Australian Government

Department of Education, Employment and Workplace Relations

PRSTS304A Commission/decommission security equipment/system

Release: 1

PRSTS304A Commission/decommission security equipment/system

Modification History

Not applicable.

Unit Descriptor

This competency standard covers the skills and knowledge required to commission and decommission a range of security equipment and systems. It requires the ability to clearly identify and follow correct commissioning/decommissioning procedures, use safe and efficient work practices, maintain a hazard-free work area, accurately document and maintain information systems. This work would be carried out under routine supervision within organisational guidelines and applies in extra low voltage as defined through the Australian Standards As 2201 (1986) environments.
Functional Area: Core, Technical Security
This competency standard covers the skills and knowledge required to commission and decommission a range of security equipment and systems. It requires the ability to clearly identify and follow correct commissioning/decommissioning procedures, use safe and efficient work practices, maintain a hazard-free work area, accurately document and maintain information systems. This work would be carried out under routine supervision within organisational guidelines and applies in extra low voltage as defined through the Australian Standards As 2201 (1986) environments.
Functional Area: Core, Technical Security

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Prepare for commissioning / decommissioning	1.1 Work order is reviewed and clarified with appropriate person(s) as required in accordance with organisational requirements
	1.2 Commissioning / decommissioning requirements of security equipment / systems are identified and confirmed in accordance with organisational procedures
	1.3 Tools, equipment and materials are selected appropriate to job requirements and checked for operational effectiveness in accordance with manufacturer's specifications and organisational procedures
	1.4 Potential and existing risks and hazards associated with security equipment / systems are identified and managed in accordance with OHS policies and procedures and organisational requirements
	1.5 Suitable personal protective equipment is selected, used and maintained in accordance with OHS and organisational requirements
	1.6 Personal limitations in commissioning / decommissioning security equipment / systems are promptly identified and assistance is sought from appropriate person(s) in accordance with organisational procedures
2 Commission security equipment / system	2.1 Correct security equipment / system operational and testing procedures are observed and followed in accordance with manufacturer's specifications and work order
	2.2 Testing confirms that security equipment / system meets installation performance specifications, industry and legislative requirements

	2.3 Customisation of security equipment / system to match client requirements is completed as required in accordance with manufacturer's specifications and work order
	2.4 Malfunctions or deviations from specifications are identified and rectified or reported in accordance with organisational procedures
	2.5 Client hand-over of commissioned security equipment / system is undertaken in accordance with legislative and organisational requirements and relevant industry standards
	2.6 Safe operating practices are observed to remove risk of injury to self, others or security equipment / system in accordance with OHS and organisational requirements
3 Decommission security equipment / system	3.1 Isolation procedures to protect the functioning or operation of existing structures are confirmed with appropriate person(s) and implemented in accordance with site procedures
	3.2 Security equipment / system to be decommissioned is accessed in accordance with manufacturer's specifications and minimises disruption to client, services or normal work routines
	3.3 Correct security equipment / system decommissioning procedures are observed and followed in accordance with manufacturer's specifications, OHS, legislative and organisational requirements
	3.4 Clear and concise communication is maintained with appropriate person(s) during decommissioning procedures in accordance with client and organisational requirements
	3.5 Safe operating practices are observed to remove risk of injury to self, others or security equipment / system in accordance with OHS and organisational requirements

4 Complete commissioning / decommissioning activities	4.1 Removal of decommissioned security equipment / system or components is arranged in accordance with work order, OHS and organisational procedures
	4.2 Notification of work completion is made to appropriate person(s) in accordance with client and organisational procedures
	4.3 Results of commissioning and other relevant documentation is completed and processed in accordance with industry, legislative and organisational requirements
	4.4 Work area, tools and equipment are cleaned and stored in a secure and safe location in accordance with organisational requirements
	4.5 Waste from commissioning / decommissioning activities is collected, treated and disposed of or recycled in accordance with organisational procedures and environmental policies

Required Skills and Knowledge

Not applicable.

