Group. He explained that in 2016, the meeting of the RODOS Users Groups was held in June 2016 in Madrid. About 40 participants from 17 countries were present. In addition to this meeting, an optional training course on advanced features of JRODOS was organised by KIT.

Florian Gering specified that the 2017 meeting of the RODOS Users Group was held last April 2017 in Karlsruhe. Next meeting of the RODOS Users Group is scheduled in April 2018 in Netherlands. The exact dates are not determined yet and, in order to prevent some schedule conflicts, Thierry Schneider draws the attention that the 4<sup>th</sup> NERIS Workshop will also be held in April 2018: from 25 to 27.

## 4.3. NERIS R&D Committee: Updated Strategic Research Agenda

Johan Camps, Chair of the NERIS R&D Committee, presented the main activities of this committee during 2016, which were dedicated to the update of the current SRA as well as the preliminary elaboration of the NERIS Roadmap.

The presentation of Johan Camps is presented hereafter.




### The NERIS R&D Committee

Updated Strategic Research Agenda

Johan Camps  
& NERIS R&D Committee

[johan.camps@sckcen.be](mailto:johan.camps@sckcen.be)


Eight NERIS General Assembly – Lisbon, Portugal – May 17, 2017



### Overview of the activities of the R&D Committee during the last year

- July 2016: definition of NERIS priorities in context of second CONCERT call;
- September 2016: R&D Committee meeting during Radiation Protection Week in Oxford – discussion update NERIS Strategic Research Agenda (SRA);
- January 2017: R&D Committee meeting, Brussels – further discussion on NERIS SRA and NERIS & Joint RP CONCERT roadmaps, contribution to Scientific organization of the third NERIS workshop;
- Drafting updated NERIS SRA and roadmap scenario's

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### The second NERIS statement

NERIS statement in context of second CONCERT call:

- It was decided to keep the same priorities for the second NERIS statement as for the first statement:
  - Assessment of and communication of uncertainties;
  - Robust decision-making;
  - Countermeasure strategy preparedness;
  - Atmospheric dispersion modelling;
  - Local radio-ecological models;
  - Monitoring strategies;
- Finally, based on more details (selected projects first call, budget, ...), *Countermeasure strategies* as NERIS priority was selected as one of the second CONCERT call topics;
- A summary of running and finalized projects was added to the second NERIS statement (PREPARE, CATHyMara, HARMONE, SHAMISEN).


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### Towards an updated NERIS SRA

- R&D Committee meetings (Oxford and Brussels):
  - New structure proposed for the NERIS Strategic Research Agenda;
  - Updates on focus, terminology, topics, ...
- See presentation during NERIS workshop;
- Core elements of updated SRA ready: further consultation process has to be defined.

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### New structure of SRA

3 Research Areas, 10 Key Topics

- Challenges in radiological impact assessments during all phases of nuclear and radiological events
  - Improved modelling - Improved monitoring - Data assimilation
- Challenges in countermeasure and countermeasure strategies in emergency and recovery, Decision support and Disaster Informatics
  - Countermeasures & countermeasure strategies - Formal decision support - Disaster Informatics
- Challenges in setting-up a multi-faceted framework for preparedness for emergency response and recovery
  - Emergency response and recovery framework, including reference levels - Stakeholder engagement, involvement of the public & communication - Integrated emergency management, non-radiological aspects - Uncertainty and incomplete information handling

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### Towards a NERIS and Joint RP roadmap

- Two societal scenarios were developed by NERIS (as agreed during CONCERT roadmap meeting RPW Oxford):
  - Facing the consequences of a nuclear or radiological accident or incident
  - Facing the consequences of a radiological terrorist act
- Deadline for roadmaps shifted from end of May towards end of November 2017.
- Discussion joint RP roadmap continuous (Budapest, May 22)
- NERIS roadmap: further steps are necessary – start from the scenario's developed is a possibility

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## 5. INFORMATION ON THE OPERRA PROJECT

Thierry Schneider reminded that 3 projects selected under the OPERRA project are directly related to NERIS activities and involved NERIS members:

- ▶ **CATHYMARA** – Project leader: David Broggio (IRSN)  
Child and Adult Thyroid Monitoring After Reactor Accident
- ▶ **HARMONE** – Project leader: Christian Staudt (HMGU)  
Harmonising Modelling Strategies of European Decision Support Systems for Nuclear Emergencies
- ▶ **SHAMISEN** – Project leader: Elisabeth Cardis (ISGlobal)  
Nuclear Emergency Situations-Improvement of Medical and Health Surveillance

Started in December 2015, these projects will end on 31st May 2017.

Thierry Schneider also pointed out that the OPERRA Final meeting will be held on 23-25 May 2017 in Budapest. After that final event, all documents related to the projects funded by OPERRA will be available. The ones related to NERIS activities will notably be available on the NERIS Website.

## 6. INFORMATION ON THE CONCERT PROJECT

### 6.1. General information on the CONCERT Project

Thierry Schneider reminded that two major projects related to NERIS activities, CONFIDENCE and TERRITORIES, have been selected under the first CONCERT Call. Detailed presentations of these projects were presented during the 3<sup>rd</sup> NERIS Workshop.

Thierry Schneider also specified that the second CONCERT Call is under evaluation. The results are expected for the end of July.

Concerning the different CONCERT work packages, Thierry Schneider pointed out the important implication of NERIS representatives for the elaboration of the joint SRA and Roadmaps, gathering all priorities coming from all European Research Platforms. A first joint Roadmap is expected for the end of November 2017.

### 6.2. CONCERT WP5 – Contribution to the CONCERT Stakeholder Group

Tatiana Duranova explained that the SubTask 5.2 of the CONCERT project aims to establish a Stakeholder Group at the European scale to:

- ▶ Provide a route for stakeholders to build their own opinion on RP research topics and to be heard within CONCERT
- ▶ Provide input to identify areas of concern where further information or research could be beneficial.

10 to 15 persons are expected to be part of the Stakeholder Group, representing the range of different stakeholder types (patients, NGO, RP public expert, industries, research funding agencies, etc.).

In this context, Research Platforms have been asked to identify stakeholders on the basis of their interest in the orientation of RP Research.

Concerning NERIS, Tatiana Duranova informed the General Assembly that the management board has proposed three different stakeholders: Eduardo Gallego (UPM-Spain), Yves Lheureux (ANCCLI-France) and Dominique RAUBER (FOPH-Switzerland).

