

**Draft Terms of Reference for  
The CEG IAEA workshop on  
Final Elimination of the Nuclear Legacy in the Far East of Russia  
26-28 May, Vladivostok, Russia**

**Background**

The IAEA Contact Expert Group's (CEG) primary objective is to promote international cooperation and assistance in order to resolve challenges and problems related to both legacy radioactive waste (RW) and spent nuclear fuel (SNF) in the Russian Federation. In addressing this objective CEG Members have a responsibility to facilitate and co-ordinate their host country or organization's support to ensure resources are used effectively and as efficiently as possible. CEG workshops are an important tool in supporting effective coordination and international facilitation efforts through identification of bottlenecks and gaps in the remediating activities, discussing technical issues and organisational impediments and proposing new projects to close the gaps and optimise the use of resources available.

At the 23rd plenary meeting of the CEG in Rome (October 2009) the Members decided to devote the second CEG workshop in 2010 to: "*Final Elimination of the Nuclear Legacy in the Far East*". The workshop will be held 26-28 May in Vladivostok hosted by ROSATOM State Corporation with financial support from the USA and Japan.

**Justification of Topic**

In 2007 CEG members discussed the nuclear legacy in the Far East Russia. The workshop concentrated on submarine dismantlement and RW management. Since then international partners in the region have demonstrated good progress in dismantling NPSs and addressing related Global Partnership areas such as RTG recoveries. Dismantlement of decommissioned nuclear submarines nears completion. Only two (non-damaged) submarines are unallocated for dismantlement in the region at the beginning of 2010. Crucial support has been provided in achieving this status by the primary Pacific Rim nations: Japan, Canada, USA, Republic of Korea and Australia. The issue of safe transportation of NPS over long distances using a heavy lift vessel has been successfully demonstrated with Canadian assistance. The complimentary issue of re-locating large numbers of reactor compartments using the same method appears feasible.

Currently the focus of remediation efforts is shifting from NPS dismantlement to RW and SNF management. Russia continues the construction of a large dedicated storage facility for nuclear reactor compartments; Japan and Germany are providing equipments to speed up completion and its entry into service. A substantial programme for RTG recovery is being implemented with the US and Canadian funding. Russia is also building a storage facility for RW. There remains, however, a range of nuclear legacy issues outstanding in the region awaiting resolution and appropriate practical solutions. The issue of removing 85 RTGs from Kamchatka is yet to be solved. The question of isolation of two submarines which suffered nuclear accidents and the issue of removal of damaged SNF from DalRAO also need close attention by international partners.

## **Objective**

The objective of the workshop is to present, review and take stock of the current nuclear legacy situation in Far East Russia so as to discuss implementation of appropriate projects to fully address this legacy. The workshop will be identifying areas that require additional efforts and support by international partners; and discuss proposals for future projects.

**Tasks:** The workshop will address the following issues:

### **1. General issues**

- Overview of the current nuclear legacy situation in the entire Far East region of Russia
- The scope and details of all required initiatives and projects to fully remediate the nuclear legacy
- The requirements for international cooperation and prospects for future activities
- Development of a coordinated plan for Far East region nuclear remediation

### **2. Submarine Dismantlement Programme**

- Transportation and dismantlement of decommissioned nuclear submarines – what remains to be done?
- Plans for de-fuelling and dismantling the remaining nuclear surface ships
- Problem of nuclear service ships (including their conservation and protection until the storage pad is ready)
- Transport of floating reactor compartments from Kamchatka region to Primorsky Krai
- Status and management of floating reactor compartments in Razboynick bay
- Status of construction of the storage facility for reactor compartments and international assistance,
- Programme for isolation of two nuclear powered submarines damaged by nuclear accidents

### **3. SNF Management**

- Status of accumulated legacy SNF and storage facilities at DalRAO,
- Problems of removal of damaged fuel from the storage facility at Sysoeva Bay
- Infrastructural projects for removal of SNF to Mayak for reprocessing

### **4. RW Management**

- Regional nuclear safety: regulators and regulatory issues
- Construction of a long term RW storage facility and the regional centre for RW management
- LRW storage and reprocessing
- Remediation of contaminated facilities at DalRAO (Sysoyeva and Krasheninnikova Bays)
- Regional radiation monitoring and response system
- Prospects for the legacy RW disposal in the region

### **5. RTG Management**

- Current RTG inventory in the region and international programmes for their decommissioning and securing
- Current storage of RTGs at DalRAO and prospects of their removal
- RTG removal for disassembly and long term storage of heat sources.

**Sessions:** The above questions will be grouped in the five sessions:

- 1 General session: situation in Far East Russia and efforts of international partners
- 2 Status of nuclear submarine dismantlement programme
- 3 Management of legacy SNF and its removal from the Far East
- 4 RW management in the Far East its storage and prospects for disposal
- 5 Elimination of RTG legacy in the region

**International Coordination Group for RTGs.**

As agreed at the CEG meeting in Rome, the workshop will incorporate a meeting of the International Coordination Group for RTGs.

**Languages** - English and Russian.

**Time and venue**

The workshop will be held on 26-27 May, at the Hundai Hotel in Vladivostok, Russia  
Technical tour is to be arranged to DalRAO SNF and RW facilities at Sysoyeva and Razboynik bays on 28 May.