

**Annual Meeting of the Commonwealth of Independent States Research Reactor Coalition
(CISRRC)**

Dimitrovgrad, 2-5 June 2014

MEETING REPORT

OBJECTIVE

Under regional project RER/1/007 the IAEA has invited all Member States of the Commonwealth of Independent States (CIS) to take part in the annual meeting of the CIS Research Reactor Coalition (CISRRC). The main objective of the meeting was to develop work plans for each area of cooperation: research reactor safety, education and training and ageing management. Participants were expected to: develop a concrete 2014-2015 work plan with clearly defined roles, activities and timeline for coalition members and the IAEA; discuss other potential applications of CIS RRs where cooperative efforts might lead to regional coalitions/networks; identify and define future lines of activity where the IAEA's facilitation would have high impact and significance.

The meeting was attended by 11 participants from 5 Member States: Belarus, Kazakhstan, Kyrgyzstan, Russian Federation and Ukraine. The IAEA was represented by two staff members from the Research Reactor Section, Department of Nuclear Energy and Research Reactor Safety Section, Department of Nuclear Safety. One external expert was invited to present to the CISRRC members the experiences in organizing group fellowship training by East European Research Reactor Initiative (EERRI), given that the CISRRC also aims to develop education and training as one of the key activities of the coalition. The full list of meeting participants is included in Annex 1. The meeting Agenda is included in Annex 2.

WORK DONE

During the meeting the IAEA representatives, CISRRC members and the invited expert gave presentations on the following topics:

1. The IAEA Research Reactor Section Sub-programme Activities - (Anastasia Zhukova, RRS/IAEA)
2. IAEA Activities on Safety of Research Reactors - (David Sears, RRSS/IAEA)
3. Experience exchange from the Group fellowship training by East European Research Reactor Initiative - (Luka Snoj, Jozef Stefan Institute)
4. Report of the CISRRC working group on Safety of Research Reactors - (Victor Fedulin, RIAR)
5. Report of the CISRRC working group on Education and Training - (Ivan Panin, Dimitrovgrad Engineering and Technology Institute "NRNU MEPH")
6. Report of the CISRRC working group on Ageing Management of Research Reactors - (Alexander Albul, NRC "Kurchatov Institute")

7. Report of the CISRRC activity on the SNG-Atom Commission's web-site - (Victor Fedulin, RIAR)
8. Report on results of the first CIS Member States Advisory Body meeting on Information Exchange in the area of Securing Safety of the CIS Research Reactors - (Alexey Petelin, RIAR)
9. Report on results of the International Conference "Safety of Research Reactors" that took place on 26-30 May 2014 in Dimitrovgrad, Russia

Since the last CISRRC meeting one of the main tasks was achieved: all 12 CISRRC organizations from 7 Member States have signed the Memorandum of Understanding (MoU) for the establishment of the CISRRC. RIAR took the responsibility to collect signatures from the member organizations and distributed the final signed document to each party of the MoU, including the IAEA.

During the meeting participants worked in groups to review the 2013-2014 work plan and to discuss activities that should be carried out during the next 2014-2015 cycle. A 2014-2015 work plan has been drafted accordingly for each area of focus: research reactor safety, education and training and ageing management. The detailed output of the working groups is included in Annex 3.

The ageing management group coordinator, Mr Alexander Albul, reported on the achieved results. During the 2013-2014 cycle Mr Albul has developed and distributed a questionnaire on ageing status of the CIS research reactor facilities. This information was collected and generated into a table that is later planned to be placed on the coalition's web-site. Participants agreed to continue the practice of information exchange. As the next step it was decided to prepare a report on ageing management of the CISRRC research reactors, and during the next meeting to make presentations on the completed repair and modernization works and life extension experience of the CISRRC facilities.

The education and training (E&T) group coordinator, Mr Ivan Panin, also reported on the achieved results. Based on the collected information Mr Panin presented the E&T needs and capacities of the CISRRC members. This information was collected through a questionnaire. During the meeting CISRRC representatives agreed to develop an advanced training programmes for professionals involved in RR maintenance (including distance learning). Participants agreed to prepare a bulletin with available courses and to present this information on the coalition's web-site. To broaden the E&T in CISRRC member's countries, RIAR has agreed to provide its infrastructure for such training. Furthermore, it was decided to define the areas of joint research programmes. Mr Petelin informed the participants that RIAR management conducts a policy to open its infrastructure for external companies/experts, namely, on a contractual basis RIAR's facilities can be "rented" to conduct research and experimental works.

