



# HUMAN RESOURCES DEVELOPMENT

TOOLKIT FOR RADIOACTIVE SOURCE  
SECURITY MANAGEMENT



World Institute for  
Nuclear Security



# An Introduction to the Human Resources Development Toolkit for Radioactive Source Security Management

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# An Introduction to the Human Resources Development Toolkit for Radioactive Source Security Management

## CONTEXT

In many developing countries reliable access to radioactive sources for a variety of applications including health care, mining, agriculture, water management and food production is economically and socially vital but the competence to manage the security of those sources and prevent theft of the radioactive sources and/or their misuse is lacking.

In most countries the primary responsibility is related to the safe use of radioactive sources. The responsibility for security is either not assigned at all or assigned to a person whose main task is safety (in many cases a Radiation Protection Advisor or Radiation Safety Advisor or a technician).

It is often no different within the regulatory body; the main responsibility is regulation for safety not the security of radioactive sources.

Under funding from the Government of Norway WINS has developed a toolkit for national human resources development to ensure the availability of competent professionals to support and build capacity in radioactive source security management to achieve sustainable outcomes.

Often countries lack suitable competent professionals to support the safe and secure use of radioactive sources.

Many countries do not have an appropriate methodology for identifying competencies required for secure management of radioactive sources.

Many countries lack the opportunity for structured professional development in radioactive source security to support the required competencies of different national stakeholders who regulate or use radioactive sources.

Once roles and responsibilities for radioactive source security are defined a competency framework can also be developed. Based on the competency framework organisations can then develop strategies for training and development that generally are comprised of:

**Training:** The process of placing employees in a planned and coordinated training course that will improve their performance in a particular area

**Experiential learning:** The process of learning through experience. This could include internships or experience gained in previous roles.

**Continuous learning:** The ongoing development of skills, abilities and knowledge through various means (including work, experiences and communications)

**Credentials/certification:** Professional registration, licences or certifications

## AUDIENCE

This National “toolkit” is for HRD and Training managers, or those that have this additional responsibility without any extra funding or support, will assist each stakeholder organisation: recognise the importance of radioactive source security in their organisation; identify the responsibilities that are important to be carried out; identify any gaps: develop competency frameworks to support these roles and responsibilities; develop competence in key areas of radioactive sources security through training, experiential learning, continuous learning and access to certification including the new WINS Academy certification in radioactive source security management.

By taking these actions countries will build capacity to sustain radioactive source security at the national level, thereby contributing to the effectiveness of radioactive source security, globally.

Resources that are included in the “HRD KIT”

- Methodology for Competency Framework Development
- Methodology for developing training needs assessment for radioactive source security
- Information on the WINS Academy Programme for Certified Radioactive Source Security Management leading to the designation of Certified Radioactive Source Security Professional (CRSP).

# Establishing a Competence Framework for Radioactive Source Security

## Competence Framework Methodology

### 1. Stakeholder Organisations

The types of organisations for which the Competency Framework are beneficial are those stakeholders concerned with the security of radioactive sources in use, transport and storage.

The IAEA guidance document entitled “Security of Radioactive Material in Use and Storage and of Associated Facilities” (Nuclear Security Series 11-G (Revised)), sets out the typical assignment of security responsibilities.

These internationally agreed responsibilities are listed in the table below.

NSS11-G TABLE 1 TYPICAL ASSIGNMENT OF SECURITY RESPONSIBILITIES

Competent Authority	Security Responsibilities and Powers
<b>Regulatory body:</b>	<ul style="list-style-type: none"> <li>• Establish a system of regulatory control over radioactive material, associated facilities and associated activities that places the primary responsibility for security on authorised persons (licensees)</li> <li>• Establish a system of security-based categorisation of radioactive sources</li> <li>• Develop and maintain a national register of radioactive material over activity thresholds defined by the State</li> <li>• Participate in national threat assessment</li> <li>• Develop and apply the design basis threat, representative threat statement or other defined threat for purposes of regulation for security</li> <li>• Implement the authorisation (licensing) process, including review and assessment of security systems and security management measures</li> <li>• Establish regulatory requirements and provide guidelines for security, including requirements for information protection</li> <li>• Manage the safety–security interface</li> <li>• Conduct security inspections</li> <li>• Take enforcement action for non-compliance</li> <li>• Participate in regional and international databases and other cooperative activities</li> <li>• Encourage and promote a robust security culture</li> <li>• Participate in planning efforts for preparedness for and response to security events, including exercises</li> <li>• Administer procedures for authorising and controlling the import and export of radioactive material</li> <li>• Notify operators concerning specific or increased threat</li> <li>• Review and assess the design of security systems (in the authorisation process)</li> </ul>
<b>Law enforcement:</b>	<ul style="list-style-type: none"> <li>• Provide response to interrupt malicious acts (e.g. unauthorised access, unauthorized removal, sabotage)</li> <li>• Participate in planning efforts for preparedness for and response to security events, including exercises</li> <li>• Participate in national threat assessment</li> <li>• Identify facility or activity specific threats, or new or increased threat capabilities</li> <li>• Conduct background checks for purposes of trustworthiness verification</li> <li>• Detect and investigate security events</li> </ul>

NSS11-G TABLE 1 TYPICAL ASSIGNMENT OF SECURITY RESPONSIBILITIES

Competent Authority	Security Responsibilities and Powers
<b>Customs &amp; border control:</b>	<ul style="list-style-type: none"> <li>Participate in national threat assessment</li> <li>Identify facility or activity specific threats, or new or increased threat capabilities</li> <li>Control and detect non-compliance with respect to imports or exports</li> <li>Communicate with regulatory body with respect to national inventory of radioactive material</li> </ul>
<b>Intelligence &amp; security agencies:</b>	<ul style="list-style-type: none"> <li>Direct national threat assessment</li> <li>Identify specific or increased threats</li> </ul>
<b>National emergency response agency:</b>	Coordinate planning efforts for preparedness for and response to security event
<b>Civil defence, health and environment agencies:</b>	Participate in planning efforts for preparedness for and response to security events
<b>Ministry of justice and prosecuting authorities:</b>	Prosecute alleged perpetrators of malicious acts
<b>Ministry of foreign affairs:</b>	Engage in regional and international cooperation

The security responsibilities of operators are defined as:

<b>Operators/users of radioactive sources:</b>	<ul style="list-style-type: none"> <li>Security system - deter, detect, delay, respond</li> <li>Integrated technical and administrative systems</li> <li>Inventory control of radioactive sources</li> <li>Reporting and permission for transport, transfer and disposal of sources</li> <li>Reporting of incidents</li> <li>Information &amp; cyber security</li> <li>Security management – risk informed, graded approach, defence in depth, security culture, safety and security interface.</li> </ul>
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## 2. Format

The Competency Framework format is contained in the associated Excel spreadsheet. This format is suitable for simple, easy to develop competency frameworks.

Document B presents a high-level overview of the content of the Competency Framework for Radioactive Sources, set of documents that support the accompanying Training Needs Analysis (TNA) and the first level of information about the competencies required for each subject area. Parallel to the implementation of the TNA questionnaires the information gleaned from the TNA enables the organisation to determine the depth and breadth of the competency statements required for the stakeholders in accordance with the roles and responsibilities described in Table 1 (section 1).

This process to create the detailed competency statements under each subject area is depicted in the diagram below.

## 3. Roles

It is important to define the full extent of the roles to be addressed by the Competency Framework.

During the implementation of the TNA questionnaires and analysis in stage 2 of the process, the use of the RACI methodology shown below should be used to identify stakeholder roles to be addressed, as well as the level at which their competence should be assessed.



Level of Involvement	Involved and RESPONSIBLE	Involved and ACCOUNTABLE	Involved and CONSULTED	Involved and INFORMED
<i>Description of involvement</i>	Stakeholders who are required to achieve standards or implement measures (e.g. end users)	Stakeholders who set or approve standards or decide if a requirement has been completed (e.g. Regulators)	Stakeholders who need to give input before the work can be done and signed-off on (e.g. Government departments)	Stakeholders who need to be kept "in the picture." They need updates on progress or decisions only (e.g. representative organisations)

#### 4. Performance Requirements

For the purposes of the competency framework methodology, we have used a simplified version of the generic assessment levels 0 to 4 that are given below in full. See Document B for the shortened versions of these performance level descriptors.

#### 5. Knowledge, Skills & Behaviours

The knowledge, skills and behaviours (KSBs) required for each role need to be documented during Stage 2 of the Competency Framework and TNA implementation.

Once the TNA questionnaires have been completed and analysed a set of knowledge, skills and behaviours for each of the main job roles, along with the required competence statements can be collated. This activity can also identify the most important enabling skills and knowledge, as well as soft skills and attitudes.

The process flow for this activity is as follows:

#### COMPETENCY FRAMEWORK - PROCESS FLOW

Step 1	Step 2	Step 3	Step 4	Step 5
Stakeholder/Role	Competencies	Assessment	Learning and development	Evidence
<b>EXAMPLE</b>				
Regulator	Inspect the security of radioactive sources in transport	Agree level of competence	Training course, online learning, mentoring	Certificate, written testimony, video evidence etc.

Example KSBs:

Enabling Skills and Knowledge	Use, Plan, Deal with, Manage, Drive, Communicate, Lead, Organise, Solve problems, Calculate, Assess, Judge, Evaluate, Co-ordinate
Soft Skills	Interpersonal, Negotiation, Influence, Teamwork
Attitudes	Accepts authority, attention to detail, authoritative, accepts/embraces, change, cautious, conscientiousness, confident (can-do) cooperative, courteous, decisive, determined, diligent, does what is necessary/right, enthusiastic, flexible, focused, hard-working, helpful, humble, interested, mature, motivated, openness, open-minded/tolerant, perseveres, positive, practical, punctual, realistic, reliable, takes responsibility, safety conscious, self-confident, self-directed, self-disciplined, self-reliant, systematic, takes others point of view, tolerant, trusting, willing

## 6. Competency Framework - Initial Implementation Plan

The following steps define a method of approach that has been extensively tested. It informs the implementation of the competency framework.

### Initiation:

1. Through the TNA process, identify the key individuals within the organisation and potentially the wider stakeholder organisations who will act as Competency Framework Steering Committee and who will be accountable for the implementation of the competence assessments. Ideal candidates for this Committee will have both technical and leadership roles within the sector, and will have the ability to command respect of the user organisations. This Committee can provide peer review of the competency framework development and assessment process.
2. Nominate a discipline lead(s) responsible for the designation of competence statements relevant to the role/discipline requirements.
3. Agree the format and level of detail required in the assessment phase
4. Agree the Competency Framework system functional requirements. For example, develop the platform in-house or purchase a software solution.

