

Report of
**The 2nd Coordination Meeting of the Baltic Research Reactor Network
(BRRN)**

under the IAEA Regional TC project RER4032

**IAEA, Vienna, Austria
8-10 February 2010**

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”, 12 representatives of 9 Member States from the Baltic Region, namely:

1. Denmark RISOE-DTU (1)
2. Estonia, University of Tartu (1)
3. Finland, VTT (1)
4. Germany, HZB (1)
5. Latvia, LVGMC (1)
6. Lithuania, FI and LEI, (2)
7. Poland, IAE POLATOM (2)
8. Russian Federation, PNPI and I. Kant State University of Russia, (2)
9. Sweden, KTH (1)

constituting the Baltic Research Reactor Network (BRRN) held the 2nd plenary coordination meeting at IAEA Headquarters in Vienna on 8-10 February 2010. The agenda of the meeting is attached in Annex I, the list of participants is attached in Annex II.

The purpose of the 2nd Coordination Meeting of BRRN was to:

- 1) Present status report on achievement of the work-plan and actions since the last coordination meeting, held in June 2009 in Poland;
- 2) Discuss in more detail the four topics of common interest, namely
 - a) nuclear education and training,
 - b) irradiation services and radioisotope production,
 - c) basic and applied research with neutron beams,
 - d) radiactivewaste management and decommissioning;
- 3) Elaborate other potential applications of research reactors (RR) where cooperative efforts might lead to regional networking;
- 4) Prepare the work-plan of the BRRN for the next 6-12 months.

II. Work done

The meeting was opened by Mr Ivan Videnovic, Programme Management Officer, Europe Section IAEA/TC, and Mr Danas Ridikas, Technical Officer, Physics Section, IAEA/NA. Excuses for being not able to attend the meeting were received from Mr Jon Per Rambaek, Institute for Energy Technology, Norway, who was also acting as a Chairperson of BRRN. Mr Nikolay Nikulin, Immanuel Kant State University of Russia, was introduced as a new participant.

Mr Videnovic noted that continued IAEA support for EERRI is assured through 2011 under RER/4/032. Therefore it was suggested that achieving enhanced self-reliance and sustainability, including through gradual minimization of the IAEA role, is an essential objective for the network to continue its operation after the termination of the IAEA project.

Right after, presentations were made by each of the Coordinators on current status of common activities and other possible areas for collaboration, with ensuing group discussion concerning how to pursue future work. The education and training topic was discussed very actively, being the activity of the strongest common interest.

The 2nd day started with individual country reports on the activities relevant to the BRRN. Through the discussions it was recognized that the participants of BRRN should be much more proactive and take stronger initiatives within the activities and tasks agreed earlier. Two important milestones on (1) needs to access RR-based services and products as well as (2) detailed description of available RR capacities for the services and products they are able to provide were not fully completed. It was agreed that these tasks should be accomplished as soon as possible.

During the meeting the following decisions have been taken:

- **BRRN chairperson:** the model of rotating chairperson was chosen. It was agreed that Mr Janne Wallenius (KTH, Sweden) will be the Chairperson of BRRN until the next coordination meeting in Sweden, scheduled for 2-3 days in Q4 2010.
- **BRRN coordination:** BRRN coordination is ensured through the rotating BRRN Chairperson (Sweden), four Coordinators of the major activities (Denmark, Germany, Latvia, Sweden) and representative of the IAEA.
- **IAEA involvement:** IAEA will continue to provide organizational and administrative support in the framework of RER4032. Mr Danas Ridikas as a TO and Mr Ivan Videnovic as a PMO remain focal persons for BRRN.
- **BRRN meetings:** Biannual meetings for BRRN have been confirmed with a possibility, when needed, to hold parallel technical round-table discussions within the four major ongoing activities.
- **Outreach of BRRN:**
 - BRRN [web page](#) should be updated and further expanded
 - Quarterly BRRN newsletter (e-mail based) will be started
 - Promotion of BRRN on various occasions (e.g. conferences, workshops, etc.) should be ensured

III) Action Items/Work plan until next meeting

1) Management, coordination & marketing

- a. **Quarterly e-mail based newsletter to be prepared.** IAEA will propose a template, Chairperson + 4 activity coordinators will provide input. **The 1st issue by the end of April 2010.**
- b. **Web page to be revised.** IAEA will continue hosting the site and ensure the updates. Chairperson + 4 activity coordinators will provide input. **New release by 1 June 2010.**
- c. **Next BRRN meeting** will take place for 2-3 days in **Q4 2010 in Sweden.** Mr Janne Wallenius (KTH) will coordinate together with the IAEA. Alternative solution was offered by Denmark.
- d. **Promotion of BRRN** to be achieved through the [web page](#) and quarterly newsletter. Development of a dedicated promotional brochure could be envisaged in the future. Conference/workshop presentations by all members are encouraged.
- e. **Development of strategic plan for BRRN:** IAEA will prepare and share a draft document (example) during the next BRRN meeting.

