

Appendix 1

Nuclear Security Profession Skills Framework

Draft 1

Prepared by Richard West
2-3-2025

Contents

Introduction	2
What are skills?	2
What are they for?	2
How do I use the career framework skills?	2
Skill level definitions	3
List of security skills	4
Applied Personnel Security	5
Applied Physical Security	6
Applied Research	7

Introduction

The Nuclear Security Skills Framework describes the range of competencies expected of Nuclear Security professionals in the effective performance of their roles. It has been developed with reference to the Government Security Profession Career Framework and also draws on the methodology used in the CIISec Skills Framework.

It defines the skills and capability expected of nuclear security professionals in practical application and not just an assessment of the knowledge. Not all roles require detailed experience in all competency areas.

What are skills?

Skills refer to the expertise or aptitude in a capability that is needed to do something. The security skills are used to indicate the typical knowledge and experience required for each of the nuclear security roles in the career framework.

What are they for?

The security skills are for everyone in the civil nuclear sector working in a security role, or anyone who wants to find out what is required for different nuclear security roles.

How do I use the career framework skills?

It is important to link the skills to your development and use them to inform career and development discussions with your manager. This will help you to agree which development areas to focus on.

Remember the following:

- The skill profiles are for guidance only and should not be used as an exact measure for a particular role
- Achieving the skill profile for a role at a different grade level does not entitle someone to that grade, but it may enhance their chances when applying for that role
- You do not need to achieve all aspects of the skill profile for a role before you can apply for it – we often learn best by stretching ourselves to take on new responsibilities
- Skill levels are cumulative - for example, to hold a ‘practitioner’ level in any skill, you must meet the requirements of ‘working’ level too
- Examples of training courses in this document are for illustrative purposes only and are not endorsed by the Nuclear Security Directors Forum, ONR or DESNZ

Skill level definitions

Skill level		Description
Awareness	*	Applies knowledge and experience of the skill, including tools and techniques, adopting the most appropriate for the environment
Working	**	Applies knowledge and experience of the skill with others, including tools and techniques, adopting the most appropriate for the environment
Practitioner	***	Shares knowledge and experience of the skill with others, including tools and techniques, defining those most appropriate for the environment
Expert	****	Has knowledge and experience in the application of this skill. Is a recognised specialist and adviser in this skill including user needs, generation of ideas, methods, tools and leading or guiding others in best practice use

List of security skills

Listed below are the security skills identified in the Government Security Profession Career Framework, together with those which are required by those employed in **nuclear security roles** (in bold text). Those skills unique to cyber security have been excluded.

Skill	Specialism	Source
Applied Personnel Security	Personnel Security	NPSA
Applied Physical Security	Physical Security	NPSA
Applied Research	Cross-specialism	
Applied Technical Security	Technical Security	NPSA
Business Continuity Management	Cross-specialism	Business Continuity Institute
Compliance Monitoring & Controls Testing	Cross-specialism	
Design	Cross-specialisation	
Incident Management, Incident Investigation and Response	Cross-specialism	
Information Risk Assessment & Risk Management	Cross-specialisation	NCSC Information Risk Assurance skill 5.2
Intrusion Detection and Analysis	Physical Security	NPSA
Investigative Interviewing	Personnel Security	
Legal and Regulatory Environment and Compliance	Cross-specialism	ONR
Nuclear Safety & Site Management	Nuclear Security	ONR & IAEA
Nuclear Security Regulation	Nuclear Security	ONR, IAEA & WINS
Nuclear Transport Security	Nuclear Security	DfT & ONR
Penetration Testing	Physical Security	
Project Management	Cross-specialism	Project Management Institute
Protective Security	Cross-specialism	NPSA
Risk Understanding and Mitigation	Cross-specialism	
Secure By Design	Cross-specialism	
Secure Operations Management	Cross-specialism	
Secure Supply Chain Management	Cross-specialism	NPSA
Threat Intelligence and Assessments	Cross-specialism	NIST, NPSA
Vital Area Identification & Material Classification (VAIMC)	Nuclear Security	?

