

Title	Demonstrate knowledge of measurement of total propagated uncertainty in hydrographic surveying		
Level	5	Credits	5

Purpose	People credited with this unit standard are able to demonstrate knowledge of measurement of total propagated uncertainty (TPU) in hydrographic surveying.
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Classification	Surveying > Hydrography
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Available grade	Achieved
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Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with relevant industry and legislative requirements.
- 2 Legislation and references relevant to this unit standard include: Health and Safety at Work Act 2015; HYSPEC Contract Specification for Hydrographic Surveys Version 2.0, Land Information New Zealand (LINZ), available at <https://www.linz.govt.nz>; and any subsequent amendments.
- 3 Definition
Industry requirements may refer to but are not limited to relevant policies, processes, methodologies, industry codes of practice, site specific health and safety plans, standard operating procedures, site safety plans, quality plans, work plans, traffic management plans, contract work programmes, job safety analysis, safe work method statements, job instructions, manufacturer's requirements, contract specifications, manuals, procedural documents, and guidelines.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of measurement of total propagated uncertainty (TPU) in hydrographic surveying.

Performance criteria

- 1.1 The purpose of establishing measurement of TPU is explained as it relates to hydrographic surveying.
- 1.2 Contributing factors to measurement of TPU are explained in terms of how it impacts data accuracy.

- 1.3 Contributing sources of uncertainty are identified and their impact on data accuracy explained.
- 1.4 TPU of the measurement calculation is explained in terms of how it impacts on results.
- 1.5 Measurements are expressed with uncertainties generated on the calculation sheet or using an equivalent method.
- 1.6 TPU uncertainties are validated by a supervisor and in accordance with survey specification requirements.

Planned review date	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Status information and last date for assessment for superseded versions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	25 March 2021	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 Industry Training Organisation qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.