## 7. NERIS PARTICIPATION TO THE ICRP SYMPOSIUM AND THE ERPW 2017

Thierry Schneider reminded that, as mentioned during the last NERIS General Assembly, NERIS has been involved in the organisation of the ICRP Symposium as well as the ERPW 17 on October 10-12 2017 in Paris.

Concerning the ICRP Symposium, Christophe Murith specified that a joint session ICRP& NERIS will be organised on Thursday 12th October and will be dedicated to the **Post-Accidental Recovery**.

Within the ERPW 17, two sessions will be organised by NERIS, on Tuesday 10th afternoon:

- ▶ Session 1: Ethics in radiation protection
- ▶ Session 2: Management of emergency and post-accident situations: how to optimize population evacuation zones and related decision making processes?

Thierry Schneider reminded that during this week, satellite meetings will be organised as for example: the NERIS R&D Committee and Management Board on October 11th. Thierry Schneider invited participants who wish to organise satellite meetings to contact him in order to book dedicated meeting rooms.

## **8. INTERNATIONAL COOPERATION**

### **8.1. Cooperation with international organisations**

#### ▶ **EAN – European ALARA Network**

Pascal Croüail and Thierry Schneider informed that the 17th European ALARA Network workshop on "ALARA in emergency exposure situations", organised in cooperation with NERIS, was completed just before the 3rd NERIS Workshop. The report will be available by the end of September 2017 and will be also published on the NERIS website.

#### ▶ **WHO**

Zhanat Carr presented the main interaction between NERIS and WHO. The detailed presentation is available in Annex 3.

#### ▶ **ICRP**

Jean-François Lecomte presented the main current ICRP activities related to NERIS. He notably announced the results of the election of the ICRP Main Commission members. Jean-François Lecomte also mentioned the main outcomes from Task Group 93, working on the update of publications 109 and 111. The detailed presentation is available in Annex 4.

#### ▶ **IAEA**

Carol Robinson presented the main activities of the Incident and Emergency Centre of IAEA. Her detailed presentation is available in Annex 5.

#### ▶ **EC-ISPRA**

Miguel-Angel Hernandez Ceballos presented the main activities of the European Commission's Science and knowledge services. Thierry Schneider took the opportunity of this presentation to emphasise the need of closer relations between NERIS and EC-ISPRA. The detailed presentation of Miguel-Angel Hernandez Ceballos is available in Annex 6.

#### ▶ **NEA-OECD**

In the absence of Olvido Guzmán, Thierry Schneider presented the main activities of NEA-OECD related to NERIS activities in 2016. The detailed presentation is available in Annex 7.

### **8.2. Cooperation with Japanese organisations**

Thierry Schneider reminded that cooperation with Japanese organisations and universities were organised in the framework of different European projects (PREPARE, SHAMISEN, etc.). Currently, a cooperation agreement exists with CRIEPI. Thierry Schneider expressed the need to further consider the possible interaction and collaboration between NERIS and Japanese organisations in the near future, on the E&T matters notably.

## **9. NERIS WORKSHOP 2018 – DATE & VENUE OF THE NEXT GENERAL ASSEMBLY**

Thierry Schneider and Veronica Smith announced that the **next NERIS Workshop will be held in Dublin, on 25-27 April 2018.**

At this occasion, it is decided to organise **the ninth General Assembly on 25th April afternoon in Dublin.** In addition, satellite meetings could take place during this week in Dublin.

#### **10. ANY OTHER ISSUES**

Thierry Schneider provided information on 2 events of interest for NERIS:

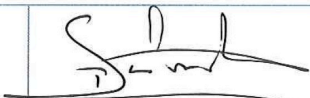



- ▶ RICOMET 2017 – Social & ethical aspects on the decision-making-process in radiological risks situations. **27-28 June 2017 in Vienna (IAEA premises)**
- ▶ ICRER 2017. **2-8 September 2017, Berlin**

#### **11. CLOSING OF THE EIGHT GENERAL ASSEMBLY**

Thierry Schneider thanked all the participants and closed the General Assembly at 4:30 pm.

**Minutes of the Eighth General Assembly of the NERIS Platform  
Wednesday 17 May 2017  
Lisbon, Portugal**

Members of the Bureau of the NERIS Platform

Thierry SCHNEIDER, CEPN	Chair	
Florian GERING, BfS	Vice-Chair	
Deborah OUGHTON, NMBU	Secretary	
Wolfgang RASKOB, KIT	Treasurer	




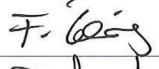
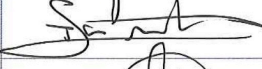

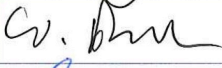

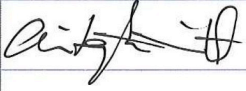

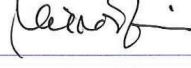
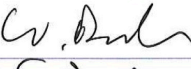
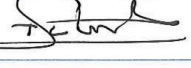
## **ANNEXES**


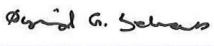
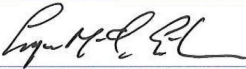
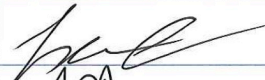
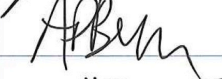


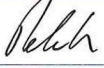

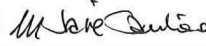
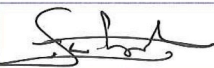
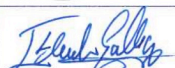
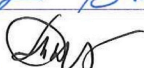
**Annex 1: List of Participants (Supporting Organisations only)**

M05172017

**Minutes of the Eighth General Assembly of the NERIS Platform  
Wednesday 17 May 2017  
Lisbon, Portugal**

Supporting organisations of the NERIS Platform

ORGANISATIONS	REPRESENTATIVES	SIGNATURE
APA - Agencia Portuguesa do Ambiente	PAULO NUNES	
BfS - Federal Office for Radiation Protection	Florian Gering	
CEPN - Nuclear Evaluation Protection Centre	Thierry Schneider	
CIEMAT	MILAGROS MONTERO	
DTU NUTECH - Technical University of Denmark	W. Raskob (proxy)	
EPA – Environmental Protection Agency	C. McMahon	
FOPH - Federal Office Public Health	C. Hunth	
GAEC - Greek Atomic Energy Commission		
IRSN - French Institute for Radiological Protection and Nuclear Safety	S. CHARRON	
IST - Instituto Superior Técnico (the Lisbon School of Engineering, Science and Technology)	MARIO REIS	
KIT - Karlsruhe Institute of Technology	W. Raskob	
MUTADIS	T. Schneider (proxy)	
NCBJ - National Centre for Nuclear Research		

