IRRS Good Practices

Interface with nuclear security (Module 11)

Legal basis

United Kingdom – Initial Mission

Mission Date: October 2019

Good Practice

The UK government implemented effective interface between safety and security for category 1 to 4 radioactive sources through the requirement for security experts to advise and inspect security requirements with environmental regulators.

Observation

The UK's regulatory framework for the interface between safety and security required counter terrorist security advisers trained in radiological matters to advise the environmental regulators on security measures for category 1 to 4 sources. This included preauthorisation inspections, security arrangements as well joint inspections.

Basis

GSR Part 1 Requirement 2, para 2.39 states that "Specific responsibilities within the governmental and legal framework shall include:

- (a) Assessment of the configuration of facilities and activities for the optimization of safety, with factors relating to nuclear security and to the system of accounting for, and control of, nuclear material being taken into account;
- (b) Oversight and enforcement to maintain arrangements for safety, nuclear security and the system of accounting for, and control of, nuclear material;
- (c) Liaison with law enforcement agencies, as appropriate".

IAEA Comments/Highlights

The UK government established the legal framework for oversight and enforcement of nuclear security. This included a state system of accounting for, and control of, nuclear material and arrangements for interfaces between safety and security. ONR was the statutory organisation with purposes covering nuclear safety and nuclear security for civil nuclear licensed sites and

transport. Security Assessment Principles (SyAPs) and Safety Assessment Principles (SAPs) were derived from the IAEA's fundamental principles for safety and security. SAPs and SyAPs contained regulatory expectations for the integration of safety and security arrangements by authorised parties.

For non-civil licensed nuclear sites, enhanced security arrangements were in place for category 1 to 4 sources. The UK environmental laws provided the legislative basis for these security measures. Counter Terrorist Security Advisers (CTSAs) trained in radiological matters advised the environmental regulators on security measures for category 1 to 4 sources and this included preauthorisation inspections to confirm security arrangements were implemented as part of permit/authorisation conditions. This provided a graded approach to security whereby the most stringent security measures were required for the most dangerous sources.

Authorisations issued by the environmental regulators for category 1 to 4 sources included requirements on operators to provide and maintain security arrangements to an appropriate standard. Security requirements for category 5 sources and unsealed sources were not prescriptive. The security requirements were aligned with requirements for safety under the IRR regulations.

Within the UK framework, the interface of safety with nuclear security involved the advice from security experts, i.e. CTSAs in establishing and monitoring security measures for category 1 to 4 radioactive sources and were based on a statutory requirement. This included joint and independent inspections as well as pre-authorization inspections.