

Point to Point Transport (Taxis and Hire Vehicles) Regulation 2017

**Clause 3 Approved security camera system specifications
Clause 3 Approved vehicle tracking device specifications
Clause 16 (1) (a) Duress alarm system specifications**

I, Timothy Reardon, Secretary of the Department of Transport, for and on behalf of Transport for NSW, pursuant to clauses 3 and 16 of the *Point to Point Transport (Taxis and Hire Vehicles) Regulation 2017*, hereby determine that the approved security camera system specifications for taxis, approved vehicle tracking device specifications and approved duress alarm system specifications effective 1 November 2017 shall be as set out hereunder.

1. Interpretation

Authorised person means a person authorised by an authorised taxi service provider to access images, a police officer, or an authorised officer (a person appointed by the Point to Point Transport Commissioner to exercise the functions of an authorised officer under the *Point to Point Transport (Taxis and Hire Vehicles) Act 2016* and the *Point to Point Transport (Taxis and Hire Vehicles) Regulation 2017*).

Electromagnetic conformance means standards associated with the emission of undesired radio frequency energy by devices and the level of susceptibility of a device to similar energy.

GPS means Global Positioning System

IP Rating means the level of ingress protection (IP). An IP rating of 67 (IP67) means that the device is resistant against water ingress to a maximum of 1 metre of water for up to 30 minutes, as well as protected against dust ingress.

Monitoring facility means the facility used by the authorised taxi service provider to monitor vehicle tracking devices, duress alarms and/or access images from security camera systems.

Regulation means the *Point to Point Transport (Taxis and Hire Vehicles) Regulation 2017*.

UTC means the time reference used by GPS receivers (Coordinated Universal Time).

Vehicle position report means data sent from the taxi and received by the monitoring facility that must include the vehicle's registration number, its position, speed (in km/h), direction of travel and the time it provides the report.

2. Approved security camera system specifications

System environmental requirements

- 2.1 The camera system must be operational in an environment over:
 - a) a temperature range of -5°C to +60°C; and
 - b) humidity range of 0 to 85 per cent relative humidity, non-condensing.
- 2.2 The camera system must be impact and shock resistant, sufficient to withstand a typical car accident and the vibration experienced during the normal operation of a taxi.
- 2.3 The camera system must conform to the following relevant electromagnetic conformance standards:
 - a) AS/NZS CISPR 25:2010

- b) ISO 10605:2008
 - c) ISO 7637-2:2011
- 2.4 Images must be capable of being recovered following loss of power to the camera system.
- 2.5 All camera system connection points and components mounted to the exterior of a taxi must meet or exceed the IP67 rating.

Camera system operation

- 2.6 The camera system must be powered and fully operational when the vehicle ignition is on or when the taxi is available for hire (for example at a taxi rank) and the ignition is not otherwise on.
- 2.7 The boot time for the camera system from 'power on' to recording images must be less than 45 seconds, and the system must continue to record for a period of 30 minutes after the ignition has been turned off.
- 2.8 The camera system must not allow any unauthorised person to turn off or in any way disable the camera system from inside the vehicle.
- 2.9 The camera system must have a visual indicator showing when the system is operational and when there is a malfunction. The visual indicator must be visible to the driver when seated in the driver position.
- 2.10 When 'powered on' the camera system must employ a self-test methodology to automatically detect and report functional faults, which must include a test for lack of image from any camera due to external interference or obstruction.
- 2.11 A camera (other than a camera fitted to the exterior of a vehicle) must be visible to passengers in the vehicle.
- 2.12 A camera (other than a camera fitted to the exterior of a vehicle) must at all times provide a clear view of the front of the taxi driver and the head and shoulders of all passengers.
- 2.13 Two externally mounted cameras shall separately provide a view of any persons approaching between 300 mm and 5 m distant from both the driver's and front passenger's window within an angle of approach of 120° from the centre of the door.
- 2.14 The camera system must record continuously and store images for at least 168 hours.
- 2.15 The camera system must use non-volatile memory to store all captured images. If the camera system has removable memory then it must only be able to be removed by authorised persons.
- 2.16 The recording system must be configured so that the recording medium automatically commences re-recording when the medium has reached its recording capacity. The oldest images must be overwritten first.
- 2.17 The camera system must record a minimum of 5 images per second.