Evidence Guide

The Evidence Guide identifies the requirements to be demonstrated to confirm competence for this unit. Assessment must confirm sufficient ability to use appropriate skills and knowledge to commission or decommission a range of security equipment and systems. Assessment of performance should be over a period of time covering all categories within the Range of Variables statements that are applicable in the learning environment.

What critical aspects are required for evidence of competency?

Clearly identify commissioning/decommissioning requirements of security equipment/systems from work order and organise appropriate tools, equipment and materials to carry out work.

Follow safe and efficient work practices in the use of tools and equipment and accurately identify and manage risks and hazards to commissioning/decommissioning work and work areas.

Access security equipment/systems and methodically carry out commissioning/decommissioning procedures with minimal disruption to client services, existing structures or normal work routines.

Hand-over security equipment/system to client ensuring a full and complete understanding of equipment/system operations and functions through the provision of clear and effective instructions, information and/or training.

Clean and store tools and equipment, reinstate work area in a clear and safe condition, and prepare and submit all required documentation in an accurate and prompt manner.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

types, functions and requirements of security equipment/systems
methods and procedures to commission/decommission security equipment/systems
security equipment/system configurations and programs
risks and hazards associated with commissioning/decommissioning work
types and functions of tools, equipment and testing devices
types and functions of keypad and control panels
earthing systems, arrangements and requirements
electrical concepts (voltage, current, resistance and impedance)
electrical connections and types of electrical circuits
cable identification and handling requirements
building construction methods and types
types and functions of computer software
technical terminology
procedures for working in confined spaces
organisational and client confidentiality requirements
OHS requirements and safe work practices
relevant legislative including Australian Standards, building codes and Australian Communications Authority (ACA) cabling standards.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some specific skills are required. These include the ability to:

read and interpret plans and specifications

select and use suitable tools and equipment
methodically prioritise and organise work tasks
effectively operate security equipment/systems
download/upload information
test security equipment systems and read a multimeter
accurately identify and correctly handle cables
customise equipment/systems to client requirements
communicate in a clear and concise manner and provide effective training/instructions to clients
safely disable security equipment/systems
solder, weld and carry out basic carpentry
solve routine problems
estimate resource requirements
apply safe and efficient work practices.

What resources may be required for assessment?

Access to a suitable venue and equipment.
Access to plain English version of relevant statutes and procedures.
Assignment instructions, work plans and schedules, policy documents and duty statements.
Assessment instruments, including personal planner and assessment record book.
Access to a registered provider of assessment services.

What is required to achieve consistency of performance?

For valid and reliable assessment of this unit, the competency should be demonstrated over a period of time and observed by the assessor. The competency is to be demonstrated in a range of situations, which may include involvement in related activities normally experienced in the workplace.
Evidence of underpinning knowledge understanding of processes and principles can be gained through thorough questioning and by observation of previous work.

Assessment against this unit may involve the following:

Continuous assessment in a setting that simulates the conditions of performance described in the elements, performance criteria and range of variables statement that make up the unit.
Continuous assessment in the workplace, taking into account the range of variables affecting performance.
Self-assessment on the same terms as those described above.
Simulated assessment or critical incident assessment, provided that the critical incident involves assessment against performance criteria and an evaluation of underpinning knowledge and skill required to achieve the required performance outcomes.

Key competency levels

There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. Information below highlights how these processes are applied in this competency standard.

1 - perform the process
2 - perform and administer the process
3 - perform, administer and design the process

How can **communication of ideas and information** be applied? (**2**)

Clear instructions, explanations and training may be provided to clients to ensure a complete understanding of the functions and operations of security equipment/systems.

How can **information be collected**, **analysed and organised**? (**2**)

Test data may be interpreted and analysed to confirm commissioned security equipment/system meets installation performance specifications.