The research reactor safety group was represented by Mr Victor Fedulin. Since the last meeting the coalition members have provided general information on the safety of CISRRC facilities. This information was generated into a table, analysed and is planned to be placed on the coalition's web-site. As the next step it was agreed to develop two reports, first - an annual information circular on safety-significant incidents at nuclear research installations of CIS member states, second - a book on Nuclear research installations of CIS member states.

It was mentioned that depending on the needs and agreements between organizations, scientific visits, fellowships and workshops can be organized between the CISRRC members, taking advantage of member facilities.

As was agreed during the 2013 meeting, a CISRRC web-page was launched as part of the CIS Member-states' Commission's on the Peaceful Use of Atomic Energy web-site. The web-page name is <http://sng-atom.com/?q=node/399>. Participants agreed to fill the web-page with content reflecting the coalition's work. Input would be coordinated by Mr Fedulin.

On Tuesday June 3rd participants visited SSC RIAR reactor facilities, including BOR-60 and the Mo-99 production facility.

On the final day of the meeting the participants reviewed the work plan in view of the progress made to date and the discussion held during the meeting. The revised work plan is included in Annex 3.

Participants proposed to hold their next meeting in May 2015 at the Institute of Nuclear Physics of the Academy of Science of the Republic of Uzbekistan in Tashkent. Alternatively the 4th CISRRC annual meeting could be hosted either by Kazakhstan or Kyrgyzstan.

CONCLUSION

At the conclusion of the meeting, the participants agreed that the CISRRC is a very effective tool that will enhance safety and effective utilization of research facilities in their states, and will give members without research reactors access to facilities for education, training and for conducting experiments. The participants agreed to continue the coalition activities.

Involved Member States will work on getting the activities and attached 2014-2015 work plan approved by their institutions. Participants also agreed to follow the developed work plan for each area of focus. Pending confirmation from Uzbekistan, the IAEA will work with Uzbekistan representatives to help arrange the next CISRRC meeting in Tashkent in May 2015.

ANNEX 1

INTERNATIONAL ATOMIC ENERGY AGENCY

Technical Cooperation Project RER/1/007

*Enhancing Use and Safety of Research Reactors
through Networking, Coalitions and Shared Best Practices*

Annual Meeting of the Commonwealth of Independent States Research Reactor Coalition (CISRRC)

2 - 5 June 2014, Research Institute of Atomic Reactors, Dimitrovgrad, Russian Federation

FINAL MEETING AGENDA

Monday, 2 June	
9:00 – 9:30	Arrival/ Registration
9:30 – 10:15	Meeting opening: <ul style="list-style-type: none">- Welcome remarks from RIAR - (Sergey Pavlov, RIAR - Director)- Opening remarks: objectives, expectations of the CISRRC meeting, approval or amendment of the Agenda - (Anastasia Zhukova, RRS/IAEA)- Group introduction and regional update (3 min for each participant)
10:15 – 10:45	The IAEA Research Reactor Section Sub-programme Activities - (Anastasia Zhukova, RRS/IAEA)
10:45 – 11:15	<i>Coffee break</i>
11:15 – 11:45	Experience exchange from the Group fellowship training by East European Research Reactor Initiative - (Luka Snoj, Jozef Stefan Institute)
11:45 – 12:15	Report of the CISRRC working group on Safety of Research Reactors - (Victor Fedulin, RIAR)
12:15 – 12:45	Report of the CISRRC working group on Education and Training - (Ivan Panin, Dimitrovgrad Engineering and Technology Institute “NRNU MEPhI”)
12:45 – 14:00	<i>Lunch break</i>
14:00 – 14:30	Report of the CISRRC working group on Ageing Management of Research Reactors - (Alexander Albul, NRC “Kurchatov Institute”)
14:30 – 15:00	Report of the CISRRC activity on the SNG-Atom Commission’s web-site - (Victor Fedulin, RIAR)
15:00 – 15:30	<i>Coffee break</i>
15:30 – 17:30	Break into Working Groups to draw up activities and draft work plan for each area of focus: <ul style="list-style-type: none">- Safety of Research Reactors- Education and Training