### Implementation:

1. Produce initial implementation plan or roadmap.
2. Assign key leadership roles to those accountable and responsible for delivering the competency framework.
3. Agree the approach and format for the competency and capability assessment framework.
4. Agree preferred IT platform for the competency framework.
5. If a bespoke IT platform is selected, produce a functional specification for competence and capability assessment.
6. Develop the role profiles in an agreed format for incorporation into the platform.
7. Develop a roll out plan for the competence assessments across the stakeholder organisations.
8. Agree and plan the individual assessment programme and schedule the assessments with the appropriate resource.
9. Define the reporting and monitoring mechanism to demonstrate that the competency framework is understood and being used correctly.

# Radioactive Sources Security Competencies

## Part 1

Assessment Level	
0	<i>The individual has no evidence of skill or knowledge.</i>
1	<i>The individual has basic knowledge of the skill and limited practical experience.</i>
2	<i>The individual has a good knowledge of the skill and adequate practical experience to consistently perform the required task(s) in a range of complex and non-routine contexts.</i>
3	<i>The individual has extensive knowledge (both depth and breadth of understanding) of the skill and significant practical experience to consistently perform the required task(s) in a range of contexts.</i>
4	<i>The individual has a deep knowledge and understanding of the skill and comprehensive practical experience to consistently perform the required task(s) in a range of contexts. They have personal accountability, as well as accountability for others regarding this skill area.</i>

Competence Statements	0	1	2	3	4
<b>Regulatory measures</b> Notify and/or register authorisations and disposal of radioactive sources. Carry out inspections, including internal inspections and threat assessments.					
<b>Security measures</b> Investigate security incident investigations and manage security policy and/or plans, produce operational requirements/vulnerability assessments, and promote security culture awareness. Select, approve or assess security measures across all security disciplines: physical, personnel, transport, man guarding, information or cyber security.					
<b>The national registration of radioactive sources</b> Identify which radioactive sources should be included and what level of detail should be used in a national register of sources.					
<b>Import/export controls</b> Make and execute decisions regarding which sources should be subject to import and export controls and produce guidance on import and export controls for Category 1 and 2 sources.					
<b>Labelling of high activity radioactive sources</b> Make and execute decisions regarding which sources should be marked with an appropriate label (in addition to the radiation trefoil) to indicate warning of the radiation hazard.					
<b>Emergency preparedness and response (contingency planning)</b> Ensure that emergency preparedness objectives, plans and response are commensurate with the type of security event and/or hazard.					
<b>Radioactive sources out of regulatory control</b> Develop the detection architecture, manage the response and review and/or modify regulatory guidance.					
<b>Communication with the public</b> Provide information and communicate with the public in relation to a security incident involving radioactive material out of regulatory control, and which may or may not result in a radiological emergency.					



## Part 2

Competence Statements	0	1	2	3	4
<i>Security Culture</i>					
<p><b>Personal Responsibility</b> Proactively identifies the security requirements and measures associated with their role and ensures they rigorously implement the security measures required. Challenges the behaviour of others when they fail to implement the security measures required. Understands their part in implementing the organisation's security improvement plan.</p>					
<p><b>Security Governance</b> Ensures the organisation has a proportionate security governance regime (processes, metrics etc). Communicates the lessons emerging from the governance regime to every level in the organisation and relevant stakeholders.</p>					
<p><b>Leading by Example</b> Creates a vision of where an organisation needs to be with regard to security performance and encourages continuous improvement. Communicate this vision to and ensure the organisation has all resources to achieve the vision. Acts as a role model.</p>					
<p><b>Organisational Learning and Capture</b> Develops and embeds effective security learning processes in the organisation, which support the achievement of security business objectives.</p>					
<i>Security Planning</i>					
<p><b>Scope of Operations</b> Effectively plan for proportionate security operations based on the knowledge of security legislation, guidance, detailed knowledge of the organisation's security threats and mitigations and interpretation of security performance data.</p>					
<p><b>Security, Strategy, Policy and Standards</b> Provides relevant knowledge and experience to the development of the organisation's security strategy, policy and standards. Understands the importance of proportionality. Bases their advice on a broad knowledge of security legislation, guidance, good practice and a detailed knowledge of the organisation's security threats, mitigations and lessons identified by the company's learning processes.</p>					
<p><b>Incident Response</b> Provides relevant knowledge and experience to the development of the organisation's response to all potential security incidents. Understands the importance of proportionality. Bases their advice on a broad knowledge of security legislation, guidance and a detailed knowledge of the organisation's security threats, mitigations and lessons identified by the companies learning processes.</p>					

# Additional Security Competencies

Competence Statements	0	1	2	3	4
<i>Security Risk Management</i>					
<b>Understanding the Threat</b> Identifies the security threats to their organisation. Knows the relevant internal and external information to analyse and applies a risk based, proportionate approach to such analysis.					
<b>Asset Care</b> Identifies the action required to protect their organisations assets from security threats. Understands the principles of asset care and the importance of risk based, proportionate security approaches (methodologies, tools and techniques) to achieving it.					
<b>Supplier Assurance</b> Specifies the process for ensuring that each supplier is competent to meet their organisation's security requirements. Understands and applies the principles of supplier assurance and the security approaches to achieving it. Ensures the organisation's purchasing process has the necessary checks and balances in it.					
<b>Risk Assessment</b> Understands and applies a risk based, proportionate approach to all security matters, including the principles of risk assessment and the methodologies, tools and techniques to asses and balance risk. Builds security risk into the organisation's risk management process.					
<b>Counter Terrorism</b> Identifies the terrorists threats to their organisation, including their potential impact, and the necessary countermeasures required. Understands the threat and the risk this presents to the organisation facilities, assets, information and employees. Takes appropriate mitigating action.					
<i>Personnel Security</i>					
<b>Pre-employment Screening</b> Identifies when an individual (e.g. employee, supplier) requires pre-employment screening and when appropriate, national security vetting. Understands and (where relevant) applies the process for achieving this. Understands the national security classification system and the appropriate level of vetting to apply to any individual based on their access to classified information/areas. Is knowledgeable on the transfer of national and international security clearances.					
<b>Insider Threat</b> Identifies the insider threats to their organisation and the necessary countermeasures required. Understands the potential risks posed to an organisation by those it employs or those who supply services to it. Understands and applies the approaches to mitigating such risks.					
<b>After Care</b> Identifies increased security risks to the organisation from individuals who develop vulnerabilities through changing circumstances. Understands and can recognise vulnerabilities, knows the appropriate action to take and acts promptly. Ensures individuals have checks of their security clearance at appropriate intervals.					

Competence Statements	0	1	2	3	4
<i>Information Security</i>					
<p><b>Cybersecurity (M)</b> Takes proactive action to protect the organisation's electronic information, data and control systems. Understands the relevant threats, risks and countermeasures to such information, data and control systems and takes appropriate steps to protect the company and its employees.</p>					
<p><b>Security Classifications</b> Classifies security information to the relevant legislation/guidance.</p>					
<p><b>Information Assurance</b> Specifies the processes for ensuring the Confidentiality, Integrity and Availability of information. Understands the principles of information assurance and the security approaches to achieving it. Ensures the organisation's information processes (electronic / written) have the necessary checks and balances in them.</p>					
<i>Physical Security</i>					
<p><b>Physical Security and Response</b> Specifies the physical security requirements for their organisation. Is knowledgeable in the functions of physical protection systems and how to determine those essential criteria which deliver a proportionate physical protection system (i.e. the Operational Requirements process). Interprets the security threats to their organisation identifying the potential vulnerabilities to physical security and designing solutions that work in harmony with business processes. Understands the importance of deploying proportionate and risk based physical security requirements.</p>					
<p><b>Providing Guidance and Advice</b> Provide risk based, proactive advice to management and employees based on a broad knowledge of security legislation, guidance, a detailed knowledge of the organisation's security threats and mitigations and interpretation of security performance data.</p>					

# Core Knowledge and Behaviours Competencies

## Part 3

Assessment Level	
0	<i>The individual demonstrates negative behaviours.</i>
1	<i>The individual demonstrates basic behaviours.</i>
2	<i>The individual consistently demonstrates good behaviours.</i>
3	<i>The individual consistently demonstrates excellent behaviours.</i>
4	<i>The individual is considered a leader in the field of behaviours required to achieve a world class safety and security culture.</i>

Core Knowledge and Behaviours	0	1	2	3	4
<i>Core Knowledge</i>					
<b>Safety and Security</b> Knowledge of safety and security is a fundamental cornerstone for the industry. Individuals are required to understand the importance of operating safely and securely at all times.					
<b>Industry Knowledge</b> The ability to understand the use of radioactive sources. This competency covers knowledge of the applications of radioactive sources and the importance of lessons learned and stakeholder management.					
<b>Regulatory Knowledge</b> Understanding the regulatory frameworks which govern the use of radioactive sources and all those who are employed in the sector maintain safe and secure use of radioactive sources to protect people and the environment from the harmful effects of ionising radiation and safeguarding people and the environment. Individuals must understand their obligations and comply with all relevant legal and regulatory requirements.					
<i>Behaviours</i>					
<b>Achieves Results</b> Achieves Results is about delivering to agreed standards, taking responsibility for your actions and helping others to achieve.					
<b>Communication</b> Communication is the ability to effectively use appropriate communication channels to share and access information, engage in dialogue and seek feedback.					
<b>Developing Self and Others</b> Developing Self and Others is about routinely seeking to learn from experiences, situations and events and then applying the lessons learned. It also involves a commitment to ongoing personal and professional development and to developing others, where appropriate.					