How are **activities planned and organised**? (**2**)

Access to security equipment/systems may be organised with minimal disruption to client services, existing structures or normal work routines.

How can **team work** be applied? (**2**)

Communication may be organised and maintained with relevant persons throughout decommissioning procedures.

How can the use of **mathematical ideas and techniques** be applied? (**2**)

Mathematical techniques may be used to accurately estimate resource requirements and prioritise work tasks.

How can **problem solving skills** be applied? (**2**)

Malfunctions or deficiencies in the performance or operational effectiveness of security equipment/system and/or components are promptly identified and reported for remedial action.

How can the **use of technology** be applied? (**2**)

Technology may be used to communicate, source and record information. It may also be used to carry out testing activities.

The Evidence Guide identifies the requirements to be demonstrated to confirm competence for this unit. Assessment must confirm sufficient ability to use appropriate skills and knowledge to commission or decommission a range of security equipment and systems. Assessment of performance should be over a period of time covering all categories within the Range of Variables statements that are applicable in the learning environment.

What critical aspects are required for evidence of competency?

Clearly identify commissioning/decommissioning requirements of security equipment/systems from work order and organise appropriate tools, equipment and materials to carry out work.

Follow safe and efficient work practices in the use of tools and equipment and accurately identify and manage risks and hazards to commissioning/decommissioning work and work areas.

Access security equipment/systems and methodically carry out commissioning/decommissioning procedures with minimal disruption to client services, existing structures or normal work routines.

Hand-over security equipment/system to client ensuring a full and complete understanding of equipment/system operations and functions through the provision of clear and effective instructions, information and/or training.

Clean and store tools and equipment, reinstate work area in a clear and safe condition, and prepare and submit all required documentation in an accurate and prompt manner.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

types, functions and requirements of security equipment/systems

methods and procedures to commission/decommission security equipment/systems

security equipment/system configurations and programs

risks and hazards associated with commissioning/decommissioning work

types and functions of tools, equipment and testing devices

types and functions of keypad and control panels

earthing systems, arrangements and requirements
electrical concepts (voltage, current, resistance and impedance)
electrical connections and types of electrical circuits
cable identification and handling requirements
building construction methods and types
types and functions of computer software
technical terminology
procedures for working in confined spaces
organisational and client confidentiality requirements
OHS requirements and safe work practices
relevant legislative including Australian Standards, building codes and Australian Communications Authority (ACA) cabling standards.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some specific skills are required. These include the ability to:

read and interpret plans and specifications
select and use suitable tools and equipment
methodically prioritise and organise work tasks
effectively operate security equipment/systems
download/upload information
test security equipment systems and read a multimeter
accurately identify and correctly handle cables
customise equipment/systems to client requirements
communicate in a clear and concise manner and provide effective training/instructions to clients
safely disable security equipment/systems
solder, weld and carry out basic carpentry
solve routine problems
estimate resource requirements
apply safe and efficient work practices.

What resources may be required for assessment?

Access to a suitable venue and equipment.
Access to plain English version of relevant statutes and procedures.
Assignment instructions, work plans and schedules, policy documents and duty statements.
Assessment instruments, including personal planner and assessment record book.
Access to a registered provider of assessment services.

What is required to achieve consistency of performance?

For valid and reliable assessment of this unit, the competency should be demonstrated over a period of time and observed by the assessor. The competency is to be demonstrated in a range of situations, which may include involvement in related activities normally experienced in the workplace.

Evidence of underpinning knowledge understanding of processes and principles can be gained through thorough questioning and by observation of previous work.

Assessment against this unit may involve the following:

Continuous assessment in a setting that simulates the conditions of performance described in the elements, performance criteria and range of variables statement that make up the unit.
Continuous assessment in the workplace, taking into account the range of variables affecting performance.

