

## **Session 3: Nuclear Security**

### **Radioactive Sources – Under Control?**

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Radioactive material, including sources, is subject to a lower level of control than nuclear material. Taking examples from Kazakhstan, some aspects of this problem will be discussed – regulatory control, security of facilities using sources, monitoring and physical control of source movements, etc.

Several directions of work can be considered for improving control of radioactive sources. First, accountancy of sources should be enhanced, focusing on better regulatory framework for bookkeeping, inventory verification, management of moving records and other measures to build an effective quality management system for accountancy in order to eliminate the orphaning of registered sources.

Second, physical protection systems should be strengthened for facilities with radioactive sources. The principles of this system could be based of those for the physical protection of nuclear material.

Third, technical systems should be developed for ‘defence in depth’ in combating the illicit use and movement of radioactive sources. Here we can consider local systems on a facility level, detection of radioactive material on most probable transport routes, and border control.

Fourth, international co-operation should be improved in combating illicit trafficking of radioactive sources and in tracing international transfer of sources, which could include the development of export/import procedures to eliminate the risk of loss of control.

Fifth, effective response measures should be developed in cases of detection of radioactive sources illegally transported or accidentally found.

Other measures can be considered for strengthening control over radioactive sources. We have good examples of nuclear material control that can be used as a basis.