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| <b>Title</b> | <b>Develop solutions for electronic security intercom systems</b> |                |           |
| <b>Level</b> | <b>4</b>  | <b>Credits</b> | <b>10</b> |

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| <b>Purpose</b> | <p>This unit standard is intended for the training and assessment of people working in or intending to work in the electronic security industry and covers the planning and installation of electronic security intercom systems.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> <li>– confirm client's electronic security intercom system requirements;</li> <li>– select system components for electronic security intercom systems;</li> <li>– select electronic security intercom system peripheral devices; and</li> <li>– lead the installation, commissioning, and handover of electronic security intercom systems.</li> </ul> |
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| <b>Classification</b> | Electronic Engineering > Electronic Security |
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| <b>Available grade</b> | Achieved |
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### Guidance Information

- 1 This unit standard has been developed for learning and assessment on-job.
- 2 Persons working or intending to work as a security officer or in related security employment may require a Security Guards Licence or, if an employee of a Security Guard Licence holder, a Certificate of Approval to be the Responsible Employee of a Security Guard. These licences are issued by the Private Security Personnel Licensing Authority available through: [www.justice.govt.nz/tribunals/licences-certificates/pspla/](http://www.justice.govt.nz/tribunals/licences-certificates/pspla/).
- 3 References  
 Building Act 2004;  
 Electricity (Safety) Regulations 2010;  
 Health and Safety at Work Act 2015;  
 Health and Safety in Employment Regulations 1995;  
 Private Security Personnel and Private Investigators Act 2010;  
 Privacy Act 1993;  
 Telecommunications Act 2001;  
 AS/NZS 3000:2007, *Electrical installations (known as the Australian/New Zealand Wiring Rules)*;  
 New Zealand Security Association (Inc), Codes of Practice available at <https://security.org.nz/>;

New Zealand Telecommunications Forum Incorporated cabling requirements;  
Local territorial authority requirements;  
and all subsequent amendments and replacements.

4 Definitions

*Industry practice* – practice used and recommended by organisations involved in the electrotechnology industry.

*Safe working practices* – work practices designed to prevent personal injuries and damage to equipment and plant. This includes practices relating to personal attire and use of safety clothing and equipment, use of machinery and tools, and handling of materials and waste.

5 Guidelines for connection of intruder alarm systems to telephone lines are contained in *Access Standards Newsletters* issued periodically by Spark NZ Ltd, available from [www.telepermit.co.nz](http://www.telepermit.co.nz).

6 Range

- a Candidates must refer to current legislation and Standards during assessment.
- b Demonstration of safe working practices in accordance with *safe and sound practice* are essential components of assessment of this unit standard.
- c All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
  - i legislation;
  - ii policies and procedures;
  - iii ethical codes;
  - iv Standards;
  - v applicable site, enterprise, and industry practice; and,
  - vi where appropriate, manufacturer instructions, specifications, and data sheets.
- d Three separate intercom systems, at least one of which must be an audio only system and one of which must be an audio-video system.

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## Outcomes and performance criteria

### Outcome 1

Confirm client's electronic security intercom system requirements.

### Performance criteria

- 1.1 Identify the client's objectives and budget.
- 1.2 Use supplied job/project documentation to confirm with the client that all electronic security intercom system objectives have been identified.
- 1.3 Review the specification, identify and document system specific programming requirements.
- 1.4 Agree the installation timeframe and milestones with the customer, installation team, and any other trades.

## Outcome 2

Select system components for electronic security intercom systems.

### Performance criteria

- 2.1 Select system components to meet all installation requirements and ensure that they are compatible.

Range may include but is not limited to – audio station, video interphone, video intercom, single and multi station call up panel, power supply, amplifier.

- 2.2 Establish connection requirements for the system components.

- 2.3 Confirm power supply capacity and cabling are suitable for the specified load.

## Outcome 3

Select electronic security intercom system peripheral devices.

Range peripheral devices may include but are not limited to – audio units, audio video units, power supplies, microphone, speakers, impedance matching transformer, horn speaker, electric locking; evidence is required for four different peripheral devices across the systems.

### Performance criteria

- 3.1 Select devices to meet all installation requirements and ensure that they meet customer requirements.

- 3.2 Position selected devices to maximise system effectiveness and reliability.

Range may include but is not limited to – environment, bright sunlight, radio frequency interference, audible interference, vibrations, monitoring link disconnect.

## Outcome 4

Lead the installation, commissioning, and handover of electronic security intercom systems.

Range may include but is not limited to – methodology, regulatory requirements, timeframes, health and safety, customer expectations, waste management, workflow, team roles, tool box meetings, tailgate meeting.

### Performance criteria

- 4.1 Explain installation requirements to supervised persons and any other trades.

- 4.2 Ensure appropriate installation of cabling and cable support systems.

- 4.3 Ensure appropriate installation of selected components and devices.
- 4.4 Power up and test the system for initial operation.
- 4.5 Ensure system programming meets client's operational requirements and system specifications.
- 4.6 Commission the system and prepare for handover to client.
- Range includes but is not limited to – waste and unused materials removed, site left clean and tidy, system operational tests, site restored to client expectations.
- 4.7 Communicate equipment operation, warranty, test and maintenance schedule, and service options to the customer.
- 4.8 Complete the handover process and documentation in the agreed format and in accordance with customer and industry requirements.
- 4.9 Provide feedback to staff and management on project and performance of supervised staff.

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| <b>Planned review date</b> | 31 December 2026 |
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#### Status information and last date for assessment for superseded versions

| Process      | Version | Date              | Last Date for Assessment |
|--------------|---------|-------------------|--------------------------|
| Registration | 1       | 24 January 2019   | N/A                      |
| Rollover     | 2       | 26 September 2024 | N/A                      |

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| <b>Consent and Moderation Requirements (CMR) reference</b> | 0003 |
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

#### Comments on this unit standard

Please contact Waihangā Ara Rau Construction and Infrastructure Workforce Development Council [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz) if you wish to suggest changes to the content of this unit standard.