Core Knowledge and Behaviours	0	1	2	3	4
<p><b>Focused Thinking</b></p> <p>Focused Thinking is about being curious and committed to finding ways of continuously improving business processes and operations whilst at the same time ensuring that the highest levels of safety and security are maintained.</p>					
<p><b>Leads by Example</b></p> <p>Leads by Example is about being true to one's own values, acting in accordance with company standards and values at all times and creating change where it makes sense to do so. It applies to all roles and levels across the industry and means setting a good example for others to see and follow.</p>					
<p><b>Teamwork</b></p> <p>Teamwork is about working collaboratively, across organisational boundaries and cultures, to achieve common goals.</p>					
<p><b>Behavioural Safety and Security</b></p> <p>Behavioural Safety and Security is a commitment to behaving in line with industry expectations and standards. It is adopting a personal behavioural safety approach and contributing to, and promoting, a positive safety and security culture.</p>					



# Methodology

This document provides an explanation of Training Needs Analysis (TNA) and forms part of a suite of documents comprising of the following:

1. TNA Questionnaire 1
2. TNA Questionnaire 2
3. Analysis Template Q2
4. TNA Questionnaire 3
5. Analysis Template Q3
6. TNA Toolbox of Reference Material

Phase	Method	Tool
1	Create project team & governance structure.	Nil
2	<p>Project team undertakes a RACI assessment of potential stakeholders.</p> <p><b>Aim</b></p> <ul style="list-style-type: none"> <li>• To identify and agree who will be involved in the initial phase of the TNA process.</li> </ul> <p><b>Remit</b></p> <ul style="list-style-type: none"> <li>• To make the initial assessment of stakeholder involvement as wide reaching and inclusive as practicable in order to gain a full understanding of stakeholders' interpretations of their roles and responsibilities.</li> </ul> <p><b>Output</b></p> <ul style="list-style-type: none"> <li>• Questionnaire 2 sent to the identified stakeholders.</li> </ul>	TNA Questionnaire 1 - The Identification of Stakeholders
3	<p>Stakeholders complete a self assessment questionnaire.</p> <p><b>Aim</b></p> <ul style="list-style-type: none"> <li>• To ensure that there is a full understanding of stakeholders' perspective of their roles and responsibilities.</li> </ul> <p><b>Remit</b></p> <ul style="list-style-type: none"> <li>• Limit the questioning of stakeholders in this phase to information required to confirm their understanding of their involvement and responsibilities.</li> </ul> <p><b>Output</b></p> <ul style="list-style-type: none"> <li>• Obtain sufficient data to conduct the next phase of the analysis.</li> </ul>	TNA Questionnaire 2
4	<p>Project team analysis of data received.</p> <p><b>Aim</b></p> <ul style="list-style-type: none"> <li>• To verify the initial assessment of potential project stakeholders.</li> </ul> <p><b>Remit</b></p> <ul style="list-style-type: none"> <li>• Review and record the data received.</li> <li>• Review the RACI self assessment and compare to the project team's assessment.</li> <li>• Identify areas of ambiguity in the understanding of stakeholder roles, reevaluate and clarify where necessary.</li> <li>• Identify stakeholders who have levels of responsibility that potentially requires a competency framework, development and training.</li> <li>• Modify questionnaire 3 to suit the requirements of each stakeholder involved in the next phase in order to save time when completing or analysing the document.</li> </ul> <p><b>Output</b></p> <ul style="list-style-type: none"> <li>• Questionnaire 3 sent to the refined list of stakeholders.</li> </ul>	Analysis Template Q2

Phase	Method	Tool
5	<p>Stakeholders complete detailed questionnaire.</p> <p><b>Aim</b></p> <ul style="list-style-type: none"> <li>To collect detailed information in order to populate the elements of the competency framework and to inform the TNA.</li> </ul> <p><b>Remit</b></p> <ul style="list-style-type: none"> <li>Stakeholders complete a self assessment, examining different security subjects in order to identify core knowledge requirements and technical competencies.</li> <li>Stakeholders are asked to identify knowledge gaps in each security subject.</li> </ul> <p><b>Output</b></p> <ul style="list-style-type: none"> <li>Provision of detailed information which will inform the development of the competency framework and TNA.</li> </ul>	TNA Questionnaire 3
6	<p>Project team analysis of data received.</p> <p><b>Aim</b></p> <ul style="list-style-type: none"> <li>Analyse the data provided by the stakeholders.</li> </ul> <p><b>Remit</b></p> <ul style="list-style-type: none"> <li>Collate the data and analyse.</li> <li>Identify core knowledge requirements and technical competencies across peer groups and individuals.</li> <li>Identify knowledge gaps in each security subject across peer groups and individuals.</li> </ul> <p><b>Output</b></p> <ul style="list-style-type: none"> <li>Report findings of training needs across the stakeholders.</li> <li>Report findings of role requirements which will inform the design of the competency framework.</li> </ul>	Analysis Template Q3

# Questionnaire 1

## The Identification of Stakeholders

### INSTRUCTIONS FOR USE

Listed in the column below are 8 security subjects (extracted from the IAEA Safety Guide No. RS-G-1.9). Listed in the row to the right are 5 statements which describe levels of involvement. The intention is to firstly identify potential stakeholders in each of the security subjects and, secondly, to make an initial assessment of the level of their involvement. In the next phase of the TNA, stakeholders will be again contacted and asked to answer detailed questions as part of the process. For each security subject consider your involvement, if any.

Level of involvement	Option 1: Involved and Responsible
<i>Description of involvement</i>	<i>Stakeholders who are required to achieve standards or implement measures i.e. End Users</i>
<b>Regulatory measures:</b> Includes the notification, registration of, authorisations and disposal of sources. Inspections (including internal inspections), threat assessment (design basis threat, representative threat statement or other defined threat).	
<b>Security measures:</b> Includes security incident investigations, the management of security policy and/or plans, production of operational requirements or vulnerability assessments, promotion of security culture and/or awareness. The selection, approval or assessment of security measures across any of the security disciplines: physical, personnel, transport, man guarding, information or cyber.	
<b>The national registration of radioactive sources:</b> Includes identifying which radioactive sources should be included and what level of detail should be used in a national register of sources.	
<b>Import/export controls:</b> Includes decisions regarding which radioactive sources should be subject to import and export controls and guidance on import/export controls for Category 1 and 2 sources.	
<b>Labelling of high activity radioactive sources:</b> Includes decisions regarding which radioactive sources should be marked with an appropriate label (in addition to the radiation trefoil) warning of the radiation hazard.	
<b>Emergency preparedness and response (contingency planning):</b> Includes objectives, actions and the response, ensuring they are commensurate with the type of security event and hazards.	
<b>Radioactive sources out of regulatory control:</b> Includes developing the detection architecture, managing the response and reviewing or modifying regulatory guidance. (This subject is referred to as regaining control over orphan sources in RS-G-1.9)§	
<b>Communication with the public:</b> Providing public information or communicating with the public in relation to a security incident involving radioactive material out of regulatory control which may or may not result in a radiological emergency.	



# Questionnaire 2A

## PURPOSE

For stakeholders to make an assessment of their involvement in the security requirements for radioactive sources in order to decide which stakeholders need to be part of the TNA process. This document is intended for use by the stakeholders previously identified by means of questionnaire 1.

## INSTRUCTIONS FOR USE

Listed in the column below are 8 security subjects (extracted from the IAEA *Safety Guide No. RS-G-1.9*). Listed in the row to the right are 5 statements which describe levels of involvement. The intention is to firstly identify potential stakeholders in each of the security subjects and, secondly, to make an initial assessment of the level of their involvement. In the next phase of the TNA, stakeholders will be again contacted and asked to answer detailed questions as part of the process. For each security subject consider your involvement, if any.

Stakeholder Information	
Organisation	
Department	
Stakeholder's Job Title	

Understanding the Complexity of the Security Responsibility	
Are you responsible for the management of Category 1 Sources with Security Level A objectives?: Prevent unauthorised removal of a source. YES or NO (Reference: IAEA <i>Security of Radioactive Material in Use and Storage and of Associate Facilities No. 11-G (Rev.1)</i> )	
Are you responsible for the management of Category 2 Sources with Security Level B objectives?: Minimise the likelihood of unauthorised removal of a source. YES or NO (Reference: IAEA <i>Security of Radioactive Material in Use and Storage and of Associate Facilities No. 11-G (Rev.1)</i> )	
Are you responsible for the management of Category 3 Sources with Security Level C objectives?: Reduce the likelihood of unauthorised removal of a source. YES or NO (Reference: IAEA <i>Security of Radioactive Material in Use and Storage and of Associate Facilities No. 11-G (Rev.1)</i> )	
What is your level of personal involvement? Is it at a strategic or corporate level, directing activities and setting strategies? YES or NO	



<i>Understanding the Complexity of the Security Responsibility</i>	
What is your level of personal involvement? Is it at middle management level, i.e. Head of Department, managing the issues and activities? YES or NO	
What is your level of personal involvement? Is it at an operational level, dealing with the issues and carrying out activities? YES or NO	
Is there a role profile/job description? YES or NO? If there is a role profile/job description please supply a copy together with the completed questionnaire.	
Summarise your security responsibilities - if a role profile or job description is provided please identify any responsibilities which you do not carry out and any tasks which are not listed.	
What specialist security knowledge or skills are required to carry out this role? If you are able to supply a copy of a role profile/job description only identify areas that are not included in it.	
At the point of recruitment for your role did you receive any initial training? Please specify.	
Since recruitment for your role have you been required to undertake any self-study and or on-the-job training? Please specify	
Are there any formal qualifications which you have found it necessary to acquire in order to carry out this security responsibility, either at the point of recruitment or whilst in role?	
Who do you report to in respect of your security responsibilities? Please identify the job title only.	
Do you delegate any of your security responsibilities? Please identify the job title(s) who carry out the delegated tasks.	

# Questionnaire 2B

## INSTRUCTIONS FOR USE

Listed in the column below are 8 security subjects (extracted from the IAEA *Safety Guide No. RS-G-1.9*). Listed in the row to the right are 5 statements which describe levels of involvement. The intention is to firstly identify potential stakeholders in each of the security subjects and, secondly, to make an initial assessment of the level of their involvement. In the next phase of the TNA, stakeholders will be again contacted and asked to answer detailed questions as part of the process. For each security subject consider your involvement, if any.

Level of involvement	Option 1: Involved and Responsible	Option 2: Involved and Accountable
<i>Description of involvement</i>	<i>Stakeholders who are required to achieve standards or implement measures i.e. End Users</i>	<i>Stakeholders who set or approve standards or decide if a requirement has been completed i.e. Regulator</i>
<b>Regulatory measures:</b> Includes the notification, registration of, authorisations and disposal of sources. Inspections (including internal inspections), threat assessment (design basis threat, representative threat statement or other defined threat).		
<b>Security measures:</b> Includes security incident investigations, the management of security policy and/or plans, production of operational requirements or vulnerability assessments, promotion of security culture and/or awareness. The selection, approval or assessment of security measures across any of the security disciplines: physical, personnel, transport, information or cyber.		
<b>The national registration of radioactive sources:</b> Includes identifying which radioactive sources should be included and what level of detail should be used in a national register of sources.		
<b>Import/export controls:</b> Includes decisions regarding which radioactive sources should be subject to import and export controls and guidance on import/export controls for Category 1 and 2 sources.		
<b>Labelling of high activity radioactive sources:</b> Includes decisions regarding which radioactive sources should be marked with an appropriate label (in addition to the radiation trefoil) warning of the radiation hazard.		
<b>Emergency preparedness and response (contingency planning):</b> Includes objectives, actions and the response, ensuring they are commensurate with the type of security event and hazards.		
<b>Radioactive sources out of regulatory control:</b> Includes developing the detection architecture, managing the response and reviewing or modifying regulatory guidance. (This subject is referred to as regaining control over orphan sources in RS-G-1.9)		
<b>Communication with the public:</b> Providing public information or communicating with the public in relation to a security incident involving radioactive material out of regulatory control which may or may not result in a radiological emergency.		

