

Title	Demonstrate knowledge of factors that can degrade the performance and stability of complex network systems and services		
Level	4	Credits	10

Purpose	<p>This standard is intended for technicians who work on complex telecommunications networks.</p> <p>People credited with this unit standard are able to demonstrate knowledge of factors that can degrade performance and stability of complex network systems and services.</p>
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Classification	Telecommunications > Telecommunications - Service Delivery
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Available grade	Achieved
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Guidance Information

- 1 Learning and assessment within this unit standard must be carried out in accordance with the following legislation, guidelines, and codes of practice, as relevant to role, and any subsequent amendments:
 - New Zealand Telecommunications Forum Inc., Customer Complaints Code, available from <https://www.tcf.org.nz/industry/resources/publications/industry-standards-guides/>;
 - Health and Safety at Work Act 2015;
 - Privacy Act 1993;
 - Resource Management Act 1991;
 - Telecommunications Act 2001, all available from <http://legislation.govt.nz/>.
- 2 Definition
Complex refers to three or more components and/or services used together in networks or enterprise solution systems.
- 3 For the purpose of this unit standard, assessment can take place in a core network, access network, or wireless technology telecommunications work environment.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of factors that can degrade performance and stability of complex network systems and services.

Performance criteria

- 1.1 Factors that can degrade the performance of the network and network hardware are explained in terms of the techniques to mitigate them.
- 1.2 Factors that can degrade performance of broadcast systems are explained in terms of the techniques to mitigate them.
- 1.3 Modulation and multiplexing methods are compared in terms of reliability and stability of the network.
- 1.4 Network diversity and redundancy is explained in terms of network performance and stability.
- 1.5 Roles and responsibilities of other personnel are explained in terms of network performance, stability, documentation and software systems.
- Range personnel may include but are not limited to – National Operation Centre, IT, Engineers, Planners, Designers, Regulators, Standard setting bodies, Inspectors.
- 1.6 The importance of inventory systems and practices are explained in terms of recording factors that can degrade performance of the network.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 May 2019	N/A

Consent and Moderation Requirements (CMR) reference	0101
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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 Connexis Infrastructure ITO qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.