Images

- 2.18 Images from camera systems must comply with section 3.7 (Recommended object sizes) of Australian Standard AS 4806.2—2006 Closed Circuit Television (CCTV) (Part 2 Application guidelines) in relation to face identification of the driver and all passengers in the taxi.
- 2.19 The stored image from all cameras must record a minimum of 360 pixels per metre both horizontally and vertically.
- 2.20 The camera system must store colour images or images with a minimum of 256 greyscale levels.

- 2.21 The images must be in focus at any distance from the lens between 300 mm and 3m for internal camera head(s) and 300 mm to 5m for the external cameras.
- 2.22 The resolution and clarity of the recorded images from a camera must be maintained under all lighting conditions from darkness (0 lux) through to bright sunlight (100,000 lux).
- 2.23 All images (either displayed on a computer device or printed) must have imprinted on them the following metadata (without obstructing the view of any occupant in a seated position in the vehicle):
 - a. the vehicle registration number; and
 - b. date and time in UTC within 1 second; and
 - c. location in coordinates of latitude and longitude accurate to within 25 metres 95 per cent of the time.

Accessing images

- 2.24 A person who supplies a camera system must provide software to the monitoring facility that enables authorised persons to access and download images from the camera system.
- 2.25 The software provided by the supplier must be able to operate on a commercial off-the-shelf computer device or the supplier must provide a download system to the monitoring facility.
- 2.26 The download software must be password protected and stored images encrypted to prevent unauthorised viewing, recovery or reproduction of images.
- 2.27 If an image is stored on the hard drive of a computer, or in logical pools or across disparate commodity servers located on premises or in a data centre managed by a third-party cloud provider, access to the image must be password protected and stored images encrypted so that it can only be viewed, copied, deleted, printed or otherwise reproduced by an authorised person.
- 2.28 A video recording made by a security camera system fitted to a taxi must be kept in a form that may be accessed from, or made available in, this state.

3. Duress alarms systems

- 3.1 A compliant duress alarm system (alarm system) must be fitted in taxis which provide a service in certain NSW transport districts according to the Regulation.
- 3.2 The alarm system must be powered and fully operational when the vehicle ignition is on or when the taxi is available for hire (for example at a taxi rank) and the ignition is not otherwise on.
- 3.3 The boot time for the alarm system from 'power on' must be less than 30 seconds.
- 3.4 When the duress alarm system is activated, the vehicle position report must be sent immediately to the monitoring facility. The vehicle position report must be re-sent at least every 5 seconds or until the alarm is disarmed.
- 3.5 The duress alarm must be able to be readily activated by the driver while seated in the driver's seat.
- 3.6 Upon activation of the duress alarm the driver must be able to communicate directly with the monitoring facility.

4. Approved vehicle tracking device

- 4.1 An approved vehicle tracking device (tracking device) must be fitted in taxis which provide a service in certain NSW transport districts according to the Regulation.
- 4.2 The tracking device must be powered and fully operational when the vehicle ignition is on or when the taxi is available for hire (for example at a taxi rank) and the ignition is not otherwise on.
- 4.3 The boot time for the tracking device from 'power on' must be less than 30 seconds.
- 4.4 The tracking device must not allow any person to turn it off or in any way disable the tracking device from inside the vehicle.
- 4.5 Upon activation of the tracking device by the driver, a vehicle position report must be transmitted to the monitoring facility.
- 4.6 The vehicle position report must include the vehicle's registration number, its position, speed (in km/h), direction of travel and the time each report is sent.
- 4.7 The tracking device must be capable of sending a vehicle position report regardless of the taxi duress alarm status.
- 4.8 The vehicle position report must use current GPS positioning data each time it is sent.

DATED: 18 October 2017

Timothy Reardon
Secretary