# TRAINING NEEDS ANALYSIS

QUESTIONNAIRE 2B

Option 3: Involved and Consulted	Option 4: Involved and Informed	Option 5: No Involvement
<i>Stakeholders who need to give input before the work can be done and signed-off on. These stakeholders "in the loop" and active participants</i>	<i>Stakeholders who need to be kept "in the picture". They need to update on progress or decisions, but they do not need to be formally consulted, nor do they contribute directly to the task or decision.</i>	

# Questionnaire 3

## Stakeholder Analysis

### PURPOSE

This is a scalable questionnaire which can be readily modified to provide stakeholders with a series of questions targeting their role and responsibilities which will inform the TNA and design of the Competency Framework.

Stakeholder Information	
Organisation	
Department	
Stakeholder's Job Title	

### OBJECTIVE

The objective of the questionnaire is to inform the creation of a competency framework. The process is also intended to identify the gaps so that training and development needs can be assessed and designed to meet the needs of the stakeholders.

In order to achieve the TNA objectives the questionnaire asks for examples of instances when you, the stakeholder, has either received feedback or recognised a knowledge gap. You are asked to provide a brief explanation which will be used to identify specific areas of learning. Please keep any information provided at 'Official' security level, avoiding dates, times and other specific references that could identify aspects of a security regime.

### INSTRUCTIONS FOR USE

The TNA questions are split into up to eight security subjects referred to in the previous questionnaire. Please go to the table where the subjects and questions that have relevance to your role can be found, not all stakeholders are sent all eight subjects. Please answer all of the questions, particularly requests for additional information regarding gaps in knowledge because this is critical to creating an effective competency framework and identifying the training needs of individuals.

Review each question and indicate in the box whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which can be entered in the box.

### Regulatory Measures

Includes the notification, registration of, authorisations and disposal of sources. Inspections (including internal inspections), threat assessment (design basis threat, representative threat statement or other defined threat).

#### INSTRUCTIONS FOR USE

Review each question listed below and indicate whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which is to be entered in the box.

REGULATORY MEASURES		
<i>Legal and Enforcement Requirements</i>	Yes	No
Are you responsible for establishing and maintaining regulatory control over radioactive sources, associated facilities and activities?		
Are you responsible for the security based categorisation of radioactive sources?		
Do you enforce the regulations on behalf of the government?		
Do you provide a response to security events on behalf of the government?		
Do you investigate security events on behalf of the government?		
Do you prosecute the alleged perpetrators of malicious acts?		
Are you responsible for maintaining regulatory standards, including carrying out inspections against the regulations within your own organisation?		
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.		
Which regulatory bodies are you regulated by, on behalf of, and in which security disciplines? Please specify.		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		



# Questionnaire 3 - Regulatory Measures

REGULATORY MEASURES		
<i>Threat Assessment</i>	Yes	No
Do you apply the design basis threat, representative threat statement or other defined threat for purposes of regulation for security?		
Do you participate in national threat assessment?		
Do you identify facility or activity specific threats?		
Are you responsible for notifications concerning specific or increased threats?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Notification, Registration, Authorisation and Disposal of Sources</i>	Yes	No
Are you responsible for the submission of applications for authorisation of practices with radioactive sources?		
Do you review or assess applications for authorisation for radioactive sources?		
Do you approve applications for the authorisation of radioactive sources?		
Are you responsible for developing appropriate conditions that would be imposed on an authorisation?		
Do you approve applications for the disposal of radioactive sources?		
Are you responsible for developing the arrangements for disposal of radioactive sources?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Inspections (either conducting internal inspections, hosting or conducting regulatory inspections)</i>	Yes	No
Do you conduct inspections of physical security for radioactive sources?		
Do you conduct inspections of personnel security measures?		
Do you conduct inspections of transport security plans for the movement of high activity sources?		
Do you conduct inspections of information security arrangements/measures?		
Do you conduct inspections of cyber security arrangements/measures?		
Do you conduct inspections of temporary security plans/arrangements (measures that require formal approval because they are a change to agreed security plan)?		
Do you conduct other security inspections? If answered YES, please specify.		

REGULATORY MEASURES		
<i>Inspection Responsibilities</i>	Yes	No
Do you identify the scope of each regulatory inspection prior to undertaking the inspection?		
Do you produce inspection programmes?		
Do you undertake planned and unplanned security inspections?		
Do you undertake announced and unannounced inspections?		
Do you verify that performance criteria has been met by the licensee/authorised person during the course of inspection?		
Are you responsible for managing stakeholder expectations in respect of the inspection?		
Do you identify good practices during the course of the inspection?		
Do you produce reports in respect of inspection findings?		
Do you identify security vulnerabilities?		
Do you determine mitigating measures to close gaps in compliance?		
Do you agree the programme of work for rectification?		
Do you produce security plans and temporary security plans?		
Do you monitor completion of actions by the licensee/authorised person?		
Do you normally close out inspections?		
Do you engage with counterpart organisations to share lessons learned and best practices?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Other Regulatory Responsibilities</i>		
Please identify any other regulatory responsibilities that you have. Please specify.		
Do any other role holders within your organisation have an involvement in this security subject? Please specify.		

# Questionnaire 3 - Security Measures

## Security Measures

Includes security incident investigations, the management of security policy and/or plans, production of operational requirements or vulnerability assessments, promotion of security culture and/or awareness. The selection, approval or assessment of security measures across any of the security disciplines: physical, personnel, transport, information or cyber.

### INSTRUCTIONS FOR USE

Review each question listed below and indicate whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which is to be entered in the box.

SECURITY MEASURES			
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>General Management Tasks - All Disciplines</i>		Yes	No
Are you responsible for ensuring compliance with relevant laws and regulations?			
Are you responsible for assigning organisational security responsibilities?			
Are you responsible for providing adequate resources to implement an effective security programme?			
Are you responsible for ensuring development of a security awareness programme and associated plans and procedures?			
Are you responsible for ensuring effective change management related to plans, procedures and policies?			
Are you responsible for establishing and maintaining relationships with competent authorities, including law enforcement bodies?			
Are you responsible for implementing compensatory measures, when necessary, in response to a specific, emerging or increased threat?			
Are you responsible for ensuring periodic audits, reviews and revisions of security policies and procedures?			
Are you responsible for managing the movement of radioactive sources within the organisation?			
Are you responsible for monitoring or tracking sources within your organisation (External transport dealt with separately)?			
Are you responsible for the maintenance of the radioactive source inventory?			
Are you responsible for maintaining security during radioactive source replacement and maintenance?			
Are you responsible for supplier assurance? Specifying the process for ensuring that each supplier is competent to meet their organisation's security requirements.			

SECURITY MEASURES		
Are you responsible for providing effective security training and education? If answered YES, please specify.		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Security Incident Investigations</i>	Yes	No
Are you responsible for assessing incoming information?		
Are you responsible for assessing if it is a security event that must be reported to the regulatory body?		
Are you responsible for notifying relevant persons/body?		
Do you undertake initial investigations?		
Do you undertake full investigations (interviews, statements, site & area observations, route cause analysis, route branch investigation)?		
Are you responsible for managing stakeholder expectations?		
Do you produce and identify recommendations and learning?		
Do you undertake peer reviews?		
Do you issue reports, monitor progress and close out actions appropriately?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Management of Security Policy and Plans</i>	Yes	No
Do you undertake security risk assessments?		
Do you assess security risks against regulatory requirements?		
Are you responsible for managing stakeholder expectations?		
Do you write security policies?		
Do you write security plans or temporary security plans?		
Are you responsible for seeking appropriate approvals?		
Are you responsible for agreeing changes and compensatory measures where necessary?		
Do you monitor, inspect, observe security plan compliance?		

## SECURITY MEASURES

Do you formally close out temporary security plans?		
Are you responsible for ensuring periodic audits, reviews and revisions of security policies and procedures?		
Are you responsible for managing the movement of the assets within the organisation?		
Are you responsible for creating source target folders (a comprehensive database of information which would be of use in an emergency)?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Produce Operational Requirements (or) support production of Vulnerability Assessments (VA)</i>	<i>Yes</i>	<i>No</i>
Are you responsible for identifying the task?		
Do you assess security risks against regulatory requirements?		
Are you responsible for obtaining plans, drawings, method statements and timescales?		
Are you responsible for managing stakeholder expectations?		
Do you write operational requirement or vulnerability assessment documents?		
Are you responsible for seeking appropriate approvals?		
Are you responsible for performance testing and preventive maintenance?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Promotion of Security Culture or Awareness</i>	<i>Yes</i>	<i>No</i>
Are you responsible for promoting security awareness, including both and recognition of the need for security?		
Security culture or awareness - does your involvement include threat appreciation?		
Security culture or awareness - does your involvement extend to establishing clear requirements, expectations and accountability?		
Security culture or awareness - does your involvement extend to ensuring that all staff are aware that security is everyone's responsibility, fostering understanding by staff of the effects on and implications for security of their actions or omissions?		
Security culture or awareness - does your involvement extend to establishing mechanisms of positive reinforcement for behaviours and performance that support security, such as raising concerns or making suggestions for improvement?		

SECURITY MEASURES		
Security culture or awareness - does your involvement extend to assessing the strength of security culture, through self-assessment and other means, and taking corrective action, if necessary, as well as actions for continuous improvement?		
Are you responsible for writing security policies in relation to security culture or awareness?		
Are you responsible for monitoring security performance across the organisation?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Technical Knowledge required to carry out the role: Physical Security</i>	Yes	No
Please review the security measures described below. Do you require knowledge of the measures in the course of your duties?		
• Access control?		
• Cages (To segregate and secure sources)?		
• CCTV surveillance?		
• Communication Devices (For security personnel use etc)?		
• Fences and gates?		
• Intrusion detection systems?		
• Key control procedures?		
• Locks, hinges and interlocks for doors?		
• Locked, shielded containers?		
• Maintenance and testing of security technology?		
• Pass systems?		
• Quality assurance?		
• Security and area lighting?		
• Specialist security doors and door sets?		
• Standby power?		
• Walls?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		

## SECURITY MEASURES

*Technical Knowledge required to carry out the role: Cybersecurity and Information Assurance (CSIA)*      Yes      No

Are you responsible for the security requirements for sensitive information?

Are you responsible for ensuring compliance with relevant laws and regulations?

Are you responsible for ensuring there are periodic audits, reviews and revisions of information security policy and procedures?

Are you responsible for the establishment of a risk management plan to reduce risks to an acceptable level?

Are you responsible for the CS&IA Policy and associated procedures?

Which, if any, aspects of the sensitive information and sensitive information asset (technical, procedural and administrative controls) life cycle are you responsible for? Please refer to the list below:

• Classification?

• Marking?

