

**RECORD OF MEETING
AMEC PROJECTS 1.5-1/1.5
14-17 May 2002
HALDEN, NORWAY**

INTRODUCTION

Representatives of the Ministries of Defence (MOD) of Russia (RF), Norway (NOR), and the US Department of Defense (US) met in accordance with the AMEC Principals decisions on AMEC Projects 1.5 "Cooperation in Radiation Safety" and 1.5-1 "Radiation Control at Facilities – Application of the PICASSO System." The list of participants is included in Attachment 1.

MEETING GOALS

1. Review the status of the delivery of KID-08S dosimeters to Polyarninsky shipyard.
2. Review the status of the delivery of US electronic dosimeters to Polyarninsky shipyard.
3. Review the TZ and conceptual design document for the PICASSO-AMEC development and installation at RTP Atomflot.
4. Demonstration of the PICASSO system, its possibilities and application areas; its use for radiation monitoring at the Halden reactor and discussions on further adaptation of the PICASSO-AMEC software.
5. Status of the contract between ICC Nuclide and FFI for development of technical design and installation design.
6. Development of milestones and time schedule for the development and installation of the automated radiation monitoring system by using the PICASSO-AMEC software at RTP Atomflot, including purchase, adjustment, development of applied software, assembly, testing, installation, test operation and certification.

ACCOMPLISHED AND NEXT STEPS

1. In accordance with the contract between ICC Nuklid and FFI for procurement and delivery of KID-08S dosimeters to the Polyarninsky shipyard, ICC Nuklid submitted deliverable 1, the Copy of the Certificate for the KID-08S dosimeters March 21, 2002, to FFI. FFI received monthly progress reports numbers 1, 2 and 3 on May 7, 2002. ICC Nuklid delivered monthly report No. 4 at the meeting.

By 30 May 2002 ICC Nuklid shall deliver monthly reports No. 5 and 6. These progress reports will include more detailed technical and financial information in view of the comments of the Norwegian party.

ICC Nuklid informed that as of May 8, 2002 the Kursk plant Mayak had fully completed manufacturing of the KID-08S dosimeter set according to the contract. The product stock produced for the RF Navy's order was used for manufacturing of the set.

The set shall be shipped to the Polyarninsky Shipyard (Task 2 of the TZ Stage 1) after the proper regulatory documents are issued by the Russian MOD. Delivery is expected in June 2002.

2. Status of delivery and use of DD-100 dosimeters:

It was determined that the next step of continuing with the implementation of the US digital self-reading dosimeter project was to determine if there still exists an RF Navy need for these dosimeters. A letter to the RF SG Co-chair was signed out by the U.S. Project Officer for Project 1.5 requesting an official RF position. 100 batteries were delivered for use with the DD-100 dosimeters.

The Russian party informed the meeting that new Radiation Safety Rules (NRB-99) were launched on January 1, 2001. The Russian Project Officer reported that the DD-100 dosimeters functions do not meet the new requirements under the new regulations. Further, the DD-100 dosimeters lose key programmable functions without the DR-200 readers, which were not delivered.

3. ICC Nuklid delivered and Excerpt from the TZ for RTP Atomflot on Project 1.5-1. The RF reported that this TZ has now been approved by all appropriate authorities. The NOR and US delegations reviewed this TZ and suggested that several modifications be made.
4. The ICC Nuklid delivered the Conceptual Design. This document was jointly prepared by ICC Nuklid, IBRAE RAN and RTP Atomflot under the guidance of the RF MOD. The cost for preparing the Conceptual Design was funded by Minatom. Extensive discussions were held on its content. Based on these discussions a monitoring strategy was agreed upon including detailed identification of equipment, labor and cost. These are described in greater detail in the Conceptual design itself. With this trilateral review and approval of the Conceptual design, FFI is ready to transfer the advance payment to ICC Nuklid in accordance with the contract for development of the technical and installation design.
5. The estimated total cost for the monitoring system at the SNF interim storage pad and the LRW treatment facility is 453K USD. The cost for the SNF pad site will be shared between the NOR and the US. The cost for the LRW treatment facility

will be carried solely by the NOR. A strategy for financing between NOR and the US was discussed.

6. ICC Nuklid shall provide contractual proposals for the PICASSO-AMEC installation at RTP Atomflot to FFI and BNL. On issuance of these contracts, equipment will be ordered and assembled; software will be adapted; and, construction will begin and be completed. Key deadlines are outlined in Attachment 2. The Project Officers expect construction to be completed and a test operation period of 6 months to begin by February 1, 2003.
7. The PICASSO system, its possibilities and application areas and its use for radiation monitoring at the Halden reactor was demonstrated to the RF delegates who also visited the control room of the Halden reactor.

THE EXPERTS REPORT TO THE STEERING GROUP

1. If the RF MOD determines that there is no longer a need for the US digital self-reading dosimeters, the next steps will include the development of a joint closeout report by the project officers documenting the lessons learned from this effort. If the RF MOD determines that a need still exists for the U.S. dosimeters, the US project officer will develop plans to provide the RF Navy with additional spare batteries and DR-200 dosimeter readers that are currently in the US. The RF Project Officer will determine what steps are necessary to transfer the dosimeters already delivered, and the batteries and readers that will be delivered, to the RF Navy for use at the Polyarninsky Shipyard and/or other designated location. It is understood that these steps must be complete by 30 September 2002.
2. The Norwegian Party will provide to ICC Nuklid a free of charge transfer of the right to use the PICASSO-AMEC software in development and installation of automated radiation monitoring system at RTP Atomflot.
3. A report on PICASSO-AMEC was presented at the Russia-NATO Advanced Research Workshop on Unresolved Issues Remaining in the Decommissioning of Nuclear Powered Vessels and in the Environmental Remediation of Their Supporting Infrastructure, Moscow, 22-24 April 2002.
4. A report on "Automated Environmental Radiation Monitoring at RTP Atomflot and the Polyarninsky Shipyard" will be presented at the 5th International Conference on Environmental Radioactivity in the Arctic and Antarctic, St. Petersburg, 16-20 June 2002.

NEXT MEETING

The next 1.5-1 Project Officers meeting will be held after the equipment has been assembled and the software adapted. This meeting will be held 10-12 September, 2002 in Moscow at the IBRAE-RAN.

For Russian Ministry of Defence

For US Department of Defense

CAPT Andrey Egorkin

CDR Andrew Griffith

For Norwegian Ministry of Defence

Dr. Monica Endregard

ATTACHMENT 1

THE LIST OF PARTICIPANTS OF MEETING ON PROJECT «AMEC 1.5-1»

Halden, May 14-17, 2002

РОССИЙСКАЯ ФЕДЕРАЦИЯ	RUSSIAN FEDERATION
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РТП «Атомфлот» Андрей Николаевич Абрамов Сергей Анатольевич Вариков	RTP Atomflot Andrey Abramov Serguei Varikov
США	USA
Департамент энергетики Эндрю Гриффит	Department of Energy (DOE) Andrew Griffith
Брукхевенская национальная лаборатория Пол Московитц	Brookhaven National Laboratory (BNL) Paul Moskowitz
Норвегия	NORWAY
Норвежский институт оборонных исследований Моника Эндрегард	Norwegian Defence Research Establishment Monica Endregard
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Переводчик Мария Ким Стейн Ларсен	Interpreters Maria Kim Stein Larsen

ATTACHMENT 2

ATTACHMENT 3

Phone and Mailing Addresses for the Participants

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