17:30 –	<ul style="list-style-type: none"> - Ageing Management <p><i>Adjourn</i></p>
Tuesday, 3 June	
09:30 – 11:00	<p>(cont.) Break into Working Groups to draw up activities and draft work plan for each area of focus:</p> <ul style="list-style-type: none"> - Safety of Research Reactors - Education and Training - Ageing Management
11:00 – 11:30	<i>Coffee break</i>
11:30 – 12:00	<p>Report on results of the International Conference “Safety of Research Reactors” that took place on 26-30 May 2014 in Dimitrovgrad, Russia; and</p> <p>Report on results of the first CIS Member States Advisory Body meeting on Information Exchange in the area of Securing Safety of the CIS Research Reactors - (Alexey Petelin, RIAR)</p>
12:00 – 12:30	IAEA Activities on Safety of Research Reactors - (David Sears, RRSS/IAEA)
12:30 – 14:00	<i>Lunch break</i>
14:00 – 17:30	Technical tour to SSC RIAR reactor facilities and isotopes production area
17:30 –	<i>Adjourn</i>
19:00 –	<i>Reception</i>
Wednesday, 4 June	
9:30 – 12:30	<p>(cont.) Break into Working Groups to draw up activities and draft work plan for each area of focus:</p> <ul style="list-style-type: none"> - Safety of Research Reactors - Education and Training - Ageing Management
12:30 – 14:00	<i>Lunch break</i>
14:00 – 17:30	<p>Working Groups presentations of the 2014-2015 activities and work plan for each area of focus:</p> <ul style="list-style-type: none"> - Safety of Research Reactors - Education and Training - Ageing Management
17:30	<i>Adjourn</i>

Thursday, 4 June

9:30 – 10:30	Drafting of the 2014-2015 work plan for the CISRRC
11:00 – 11:30	<i>Coffee break</i>
11:30 – 13:00	(cont.) Drafting of the 2014-2015 work plan for the CISRRC
13:00 – 14:00	Final comments and recommendations
14:00	<i>Meeting adjourn</i>

ANNEX 2**INTERNATIONAL ATOMIC ENERGY AGENCY**

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MEETING PARTICIPANTS

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ANNEX 3

INTERNATIONAL ATOMIC ENERGY AGENCY

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CISRRC WORKING GROUPS

During the meeting participants have split into three working groups to discuss each area of focus, including safety of research reactors, education and training and ageing management. The main objective of each working group was to review the 2013-2014 work plan and to develop a 2014-2015 work plan. The achieved results can be seen below:

Work Group on Safety of Research Reactors

№	Description	Steps	Member Organizations	Responsible	Milestones
Task 1	Develop and publish a yearly information circular on “Incidents at nuclear research installations of the CIS Member States”	1. Develop guidelines on procedure, scope and data submission timeline on operation of the CIS nuclear research installations, including information on incidents	All CISRRC members	INP, Republic of Kazakhstan , Nakipov D.A.	September 2014
		2. Develop requirements to the content and scope of the information circular	All CISRRC members	JIPNR-Sosny of NAS of Belarus , Sikorin S.N.	September 2014
		3. Determine the order and approval procedure of the information circular	All CISRRC members	JIPNR-Sosny of NAS of Belarus , Sikorin S.N.	September 2014
		4. Collect data for the information circular	All CISRRC members	RIAR, Fedulin V.N.	March 2015
		5. Analyse data for the information circular	RIAR	RIAR, Fedulin V.N.	April 2015
		6. Develop an electronic version of the information circular	RIAR	RIAR, Fedulin V.N.	May 2015
		7. Publish the information circular on incidents at the nuclear research	RIAR	RIAR, Fedulin V.N.	September 2015