• Handling?

• Access and use?

• Employee Awareness?

• Business continuity?

• Storage?

• Transmission?

• Destruction?

Are you responsible for the physical security of areas where sensitive information or sensitive information assets are used, handled or located?

Are you responsible for managing the risk from an insider threat to sensitive information and assets?

Are you responsible for workstation security, virus and malware protection?

Are you responsible for communication network security (telephones, email, the Internet and local area networks): policy, user authentication, equipment identification, segregation, connection and routing controls, and monitoring;

Are you responsible for CSIA equipment security: access control, logging of use, spare part management, backup of critical equipment, backup power arrangements, documentation and maintenance, cabling and media security?

Are you responsible for Software security: access control, logging of user and super user activities, backup management, maintenance contracting, configuration and version management, use of registered, legal software, testing for vulnerabilities and testing for system behaviour under error conditions?

Are you responsible for security of use-of-information systems: user rights control, user recognition and verification, connecting to services, systems and equipment, password management, oversight of use?

Are you responsible for managing the security of a third party with access to sensitive information?

Are you responsible for a Information Asset Register (IAR) or similar mechanism that records of what information and associated assets the organisation is responsible for, what format they are in, what value they have and where they are located?



### SECURITY MEASURES

Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.

--

#### Technical Knowledge required to carry out role: Personnel Security

Yes	No
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Which, if any, aspects of the personnel security life cycle are you involved in or responsible for? Please refer to the list below:

• The recruitment process, screening, background checks?		
• Vetting?		
• On-going monitoring and evaluation of the workforce?		
• Drug and alcohol tests?		
• Supervisory interviews?		
• Management reviews?		
• Awareness Training?		
• Security personnel file evaluations?		
• End of an employees employment reporting?		
Are you responsible for developing mechanisms to reduce the risk from the insider threat?		

Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.

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#### Other Security Measure Responsibilities

Please identify any other security measure responsibilities that you have. Please specify..

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Do any other role holders within your organisation have an involvement in this security subject? Please specify.

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# Questionnaire 3 - National Registration of Radioactive Sources

## National Registration of Radioactive Sources

Includes identifying which radioactive sources should be included and what level of detail should be used in a national register of sources.

### INSTRUCTIONS FOR USE

Review each question listed below and indicate whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which is to be entered in the box.

NATIONAL REGISTRATION OF RADIOACTIVE SOURCES		
<i>Legal and Regulatory Requirments</i>	Yes	No
Are you responsible for the security requirements associated with the national register of radioactive sources?		
Are you responsible for reviewing or modifying regulatory guidance (relating to security requirements) as a result of changes to the national register of radioactive sources?		
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Tasks associated with managing the changes on a National Register of Sources</i>	Yes	No
Are you responsible for assessing if the material is appropriate for inclusion on the national register?		
Are you responsible for establishing and confirming what is the intended use of the material?		
Are you responsible for assessing the security requirements for those intending to hold and use the material?		
Are you responsible for communicating the changes to the national register of radioactive sources?		

### NATIONAL REGISTRATION OF RADIOACTIVE SOURCES

Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.

### *Other Responsibilities associated with the National Register of Sources*

Please identify any other responsibilities that you have in respect of the national register of sources. Please specify.

Do any other role holders within your organisation have an involvement in this security subject? Please specify.

# Questionnaire 3 - Import and Export Control

## Import and Export Control

Includes decisions regarding which radioactive sources should be subject to import and export controls and guidance on import/export controls for Category 1 and 2 sources.

### INSTRUCTIONS FOR USE

Review each question listed below and indicate whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which is to be entered in the box.

IMPORT AND EXPORT CONTROL		
<i>Legal and Regulatory Requirements</i>	Yes	No
Are you responsible for security considerations in respect of which radioactive sources should be subject to import and export controls?		
Are you responsible for reviewing or modifying regulatory guidance (in respect of security considerations) as a result of decisions regarding the import and export control over radioactive sources?		
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Tasks associated with Managing the Import and Export of Radioactive Sources</i>	Yes	No
Are you responsible for assessing applications for the export of radioactive sources?		
Are you responsible for assessing applications for the import of radioactive sources?		
Export of Category 1 and 2 radioactive sources: Are you responsible for assessing if the importing State has the appropriate technical and administrative capability, resources and regulatory structure needed for the management of the source(s) in a manner consistent with the provisions of the international codes?		
Export of Category 1 and 2 radioactive sources: Are you responsible for assessing if the shipment of the source(s) is conducted in a manner consistent with existing relevant international standards relating to the transport of radioactive materials?		
Import of Category 1 and 2 sources: Are you responsible for assessing the authorisation to import the source(s)?		
Import of Category 1 and 2 radioactive sources: Are you responsible for assessing if the appropriate technical and administrative capability, resources and regulatory structure needed for the management of the source(s) is consistent with the provisions of the international codes?		
Are you responsible for communicating the changes to the national register of radioactive sources?		

### IMPORT AND EXPORT CONTROL

Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.

### *Other Responsibilities associated with the National Register of Sources*

Please identify any other responsibilities that you have in respect of the import and export of radioactive sources. Please specify.

Do any other role holders within your organisation have an involvement in this security subject? Please specify.

# Questionnaire 3 - Labelling High Activity Radioactive Sources

## Labelling High Activity Radioactive Sources

Examples include decisions regarding which radioactive sources should be marked with an appropriate label (in addition to the radiation trefoil) warning of the radiation hazard.

### INSTRUCTIONS FOR USE

Review each question listed below and indicate whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which is to be entered in the box.

LABELLING HIGH ACTIVITY RADIOACTIVE SOURCES		
<i>Legal and Regulatory Requirements</i>	Yes	No
Are you responsible for security considerations regarding the labelling of high activity radioactive sources?		
Are you responsible for reviewing or modifying regulatory guidance (in respect of security considerations) as a result of decisions regarding the labelling of high activity radioactive sources?		
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Tasks associated with Labelling High Activity Radioactive Sources</i>	Yes	No
Are you responsible for assessing changes to the information contained in the labels of high activity radioactive sources?		
Are you responsible for assessing changes to the types of labels used for high activity radioactive sources?		
Are you responsible for communicating changes that have been made or are intended to be made in respect of the labelling of high activity radioactive sources?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		

**LABELLING HIGH ACTIVITY RADIOACTIVE SOURCES**

*Other Responsibilities associated with Labelling High Activity Radioactive Sources*

Please identify any other responsibilities that you have in respect of labelling high activity radioactive sources. Please specify

Do any other role holders within your organisation have an involvement in this security subject? Please specify.



# Questionnaire 3 - Emergency Preparedness and Response (Contingency Planning)

## Emergency Preparedness and Response (Contingency Planning)

Includes objectives, actions and the response, ensuring they are commensurate with the type of security event and hazards.

### INSTRUCTIONS FOR USE

Review each question listed below and indicate whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which is to be entered in the box.

EMERGENCY PREPAREDNESS AND RESPONSE (CONTINGENCY PLANNING)		
<i>Legal and Regulatory Requirements</i>	Yes	No
Are you responsible for the security requirements associated with emergency preparedness plans and response for radioactive sources?		
Please identify the legislation and regulations that relate to your security responsibilities, please specify.		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Tasks associated with Managing the Emergency Preparedness Plans and Response for Radioactive Sources</i>	Yes	No
Which aspects of the security element of emergency preparedness and response planning are you involved in or responsible for? Please refer to the list below:		
• Developing the objectives of the plan?		
• Identifying roles and responsibilities?		
• The security and hazard assessment?		
• Developing command, control, communication?		
• Identifying the resources required to implement the plan?		
• Integration & inter-operability with external agencies and other stakeholders?		
• Managing operations in an emergency response?		
• Developing memorandums of understanding?		
• Providing instructions, warnings and relevant information to the responders and other stakeholders?		
• Providing instructions, warnings and relevant information in respect of crime scene management?		
• Communicating with the public?		
• Conducting exercises and rehearsals?		

### EMERGENCY PREPAREDNESS AND RESPONSE (CONTINGENCY PLANNING)

Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.

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### *Other Responsibilities associated with Managing the Emergency Preparedness Plans and Response for Radioactive Sources*

Please identify any other responsibilities that you have in respect of the security element of emergency preparedness and response planning. Please specify.

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Do any other role holders within your organisation have an involvement in this security subject? Please specify.

--

# Questionnaire 3 - Radioactive Sources Out of Regulatory Control

## Radioactive Sources Out of Regulatory Control

Includes developing the detection architecture, managing the response and reviewing or modifying regulatory guidance. (This subject is referred to as regaining control over orphan sources in RS-G-1.9).

### INSTRUCTIONS FOR USE

Review each question listed below and indicate whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which is to be entered in the box.

RADIOACTIVE SOURCES OUT OF REGULATORY CONTROL		
<i>Legal and Regulatory Requirements</i>	Yes	No
Are you responsible for security considerations regarding radioactive sources out of regulatory control?		
Are you responsible for reviewing or modifying regulatory guidance (in respect of security considerations) regarding radioactive sources out of regulatory control?		
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Tasks associated with Radioactive Sources out of Regulatory Control</i>	Yes	No
Which aspects of the security element of radioactive sources out of regulatory control are you involved in or responsible for? Please refer to the list below:		
• Developing the detection architecture for radioactive sources out of regulatory control and its response framework?		
• Developing the notification process for radioactive sources out of regulatory control?		
• Managing the response to radioactive sources out of regulatory control?		
• The detection of criminal or intentional unauthorized acts?		
• The transfer of radioactive sources out of regulatory control to a safe place?		
• The provision of training and information to stakeholders?		
• The integration of safety and security measures?		
• The maintenance of records?		
• Are you responsible for communication and engagement between competent authorities and other stakeholders?		

### RADIOACTIVE SOURCES OUT OF REGULATORY CONTROL

Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.

### *Other responsibilities associated with Radioactive Sources out of Regulatory Control*

Please identify any other responsibilities that you have in respect of radioactive sources out of regulatory control. Please specify.

Do any other role holders within your organisation have an involvement in this security subject? Please specify.

# Questionnaire 3 - Communication with the Public

## Communication with the Public

Providing public information or communicating with the public in relation to a security incident involving radioactive material out of regulatory control which may or may not result in a radiological emergency.

### INSTRUCTIONS FOR USE

Review each question listed below and indicate whether or not you have a responsibility: YES or NO. There are some questions that ask for supplementary information which is to be entered in the box.

