



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **PRSTS302A Program security equipment/system**

**Release: 1**

## **PRSTS302A Program security equipment/system**

### **Modification History**

Not applicable.

### **Unit Descriptor**

This competency standard covers the skills and knowledge required to program and configure a range of security equipment/systems. It requires the ability to clearly identify programming requirements and configuration parameters for the type of security equipment or system, use safe and efficient work practices, maintain a hazard-free work area, and maintain accurate records and information systems. This work applies in extra low voltage as defined through the Australian Standards As 2201 (1986) environments and would be carried out under routine supervision within organisational guidelines.

**Functional Area:** Core, Technical Security

This competency standard covers the skills and knowledge required to program and configure a range of security equipment/systems. It requires the ability to clearly identify programming requirements and configuration parameters for the type of security equipment or system, use safe and efficient work practices, maintain a hazard-free work area, and maintain accurate records and information systems. This work applies in extra low voltage as defined through the Australian Standards As 2201 (1986) environments and would be carried out under routine supervision within organisational guidelines.

**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 programming             | <ul style="list-style-type: none"><li>1.1 Work order is reviewed and clarified with appropriate person(s) as required in accordance with organisational requirements</li><li>1.2 Security equipment / system programming requirements and configuration parameters are identified and accurately understood</li><li>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</li><li>1.4 Suitable personal protective equipment is selected, used and maintained in accordance with OHS and organisational requirements</li><li>1.5 Potential and existing risks and hazards to programming are identified and managed in accordance with OHS and organisational requirements</li></ul> |
| 2 Program security equipment / system | <ul style="list-style-type: none"><li>2.1 All work is conducted using safe operating practices in accordance with legislative, OHS and organisational requirements</li><li>2.2 Security equipment / system is powered, programmed and configured in accordance with work order, manufacturer's specifications and relevant industry standards</li><li>2.3 Correct security equipment / system operational procedures and compliance requirements are observed and followed in accordance with manufacturer's specifications and organisational requirements</li></ul>   |

- 2.4 Security equipment / system configuration is checked to confirm required operation and functioning in accordance with organisational requirements
  - 2.5 Alterations or changes to programming requirements are confirmed with appropriate person(s) in accordance with organisational procedures
- 3 Complete programming activities
  - 3.1 Final inspections are undertaken to ensure security equipment / system programming conforms to work order and client requirements
  - 3.2 Notification of work completion is made to appropriate person(s) in accordance with organisational procedures
  - 3.3 Documentation is completed promptly and accurately and processed in accordance with client and organisational requirements
  - 3.4 Work area, tools and equipment are cleaned and stored in secure and safe locations in accordance with organisational requirements
  - 3.5 Waste from programming 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 program a range of security equipment/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 programming requirements and configuration parameters of security equipment/systems 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 programming work and work areas.

Access security equipment/systems and methodically carry out programming and configuration procedures with minimal disruption to client, services or normal work routines. 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:

- building construction methods and types
- powering systems types, functions and requirements of security equipment/systems
- keypad and control panel types and functions
- methods of equipment/system programming
- security equipment/system configurations
- computer software types and functions
- electrical concepts (voltage, current, resistance, impedance)
- cable identification and handling requirements
- earthing systems arrangements and requirements
- technical terminology
- organisational and client confidentiality requirements
- OHS requirements and safe work practices.

### **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:

- communicate in a clear and concise manner
- read and interpret plans and specifications
- select and use suitable tools and equipment
- power systems
- program and configure security equipment/systems
- methodically prioritise and organise work tasks
- operate security equipment/systems
- download/upload information
- test security equipment systems and read a multimeter
- accurately identify and handle cables
- 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)**

Programming requirements and configuration parameters may be clarified and confirmed with relevant persons to ensure client needs are accurately met.

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

Conducted inspections and checks of programming and configuration work may be accurately documented and organised by records or reports.

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

Notification may be made to relevant persons upon completion of programming and configuration work.

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

Requirements for alterations or changes to programming or configuration of security equipment/systems may be discussed with relevant persons.

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)**

Potential and existing risks and hazards associated with programming work are promptly identified and controlled.

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.

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## 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, security consultants
- regulatory personnel.

**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.

**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 systems may be:**

electronic  
mechanical  
computerised  
procedural.

**Programming requirements and configuration parameters:**

may be found in:

work order  
system plans and specifications  
manufactures specifications

may include:

alarm types  
reporting  
access controls  
alerting monitoring station.

**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  
lockpick, pick gun  
ladder, scaffold, scissor lift, hoist, drop sheet, batteries  
personal protective equipment  
communications equipment.

**Materials may include:**

computer disks.

**Personal protective equipment may include:**

safety boots  
masks  
safety glasses  
knee pads  
gloves  
first aid kit, fire extinguisher.

**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.

**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.

**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.

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

**Documentation may include:**

completion of work log  
security equipment/system positioning  
cable identification  
adjustments to original cable plan  
section lists, zone lists, equipment lists  
fixings, job card.

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personal protective equipment

communications equipment.

**Materials may include:**

computer disks.

**Personal protective equipment may include:**

safety boots

masks

safety glasses

knee pads

gloves

first aid kit, fire extinguisher.

**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.

**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  
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## **Unit Sector(s)**

Not applicable.