2) Education and training, coordinated by Sweden

- a) Collect and share existing training capacities (experiment-facility matrix) at operating RR facilities, including available time-tables and limits on number of students to be hosted; good experience from EERRI to be used
- b) Establish quantitative needs from different partners of RR network on MSc curricula or special training programs requesting hands-on training at RRs
- c) Collect and share of the MSc curricula/courses including description of proposed new MSc projects among the partners
- d) Proposal of STURE critical assembly (Sweden) for education and training should be re-examined in the regional prospective, after the needs and existing capacities are carefully evaluated
- e) “Train the trainers approach” should be prioritized, with the goal to improve/increase qualifications of professors able to ensure BSc/MSc or higher level training locally (e.g. exchange of professors, RR staff, or other staff members holding at least MSc degree)

3) Irradiation services, coordinated by Denmark

- a) Finalize available capabilities for isotope production at operating RR facilities, including available RR schedules and maximal specific activities for individual radioisotopes produced; good experience from EERRI could be used
- b) Collect and share the information on quantitative needs from potential end users of radioisotopes or radiopharmaceutical products in partner Member States; the information gathering should be extended beyond the participating institutions (e.g. oncology centers, hospitals, industrial

partners, etc.)

- c) Exchange of information and share of market for production (irradiation service) of specific radioisotopes
- d) Identify specific cases where collaboration could be started immediately

4) Neutron beam applications, coordinated by Germany

- a) Collect and share information on instruments, their characteristics and services available at neutron radiography facilities within BRRN; good experience from EERRI can be used for this purpose
- b) Collect and share existing sources of information (e.g. web pages, brochures, etc.) to inform and promote neutron beam applications and neutron radiography in particular
- c) Identify potential areas of applications and examine actual needs of the above techniques in R&D of advanced technologies such as fuel cells, batteries, car industry, etc. The information gathering should be extended beyond the participating institutions

5) Radioactive waste management and decommissioning, coordinated by Latvia

- a) Prepare and share the template on how the relevant data base could be designed and created. Reference is made to the IAEA guidelines on the contents for similar documents.
- b) Include only RRs in the targeted facilities
- c) Limit the data base to 1-2 case studies per Member State with “good practices and lessons learned”
- d) Explore possibility to make some national documents of high relevance and importance translated into English

6) Other issues

- a) Poland to report on latest developments of EERRI
- b) ...

Annex I: AGENDA

IAEA Regional TC project RER4032 2nd Coordination Meeting of the Baltic Research Reactor Network (BRRN)

IAEA, Vienna, Austria
8-10 February 2010

Monday, February 8

- 12:00 VIC Registration, Lunch
- 13:00 Welcome *Ivan Videnovic, IAEA/TCEU
Danas Ridikas, IAEA/NAPC*
- 13:30 Convener Reports, discussion
a) **nuclear education and training, Sweden**
b) **basic and applied research with neutron beams, Germany**
- 15:00 *Coffee Break*
- 15:30 Lessons learned: RR group fellowship course organized by EERRI (in collaboration with IAEA)
H. Boeck, AtomInstitut, Austria
- 16:00 Convener Reports, discussion
c) **irradiation services and radioisotope production, Denmark**
d) **waste management and decommissioning, Latvia**
- 17:00 Discussions *All*
- 17:30 End of the 1st day

Tuesday, February 9

- 09:00 Individual participants reports, discussion
Denmark, Estonia, Finland, Latvia, Germany
- 10:40 *Coffee Break*
- 11:00 Individual participants reports, discussion
Lithuania, Norway, Poland, Russia, Sweden
- 12:40 *Lunch*
- 14:00 Discussion of Specific Follow-up Actions and Activities *All*
- Each convener to suggest follow-up activities
- Exchange of ideas/suggestions by all
- 15:30 *Coffee Break*
- 16:00 Discussion on Marketing and Public Relations *All*
• status of the [web page](#), [group portal](#), brochure and other marketing information
• planning of trade shows and other similar events to reach out to new customers (RRFM2010, IAEA RR Conference in 2011, ENS events, EURATOM, EC, etc.)
- 17:00 End of the 2nd day meeting

Wednesday, February 10

- 09:00 Revisions of the Work Plan and Action Item List *All*
- 10:30 Conclusions and recommendations of the Meeting *All*
- 11:30 End of the meeting

Annex II: LIST OF PARTICIPANTS

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