COMMUNICATION WITH THE PUBLIC		
<i>Legal and Regulatory Requirements</i>	Yes	No
Are you responsible for the security aspect of communicating with the public in respect of radioactive sources?		
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		
<i>Tasks associated with Managing Communication with the Public</i>		
Are you utilised as a Public Information Officer (PIO)? (PIO is primarily responsible for keeping the public and media informed and for coordinating with all sources of official information to ensure a consistent message is being provided to the public.)		
Are you utilised as a Spokesperson? (A spokesperson should be an expert in the area and hold a position with a level of authority appropriate to the matter about which he/she will be speaking.)		
Do you have specific a communication role only during an emergency?		
Are you responsible for the development of a communication plan?		
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.		

### COMMUNICATION WITH THE PUBLIC

#### *Other Responsibilities associated with Managing Communication with the Public*

Please identify any other responsibilities that you have in respect of the security element of communicating with the public. Please specify

Do any other role holders within your organisation have an involvement in this security subject? Please specify.

# Questionnaire 2A - Analysis

## Collation and Analysis of data obtained in Phase 3

### PURPOSE

This document is intended for use by the project team to collate the responses from stakeholders who were sent Questionnaire 2. Page 1 will be used to collate job titles and information relating to role and responsibilities, Page 2 will collate the responses in respect of the stakeholders' assessment of their level of involvement. The collated data will be used to inform phase 3 of the project: the detailed TNA questions.

Stakeholder Information	1	2	3
Organisation			
Department			
Stakeholder's Job Title			

<i>Understanding the Complexity of the Security Responsibility</i>			
Are you responsible for the management of Category 1 Sources with Security Level A objectives?: Prevent unauthorised removal of a source. YES or NO (Reference: IAEA Security of Radioactive Material in Use and Storage and of Associate Facilities No. 11-G (Rev.1))			
Are you responsible for the management of Category 2 Sources with Security Level B objectives?: Minimise the likelihood of unauthorised removal of a source. YES or NO (Reference: IAEA Security of Radioactive Material in Use and Storage and of Associate Facilities No. 11-G (Rev.1))			
Are you responsible for the management of Category 3 Sources with Security Level C objectives?: Reduce the likelihood of unauthorised removal of a source. YES or NO (Reference: IAEA Security of Radioactive Material in Use and Storage and of Associate Facilities No. 11-G (Rev.1))			
What is your level of personal involvement? Is it at a strategic or corporate level, directing activities and setting strategies? YES or NO			
What is your level of personal involvement? Is it at middle management level, i.e. Head of Department, managing the issues and activities? YES or NO			
What is your level of personal involvement? Is it at an operational level, dealing with the issues and carrying out activities? YES or NO			
Is there a role profile/job description? YES or NO? If there is a role profile/job description please supply a copy together with the completed questionnaire.			
Summarise your security responsibilities - if a role profile or job description is provided please identify any responsibilities which you do not carry out and any tasks which are not listed.			
What specialist security knowledge or skills are required to carry out this role? If you are able to supply a copy of a role profile/job description only identify areas that are not included in it.			
At the point of recruitment for your role did you receive any initial training?			
Since recruitment for your role have you been required to undertake any self-study and or on-the-job training? Please specify			
Are there any formal qualifications which you have found it necessary to acquire in order to carry out this security responsibility, either at the point of recruitment or whilst in role?			
Who do you report to in respect of your security responsibilities? Please identify the job title only.			
Do you delegate any of your security responsibilities? Please identify the job title(s) who carry out the delegated tasks.			



### INSTRUCTIONS FOR USE

Use the table below to copy and paste the information gathered in Questionnaire 2A, including the text. One column for each respondent. In row 7 each respondent answering YES should have provided a role profile/ job description. On completion fill out Questionnaire 2B Responses.

4	5	6	7	8	9	10	11	12	13

# Questionnaire 2B - Analysis

## Collation and Analysis of data obtained in Phase 3

### INSTRUCTIONS FOR USE

Please review questionnaire 2B for each respondent. Fill in the corresponding cell in this table with the respondents job title and organisation. The cells may need to be expanded in order to contain multiple entries. This information will be compared to the project team's assessment of involvement in security measures in order to identify any significant difference of opinion and will be used to inform the next phase of the analysis.

Level of involvement	Option 1: Involved and Responsible	Option 2: Involved and Accountable
<i>Description of involvement</i>	<i>Stakeholders who are required to achieve standards or implement measures i.e. End Users</i>	<i>Stakeholders who set or approve standards or decide if a requirement has been completed i.e. Regulator</i>
<b>Regulatory measures:</b> Includes the notification, registration of, authorisations and disposal of sources. Inspections (including internal inspections), threat assessment (design basis threat, representative threat statement or other defined threat).		
<b>Security measures:</b> Includes security incident investigations, the management of security policy and/or plans, production of operational requirements or vulnerability assessments, promotion of security culture and/or awareness. The selection, approval or assessment of security measures across any of the security disciplines: physical, personnel, transport, man guarding, information or cyber.		
<b>The national registration of radioactive sources:</b> Includes identifying which radioactive sources should be included and what level of detail should be used in a national register of sources.		
<b>Import/export controls:</b> Includes decisions regarding which radioactive sources should be subject to import and export controls and guidance on import/export controls for Category 1 and 2 sources.		
<b>Labelling of high activity radioactive sources:</b> Includes decisions regarding which radioactive sources should be marked with an appropriate label (in addition to the radiation trefoil) warning of the radiation hazard.		
<b>Emergency preparedness and response (contingency planning):</b> Includes objectives, actions and the response, ensuring they are commensurate with the type of security event and hazards.		
<b>Radioactive sources out of regulatory control:</b> Includes developing the detection architecture, managing the response and reviewing or modifying regulatory guidance. (This subject is referred to as regaining control over orphan sources in RS-G-1.9)		
<b>Communication with the public:</b> Providing public information or communicating with the public in relation to a security incident involving radioactive material out of regulatory control which may or may not result in a radiological emergency.		

Stakeholder Information	
Organisation	
Department	
Stakeholder's Job Title	

Option 3: Involved and Consulted	Option 4: Involved and Informed	Option 5: No Involvement
Stakeholders who need to give input before the work can be done and signed-off on. These stakeholders "in the loop" and active participants	Stakeholders who need to be kept "in the picture". They need to update on progress or decisions, but they do not need to be formally consulted, nor do they contribute directly to the task or decision.	

# Analysis - Regulatory Measures

## PURPOSE

This document is intended for use by the project team to collate and analyse the responses from stakeholders.

REGULATORY MEASURES	1	2	3
<i>Legal and Enforcement Requirements</i>			
Are you responsible for establishing and maintaining regulatory control over radioactive sources, associated facilities and activities?			
Are you responsible for the security based categorization of radioactive sources?			
Do you enforce the regulations on behalf of the government?			
Do you provide a response to security events on behalf of the government?			
Do you investigate security events on behalf of the government?			
Do you prosecute the alleged perpetrators of malicious acts?			
Are you responsible for maintaining regulatory standards, including carrying out inspections against the regulations within your own organisation?			
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.			
Which regulatory bodies are you regulated by, on behalf of, and in which security disciplines? Please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Threat Assessment</i>			
Do you apply the design basis threat, representative threat statement or other defined threat for purposes of regulation for security?			
Do you participate in national threat assessment?			
Do you identify facility or activity specific threats?			
Are you responsible for notifications concerning specific or increased threats?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Notification, Registration, Authorisation and Disposal of Sources</i>			
Are you responsible for the submission of applications for authorisation of practices with radioactive sources?			
Do you review or assess applications for authorisation for radioactive sources?			
Do you approve applications for the authorisation of radioactive sources?			
Are you responsible for developing appropriate conditions that would be imposed on an authorisation?			
Do you approve applications for the disposal of radioactive sources?			
Are you responsible for developing the arrangements for disposal of radioactive sources?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			

### INSTRUCTIONS FOR USE

Each table matches the questionnaire sent to the stakeholders. It is intended that each stakeholder's response can be cut-and-paste into the respective table in this document. Not all stakeholders are to be supplied the 8 security subject questions. When all stakeholders' responses have been collated it is possible to analyse the information across peer groups and roles. The collated data will inform the TNA and the design of the competency framework.

4	5	6	7	8	9	10	11	12	13

REGULATORY MEASURES	1	2	3
<i>Inspections (either conducting internal inspections, hosting or conducting regulatory inspections)</i>			
Do you conduct inspections of physical security for radioactive sources?			
Do you conduct inspections of personnel security measures?			
Do you conduct inspections of transport security plans for the movement of high activity sources?			
Do you conduct inspections of information security arrangements/measures?			
Do you conduct inspections of cyber security arrangements/measures?			
Do you conduct inspections of temporary security plans/arrangements (measures that require formal approval because they are a change to agreed security plan)?			
Do you conduct other security inspections? - If answered YES, please specify.			
<i>Inspection Responsibilities</i>			
Do you identify the scope of each regulatory inspection prior to undertaking the inspection?			
Do you produce inspection programmes?			
Do you undertake planned and unplanned security inspections?			
Do you undertake announced and unannounced inspections?			
Do you verify that performance criteria has been met by the licensee/authorised person during the course of inspection?			
Are you responsible for managing stakeholder expectations in respect of the inspection?			
Do you identify good practices during the course of the inspection?			
Do you produce reports in respect of inspection findings?			
Do you identify security vulnerabilities?			
Do you determine mitigating measures to close gaps in compliance?			
Do you agree the programme of work for rectification?			
Do you produce security plans and temporary security plans?			
Do you monitor completion of actions by the licensee/authorised person?			
Do you normally close out inspections?			
Do you engage with counterpart organisations to share lessons learned and best practices?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Other Regulatory Responsibilities</i>			
Please identify any other regulatory responsibilities that you have. Please specify.			
Do any other role holders within your organisation have an involvement in this security subject? Please specify.			





# Analysis - Security Measures

SECURITY MEASURES	1	2	3
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>General Management Tasks - All Disciplines</i>			
Are you responsible for ensuring compliance with relevant laws and regulations?			
Are you responsible for assigning organisational security responsibilities?			
Are you responsible for providing adequate resources to implement an effective security programme?			
Are you responsible for ensuring development of a security awareness programme and associated plans and procedures?			
Are you responsible for ensuring effective change management related to plans, procedures and policies?			
Are you responsible for establishing and maintaining relationships with competent authorities, including law enforcement bodies?			
Are you responsible for implementing compensatory measures, when necessary, in response to a specific, emerging or increased threat?			
Are you responsible for ensuring periodic audits, reviews and revisions of security policies and procedures?			
Are you responsible for managing the movement of radioactive sources within the organisation?			
Are you responsible for monitoring or tracking sources within your organisation (External transport dealt with separately)?			
Are you responsible for the maintenance of the radioactive source inventory?			
Are you responsible for maintaining security during radioactive source replacement and maintenance?			
Are you responsible for supplier assurance? Specifying the process for ensuring that each supplier is competent to meet their organisation's security requirements.			
Are you responsible for providing effective security training and education? If answered YES, please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Security Incident Investigations</i>			
Are you responsible for assessing incoming information?			
Are you responsible for assessing if it is a security event that must be reported to the regulatory body?			
Are you responsible for notifying relevant persons/body?			
Do you undertake initial investigations?			
Do you undertake full investigations (interviews, statements, site & area observations, route cause analysis, route branch investigation)?			
Are you responsible for managing stakeholder expectations?			
Do you produce and identify recommendations and learning?			



