

FACT SHEET TELEMATICS



What is telematics?

The term *telematics* is the integrated use of telecommunications and informatics. More specifically it is the science of sending, receiving and storing information via telecommunication devices.

Telematics is applied specifically to the use of Global Navigational Satellite Systems (GNSS) (such as the Global Positioning System) integrated with computers and mobile communications technology. However, telematics is also used to refer to the use of such systems within road vehicles in which case the term vehicle telematics is also commonly used.

How are vehicles monitored?

This is achieved through an in-vehicle device, that includes a GNSS receiver (for positioning the vehicle on the Earth's surface) and a communication device (e.g. GPRS) for transmitting the vehicle position data to the end-user or service provider. The in-vehicle device can monitor other information pertaining to the vehicle.

How is telematics used in the road transport industry?

Many vehicles including road transport vehicles already use telematics for commercial purposes.

When used in a commercial environment, vehicle telematics can be a powerful and valuable tool to improve the efficiency, effectiveness, security and safety of vehicles, drivers, and transport companies.

It facilitates the effective management of a variety of factors such as routes, speeds and loads, to improve safety, productivity and reduce vehicle wear, transportation times and overall operational costs. Some practical applications of commercial vehicle telematics include:

- (a) *Vehicle monitoring* – is a way of monitoring the position, movement, status and behaviour of a vehicle or fleet of vehicles.

More specifically, it can be used to monitor compliance against company policies, such as speed, route and driving hours compliance, etc.

It provides the ability for a transport operator to remotely monitor their drivers' compliance with company policies relating to on-road behavior, accreditation requirements and regulations (e.g. compliance with speed limits). Additionally, it can provide an excellent and real-time means of optimising operational performance, such as pick-up and delivery times and schedules.

- (b) *Security monitoring* – this monitors vehicle and consignment access, vehicle tampering, tampering or removal of the in-vehicle device, tracking and recovering stolen vehicles, and the ability to disable a vehicle if, for example, it is stolen. It can also offer emergency and driver distress alarm notification.
- (c) *Operational performance monitoring* – used to monitor engine transmission performance, for example, over revving the engine, service intervals, fuel consumption, axle and transmission temperatures system voltages. It can also be used to monitor trailer parameters such as consignment refrigeration temperature, etc.

Who provides telematics services?

Commercial telematics providers are commonly available.

Transport Certification Australia Limited (TCA) has been working with commercial telematics providers in the development and implementation of the Intelligent Access Program (IAP).

The IAP augments commercial telematics to provide evidentiary level service provision. Most commercial telematics providers are members of the TCA IAP Focus Group and their contact details can be found on the TCA website.

For more information on Transport Certification Australia and Intelligent Access Program visit www.tca.gov.au or send an email to tca@tca.gov.au.

While at the TCA website, register to the News Alert service to receive regular news and updates on the IAP.

www.tca.gov.au

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