Self-assessment on the same terms as those described above.
Simulated assessment or critical incident assessment, provided that the critical incident involves assessment against performance criteria and an evaluation of underpinning knowledge and skill required to achieve the required performance outcomes.

Key competency levels

There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. Information below highlights how these processes are applied in this competency standard.

1 - perform the process
2 - perform and administer the process
3 - perform, administer and design the process

How can **communication of ideas and information** be applied? (**2**)
Clear instructions, explanations and training may be provided to clients to ensure a complete understanding of the functions and operations of security equipment/systems.

How can **information be collected**, **analysed and organised**? (**2**)
Test data may be interpreted and analysed to confirm commissioned security equipment/system meets installation performance specifications.

How are **activities planned and organised**? (**2**)
Access to security equipment/systems may be organised with minimal disruption to client services, existing structures or normal work routines.

How can **team work** be applied? (**2**)
Communication may be organised and maintained with relevant persons throughout decommissioning procedures.

How can the use of **mathematical ideas and techniques** be applied? (**2**)
Mathematical techniques may be used to accurately estimate resource requirements and prioritise work tasks.

How can **problem solving skills** be applied? (**2**)
Malfunctions or deficiencies in the performance or operational effectiveness of security equipment/system and/or components are promptly identified and reported for remedial action.

How can the **use of technology** be applied? (**2**)
Technology may be used to communicate, source and record information. It may also be used to carry out testing activities.

Range Statement

The Range of Variables provides information about the context in which the unit of competency is carried out. It allows for different work practices and work and knowledge requirements as well as for differences between organisations and workplaces. The following variables may be present for this particular unit:

Work order information may relate to:
work schedules
completion dates
job requirements and tasks
specific client requirements
access to site and specific site requirements
resource requirements
OHS requirements
compliance with relevant legislation
budget allocations
warranties and service information.

Appropriate person(s) may include:
clients
site managers
project managers
engineers and technicians
technical experts
line managers/supervisors
colleagues
regulatory personnel
security consultants.

Organisational requirements may relate to:
legal and organisational operational policies and procedures
operations manuals, induction and training materials
insurance policy agreements
client and organisational confidentiality requirements
organisational goals, objectives, plans, systems and processes
employer and employee rights and responsibilities
own role, responsibility and delegation
quality and continuous improvement processes and standards
client service standards
defined resource parameters
OHS policies, procedures and programs
emergency and evacuation procedures
duty of care, code of conduct, code of ethics
access and equity policy, principles and practice
records and information systems and processes
communication channels and reporting procedures.

Commissioning requirements may relate to:
equipment/system to be commissioned
persons to be trained
scheduling of commissioning

information/documentation to be handed over to client
customisation
monitoring and response procedures to be determined/clarified.

Decommissioning may involve:
disconnection
disablement
hardware/software changes
adjustments
reconnecting components to ensure correct operation and compliance with building codes and regulations
removal of components
downloading system information
default system-held information.

Security equipment and systems may include:
detection devices, audible/visual warning devices
cameras, monitors and control equipment
control panels, intercoms
wireless equipment, car alarms
electronic readers, electronic recognition controls
locks and locking systems
grills, lighting, boom gates, turnstiles
bank pop-up screens
smoke detection devices
electric/mechanical fire safety and fire locking systems
power supplies, batteries
security doors and door controls.

Security systems may be:
electronic
mechanical
computerised
procedural.

Tools and equipment may include:
multimeter, F-set, cable testing equipment
hand tools, power tools, fixing tools, crimp tools, IDS tools
flexible rods, fishing tools
strippers, router, file, followers, spirit level
soldering iron, welder
insulation mega
ladder, scaffold, scissor lift, hoist, drop sheet, batteries
personal protective equipment
communications equipment.

Materials may include:
computer disks
computer leads/cables
interface PCBs
keypads
handheld programmers
software.

