

Report of
The 5th Coordination Meeting of the Eastern Europe Research Reactor Initiative (EERRI)
17-19 November 2010
Institute for Nuclear Research Pitesti, Bucharest, Romania
Under IAEA TC project RER4032

I. Background and Objectives

Under the auspices of IAEA Technical Cooperation Project RER/4/032, titled “Enhancement of the Sustainability of Research Reactors and Their Safe Operation through Regional Cooperation, Networking, and Coalitions”, 14 representatives of research reactor institutions from:

1. Czech Republic, Nuclear Research Institute in Rez (1) and Czech Technical University in Prague (2), member
2. Hungary, KFKI Atomic Energy Research Institute (1), member
3. Poland, Institute of Atomic Energy in Swierk (2), member
4. Romania, Institute of Nuclear Research in Pitesti (7), member
5. Slovenia, Jozef Stefan Institute in Ljubljana (1), member

held the 5th plenary East European Research Reactor Initiative (EERRI) coordination meeting at INR, Pitesti, Romania on 17-19 November 2010. Excuses have been received from AtomInstitut (Austria) and Budapest University of Technology and Economics (Hungary) for being not able to attend this time. The agenda of the meeting is attached in Annex I, the list of participants is attached in Annex II.

The purpose of the meeting was to revise and intensify implementation of EERRI and to decide upon further concrete activities to enhance the involved RR utilization. The specific objectives of the meeting were to:

- Present a status report on the goals set forth in the work-plan during the previous meeting in February 2010, and address any outstanding action items
- Develop a long range plan and evaluation measures for cooperation in the EERRI’s four focus areas, namely, education and training, fuel and material testing, radioisotope production and neutron beam applications
- Discuss the next RR Group Fellowship training course ensured by the EERRI and supported by the IAEA
- Review suggested means for publicizing the EERRI and its capabilities, and identify further cooperative efforts that could allow the EERRI to more broadly reach potential stakeholders, particularly those in regional Member States without RRs
- Establish the work-plan and action matrix of the EERRI for 2011

II. Work done

The meeting was opened by Mr Danas Ridikas as an IAEA TO of RER4032 and Scientific Secretary of the meeting, and Mr Marin Ciocanescu (INR, Romania) as a Chair of EERRI. Right after welcome remarks were given by Mr Constantin Paunoiu, director of INR (Romania) and Mr Kevin Alldred as a 2nd IAEA TO of RER4032.

Later the presentations were made by each of the Activity Coordinators on current status of activities and possible areas for collaboration, with ensuing group discussion concerning how to

pursue future activities. Sustainability and self-supporting strategy were discussed by all participants after these presentations.

It was recognized that little progress has been made since the last coordination meeting in February 2010, and therefore the IAEA's role continues to be important for encouragement of further development of EERRI. It was once again emphasized that achieving enhanced self-reliance and sustainability, including through gradual minimization of the IAEA role, is an essential objective. Mr Ridikas (IAEA) noted that continued IAEA support for EERRI is assured through 2011 under RER/4/032. In addition, he reminded that it is possible for RER/4/032 to provide some financial support for EERRI Secretariat functions if requested.

During the 2nd day of the meeting the participants were divided into groups to discuss in more detail the work plan and actions to be taken under four activities of EERRI. The conclusions and recommendations from all groups were reported during the plenary session afterwards. During the same day a Technical Tour to the TRIGA Dual Core Research Reactor and its ancillary facilities was organized.

The morning of the last 3rd day was exclusively dedicated for drafting the meeting conclusions and recommendations, including the detailed work-plan for the year 2011.

During the meeting the following decisions have been taken:

- **EERRI chairperson:** the model of rotating chairperson was confirmed. It was agreed that Mr Snoj (JSI Ljubljana) will be the Chairperson of EERRI until the next coordination meeting in Slovenia, scheduled during Q3 2011.
- **EERRI coordination:** EERRI coordination is ensured through the EERRI Chairperson, four Coordinators of the major activities and representative of the IAEA.
- **IAEA involvement:** IAEA will continue to provide organizational and administrative support. Ms Ferrari as a new leading IAEA TO (in collaboration with Mr Alldred and Mr Ridikas) and Mr Ivan Videnovic as a PMO will be focal persons for EERRI.
- **EERRI strategic and business plan:** the IAEA will provide the EERRI partners with a template to be filled in for national strategic plans; based on this input a regional strategic plan of the EERRI will be discussed/developed during the next coordination meeting
- **Outreach of EERRI:**
 - EERRI web page should be updated and further expanded
 - EERRI brochure should be designed and published
 - Agreement was reached to valorise EERRI during various manifestations

III. Action Items/Work plan

1) Management, coordination & marketing

- a. Web page to be revised. IAEA will propose a new structure/design, Chairperson + 4 activity coordinators will provide input. New release by the end of February 2011.
- b. Promotional brochure to be designed. IAEA will propose a layout, Chairperson + 4 activity coordinators will provide input. 1st draft by the end of April 2011.

