



## **SAFEGUARDS IMPLEMENTATION AND STRENGTHENING IN BELARUS**

I.SUDAKOU, O.PIOTUKH

Committee for Supervision of Industrial and Nuclear Safety, Minsk, Belarus

### **INTRODUCTION**

It is a matter of common knowledge that non proliferation regime includes such components as accounting and control of nuclear materials, physical protection of nuclear materials, export/import control and measures to combat illicit trafficking of nuclear materials.

The task to establish and implement the state system of accounting and control of nuclear materials (SSAC) as well functions of the national competent body for physical protection of nuclear materials (PP) were assigned to the Committee for Supervision of Industrial and Nuclear Safety (PROMATOMNADZOR) by a resolution of the Council of Ministers in 1993.

Basic regulatory documents governing functioning of the SSAC and PP both at the state and facility levels were put in force in 1995 by order of Promatomnadzor.

### **SYSTEM OF ACCOUNTING AND CONTROL OF NUCLEAR MATERIALS**

Nuclear material accounting is based on a computer program developed with due regard to the requirements of the IAEA. The program is written on FoxPro under control of the MSWINDOWS operating system. The program allows us to work with archives, to take account of material movements in real time, to prepare accounting documents and reports and to record measurement results. The system of measurement of nuclear materials provides authenticity and reliability of data. Measuring instrumentation was selected according to types of material available. With regard to the measurement system employed there are still some problems to be solved. Among them, certification of the instruments, working out and approval of quality assurance procedures, acquisition of standards.

Accounting documents and reports are processed by Promatomnadzor, including completeness and authenticity of reports. Archived data are kept with respect to material quantities in MBA's, inventory changes, etc. Information coding is based on the code 10 of the IAEA.

### **PHYSICAL PROTECTION OF NUCLEAR MATERIALS AND FACILITIES**

Nuclear materials of the Republic of Belarus are located at the Academic Scientific and Technical Center "Sosny". Modern system of physical protection was started to operate in October 1996. Without going into details, the system of physical protection makes it possible to maintain automatic control of access to the most sensitive zones and the facility as a whole, automatic detection and testing of all components, automatic generation of alarm signal in case of an incident and taping of video signal.

During operation and maintenance of the system we have encountered some difficulties like the absence of national producers of necessary spare parts and expensive prices of such parts with foreign producers, the necessity of adaptation of some system components to local climatic conditions, etc.

## **EXPORT/IMPORT CONTROL AND PREVENTION OF NON-AUTHORIZED USE OF NUCLEAR MATERIALS**

The Law of the Republic of Belarus «On Exports Control» came into force in January 1998. This law defines the legal bases for activities of state bodies, legal and natural persons of the Republic of Belarus in the field of export control and regulates relations arising in connection with the movement of objects subject to export control across the customs border of the Republic of Belarus and their subsequent use. The objects subject to export control include such items «as goods, technologies and services connected with nuclear fuel cycle and production of nuclear materials which can be used for production of nuclear weapons and nuclear explosive systems» as well as «dual purpose commodities». Information support of the export/import control system is provided by ORACLE-controlled computer data bases. This system includes the Ministry of Foreign Affairs, the Customs Committee, the Academy of Sciences and other agencies. The Republic of Belarus became a member of the Nuclear Supplies Group in 2000.

According to the decrees of the Council of Ministers 675 dated June 1997, licensing and state supervision of activities involving use and transportation of nuclear materials is carried out by Promatomnadzor. Promatomnadzor also issues permits on movement of nuclear materials across the borders of Belarus.

State Customs Committee is responsible for detection of unauthorised imports and exports of nuclear and other radioactive materials at the customs border of the Republic of Belarus. They report each case to other responsible authorities.

Belarus is a transport corridor between the East and West, and the issues relating to regulation of export and import, exercising control over export, import of nuclear materials, prevention of smuggling of nuclear materials and maintaining of international co-operation are very important for us.

## **FURTHER DEVELOPMENT OF THE SAFEGUARDS SYSTEM**

It should be noted that control over use of nuclear materials and facilities, which is still of crucial importance can not ensure the absence of undeclared nuclear activities as required. The IAEA has developed the strengthened safeguards system (INFIRC/590) the essence of which is to expand control over relevant technologies, dual use commodities and services. Of course, the implementation of the system provides for more effective and efficient safeguards.

Co-operation with the IAEA and other international organisations is regarded as one of the conditions of further improvement of reliability and efficiency of the safeguards.

In conclusion I would like to express my profound gratitude to the IAEA and donor countries, in particular Japan, USA and Sweden, for their assistance aimed at strengthening safeguards in Belarus.