

Telematics Industry Group Forum

Hosted by
Transport Certification Australia

7 May 2020



Agenda

1. Introductions and welcome
 2. National Transport Commission update
 3. Road manager and regulator update
 4. New Telematics Device Specification
 5. TCA's Priorities going forward
 6. Supporting road network resilience
- Meeting close

Introductions and welcome



Welcome to TCA's first fully virtual TIG group

- Actions from last meeting
- We will be updating you on implementation of the new applications, and other telematics developments
- Strong interest from road managers in deploying RIM and TMA, both as fully operational schemes, as well as proofs-of-concept and pilots for new uses

Heavy Vehicle National Law Review

Telematics Industry Group
Paul Davies

Road managers and regulator roundup





Telematics Industry Group (TIG)

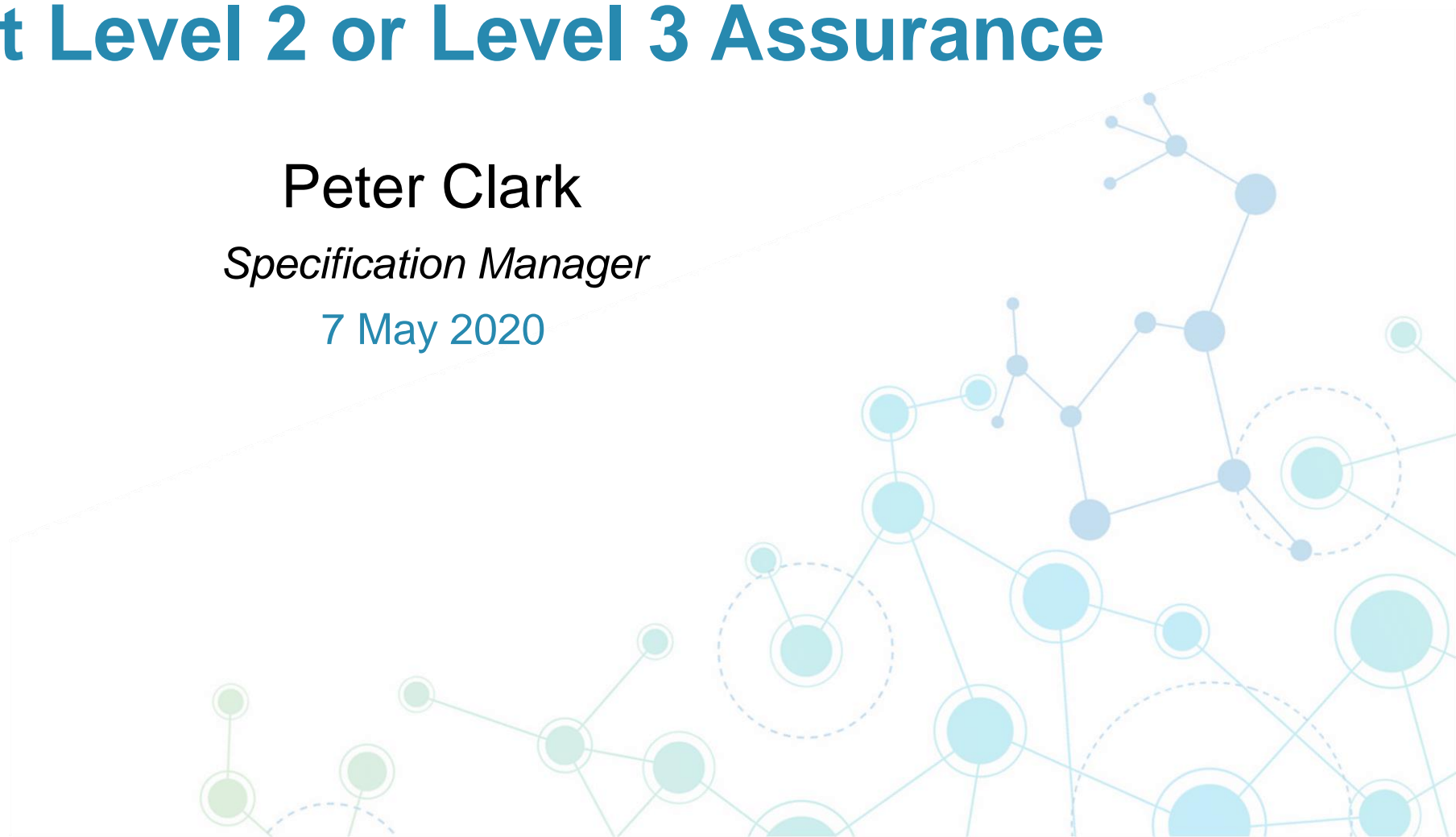


Requirements for Telematics Devices Used at Level 2 or Level 3 Assurance

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Specification Manager

7 May 2020



Purpose

- Present a revision of the *Telematics Device Functional and Technical Specification* ('Telematics Device Specification'), which now features two separate sets of requirements for telematics devices used at Level 2 Assurance or Level 3 Assurance.