ORGANISATIONS	REPRESENTIVES	SIGNATURE
NCSRD - National Centre for Scientific Research "Demokritos"	S. Andronopoulos	
NMBU - Norwegian University of Life Sciences	ØYVIND GJØLME SELNES	
NRPA - Norwegian Radiation Protection Authority	Inger M. H. Eikeland	
PDC-Argos - Prolog development Center	Jay Behar	
PHE - Public Health England	ANTONY BEXAN	
SCK-CEN - Belgian Nuclear Research Centre	JOHAN CAMPS	
STUK - Finnish Radiation and Nuclear Safety Authority	M. Muikku	
SURO - National Radiation Protection Institute	Petr KUČA	
Tecnatom	E. GALLEGO (Proxy)	
UNIMI- University of Milan	Marie Claire Cantone	
University of Warwick	T. SCHNEIDER (proxy)	
UPM - Universidad Politécnica de Madrid	E. GALLEGO	
VUJE - Nuclear Power Plants Research Institute	T. Duranora	

**Agenda****EIGHTH GENERAL ASSEMBLY OF THE NERIS PLATFORM****Wednesday May 17, 2017****13.30 - 16.30****CTN – Tecnológico e Nuclear Campus**


Estrada Nacional 10

2695-066 Bobadela LRS

- 1. Opening of the General Assembly and adoption of the agenda**  
*(President – Thierry Schneider - CEPN)*
- 2. Annual report** *(President – Thierry Schneider - CEPN)*
  - 2.1. Activities and evolution of the memberships
    - ▶ Adoption of the report by the GA
- 3. Financial issues** *(Report of the treasurer: Wolfgang Raskob – KIT)*
  - 3.1. Results of 2016
    - ▶ Adoption of the results of 2016
  - 3.2. Proposal for 2017
  - 3.3. Adoption of the fees for 2018
- 4. Review of the Platform activities**
  - 4.1. Activities of the NERIS Working groups:
    - 4.1.1. WG on ICRP recommendations *(Wolfgang Raskob - KIT)*
    - 4.1.2. WG on Contaminated Goods *(Sylvie Charron - IRSN)*
    - 4.1.3. WG on Information, Participation and Communication  
*(Eduardo Gallego - UPM)*
  - 4.2. Activities of the RODOS Users Group *(Florian Gering – BfS)*
  - 4.3. R&D Committee: Updated Strategic Research Agenda  
*(Johan Camps – SCK CEN)*
- 5. Information on the OPERRA Project**
- 6. Information on the CONCERT project**
  - 6.1. General Information on the CONCERT Project
  - 6.2. CONCERT WP5 – Contribution to the CONCERT Stakeholder Group
  - 6.3. Information on the development of the CONFIDENCE & TERRITORIES projects

- 7. NERIS participation to the ICRP Symposium & European Radiation Protection Week in October 2017 in Paris** *(Thierry Schneider & Christophe Murith)*
- 8. International cooperation** *(All)*
  - 8.1. Co-operation with international organisations
    - 8.1.1. EAN – European ALARA Network: Feedback on the workshop organised in cooperation with NERIS *(Fernand Vermeersch, Pascal Croûail)*
    - 8.1.2. WHO – REMPAN *(Zhanat Carr)*
    - 8.1.3. ICRP *(Jean-François Lecomte)*
    - 8.1.4. IAEA *(Carole Robinson)*
    - 8.1.5. NEA/OECD
  - 8.2. Co-operation with Japanese organisations
- 9. RP Research coordination**
  - 9.1.1. MELODI *(Pedro Vaz)*
  - 9.1.2. ALLIANCE *(Maria-José Madruga)*
- 10. NERIS Workshop 2018**
- 11. Date and venue of the next General Assembly**
- 12. Any other issues**
- 13. Closing of the Eighth General Assembly** *(President – Thierry Schneider – CEPN)*

## Annex 3: Updates from WHO Radiation Programme's Activities in the EPR area

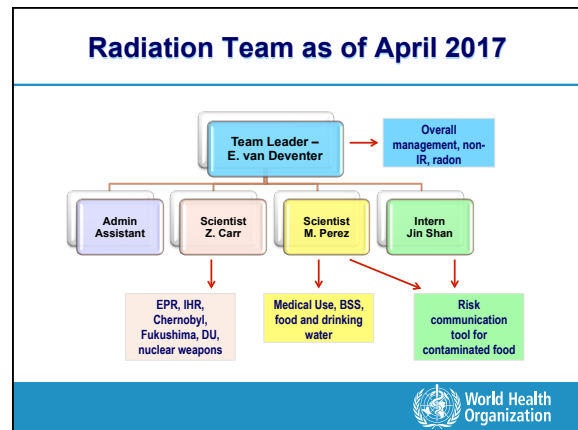


**World Health Organization**

**Updates from WHO Radiation Programme's Activities in the EPR area**

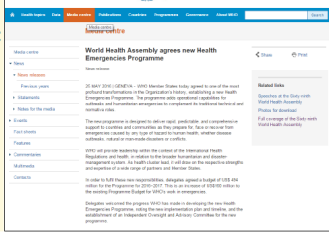

**Dr Zhanat Carr**

**NERIS General Assembly  
17 May 2017 – Lisbon, Portugal**



### May 2016: WHA adopts new WHO Health Emergencies Programme (WEP)

“.....to deliver rapid, predictable, and comprehensive support to countries and communities as they prepare for, face or recover from emergencies caused by any type of hazard...”