		installations of the CIS Members States			
Task 2	Develop and publish a book on “Nuclear research facilities in CIS member states”	1. Develop a book layout (content, scope, requirements to the text, graphic data and etc.)	All CISRRC members	RIAR, Fedulin V.N.	September 2014
		2. Data accumulation for the book	All CISRRC members	RIAR, Fedulin V.N.	March 2015
		3. Data editing for the book	RIAR	RIAR, Fedulin V.N.	September 2015
		4. Organize data translation for the book into English language	RIAR	RIAR, Fedulin V.N.	December 2015
		5. Prepare of electronic version of the book in Russian and English languages	RIAR	RIAR, Fedulin V.N.	February 2016
		6. Publish the book in Russian and English languages	RIAR	RIAR, Fedulin V.N.	March 2016
Task 3	Foresee the possibility to ask IAEA’s financial support to publish the information circular on “Incidents at	Prepare a proposal to the IAEA on the financial support to publish the information circular and the book	RIAR	RIAR, Fedulin V.N.	September 2014

	nuclear research installations of CIS Member States” and the book on “Nuclear research facilities in CIS member states”				
Task 4	Prepare and submit during the next CISRRC meeting a report on preparation stage of the information circular and the book		RIAR	RIAR, Fedulin V.N.	May 2015
Task 5	Prepare and submit during the next CISRRC meeting a presentation on major incidents that occurred at the CIS member state’s nuclear research installations		All CISRRC members	RIAR, Fedulin V.N.	May 2015

Working group on education and training of nuclear research installations staff

№	Description	Steps	Member Organizations	Responsible	Milestones
Task 1	Develop training and further education programmes for professionals working at the research reactors (including distance learning)	1. Prepare flyers with information on content, scope and cost of the courses	NRNU MEPhI	Panin I.N., Fedulin V.N.	September 2014
		2. Place information on training courses on the coalition's web-site	NRNU MEPhI	Panin I.N., Fedulin V.N.	September 2014
		3. Collect information on the needs and fields of staff training	NRNU MEPhI	Panin I.N., Fedulin V.N.	December 2014
Task 2	Broadening the staff training platform of the CIS nuclear research installations through the use of RIAR infrastructure	1. Develop a methodical support programmes and training courses based on the requests of the CISRRC member states	RIAR, NRNU MEPhI, Coalition organizations	Panin I.N., Fedulin V.N.	February 2015
Task 3	Identify areas of joint research of the CISRRC members	1. Collect from the CISRRC members proposals for areas of joint research	RIAR, NRNU MEPhI	Panin I.N., Fedulin V.N.	May 2015

	2. Provide information on the work of the "Collective Use RIAR Centre"	RIAR	Petelin A.L.	June 2014
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Working group on ageing management of the nuclear research installations

№	Description	Steps	Member Organizations	Responsible	Milestones
Task 1	Experience exchange	1. Collect the missing information on main issues facing research reactors of the CISRRS coalition members	INF(Tashkent), JIPNR-Sosny of NAS of Belarus (Minsk)	A. Albul, S. Sikorin, S. Baytelesov	September 2014
		2. Finalise the analysis of collected information	Kurchatov Institute	A. Albul	November 2014
		3. Collect detailed information on completed and planned major repairs and modernization works	All CISRRC members	A. Albul	November 2014
		4. Compilation of detailed information collected under subtask 3 in three separate groups: <ul style="list-style-type: none"> • Cooling systems; • Power supply systems; • I&C systems 	Kurchatov Institute	A. Albul	January 2015
		5. Setting up the analysed information on the CISRRC's web-page in the format of tables with comments	RIAR	V. Fedulin	Upon availability
		6. Regular information update	All CISRRC members	A. Albul (albul_av@nrcki.ru), V. Fedulin (fvn@niar.ru)	Yearly
Task 2	Prepare reports on	1. Report on ageing management of	Kurchatov Institute	A. Albul	CISRRC meeting

	ageing management of the CISRRC nuclear research installations	the CISRRC nuclear research installations			in 2015
		2. Presentations of the coalition members on repair and modernization works completed at the nuclear research installations	All CISRRC members	CISRRC meeting members	CISRRC meeting in 2015
		3. Presentations of the coalition members on life extension experience at the CISRRC nuclear research installations	All CISRRC members	CISRRC meeting members	CISRRC meeting in 2015
Task 3	Organize Scientific Visits, Fellowships, Workshops	1. Based on the collected information develop proposals	All CISRRC members, IAEA	CISRRC members	To be defined