Note: 'Telematics device' is the term now used rather than 'telematics in-vehicle unit', acknowledging that it may not be inside a vehicle.

- Present the convention for indicating optional requirements in this document.

Background

- The introduction of Level 2 Assurance applications through the National Telematics Framework has necessitated a fresh look at the functional and technical requirements of the Telematics Device Specification.
- Authorities and device suppliers have requested telematics device requirements that are appropriate for usage at Level 2 Assurance.
- Previous internal analysis in early 2019 identified functional and technical requirements for Level 2 Assurance *applications* (e.g. Telematics Monitoring Application).



Review

Characteristics of a telematics device used at Level 2 Assurance include (examples):

- No need for an independent movement sensor
- No need for a battery
- No need for an internal clock independent of external power supply
- Only needs to meet electromagnetic compatibility (EMC) environmental standards
- No need for HDOP or number of satellites to determine GNSS quality
- No need to meet applicable requirements if out of signal range
- No need to determine direction of travel (can estimate using two-position vector)
- No need for record numbering if record generation sequence can be reconstructed
- Resolution of vehicle speed data can be ≥ 1 km/h (not ≥ 0.1 km/h)
- Position and speed records only need to be stored for at least 6 hours.

Etcetera...

Review

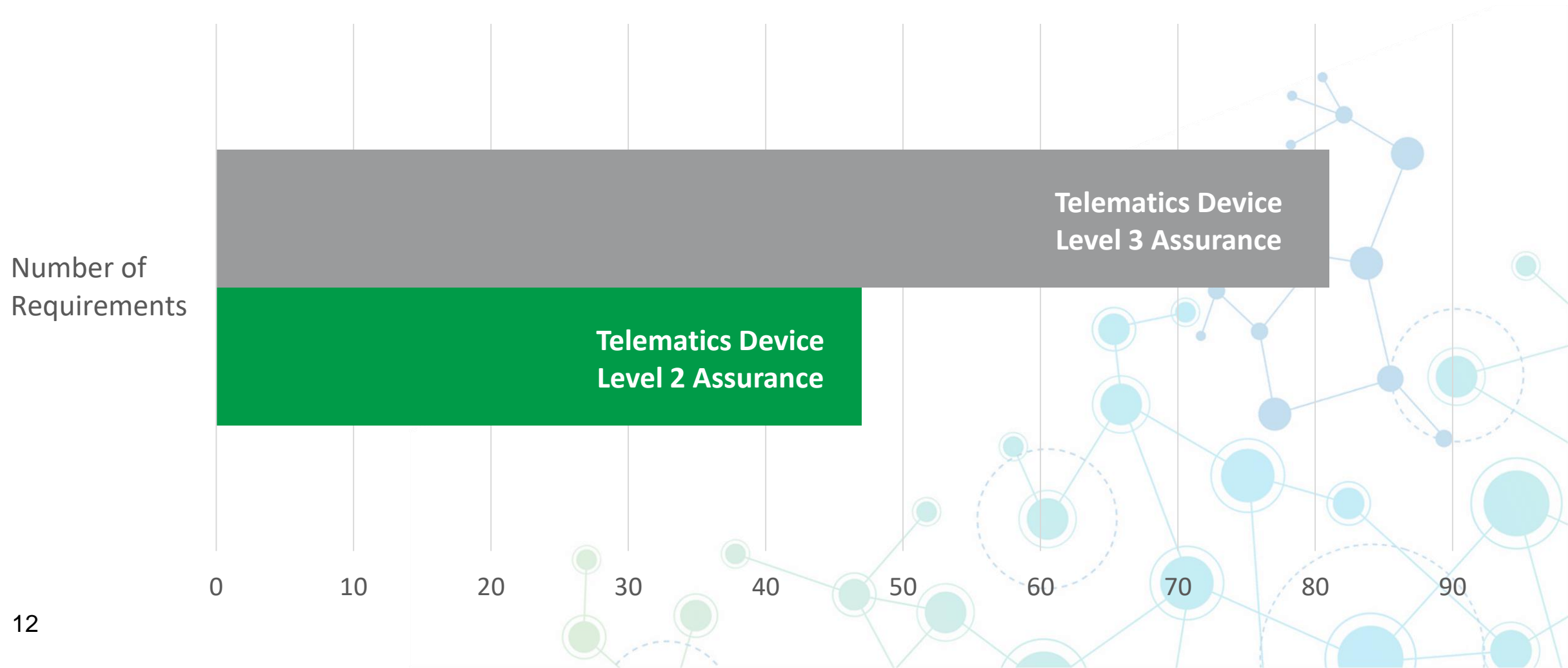
The review considered:

- **Use cases** and needs of Level 2 Assurance applications such as TMA
- The **capability** of telematics devices used by, or commercially available to, consumers to satisfy requirements necessary to support Level 2 Assurance applications
- Functional and technical **barriers** which may have impeded providers from obtaining type-approval of telematics devices used in Level 2 Assurance applications.