### The new WEP: Key Features



- One workforce
- One work plan and \$494 m budget
- One line of accountability
- One set of processes
- One admin. system

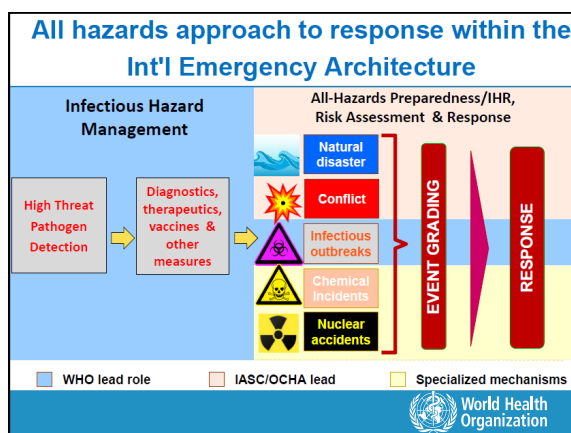
**2 x staff; highly mobile; high-vulnerability countries & Regions**

**Single integrated plan across all 7 major offices**


**Director-General to ExD & Regional Directors**

**Risk Assessment, Grading, Incident Management**

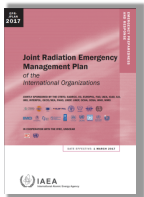
**Contingency Emergency Fund, Rapid Deployment Processes**


### IACRNE and Joint Plan



- Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE): strengthening coordination of response to radiation emergencies by the international organizations with relevant responsibilities (IAEA is the coordinating agency).
- Provides links between agencies to ensure continuous communication prior to, during, and after emergencies. Arrangements are described in the Joint Radiation Emergency Management Plan of the International Organizations (EPR-JPLAN 2017)
  - regularly exercised via ConvEx drills

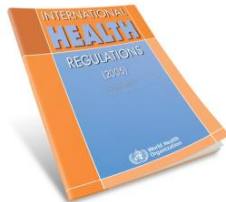


Members: CTBTO, EC, EUROPOL, FAO, IAEA, ICAO, IMO, UNSCAR, INTERPOL, NATO, OECD/NEA, PAHO, UNDP, UNEP, UN/OCHA, UN/OOSA, WHO, and WMO.



## International Health Regulations (2005)

- **Legally binding treaty**
- **196 States Parties**
- **In force 15 June 2007**

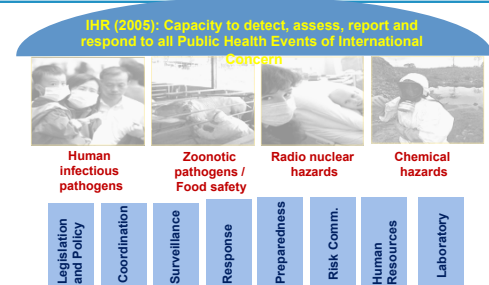


**States must prepare, report and cooperate**

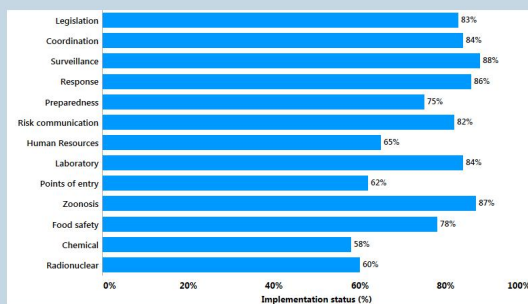
**WHO must coordinate**



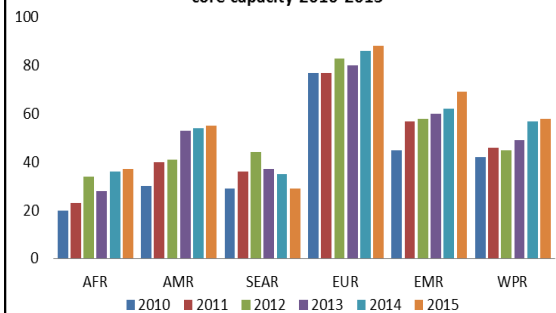
## IHR (2005): a multi-hazards framework to assess core national capacities



**IHR core capacities implementation status, 2015**  
(127 reporting countries)



**IHR Implementation Status of Radionuclear core capacity 2010-2015**



## IHR Monitoring and Evaluation Framework (IHR – MEF)



## Joint External Evaluation of IHR implementation

- Developed in collaboration with partners and initiatives such as the Global Health Security Agenda (GHSA), the JEE tool and process is a part of the IHR (2005) Monitoring and Evaluation framework ([http://www.who.int/ihr/publications/WHO\\_HSE\\_GCR\\_2016\\_2/en/](http://www.who.int/ihr/publications/WHO_HSE_GCR_2016_2/en/))
- By end Apr 2017, the JEE reviews were done in 37 countries including Pakistan, Turkmenistan, Qatar, Morocco, USA, etc.
- Focuses on health security and cross-sector coordination and includes 19 areas of evaluation, radiation emergencies being one of them.
- Somewhat similar to EPREv but not as thorough and detailed at the technical level as EPREv, however – we need to find the way to coordinate these two mechanisms





<https://extranet.who.int/spp/ihr-monitoring-evaluation>

World Health Organization Strategic Partnership Portal

Home Country Planning for Health Security Joint Monitoring and Evaluation Framework Health Security Investment

IHR Monitoring & Evaluation

IHR Monitoring Map

View by: Joint External Evaluation (JEE) Status Parties Annual Reporting (SPAR)

Region: All -

Country: All -

World Health Organization

### Upcoming JEE Missions in 2017

February 2017	March 2017	April 2017	May 2017
6 Feb 2017 to 10 Feb 2017 Oman	1 Mar 2017 to 3 Mar 2017 Bahrain	2 Apr 2017 to 6 Apr 2017 Oman	1 May 2017 to 5 May 2017 Djibouti
17 Feb 2017 to 24 Feb 2017 Laos People's Democratic Republic	6 Mar 2017 to 10 Mar 2017 Maldives	10 Apr 2017 to 14 Apr 2017 United Republic of Tanzania	3 May 2017 to 5 May 2017 Myanmar
27 Feb 2017 to 3 Mar 2017 Kenya	12 Mar 2017 to 16 Mar 2017 Saudi Arabia	16 Apr 2017 to 20 Apr 2017 Kuwait	8 May 2017 to 12 May 2017 Lanka
	18 Mar 2017 to 23 Mar 2017 United Arab Emirates	23 Apr 2017 to 30 Apr 2017 Iraq	8 May 2017 to 12 May 2017 Cameroon
	27 Mar 2017 to 31 Mar 2017 Mauritania	24 Apr 2017 to 28 Apr 2017 United Republic of Tanzania	8 May 2017 to 12 May 2017 Lanka
	27 Mar 2017 to 31 Mar 2017 Finland	24 Apr 2017 to 29 Apr 2017 Guinea	12 May 2017 to 15 May 2017 Mongolia
5 Jun 2017 to 9 Jun 2017 Slovenia			
12 Jun 2017 to 16 Jun 2017 Nigeria			
19 Jun 2017 to 23 Jun 2017 Belgium	28 Aug 2017 to 2 Sep 2017 Republic of Korea		
19 Jun 2017 to 24 Jun 2017 Sri Lanka			
26 Jun 2017 to 30 Jun 2017 Thailand	30 Oct 2017 to 3 Nov 2017 Switzerland		
26 Jun 2017 to 30 Jun 2017 Uganda			
		1 Sep 2017 to 30 Sep 2017 Indonesia	
			24 Nov 2017 to 1 Dec 2017 Australia