Risks and hazards may include:
non-compliance with building codes and regulations
exposed electrical wiring
manual handling
chemical hazards (battery corrosion)
exposure to:
asbestos
dust
noise
live power
vermin
water
glass fibre
building debris
natural and other gas build-up.

OHS policies and procedures may relate to:
hazardous and risk assessment mechanisms
implementation of safety regulations
safety training
safety systems incorporating:
work clearance procedures
isolation procedures
gas and vapour
monitoring/testing procedures
use of protective equipment and clothing

use of codes of practice.

Personal protective clothing and equipment may include:
masks, safety glasses, head protection, ear muffs
safety boots, knee pads
gloves
witches hats, flashing lights
warning signs and tapes
fire extinguisher
first aid kit.

Applicable legislation, **codes and national standards may relate to**:
compliance with Australian building codes and regulations
compliance with Australian Communications Authority (ACA) cabling standards
relevant Commonwealth/State/Territory legislation which affect organisational operation:
Occupational Health and Safety and safe work practices
environmental issues
equal employment opportunity
industrial relations
anti-discrimination and diversity

Australian Standards, quality assurance, licensing and certification requirements
relevant industry Codes of Practice
trade practices, award and enterprise agreements

privacy requirements, freedom of information.
Customisation may involve:
changing password or user code
modifying system functions
adding system functions
changing volume or length of alarms.
Hand-over procedures may include:
comprehensive explanation/demonstration of security equipment/system operations and functions
effective user training:
verbal and written explanations, demonstration, practice, question and answer session.

clear instructions on security equipment/system maintenance
provision of all relevant information and documentation:
manufacturer's and user manuals, maintenance requirements and contract, monitoring procedures and contract, keying plan, warranty requirements and contract, company contact details.
Safe operating practices may include:
working safely around electrical wiring, cables and overhead power lines
working safely around tools and equipment
hazard recognition
emergency procedures
awareness of electrical hazards
following confined spaces procedures
administering first aid.
Removal may include:
disconnection
dismantling
removal
reconnecting components to ensure correct operation and compliance with building codes and regulations.
Results of commissioning may include:
commissioning undertaken
persons equipment/system commissioned to
date and time of commissioning
information/documentation handed over to client
job card
customisation of equipment/system.
Documentation may include:
completion of work log
details of system decommissioning/commissioning
client approval for decommissioning
client sign-off for commissioning
adjustments made to security equipment/system
section lists, zone lists, equipment lists
fixings, job card
adjustments to original cable plan.
Disposal may involve:

return to client
destruction
return to manufacturer
special disposal requirements for hazardous components (radioactive components and batteries)
return to store
special storage and/or disposal requirements for classified or high security equipment/systems.

The Range of Variables provides information about the context in which the unit of competency is carried out. It allows for different work practices and work and knowledge requirements as well as for differences between organisations and workplaces. The following variables may be present for this particular unit:

Work order information may relate to:
work schedules
completion dates
job requirements and tasks
specific client requirements
access to site and specific site requirements
resource requirements
OHS requirements
compliance with relevant legislation
budget allocations
warranties and service information.

Appropriate person(s) may include:
clients
site managers
project managers
engineers and technicians
technical experts
line managers/supervisors
colleagues
regulatory personnel
security consultants.

Organisational requirements may relate to:
legal and organisational operational policies and procedures
operations manuals, induction and training materials
insurance policy agreements
client and organisational confidentiality requirements
organisational goals, objectives, plans, systems and processes
employer and employee rights and responsibilities
own role, responsibility and delegation
quality and continuous improvement processes and standards
client service standards
defined resource parameters
OHS policies, procedures and programs
emergency and evacuation procedures
duty of care, code of conduct, code of ethics
access and equity policy, principles and practice

records and information systems and processes
communication channels and reporting procedures.

Commissioning requirements may relate to:
equipment/system to be commissioned
persons to be trained
scheduling of commissioning
information/documentation to be handed over to client
customisation
monitoring and response procedures to be determined/clarified.