Applied Personnel Security

Skill Definition	Applied Personnel Security refers to the policies, practices and methodologies that seek to mitigate the risk of workers (insiders) exploiting legitimate access to an organisation's assets for unauthorised purposes.			
Skill source	NPSA			
Awareness *	- Describes concepts of Personnel Security, including the significance of the Personnel Security specialism, the relationship between all specialisms and how the specialisms relate to the security function across the nuclear industry. - Promotes Personnel Security within the local working environment.			
Working **	- Applies concepts of Personnel Security within the context of other specialisms/enablers. - Champions Personnel Security within the wider security function, providing advice to others.			
Practitioner ***	- Develops and applies new concepts in Personnel Security, involving other specialisms/enablers. - Develops individuals and contributes to the development of the specialism. - Promotes Personnel Security as a business enabler throughout the organisation. - Engages with the UK security community.			
Expert ****	- Leads innovation in Personnel Security, taking into account other specialisms/enablers and business drivers. - Promote the development of individuals against the career framework. - Promote the use of Personnel Security as a business enabler at board or senior management level - Active member of the UK security community			

Reference: Government Personnel Security Curriculum, February 2022

Indicative training	Skill Level			
CERT Insider Threat Program Evaluator Certificate	Awareness			
Fundamentals of Employment Law - CIPD				
Grievance, Discipline and Dismissals - CIPD				
How to Prepare for an Employment Tribunal				
Security Management Level 3 - Security Institute				
Social Media and Employment Law				
The role of national security vetting and aftercare				

Applied Physical Security

Skill Definition	Applied physical security refers to the policies, practices and methodologies used to protect assets, including people, services, infrastructure, systems, places, equipment and networks.	
Skill source	NPSA	
Awareness *	- Describes concepts of Physical Security, including the significance of the Personnel Security specialism, the relationship between all specialisms and how the specialisms relate to the security function across the nuclear industry. - Promotes Physical Security within the local working environment.	
Working **	- Applies concepts of Physical Security within the context of other specialisms/enablers. - Champions Physical Security within the wider security function, providing advice to others.	
Practitioner ***	- Develops and applies new concepts in Physical Security, involving other specialisms/enablers. - Develops individuals and contributes to the development of the specialism. - Promotes Physical Security as a business enabler throughout the organisation. - Engages with the UK security community.	
Expert ****	- Leads innovation in Physical Security, taking into account other specialisms/enablers and business drivers. - Promote the development of individuals against the career framework. - Promote the use of Physical Security as a business enabler at board or senior management level - Active member of the UK security community	

Indicative training	Format	Length	Provider examples
IQ Level 5 Physical Security Professional	eLearning	150 hours, self-paced	External
Physical Security Professional (PSP)	eLearning	TBC	ASIS
Security Management – BTEC Level 3	eLearning	180 hours, self-paced	Security Institute

Applied Research

Skill Definition	Applied research is the understanding and application of research methods to ensure and maintain best practise within an organisation. The principles of applied research are vulnerability research and discovery. They lead to the development of exploits; reverse engineering and researching mitigation bypasses; and the use of existing knowledge in experimental development to produce new or substantially improved devices, products and processes.
Skill source	IAEA & ONR – Threat Assessment, Vulnerability Analysis & Design Basis Threat
Awareness *	- Describes concepts of Physical Security, including the significance of the Personnel Security specialism, the relationship between all specialisms and how the specialisms relate to the security function across the nuclear industry. - Promotes Physical Security within the local working environment.
Working **	- Applies concepts of Physical Security within the context of other specialisms/enablers. - Champions Physical Security within the wider security function, providing advice to others.
Practitioner ***	- Develops and applies new concepts in Physical Security, involving other specialisms/enablers. - Develops individuals and contributes to the development of the specialism. - Promotes Physical Security as a business enabler throughout the organisation. - Engages with the UK security community.
Expert ****	- Leads innovation in Physical Security, taking into account other specialisms/enablers and business drivers. - Promote the development of individuals against the career framework. - Promote the use of Physical Security as a business enabler at board or senior management level Active member of the UK security community