SECURITY MEASURES	1	2	3
Do you undertake peer reviews?			
Do you issue reports, monitor progress and close out actions appropriately?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Management of Security Policy and Plans</i>			
Do you undertake security risk assessments?			
Do you assess security risks against regulatory requirements?			
Are you responsible for managing stakeholder expectations?			
Do you write security policies?			
Do you write security plans or temporary security plans?			
Are you responsible for seeking appropriate approvals?			
Are you responsible for agreeing changes and compensatory measures where necessary?			
Do you monitor, inspect, observe security plan compliance?			
Do you formally close out temporary security plans?			
Are you responsible for ensuring periodic audits, reviews and revisions of security policies and procedures?			
Are you responsible for managing the movement of the assets within the organisation?			
Are you responsible for creating source target folders (a comprehensive database of information which would be of use in an emergency)?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Produce Operational Requirements (or) support production of Vulnerability Assessments (VA)</i>			
Are you responsible for identifying the task?			
Do you assess security risks against regulatory requirements?			
Are you responsible for obtaining plans, drawings, method statements and timescales?			
Are you responsible for managing stakeholder expectations?			
Do you write operational requirement or vulnerability assessment documents?			
Are you responsible for seeking appropriate approvals?			
Are you responsible for performance testing and preventive maintenance?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Promotion of Security Culture or Awareness</i>			
Are you responsible for promoting security awareness, including both and recognition of the need for security?			
Security culture or awareness - does your involvement include threat appreciation?			
Security culture or awareness - does your involvement extend to establishing clear requirements, expectations and accountability?			



SECURITY MEASURES	1	2	3
Security culture or awareness - does your involvement extend to ensuring that all staff are aware that security is everyone's responsibility, fostering understanding by staff of the effects on and implications for security of their actions or omissions?			
Security culture or awareness - does your involvement extend to establishing mechanisms of positive reinforcement for behaviours and performance that support security, such as raising concerns or making suggestions for improvement?			
Security culture or awareness - does your involvement extend to assessing the strength of security culture, through self-assessment and other means, and taking corrective action, if necessary, as well as actions for continuous improvement?			
Are you responsible for writing security policies in relation to security culture or awareness?			
Are you responsible for monitoring security performance across the organisation?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Technical Knowledge required to carry out the role: Physical Security</i>			
Please review the security measures described below. Do you require knowledge of the measures in the course of your duties?			
• Access control?			
• Cages (To segregate and secure sources)?			
• CCTV surveillance?			
• Communication Devices (For security personnel use etc)?			
• Fences and gates?			
• Intrusion detection systems?			
• Key control procedures?			
• Locks, hinges and interlocks for doors?			
• Locked, shielded containers?			
• Maintenance and testing of security technology?			
• Pass systems?			
• Quality assurance?			
• Security and area lighting?			
• Specialist security doors and door sets?			
• Standby power?			
• Walls?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Technical Knowledge required to carry out the role: Cybersecurity and Information Assurance (CSIA)</i>			
Are you responsible for the security requirements for sensitive information?			
Are you responsible for ensuring compliance with relevant laws and regulations?			
Are you responsible for ensuring there are periodic audits, reviews and revisions of information security policy and procedures?			



SECURITY MEASURES	1	2	3
Are you responsible for the establishment of a risk management plan to reduce risks to an acceptable level?			
Are you responsible for the CS&IA Policy and associated procedures?			
Which, if any, aspects of the sensitive information and sensitive information asset (technical, procedural and administrative controls) life cycle are you responsible for? Please refer to the list below:			
• Classification?			
• Marking?			
• Handling?			
• Access and use?			
• Employee Awareness?			
• Business continuity?			
• Storage?			
• Transmission?			
• Destruction?			
Are you responsible for the physical security of areas where sensitive information or sensitive information assets are used, handled or located?			
Are you responsible for managing the risk from an insider threat to sensitive information and assets?			
Are you responsible for workstation security, virus and malware protection?			
Are you responsible for communication network security (telephones, email, the Internet and local area networks): policy, user authentication, equipment identification, segregation, connection and routing controls, and monitoring;			
Are you responsible for CSIA equipment security: access control, logging of use, spare part management, backup of critical equipment, backup power arrangements, documentation and maintenance, cabling and media security?			
Are you responsible for Software security: access control, logging of user and super user activities, backup management, maintenance contracting, configuration and version management, use of registered, legal software, testing for vulnerabilities and testing for system behaviour under error conditions?			
Are you responsible for security of use-of-information systems: user rights control, user recognition and verification, connecting to services, systems and equipment, password management, oversight of use?			
Are you responsible for managing the security of a third party with access to sensitive information?			
Are you responsible for a Information Asset Register (IAR) or similar mechanism that records of what information and associated assets the organisation is responsible for, what format they are in, what value they have and where they are located?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			





SECURITY MEASURES	1	2	3
<i>Technical Knowledge required to carry out role: Personnel Security</i>			
Which, if any, aspects of the personnel security life cycle are you involved in or responsible for? Please refer to the list below:			
• The recruitment process, screening, background checks?			
• Vetting?			
• On-going monitoring and evaluation of the workforce?			
• Drug and alcohol tests?			
• Supervisory interviews?			
• Management reviews?			
• Awareness Training?			
• Security personnel file evaluations?			
• End of an employees employment reporting?			
Are you responsible for developing mechanisms to reduce the risk from the insider threat?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify in the free text box below.			
<i>Other Security Measure Responsibilities</i>			
Please identify any other security measure responsibilities that you have.			
Do any other role holders within your organisation have an involvement in this security subject?			

# TRAINING NEEDS ANALYSIS

## QUESTIONNAIRE 3

4	5	6	7	8	9	10	11	12	13



# Analysis - National Registration of Radioactive Sources

NATIONAL REGISTRATION OF RADIOACTIVE SOURCES	1	2	3
<i>Legal and Regulatory Requirments</i>			
Are you responsible for the security requirements associated with the national register of radioactive sources?			
Are you responsible for reviewing or modifying regulatory guidance (relating to security requirements) as a result of changes to the national register of radioactive sources?			
Please identify the legislation and regulations that relate to your security responsibilities, please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Tasks associated with managing the changes on a National Register of Sources</i>			
Are you responsible for assessing if the material is appropriate for inclusion on the national register?			
Are you responsible for establishing and confirming what is the intended use of the material?			
Are you responsible for assessing the security requirements for those intending to hold and use the material?			
Are you responsible for communicating the changes to the national register of radioactive sources?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Other Responsibilites associated with the National Register of Sources</i>			
Please identify any other responsibilities that you have in respect of the national register of sources. Please specify.			
Do any other role holders within your organisation have an involvement in this security subject? Please specify.			

# TRAINING NEEDS ANALYSIS

## QUESTIONNAIRE 3

4	5	6	7	8	9	10	11	12	13



# Analysis - Import and Export Control

IMPORT AND EXPORT CONTROL	1	2	3
<i>Legal and Regulatory Requirements</i>			
Are you responsible for security considerations in respect of which radioactive sources should be subject to import and export controls?			
Are you responsible for reviewing or modifying regulatory guidance (in respect of security considerations) as a result of decisions regarding the import and export control over radioactive sources?			
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Tasks associated with Managing the Import and Export of Radioactive Sources</i>			
Are you responsible for assessing applications for the export of radioactive sources?			
Are you responsible for assessing applications for the import of radioactive sources?			
Export of Category 1 and 2 radioactive sources: Are you responsible for assessing if the importing State has the appropriate technical and administrative capability, resources and regulatory structure needed for the management of the source(s) in a manner consistent with the provisions of the international codes?			
Export of Category 1 and 2 radioactive sources: Are you responsible for assessing if the shipment of the source(s) is conducted in a manner consistent with existing relevant international standards relating to the transport of radioactive materials?			
Import of Category 1 and 2 sources: Are you responsible for assessing the authorisation to import the source(s)?			
Import of Category 1 and 2 radioactive sources: Are you responsible for assessing if the appropriate technical and administrative capability, resources and regulatory structure needed for the management of the source(s) is consistent with the provisions of the international codes?			
Are you responsible for communicating the changes to the national register of radioactive sources?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Other Responsibilities associated with the National Register of Sources</i>			
Please identify any other responsibilities that you have in respect of the import and export of radioactive sources. Please specify.			
Do any other role holders within your organisation have an involvement in this security subject? Please specify.			

# TRAINING NEEDS ANALYSIS

## QUESTIONNAIRE 3

4	5	6	7	8	9	10	11	12	13

# Analysis - Labelling High Activity Radioactive Sources

LABELLING HIGH ACTIVITY RADIOACTIVE SOURCES	1	2	3
<i>Legal and Regulatory Requirements</i>			
Are you responsible for security considerations regarding the labelling of high activity radioactive sources?			
Are you responsible for reviewing or modifying regulatory guidance (in respect of security considerations) as a result of decisions regarding the labelling of high activity radioactive sources?			
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Tasks associated with Labelling High Activity Radioactive Sources</i>			
Are you responsible for assessing changes to the information contained in the labels of high activity radioactive sources?			
Are you responsible for assessing changes to the types of labels used for high activity radioactive sources?			
Are you responsible for communicating changes that have been made or are intended to be made in respect of the labelling of high activity radioactive sources?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Other Responsibilities associated with Labelling High Activity Radioactive Sources</i>			
Please identify any other responsibilities that you have in respect of labelling high activity radioactive sources. Please specify			
Do any other role holders within your organisation have an involvement in this security subject? Please specify.			

# TRAINING NEEDS ANALYSIS

## QUESTIONNAIRE 3

4	5	6	7	8	9	10	11	12	13





# Analysis - Emergency Preparedness and Response (Contingency Planning)

EMERGENCY PREPAREDNESS AND RESPONSE (CONTINGENCY PLANNING)	1	2	3
<i>Legal and Regulatory Requirements</i>			
Are you responsible for the security requirements associated with emergency preparedness plans and response for radioactive sources?			
Please identify the legislation and regulations that relate to your security responsibilities. Please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Tasks associated with Managing the Emergency Preparedness Plans and Response for Radioactive Sources</i>			
Which aspects of the security element of emergency preparedness and response planning are you involved in or responsible for? Please refer to the list below:			
• Developing the objectives of the plan?			
• Identifying roles and responsibilities?			
• The security and hazard assessment?			
• Developing command, control, communication?			
• Identifying the resources required to implement the plan?			
• Integration & inter-operability with external agencies and other stakeholders?			
• Managing operations in an emergency response?			
• Developing memorandums of understanding?			
• Providing instructions, warnings and relevant information to the responders and other stakeholders?			
• Providing instructions, warnings and relevant information in respect of crime scene management?			
• Communicating with the public?			
• Conducting exercises and rehearsals?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Other Responsibilities associated with Managing the Emergency Preparedness Plans and Response for Radioactive Sources</i>			
Please identify any other responsibilities that you have in respect of the security element of emergency preparedness and response planning. Please specify.			
Do any other role holders within your organisation have an involvement in this security subject? Please specify.			

