

# **Role and Activities of the IAEA Contact Expert Group**

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## **CEG Establishment**

After the end of the Cold War Russian Federation has been facing a number of complicated environmental problems deriving from poor management of radioactive waste generated in the course of past activities in production of nuclear weapons, use of nuclear energy for peaceful and military purposes, and as a result of nuclear arms reduction.

In the middle of 90s more than 160 nuclear submarines retired from the Russian Navy were stored afloat for decades with spent nuclear fuel (SNF) on board. Thousands of spent fuel assemblies of naval reactors and thousands of tons of radioactive waste (RW) have been accumulated at the former naval bases and service ships and in many cases were stored in conditions that did not meet requirements of safety regulations contaminating the environment. A number of other problems also existed.

At that time several countries and international organizations decided to initiate assistance to Russia in the frames of bilateral and multilateral programmes to resolve the most severe problems mostly in the North-West Russia (Murmansk and Arkhangelsk Regions).

In order to promote and coordinate these efforts, a special Contact Expert Group for International Radwaste Projects in the Russian Federation (CEG) has been established under the auspices of the International Atomic Energy Agency (IAEA) in 1996. The need for this coordinating body was recognized already early in May 1995 at the seminar "International Cooperation on Nuclear Waste Management in the Russian Federation" organised by the IAEA upon the request of Nordic countries. The CEG Secretariat is located in the IAEA Headquarters and is operated by the IAEA with financial support from the CEG member-countries.

Currently CEG comprises of twelve countries: Belgium, Canada, Finland, France, Germany, Italy, the Netherlands, Norway, Russian Federation, Sweden, United Kingdom and United States of America, and four international organizations: European Commission, International Institute for Applied Systems Analysis, International Science and Technology Centre and IAEA.

## **CEG Objectives and Priorities**

According to the CEG Terms of Reference, the main objectives of the CEG are:

- to promote cooperation between all countries and international organizations interested in contributing to projects aimed at enhancing the SNF and RW management in the Russian Federation;
- to provide a forum for discussion and exchange of information with the view of identifying main priorities and presenting recommendations on specific projects for further cooperation;
- to avoid redundancy and duplication in project work in Russia and assure that priorities are properly addressed and made known to the international community;
- to provide points of contact to facilitate cooperation.

During first years of its operation CEG collected detailed information on RW and SNF inventories, nature of problems and the Russian strategy towards their resolution in order to define and initiate the most urgent projects. After careful evaluation of different challenges the CEG defined the following high-priority areas:

- Remediation of the former naval bases in the North-West Russia.
- Dismantlement of nuclear submarines retired from the Navy.

### **CEG Activities**

On its regular plenary meetings the CEG reviews progress of the Russian clean-up activities and international assistance, discusses future plans and defines the most urgent tasks that should be addressed. Plenary meetings are organised usually on the annual basis. The next 20<sup>th</sup> CEG plenary meeting is to be held in Munich, Germany on 11-13 October 2006.

In order to facilitate international assistance on the most challenging issues the CEG also organises topical workshops aimed to discussion of technical problems, elaboration of recommendations for their resolution and delivery of specific project proposals to Donors. Since October 2001, when the first CEG workshop on Remediation of the SNF and RW Storage Site at Andreeva Bay was held in Idaho Falls, USA, the CEG conducted ten topical workshops on remediation of the former naval bases in Andreeva Bay and in Gremikha, on dismantlement of multi-purpose nuclear submarines and nuclear service ships, on environmental impact and risk assessments, methods and techniques for radioactive waste management, disposal of radioactive waste and decommissioning and replacement of radioisotope thermoelectric generators (RTG).

CEG member-countries recognised these workshops as a useful tool for initiating new cooperative activities, for coordinating efforts of different donors and eliminating duplication of work. For example, after the workshop on dismantlement of multi-purpose submarines, Norway initiated a contract for dismantlement of two submarines and Canada launched a programme to dismantle 12 submarines during four years. Then UK joined this work also and sponsored cutting of another three subs. Recently Italy also signed a contract on dismantlement of one retired submarine. Japan reached a general agreement with Russia to fund dismantlement of five nuclear submarines in the Pacific Region in addition to one submarine which was already dismantled there under Japanese assistance.

The CEG workshops helped also to establish multilateral cooperation on remediation of the Andreeva Bay site and the Gremikha site where substantial amounts of the naval spent fuel and radioactive waste have been accumulated during decades of the Russian nuclear fleet operation. The storage conditions of these hazardous substances in many cases pose high risk of radioactive contamination to the environment and require urgent measures for improving the radiation safety. Currently Norway, United Kingdom and Sweden assist Russia in improving safety and security of SNF and RW management in Andreeva Bay, and France and EBRD assist on similar activities at the Gremikha site.

### **International assistance to Russia**

Recently international assistance to Russia in the area of nuclear clean-up activities has been substantially expanded. After signing the Framework Agreement on Multilateral Nuclear Environmental Programme in Russia (MNEPR), which took place in May 2003 in Stockholm, a special fund named Northern Dimensions Environmental Partnership (NDEP) was

established and is administered by EBRD. The fund accumulated currently about €150 million, and a number of clean-up projects already initiated.

G8 Global Partnership Programme Against the Spread of Weapons and Materials of Mass Destructions that committed 20 billion US\$ for 10 years, recognised dismantlement of the Russian retired nuclear submarines and remediation of associated nuclear sites as one of four major tasks. With the assistance of Western countries Russia gained significant progress in this area during 2003-2006.

Out of 197 nuclear submarines retired from the Russian Navy by June 2006 [1], 133 subs have been already dismantled, including 15 submarines under the Western funding. Another 8 submarines will be dismantled by the beginning of 2007 under Western assistance.

Germany allocated 300 M€ for construction of the on-shore storage facility for the submarine reactor compartments which are the final product of the submarine dismantlement. First stage of this facility for 40 reactor compartments was commissioned on 18 July 2006.

According to the Russian plans the problem of dismantlement of all retired submarines will be solved by 2010.

In order to assist in coordinating these multilateral efforts CEG proposes its services as a technical advisor and a project facilitator for managing bodies of all bilateral and multilateral programmes in the area of radioactive waste management in Russia. The CEG Secretariat maintains a database on co-operative projects in the CEG-related areas that is accessible in the Internet since early 2005 (<http://cegdb.iaea.org>). The database contains information on project scope and status, organisations and experts involved, documents and reports, photos and web-links.

Information on the CEG activities is available of the CEG website <http://www.iaea.org/OurWork/ST/NE/NEFW/CEG/index.html> that is maintained by the CEG Secretariat. The website also contains key materials of the CEG workshops and other documents.

Different institutions and authorities have acknowledged the efficiency and value of the CEG work, and the importance of its informal coordinating role is ever increasing. The CEG activities now are concentrated on informational support and exchange between the CEG members, sharing the experience gained in implementing projects with Russia, promoting the best practice and up-to-date technologies, for provision of efficient use of donor's money. The CEG Secretariat plays a crucial role here providing organisation of meetings and workshops, maintaining the CEG website and the CEG database, communicating to the parties and the media.

## **Reference**

1. Interview with Mr. Sergey Antipov, Deputy Head of the Federal Atomic Energy Agency of Russia in 2003-2006, published on the site:  
[www.a-submarine.ru/News/Main/view?id=19500&idChannel=105](http://www.a-submarine.ru/News/Main/view?id=19500&idChannel=105).