<https://extranet.who.int/spp/calendar>

World Health Organization

### Planned JEE Missions in 2017 in European Region

EURO	Country	Year	Period
EURO	Belgium	2017	Jun 19-23
EURO	Finland	2017	Mar 27-31
EURO	Latvia	2017	May 8-12
EURO	Slovenia	2017	Jun 5-9
EURO	Switzerland	2017	Oct 30 -3 Nov
EURO	Liechtenstein	2017	Oct 30 -3 Nov

<https://extranet.who.int/spp/calendar>

World Health Organization

### Development of technical tools/reports

- Guidelines for PH response to radiation emergencies – a complementary document to GSR Part 7
- Revision of 1999 WHO guidelines on KI thyroid blocking – KI national policies survey 2016-2017 (ends May 31) – <https://extranet.who.int/dataform/717972/lang-en>
- Risk comm. tool for radioactively contaminated food
- WHO guide on emergency risk communication
- NBI: IHR and radiation emergencies – a document similar to "IHR and Chemical emergencies" – will be developed in 2017

<http://apps.who.int/iris/bitstream/10665/249532/1/9789241509589-eng.pdf?ua=1>

World Health Organization

### The 2nd KIRAMS-WHO Asian Workshop on Medical Response to Radiation Emergencies

- Seoul, Rep of Korea – 6-8 Dec, 2016
- Fully funded by Korean Ministry of Science and Technology
- Attended by 30 participants from Western-Pacific and South-East Asian member states
- Reviewed national programs
- Discussed gaps/needs
- Identified priority areas
- WS report is available upon request

The 2nd Asian REMPAN Workshop

World Health Organization

### UPCOMING EVENTS

- World Health Assembly – next week will elect new DG, will come to administration from July 01, 2017.
- Various national and regional training programs held by the WHO Collaborating Centres
  - RERF annual training course in biodosimetry, Hiroshima, Japan;
  - Karolinska University training for on clinical management of radiation injuries, Sweden – Nov 2017
  - KIRAMS training on EPR for Asian countries, Seoul Korea – Q3, 2017
- Topical Webinars aiming at specific issues, e.g. iodine thyroid blocking, acute radiation syndrome management, etc.
- ConvEx-3(2017) in Hungary – June 2017
- The 15<sup>th</sup> Coordination meeting of WHO REMPAN – 3-5 July 2017 in Geneva, Switzerland (co-hosted by Swiss FOPH)

World Health Organization

### WHO REMPAN-15 meeting

3 to 5 July 2017 – Geneva, Switzerland

GENEVA

World Health Organization



## Annex 4: International Commission on Radiological Protection (ICRP)

**International Commission on  
Radiological Protection  
(ICRP)**

Jean-Francois Lecomte  
ICRP Committee 4

NERIS Platform – General Assembly  
Lisbon, Portugal  
17 May, 2017

**New Term 2017-2021**

- **New membership for the MC**
  - Claire Cousins (Chair)
  - Jacques Lochard (vice-Chair)
  - Werner Rühm (C1 Chair)
  - John Harrison (C2 Chair)
  - Don Miller (C3 Chair)
  - Don Cool (C4 Chair)
  - Simon Bouffler
  - Kunwoo Cho
  - Michiaki Kai
  - Carl-M. Larsson
  - Dominique Laurier
  - Senlin Liu
  - Sergey Romanov

ICRP INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

**New Term 2017-2021**

- **New membership for the 4 Committees**
  - Elections have taken place
  - Invitations are going on
  - Formalisation of the lists after replies

ICRP INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

**New term 2017-2021**

- **Strategic objectives 2016-2020**
  - Maintain and continue to improve the System of RP
  - Promote awareness of radiological protection and broaden access to ICRP Recommendations
  - Increase engagement with professionals, policy-makers and the public
- **Main internal challenges**
  - Terminate the modernization of the governance of the Commission
  - Pursue the fund raising campaign
  - Initiate the update of the general

ICRP INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

**Programme of work**

	2013-2017	2017-2021
<b>Committee 1</b>	No clear direction...	Update of the detriment
<b>Committee 2</b>	Development of dose coefficients	Finalisation of dose coefficients
<b>Committee 3</b>	Protection in various medical practices	Continuation...
<b>Committee 4</b>	Protection in existing exposure situations	Topics of common interest with SLOs
<b>Committee 5</b>	Scientific basis for the protection of fauna and flora	Integration of protection of man and the environment

ICRP INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION



ICRP  
2017

Paris, France

October 10-12, 2017

In conjunction with the  
2<sup>nd</sup> European  
Radiological  
Protection Research  
Week

ICRP INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION

## ICRP TG 93: a new report

- Updating ICRP Publications 109 (emergencies) and 111 (living in long term contaminated areas) issued in 2009, in light of the lessons of the Fukushima accident
- Focused on the emergency and recovery situations of large scale nuclear accidents
- Superseding all previous ICRP Recommendations in the same field

## TG93 membership

- **Members:**
  - Michiaki Kai, Japan (Chair)
  - Toshimitsu Homma, Japan (Vice-chair)
  - Anne Nisbet, UK
  - Thierry Schneider, France
  - Victor Averin, Belarus
  - Ralph Andersen, USA
- **Corresponding Members:**
  - Miroslav Pinak (IAEA), Ted Lazo (NEA/CRPPH)
- **Collaboration with:**
  - Fukushima Dialogue stakeholders
  - ICRP members: Jacques Lochard (MC), Chris Clement (Scientific Secretary), Ohtsura Niwa (MC), Nobuhiko Ban (C1), Jean-François Lecomte (C4)

## TG 93 draft report

Application of the Commission's Recommendations  
for the protection of people in the event of a nuclear accident  
- Update of Publications 109 and 111 -

### Contents

Editorial: From Chernobyl to Fukushima  
Abstract  
Preface  
Main points  
Glossary