- c. Next meeting will take place during Q3 in 2011 in Slovenia: Mr Snoj will coordinate together with the IAEA.
- d. Promotion of EERRI through RRFM2011 in March 2011 (Italy) and International RR Conference in November 2011 (Morocco).

2) **Strategic & Business Plan Development**

- a. Based on IAEA's template the EERRI partners will provide the input, Chairperson + 4 activity coordinators will follow up. Template: by January; inputs from EERRI partners: by April; follow up: until next meeting.

3) **Education and training, coordinated by Mr Boeck**

- a. 3rd course will take place in January-March 2011; 4th course has also been scheduled but its implementation is subject to availability of sufficient number of trainees: Ms Ferrari (IAEA).
- b. E&T related consultancy will take place January 2011 in Vienna: Ms Ferrari (IAEA)
- c. Design and publication of a promotional E&T leaflet: draft by January, final version by May 2011: Mr Lubomir Sklenka in collaboration with Ms Ferrari (IAEA)
- d. Preparation and publication of CD/DVD on the RR Group Fellowship Course: Ms Ferrari (IAEA) + all partners
- e. Identification of training needs and student outreach in Europe, Japan and Korea, including a possible meeting in Japanese nuclear training requirements: Mr Sklenka in collaboration with Ms Ferrari (IAEA)
- f. Opportunities and case study related to the remote controlled (virtual) training course: Mr Snoj in collaboration with Ms Ferrari (IAEA)
- g. Insertion of an additional module on neutron science in the RR Group Fellowship Course: Ms Baranyai in collaboration with Ms Ferrari (IAEA)
- h. Standardization and accreditation of the 6 week RR Group Fellowship Course, and development of other courses of varying durations: Mr Sklenka in collaboration with Ms Ferrari (IAEA)
- i. Establish EERRI course administration, with support from CTU students and from the IAEA: Mr Sklenka in collaboration with Ms Ferrari (IAEA)

4) **Neutron beam applications, coordinated by Ms Baranyai**

- a. Organization of sponsor and user oriented workshop in April 2011 in Budapest: Ms Baranyai in collaboration with Mr Ridikas (IAEA); subject to approval by TC
- b. Explore further ongoing collaboration activities (Romania, Czech Republic and Hungary): Ms Baranyai in collaboration with Mr Ridikas (IAEA)

5) **Radioisotope production, coordinated by Mr Jaroszewicz**

- a. 4 partners (Romania, Poland, Hungary and Czech Republic) to work on possible scenarios from national point of view related to Mo-99 production from LEU, including processing and distribution: template to be provided by the IAEA, inputs by May 2011: Mr Jaroszewicz
- b. Update existing data base and operational schedules of RRs by February 2011: Mr Jaroszewicz
- c. Status and opportunities for other radioisotopes; share information on national strategy in radioisotope production plans, define and develop procedure how to coordinate as a group: Mr Jaroszewicz

- d. Experiment on Mo-98 irradiation using small sample to demonstrate Mo-99 capabilities in terms of specific activities at different RRs, in conjunction with the activity planned under the Eurasia Research Reactor Coalition: Mr. Alldred (IAEA) + all partners
- e. Promotion of EERRI capabilities in specific-topical meetings related to medical radio-isotopes: Mr Jaroszewicz + all partners

6) Fuel and material testing, coordinated by Mr Broz

- a. Organization of workshop in June 2011 in Prague; discuss and promote capabilities and look for potential users of the existing capabilities within EERRI: Mr Broz in collaboration with Mr Ridikas (IAEA); subject to approval by TC

7) Other items

- a. IAEA and Mr Snoj to contact Serbia in order to clarify the present status of Mr Pesic (Vinca), and seek for a new project counterpart if necessary.
- b. Promotion of EERRI and potential cooperation with other networks and coalitions: IAEA + all partners
- c. Participate in the NAA proficiency test: Mr Ridikas (IAEA)

IV. Closing Session

Mr Danas Ridikas (IAEA) thanked Romanian representatives for hosting this meeting, for good local organization and assistance. Equally, the Scientific Secretary thanked all participants for their valuable contribution and inputs to this meeting and recommendations.

V. Photo of Meeting Participants



Annex I: AGENDA**5th EERRI Meeting****17 – 19 November 2010, Institute for Nuclear Research Pitesti,
Bucharest, Romania****Wednesday, 17 November 2010**

08:30-09:00	Registration, Morning Coffee & Tee
09:00-09:30	Welcome & Opening Remarks Mr. Constantin Paunoiu director of INR Pitesti, Romania Mr Marin Ciocanescu (INR, Romania) Mr Danas Ridikas (Scientific Secretary & TO of RER4032, IAEA) Mr Kevin Alldred (TO of RER4032, IAEA) Self-introduction of the participants Selection of the Chairperson & Rapporteur Approval of the Agenda, Discussion & Administrative Arrangements
09:30-10:00	Mr Danas Ridikas, IAEA: Introduction & Objectives of the Meeting
10:00-10:30	Mr Marin Ciocanescu, report by the Chair of EERRI
10:30-11:00	<i>Coffee break</i>
11:00-12:30	Coordinator reports on Education & Training Mr Lubomir Sklenka , CTU, Czech Republic Beam Applications Ms Rozsa Baranyai , KFKI-AEKI, Hungary
12:30-14:00	<i>Lunch break</i>
14:00-15:30	Coordinator reports (continued) Radioisotopes Mr Janusz Jaroszewicz , IAE, Poland Fuel & Material Testing Mr Vladimir Broz , NRI, Czech Republic
15:30-16:00	<i>Coffee break</i>
16:00-17:00	Other presentations – INR Pitesti (Mr. Petre Busuioc , Ms. Mirela Ancuta , Mr. Dumitru Barbos , Mr. Csaba Roth and Mr. Ion Ionita)
17:00-17:30	Summary Discussion