4	5	6	7	8	9	10	11	12	13

# Analysis - Radioactive Sources Out of Regulatory Control

RADIOACTIVE SOURCES OUT OF REGULATORY CONTROL	1	2	3
<i>Legal and Regulatory Requirements</i>			
Are you responsible for security considerations regarding radioactive sources out of regulatory control?			
Are you responsible for reviewing or modifying regulatory guidance (in respect of security considerations) regarding radioactive sources out of regulatory control?			
Please identify the legislation and regulations that relate to your security responsibilities, please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Tasks associated with Radioactive Sources out of Regulatory Control</i>			
Which aspects of the security element of radioactive sources out of regulatory control are you involved in or responsible for? Please refer to the list below:			
<ul style="list-style-type: none"> <li>Developing the detection architecture for radioactive sources out of regulatory control and its response framework?</li> </ul>			
<ul style="list-style-type: none"> <li>Developing the notification process for radioactive sources out of regulatory control?</li> </ul>			
<ul style="list-style-type: none"> <li>Managing the response to radioactive sources out of regulatory control?</li> </ul>			
<ul style="list-style-type: none"> <li>The detection of criminal or intentional unauthorized acts?</li> </ul>			
<ul style="list-style-type: none"> <li>The transfer of radioactive sources out of regulatory control to a safe place?</li> </ul>			
<ul style="list-style-type: none"> <li>The provision of training and information to stakeholders?</li> </ul>			
<ul style="list-style-type: none"> <li>The integration of safety and security measures?</li> </ul>			
<ul style="list-style-type: none"> <li>The maintenance of records?</li> </ul>			
<ul style="list-style-type: none"> <li>Are you responsible for communication and engagement between competent authorities and other stakeholders?</li> </ul>			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Other responsibilities associated with Radioactive Sources out of Regulatory Control</i>			
Please identify any other responsibilities that you have in respect of radioactive sources out of regulatory control. Please specify.			
Do any other role holders within your organisation have an involvement in this security subject? Please specify.			

# TRAINING NEEDS ANALYSIS

## QUESTIONNAIRE 3

4	5	6	7	8	9	10	11	12	13

# Analysis - Communication with the Public

COMMUNICATION WITH THE PUBLIC	1	2	3
<i>Legal and Regulatory Requirements</i>			
Are you responsible for the security aspect of communicating with the public in respect of radioactive sources?			
Please identify the legislation and regulations that relate to your security responsibilities, please specify.			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Tasks associated with Managing Communication with the Public</i>			
Are you utilised as a Public Information Officer (PIO)? (PIO is primarily responsible for keeping the public and media informed and for coordinating with all sources of official information to ensure a consistent message is being provided to the public.)			
Are you utilised as a Spokesperson? (A spokesperson should be an expert in the area and hold a position with a level of authority appropriate to the matter about which he/she will be speaking.)			
Do you have specific a communication role only during an emergency?			
Are you responsible for the development of a communication plan?			
Please identify any areas within this section that you would prefer to have a better understanding of in order to carry out your role more effectively. Please specify.			
<i>Other Responsibilities associated with Managing Communication with the Public</i>			
Please identify any other responsibilities that you have in respect of the security element of communicating with the public. Please specify.			
Do any other role holders within your organisation have an involvement in this security subject? Please specify.			

# TRAINING NEEDS ANALYSIS

## QUESTIONNAIRE 3

4	5	6	7	8	9	10	11	12	13



## Certified Radioactive Source Security Professional (CRSP)

Our Certified Radioactive Source Security Professional (CRSP) programme consists of a single module for participants to complete. This programme is for anyone who has responsibilities for managing the security of radioactive sources. This could include leaders and managers of health care facilities, well logging operations, industry, research institutes, or even law enforcement agencies who want to enhance their knowledge about radioactive source security.

In particular, the programme will be useful for individuals who hold such job titles as Radiation Safety Officer (RSO), Radiation Protection Officer (RPO), and Radiation Protection Advisor (RPA). These safety experts have often been given the responsibility to implement security policies and procedures because some basic measures, such as radioactive source inventories and control of access to radioactive sources, were already part of their responsibilities.

Such professionals will have a good knowledge of radiation protection and safety practices and the use of radioactive sources; however, they often do not receive any formal education or training in security and may therefore lack an in-depth understanding of security-related matters. This programme will help to fill this gap. In addition, the programme supports the professional development of regulatory personnel who have responsibilities for licensing and inspecting radioactive sources.

### PROGRAMME STRUCTURE

The Radioactive Source Security Management programme consists of a single module. Due to the targeted nature of the programme, it does not require participants to enrol in the Foundation Module.

By the end of the programme, participants will have explored security threats and the risks arising from those threats. They will have examined security systems including administrative and technical measures that are put in place to protect and secure radioactive sources, mitigate the threats and minimise the risk of harmful events taking place. The programme also emphasises the crucial role of security culture and human reliability for the protection and security of radioactive sources.

The programme requires approximately 30 to 40 hours of self-study and concludes with a single examination. To receive CRSP certification, the exam pass grade for each module is 65% and participants will have the option to take the exams at a PearsonVUE test centre or by remote online proctoring.

Successful participants will earn the designation of Certified Radioactive Source Security Professional (CRSP).

The programme and exam are available in both written English and Spanish, and the cost of the programme is 700 euros. A working knowledge of either language is required to successfully complete the programme.

#### 1. Why did WINS create a new certification programme for radioactive source security?

We have taken this step because the knowledge and skills required to demonstrate competence among stakeholders who are responsible for managing radioactive source security in such industries as medicine, well logging, academia, research and agriculture differ in significant ways from those required to demonstrate competence in managing nuclear materials (i.e. uranium at different levels of enrichment, as well as plutonium and thorium) in the nuclear fuel cycle and nuclear technology. Therefore, we have created a new 'stream' for radioactive source security, with different requirements for certification, as well as a new designation: Certified Radioactive Source Security Professional (CRSP).

#### 2. Do I also need to enrol in the Foundation Module?

No. Because the programme focuses solely on radioactive source security responsibilities, you will not need to become competent in the subject areas covered in the Foundation Module which mainly cover the nuclear fuel cycle.

**3. What is the difference between the new standalone module for Radioactive Source Security and the previous module?**

The content in the new module has been completely revised, expanded and updated. It is also much more focused on what the target audience needs to know about radioactive source security in order to perform their security responsibilities more competently.

**4. Is the standalone module available in any other languages?**

Yes. The module is also available in Spanish.

**5. How much does the new programme cost?**

700 euros.

**6. Can anyone purchase the new programme?**

Yes.

**7. Are scholarships available to enrol in the new programme?**

Yes. Applicants will need to demonstrate that they currently have or will have responsibilities for managing the security of radioactive sources.

**8. How long will it take to complete the course?**

Approximately 30 to 40 hours of study are required to fully prepare for the examination.

**9. How long do I have to complete the programme and take an examination?**

Participants are given six months to complete the learning and to have booked and take the examination.

**10. How long is the examination for this programme?**

The Pearson VUE examination has 60 multiple choice questions. Native speakers of English will have 80 minutes to complete the examination, and non-native speakers will have 100 minutes to complete it. Participants must receive a score of 65% or higher to pass the examination.

**11. What kind of certification will I receive after passing the examination?**

WINS will award successful participants with an electronic certificate that has the designation Certified Radioactive Source Security Professional (CRSP).

**12. When do I need to recertify?**

Certification will last for five years, so you are required to recertify by the fifth annual anniversary after having received your current designation. After this date, your certification will expire. You will be automatically prompted to consider recertification 12 months prior to your expiry date.

**13. Will the previous RSSM elective module continue to be available as well?**

Yes, it will continue to be available for current enrolled participants to complete and take the examination. New participants will either purchase the new programme or may apply for a funded scholarship.

**14. What should I do if I am currently enrolled for the Radioactive Source Security Management elective module?**

You should finish the module in which you are currently enrolled.



## INTRODUCTION

The new Radioactive Source Security Management certification programme consists of a single module, titled Radioactive Source Security Management Standalone Module. Due to the targeted nature of the programme to focus on radioactive material used predominantly in a non-nuclear environment, it does not require participants to enrol in the Foundation Module.

The course requires approximately 30 to 40 hours of self-study and concludes with a single formal examination administered by Pearson VUE. Similar to other WINS Academy programmes, the learning can be completed entirely online, and traditional hardcopy textbooks are also available.

Once participants have passed the examination—which consists of 60 questions—they will receive an electronic certificate with the designation Certified Radioactive Source Security Professional (CRSP).

As with all WINS Academy programmes, CRSPs will need to recertify to maintain their current designation. (For more information on recertification, download the WINS Academy Recertification Guide.)

## CONTENTS

The module explores security threats and the risks arising from those threats. It also examines the security systems—including administrative and technical measures—that are put in place to protect and secure radioactive sources, mitigate the threats, and minimise the risks of harmful events. In addition, the module emphasises the crucial role of security culture and human reliability programmes as well as the interface between safety and security in the protection and security of radioactive sources.

Radioactive sources are used widely in medicine, industry, academia, research and agriculture around the world. To minimise the risk that an external adversary or an insider will use these sources in a malicious act that leads to harmful consequences, sources need to be protected and secured. This requires demonstrable competence in radioactive source security management.

## OUTLINE

### UNIT 1: Introduction to Radioactive Sources

Understanding Radiation and Radioactive Material  
How Radioactive Sources Are Used  
How Radioactive Sources Are Categorised

### UNIT 2: Radioactive Source Security

Security Threats  
Security Risks

### UNIT 3: Responsibilities for Radioactive Source Security

Global Responsibilities  
State Responsibilities  
Regulatory Body Responsibilities  
Licensee Responsibilities

### UNIT 4: Security Systems

Physical Protection Systems  
Physical Protection Technologies

### UNIT 5: Security Management (I)

The Security Policy and Security Plan  
Administrative Measures

### UNIT 6: Security Management (II)

Nuclear Security Culture  
Human Reliability

### UNIT 7: Additional Ways to Reduce Risk

Risk Reduction: Alternative Technologies  
Risk Reduction: Transport Security