1. INTRODUCTION
2. GENERAL CONSIDERATIONS
3. EMERGENCY RESPONSE
4. RECOVERY
5. EMERGENCY AND RECOVERY PREPAREDNESS
6. CONCLUSION

### Annexes:

A.1. Chernobyl  
A.2. Fukushima

## TG93 and related meetings

- **TG93 meetings**

1 <sup>st</sup>	28-29, Nov, 2013	Fukushima
2 <sup>nd</sup>	8-9, May, 2014	Fukushima
3 <sup>rd</sup>	28-30, Nov, 2014	Paris
4 <sup>th</sup>	30 March-1 April, 2015	Paris
5 <sup>th</sup>	8-10, July, 2015	Tokyo
6 <sup>th</sup>	14-15, July, 2016	Tokyo
7 <sup>th</sup>	22-23, Feb, 2017	Paris
8 <sup>th</sup>	6-7, July, 2017	Fukushima
- **ICRP "Dialogue in Fukushima" meetings**  
12 meetings during Nov. 2011 - Sep. 2015, Fukushima
- **Stakeholder meetings**

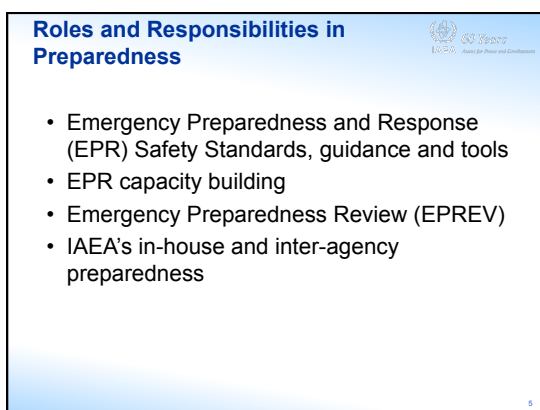
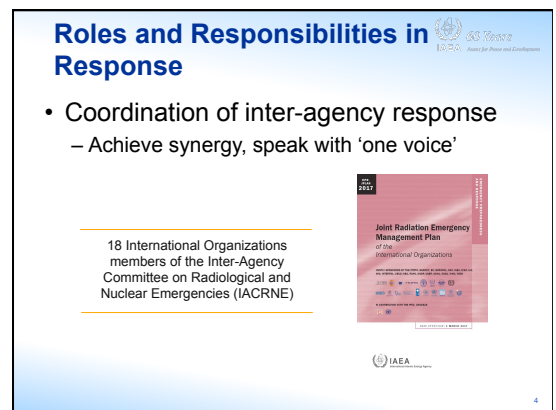
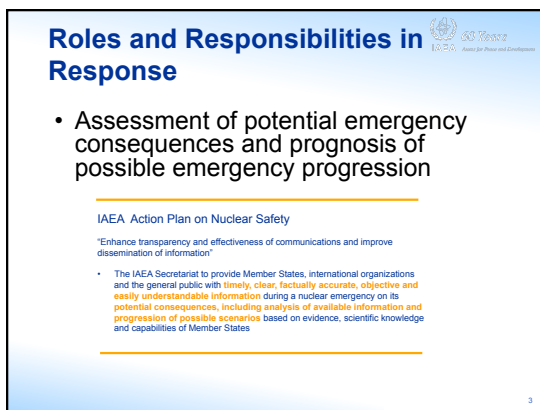
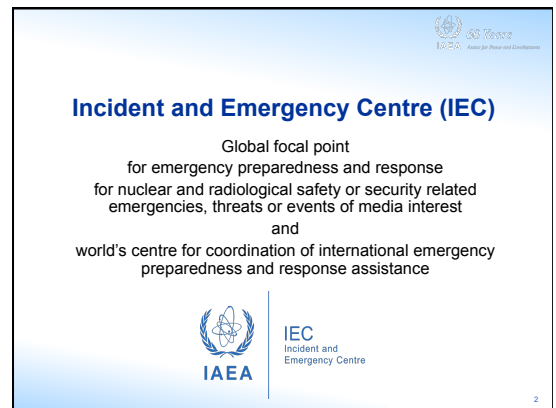
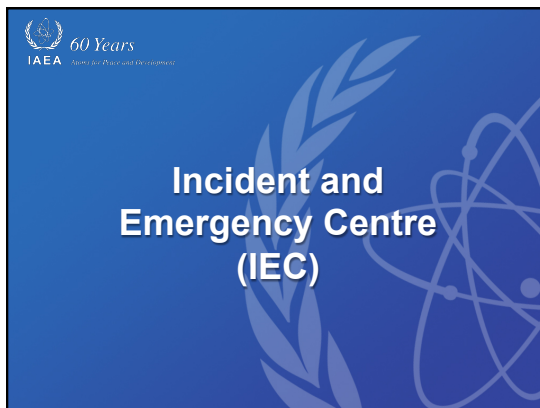
6-7, July, 2015	Fukushima Dialogue	Tokyo
11-12, April, 2016	NERIS	Paris
11-12, July, 2016	Fukushima Dialogue	Tokyo
5 July, 2017	Fukushima Dialogue	Fukushima

## TG93 Timetable

- Approbation of the draft by C4: October 2017
- Approbation of the draft by MC: April 2018
- Public consultation: Summer 2018
- Final approbation: Fall 2018



## Annex 5: Incident and Emergency Centre (IEC)



## Standards, Guidance and Tools (cont'd)



- Safety Standards under development:
  - ✓ **DS474: Arrangements for the Termination of a Nuclear or Radiological Emergency**
    - Expected to be published in 2018
  - ✓ **DS475: Arrangements for Public Communication in a Nuclear or Radiological Emergency**
    - Expected to be completed in 2019
  - ✓ **DS469, EPR in Transport, revision of TS-G1.2**
    - Expected to be completed in 2020

## Standards, Guidance and Tools (cont'd)



- Most recent developments within EPR series:
  - ✓ **EPR-Harmonized Assistance Capabilities 2017: Guidelines on the Harmonization of Response and Assistance Capabilities for a Nuclear or Radiological Emergency**
  - ✓ **EPR-NPP-OILs 2017: Operational Intervention Levels for Reactor Emergencies and Methodology for their Derivation**



