DON'T DROP YOUR GUARD Securing Nuclear Facilities

You're never quite finished with nuclear security. "Even the most advanced security system for radioactive or nuclear material needs to be continuously updated to ensure that it remains effective," says Arvydas Stadalnikas, an IAEA Senior Nuclear Security Officer. "Security can always be improved. Even if you think you have the best system for today, it may require enhancements because of the changing environment," he said.

To help States with this daunting task, the IAEA offers support through its International Physical Protection Advisory Service (IPPAS) which includes in-depth analysis of the physical protection and nuclear security followed by expert advice. The IAEA has carried out 58 missions to 37 countries since the IPPAS programme was launched in 1996, helping States translate international conventions, codes and guidance on nuclear security into practice. Although each mission focuses on improving the security in a specific country, "the programme has benefits that reach far beyond the recipient State's national borders," Stadalnikas noted.

"Each IPPAS mission helps improve global nuclear security because enhanced security in one country means that you improve globally. Deficiencies in one country could open the way for malicious acts, which can have worldwide effects," he said.

In addition, the missions' generic recommendations feed into the development of the IAEA's nuclear security publications, which are updated from time to time to adapt to an evolving environment. This enables all States to benefit from lessons learned, even though the individual mission reports are treated as strictly confidential and shared only with the host country. "The missions have given us a stronger basis to provide advice," Stadalnikas said.

"Emphasizing that the IPPAS is a process," Stadalnikas said, "IPPAS missions can be a starting point for support programmes in the nuclear security area, with the IAEA providing training courses on security aspects or technical support such as more sensitive detection systems or intrusion-resistant doors." States welcome the service and take recommendations "very seriously," he added. For the Swedish Radiation Safety Authority (SSM), which hosted an IPPAS mission in 2010 following a request by the Government to the IAEA to review the Swedish physical protection programme, the resulting mission recommendations served to justify proposals in a report to the Government, said Stig Isaksson, Government Specialist at SSM.

"Moreover, the discussions and interaction with the international experts in the IPPAS team were very useful for both SSM personnel and representatives from other participating national authorities as well as for the licensees visited during the mission," he said.

Sweden improved its physical protection programme following the IPPAS mission, for example by establishing in April 2013 a formal coordination group that includes the Swedish Radiation Safety Authority, the National Police Board, the Swedish Security Service, the Civil Contingencies Agency and the National Grid Authority. This group will coordinate various measures to ensure the effective protection of nuclear facilities, as well as nuclear material during transport, including by carrying out threat assessments.

"As security needs are evolving, so too is the IPPAS programme. A new modular approach has made it easier to adapt missions to the specific needs of each State," Stadalnikas said. Modules focus on topics such as the physical protection regime, facility review, transport and computer security. A module focusing solely on radioactive material has proved particularly useful for countries that do not have nuclear reactors but use radioactive material for a variety of beneficial purposes.

In addition, a series of regional workshops was launched in 2012 to explain the IPPAS programme and its benefits to States. A technical session to be held in France in 2013, will gather representatives of all countries that have hosted IPPAS missions, countries that have requested such missions, as well as countries with larger nuclear power programmes. These activities help the IAEA to improve the IPPAS programme and thereby to better assist States strengthen nuclear security.

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