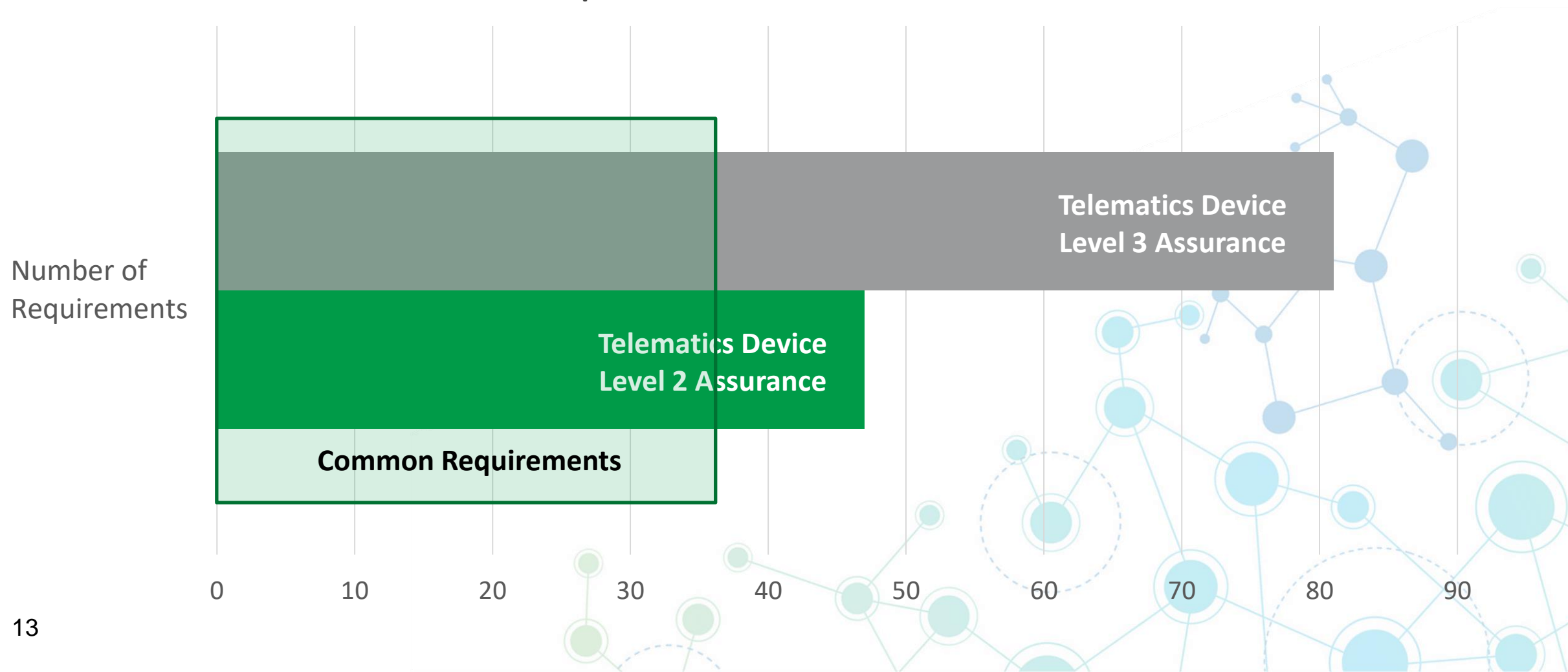


Review

Reduction in Telematics Device Requirements at Level 2 Assurance Compared with Level 3 Assurance



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Presentation of Requirements

Requirements for telematics devices used at Level 2 or 3 Assurance are presented in a single document:



Section 6: Common requirements for a telematics device used at either **Level 2 or Level 3 Assurance**



Section 7: Additional requirements for a telematics device used at **Level 2 Assurance**



Section 8: Additional requirements for a telematics device used at **Level 3 Assurance.**

This arrangement provides an easier pathway for any provider or supplier wishing to upgrade approval for a telematics device used at Level 2 Assurance to usage at Level 3 Assurance.

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Optional Requirements

- Requirements for speed data and data records are optional, since not all applications include speed data records.
- Optional requirements are now marked with an asterisk within parentheses (*) at the beginning of the requirement.
- The choice for whether to support this functionality or not will depend upon the business case assessed by the provider, taking into account the types of telematics applications and schemes the provider may support.



We're Here to Help

TCA will assist applicants in the determination of:

- which level of assurance a telematics device should be assessed at, as well as
- which optional requirements will apply.

The determination will be based on current and future use of the telematics device to support applications of the National Telematics Framework.



Any questions?

TCA's priorities going forward



Key objectives from TCA's new Strategic Plan include:

- Enable improved public purpose outcomes from road transport
- Administer an assurance framework that supports multiple assurance models and applications
- Increase the number and range of vehicles enrolled in telematics applications
- Develop our digital infrastructure to address emerging data demands and requirements
- Provide support for evolving and emerging transport technologies
- Evolve our business practices and capabilities to meet changing requirements

What would you like to see?

Supporting road network resilience with good data

- Australia's networks hit by multiple critical events
- How have transport and logistics adapted
- What have road managers done to support adaptation and resilience – what worked well?
- Heavy vehicle data can tell a story
- Want to work with partners to explore.