8

## Standards, Guidance and Tools (cont'd)



- EPR Series documents under development:
  - ✓ **EPR Protection Strategy**
    - Expected to be completed in 2017
  - ✓ **EPR Combined Emergencies**
    - Expected to be completed in 2017
  - ✓ **Revision of TECDOC 955: EPR Assessment of Nuclear Accidents**
    - Expected to be completed in 2017
  - ✓ **EPR RAD OILs:**
    - Expected to be completed in 2017

## Standards, Guidance and Tools (cont'd)



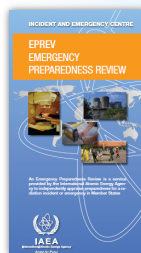
Concluded:

- GSR Part 7 requirements were fully applicable.
  - Hazard assessment would provide the basis for defining EPR arrangements
- There would be value in developing technical guidance to help Member States in defining EPR arrangements for these new reactors
  - Tasks to be started in 2018
  - There is a plan to launch a Coordinated Research Project on emergency planning zones for Small Modular Reactors

## Emergency Preparedness Review (EPREV)



- To independently appraise national capabilities in emergency preparedness and response
- Service since 1999
- 43 missions conducted



## EPRIMS: Emergency Preparedness and Response Information Management System



- Improve access to relevant EPR information during an emergency
  - Used by IAEA Incident and Emergency System
  - In line with Agency's extended role on assessment and prognosis
- Promote information exchange on national EPR arrangements in the preparedness stage



<https://iec.iaea.org/eprims/>

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## EPnet: Emergency Preparedness Network

- Web-based network for emergency preparedness and response professionals to strengthen transparency and information exchange
- Six professional sub-networks:
  - Emergency Planners
  - First Responders
  - Radiation Specialists
  - Medical Practitioners
  - Dose Assessment Experts
  - Public Information Officers

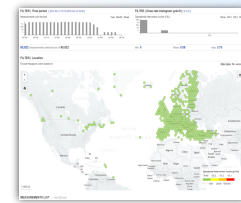


- <https://gnssn.iaea.org/regnet/Pages/EPNet.aspx>

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## IRMIS: International Radiation Monitoring Information System

- Emergency monitoring data sharing
- Share routine and emergency monitoring data
- Based on IAEA emergency information standard (IRIX)
  - same standard used in USIE
- Value, time, area filters
- For mobile and fixed monitoring stations



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*Thank you!*

## Annex 6: The European Commission's science and knowledge service



**The European Commission's  
science and knowledge service**

Joint Research Centre

**A modern JRC  
in a modern Commission**

**Miguel Angel Hernandez Ceballos**  
REM&EPR  
Directorate for Nuclear Safety and Security

**Lisbon, 17<sup>th</sup> May 2017**

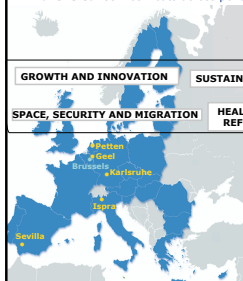


### JRC sites and directorates (1 April 2017)

4 directorates and across six sites in five different countries

**DG JRC values**

- **Independent** of private, commercial or national interests
- **Policy neutral**: has no policy agenda of its own
- **Transversal** service - cuts across policy silos



**DIRECTORATE FOR STRATEGY AND WORK PROGRAMME COORDINATION**


**DIRECTORATE FOR KNOWLEDGE PRODUCTION**

**DIRECTORATE FOR KNOWLEDGE MANAGEMENT**

**DIRECTORATE FOR RESOURCES**

**NUCLEAR SAFETY AND SECURITY**

**Other directorates:** GROWTH AND INNOVATION, SUSTAINABLE RESOURCES, ENERGY, TRANSPORT AND CLIMATE, SPACE, SECURITY AND MIGRATION, HEALTH, CONSUMERS and REFERENCE MATERIALS.



### Horizon 2020 – Council Regulation EURATOM 1314/2013

**High-level objectives for EURATOM direct actions (2014-2018)**



**emphasis on nuclear safety and security**

- 1 – Improve **nuclear safety** including: fuel and reactor safety, waste management and decommissioning, and emergency preparedness;
- 2 – Improve **nuclear security** including: nuclear safeguards, non-proliferation, combating illicit trafficking and nuclear forensics;
- 3 – Raising excellence in the **science base for standardisation**;
- 4 – Foster **knowledge management, education and training**;
- 5 – **Support the policy** of the Union on nuclear safety and security and the related evolving Union legislation.

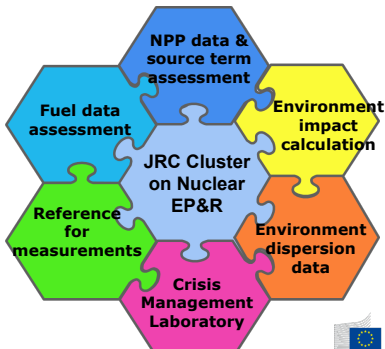



### JRC expertise in support of EU institutions in case of nuclear crises

1. expertise on NPP data, safety, accident scenarios, source term calculations ('Clearinghouse', JRC-Petten)
2. expertise on fuel behavior and damage (JRC-Karlsruhe)
3. expertise on environmental dispersion data (EURDEP & REMdb) and impact assessments (JRC-Ispira)
4. expertise on environmental and food radiological measurements, reference for measurements (JRC-Geel)
5. 'European Crisis Management Laboratory' integrates information and provides visual analytics (JRC-Ispira, non nuclear)