Thursday, 18 November 2010

09:00-10:30	Discussions in groups (2 groups at the same time): Education & Training Beam Applications Radioisotopes, and Fuel & Material
10:30-11:00	<i>Coffee break</i>
11:00-12:30	Discussions in groups (2 groups at the same time): Education & Training Beam Applications Radioisotopes, and Fuel & Material
12:30-14:00	<i>Lunch break</i>
14:00-15:30	Technical Tour to RR facilities of INR, Pitesti
15:30-16:00	<i>Coffee break</i>
16:00-17:30	Discussion: reports from the groups by conveners/coordinators Discussion: Drafting action plan for 2011
20:00	Hospitality event

Friday, 19 November 2010

09:00-10:30	Discussion: Finalizing action plan for 2011 Discussion: Drafting conclusions & recommendations
10:30-11:00	<i>Coffee break, end of the Meeting</i>

Annex II: LIST OF PARTICIPANTS
 5th EERRI Meeting
 17 – 19 November 2010, Institute for Nuclear Research Pitesti,
 Bucharest, Romania

1	Czech Republic	Mr Vladimir Broz LVR15 research reactor Nuclear Research Institute Rez plc 250 68 REZ CZECH REPUBLIC Tel.: 00420 2 66172384 Fax: 00420 2 66172386 EMail: brv@ujv.cz
2	Czech Republic	Mr Jan Rataj Department of Nuclear Reactors Faculty of Nuclear Science and Physical Engineering (FNSPE) Czech Technical University (CTU) V. Holesovickach 2 180 00 PRAHA 8 CZECH REPUBLIC Tel.: 00420 2 21912390 Fax: 00420 2 84680764 EMail: jan.rataj@fjfi.cvut.cz
3	Czech Republic	Mr Lubomir Sklenka Department of Nuclear Reactors Faculty of Nuclear Science and Physical Engineering (FNSPE) Czech Technical University (CTU) V. Holesovickach 2 180 00 PRAHA 8 CZECH REPUBLIC Tel.: 00420 2 21912390 Fax: 00420 2 84680764 EMail: lubomir.sklenka@fjfi.cvut.cz
4	Hungary	Ms Rozsa Fliszar Baranyai KFKI Atomic Energy Research Institute (AEKI) Konkoly Thege Miklós út 29-33 1121 Budapest P.O. Box 49 1525 BUDAPEST HUNGARY Tel.: 0036 1 3922296 Fax: 0036 1 3959293 EMail: baranyai@aeki.kfki.hu
5	Poland	Mr Janusz Waldemar Jaroszewicz Institute of Atomic Energy 05-400 OTWOCK SWIERK POLAND Tel.: 0048 22 7180223 Fax: 0048 22 7180218 EMail: j.jaroszewicz@cyf.gov.pl
6	Poland	Dr Grzegorz Krzysztozek Subdirector for Reactors

		Institute of Atomic Energy 05-400 OTWOCK SWIERK POLAND Tel.: 0048 22 7180080 Fax: 0048 22 7180218 EMail: gkrzysz@cyf.gov.pl
7	Romania	Mr Marin Ciocanescu Institute for Nuclear Research Campului Street No. 1 P.O. Box 78 115400 MIOVENI, Arges, ROMANIA Tel.: 0040 248 262749 Fax: 0040 248 262449 EMail: ciocanescum@lycos.com Internet: http://www.scn.ro
8	Romania*	Mr Constantin Paunoiu Institute for Nuclear Research Campului Street No. 1 P.O. Box 78 115400 MIOVENI, Arges, ROMANIA Tel.: 0040 248 264849 Fax: 0040 248 262449 EMail: cpaunoiu@email.com
9	Slovenia	Mr Luka Snoj Department of Reactor Physics Jozef Stefan Institute Reactor Centre Podgorica Jamova 39 P.O. Box 3000 1000 LJUBLJANA, SLOVENIA Tel.: 00386 1 5885362 Fax: 00386 1 5885316 EMail: luka.snoj@ijs.si
10	IAEA	Mr Kevin Alldred, TO, K.Alldred@iaea.org
11	IAEA	Mr Danas Ridikas, TO, D.Ridikas@iaea.org

*With participation of **Mr Petre Busuioc**, **Ms Mirela Ancuta**, **Mr Dumitru Barbos**, **Mr Csaba Roth** and **Mr Ion Ionita**, all from INR Pitesti (Romania).