Decommissioning may involve:
disconnection
disablement
hardware/software changes
adjustments
reconnecting components to ensure correct operation and compliance with building codes and regulations
removal of components
downloading system information
default system-held information.

Security equipment and systems may include:
detection devices, audible/visual warning devices
cameras, monitors and control equipment
control panels, intercoms
wireless equipment, car alarms
electronic readers, electronic recognition controls
locks and locking systems
grills, lighting, boom gates, turnstiles
bank pop-up screens
smoke detection devices
electric/mechanical fire safety and fire locking systems
power supplies, batteries
security doors and door controls.

Security systems may be:
electronic
mechanical
computerised
procedural.

Tools and equipment may include:
multimeter, F-set, cable testing equipment
hand tools, power tools, fixing tools, crimp tools, IDS tools
flexible rods, fishing tools
strippers, router, file, followers, spirit level
soldering iron, welder
insulation mega
ladder, scaffold, scissor lift, hoist, drop sheet, batteries
personal protective equipment
communications equipment.

Materials may include:

computer disks
computer leads/cables
interface PCBs
keypads
handheld programmers
software.

Risks and hazards may include:
non-compliance with building codes and regulations
exposed electrical wiring
manual handling
chemical hazards (battery corrosion)
exposure to:
asbestos
dust
noise
live power
vermin
water
glass fibre
building debris
natural and other gas build-up.

OHS policies and procedures may relate to:
hazardous and risk assessment mechanisms
implementation of safety regulations
safety training
safety systems incorporating:
work clearance procedures
isolation procedures
gas and vapour
monitoring/testing procedures
use of protective equipment and clothing

use of codes of practice.

Personal protective clothing and equipment may include:
masks, safety glasses, head protection, ear muffs
safety boots, knee pads
gloves
witches hats, flashing lights
warning signs and tapes
fire extinguisher
first aid kit.

Applicable legislation, **codes and national standards may relate to**:
compliance with Australian building codes and regulations
compliance with Australian Communications Authority (ACA) cabling standards
relevant Commonwealth/State/Territory legislation which affect organisational operation:
Occupational Health and Safety and safe work practices
environmental issues
equal employment opportunity

industrial relations
anti-discrimination and diversity

Australian Standards, quality assurance, licensing and certification requirements
relevant industry Codes of Practice
trade practices, award and enterprise agreements
privacy requirements, freedom of information.

Customisation may involve:
changing password or user code
modifying system functions
adding system functions
changing volume or length of alarms.

Hand-over procedures may include:
comprehensive explanation/demonstration of security equipment/system operations and functions
effective user training:
verbal and written explanations, demonstration, practice, question and answer session.

clear instructions on security equipment/system maintenance
provision of all relevant information and documentation:
manufacturer's and user manuals, maintenance requirements and contract, monitoring procedures and contract, keying plan, warranty requirements and contract, company contact details.

Safe operating practices may include:
working safely around electrical wiring, cables and overhead power lines
working safely around tools and equipment
hazard recognition
emergency procedures
awareness of electrical hazards
following confined spaces procedures
administering first aid.

Removal may include:
disconnection
dismantling
removal
reconnecting components to ensure correct operation and compliance with building codes and regulations.

Results of commissioning may include:
commissioning undertaken
persons equipment/system commissioned to
date and time of commissioning
information/documentation handed over to client
job card
customisation of equipment/system.

Documentation may include:
completion of work log
details of system decommissioning/commissioning
client approval for decommissioning

client sign-off for commissioning
adjustments made to security equipment/system
section lists, zone lists, equipment lists
fixings, job card
adjustments to original cable plan.
Disposal may involve:
return to client
destruction
return to manufacturer
special disposal requirements for hazardous components (radioactive components and batteries)
return to store
special storage and/or disposal requirements for classified or high security equipment/systems.

Unit Sector(s)

Not applicable.