### JRC cluster for a consolidated expertise on nuclear EP&R







### European Clearinghouse on OPERATING EXPERIENCE FEEDBACK

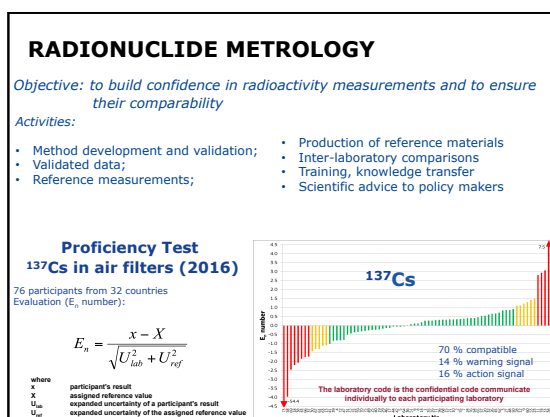
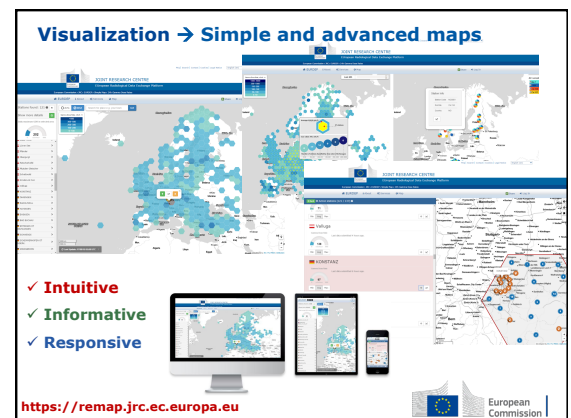
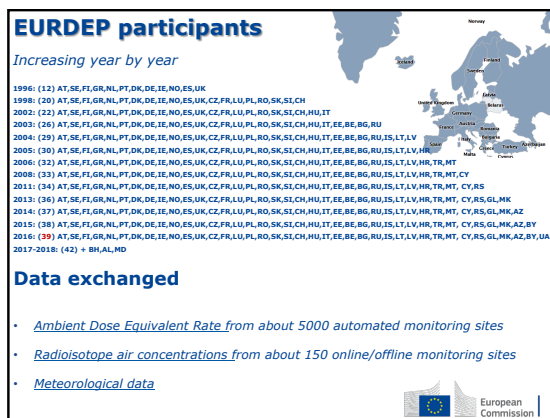
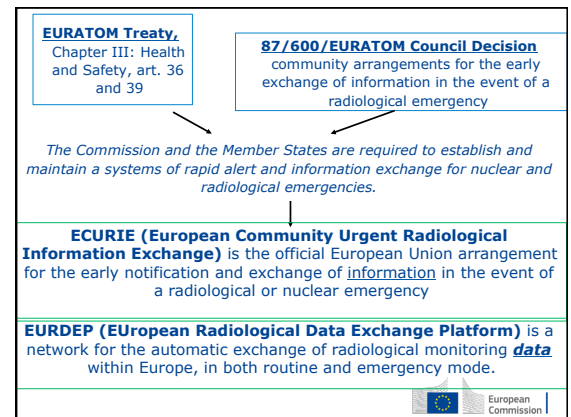
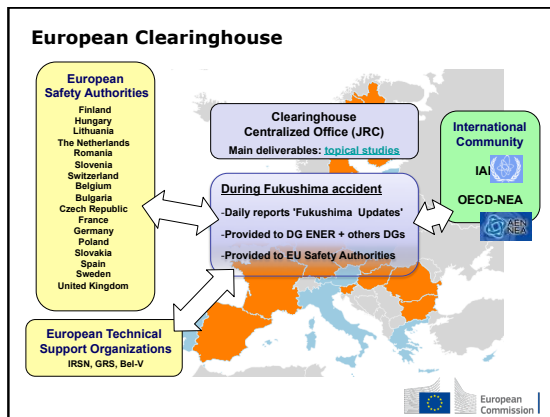
**Objective:** To improve the safety of nuclear power plants

**How?** to make available and disseminate relevant information and lessons learned acquired from reported operating events

**Who?** nuclear regulators of EU Member States having NPPs + Switzerland + Ukraine  
International cooperation through IAEA and OECD/NEA





- ### Collaborative Research Agreement signed between JRC and NERIS on 5th October 2015
- possible joint actions:
- joint identification of N/R EP&R issues to be investigated;
  - exploring possibilities for developing research projects of mutual interest;
  - exchange appropriate scientific and technological information;
  - harmonise established analytical procedures;
  - develop initiatives for research projects of mutual interest;
  - participate in the execution of on-going programs;
  - ...

## Stay in touch

**KOCKEROLS Pierre (JRC):** [Pierre.KOCKEROLS@ec.europa.eu](mailto:Pierre.KOCKEROLS@ec.europa.eu)



**JRC Science Hub:** [ec.europa.eu/jrc](http://ec.europa.eu/jrc)



**Twitter:** @EU\_ScienceHub



**Facebook:** EU Science Hub - Joint Research Centre



**LinkedIn:** Joint Research Centre



**YouTube:** EU Science Hub



## DG JRC Role

As the European Commission's science and knowledge service:

- **Expertise in a wide range of areas** from economic and financial analysis through to energy, transport, health and environment
- **Focus** on the **priorities** of the European Commission (80% of activities co-designed with partner DGs)

## DG JRC values

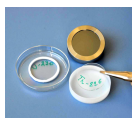
- **Independent** of private, commercial or national interests
- **Policy neutral:** has no policy agenda of its own
- **Transversal** service - cuts across policy silos



## RADIONUCLIDE METROLOGY

*Objective: to build confidence in radioactivity measurements and to ensure their comparability*

- Method development and validation
- Validated data
- Reference measurements
- Production of reference materials
- Inter-laboratory comparisons
- Training, knowledge transfer
- Scientific advice to policy makers





- **primary and secondary standardisation of radionuclide activity**
- **reference nuclear-decay data** (nuclear waste, medicine, forensics,...)
- **inter-laboratory comparisons**
- **standardise testing methods for security-relevant equipment** (CBRN action plan)





## Annex 7: NEA-OECD activities

	NEA-OECD (1)
<ul style="list-style-type: none"><li>▶ Declassification of INEX Materials / up to INEX 5 to be used for CONFIDENCE</li><li>▶ NEW WPNEM Terms of Reference and Strategic Direction for the period 2017-2020<ul style="list-style-type: none"><li>○ an integrated all-hazards approach to EPR with relevant OECD bodies</li><li>○ inclusion of the psychological aspects together with the societal and public information aspects under its potential field of activity.</li></ul></li><li>▶ Report on Lessons Learnt on EPR from non-nuclear events.-</li><li>▶ INEX 5 International Workshop<ul style="list-style-type: none"><li>○ held in conjunction with the next meeting of the WPNEM, 23-27 October 2017.</li></ul></li></ul>	
17 May 2017	8th NERIS General Assembly
86	

	NEA-OECD (2)
<ul style="list-style-type: none"><li>▶ Regarding CRPPH possible activities to report to NERIS:<ul style="list-style-type: none"><li>○ SHAMISEN: hosting of the final meeting + report to the CRPPH during 75th CRPPH meeting</li><li>○ Topical session on psychological aspects during 75th CRPPH meeting</li><li>○ Reports, workshop and workshop related to food science, consumption</li></ul></li></ul>	
17 May 2017	8th NERIS General Assembly
87	