

Safe Driving

Occupant Monitoring

Protocol

Implementation January 2026

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PREFACE

During the test preparation, vehicle manufacturers are encouraged to liaise with the laboratory and to check that they are satisfied with the way cars are set up for testing. Where a manufacturer feels that a particular item should be altered, they should ask the laboratory staff to make any necessary changes. Manufacturers are forbidden from making changes to any parameter that will influence the test, such as dummy positioning, vehicle setting, laboratory environment etc.

It is the responsibility of the test laboratory to ensure that any requested changes satisfy the requirements of Euro NCAP. Where a disagreement exists between the laboratory and manufacturer, the Euro NCAP secretariat should be informed immediately to pass final judgment. Where the laboratory staff suspect that a manufacturer has interfered with any of the set up, the manufacturer's representative should be warned that they are not allowed to do so themselves. They should also be informed that if another incident occurs, they will be asked to leave the test site.

Where there is a recurrence of the problem, the manufacturer's representative will be told to leave the test site and the Secretary General should be immediately informed. Any such incident may be reported by the Secretary General to the manufacturer and the person concerned may not be allowed to attend further Euro NCAP tests.

DISCLAIMER: Euro NCAP has taken all reasonable care to ensure that the information published in this protocol is accurate and reflects the technical decisions taken by the organisation. In the unlikely event that this protocol contains a typographical error or any other inaccuracy, Euro NCAP reserves the right to make corrections and determine the assessment and subsequent result of the affected requirement(s).

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DEFINITIONS

Journey – A journey starts with activation of the master control switch and lasts until the deactivation of the master control switch and the driver's door being opened.

Vehicle master control switch – Means the device by which the vehicle's on-board electronics system is brought from being switched off, as in the case where a vehicle is parked without the driver being present, to a normal operation mode.

Adult occupant – Means a person of any age with a mass or stature as of at least 47kg and 140cm defined under the UN Regulation No. 16 lower boundary.

Six year old child occupant – Means a person with a mass or stature of that of a 95th percentile 6yo child, 28kg or 125cm respectively. Growth Charts - 2000 CDC Growth Charts - United States.

Direct sensing – The ability to detect the presence of a human inside the vehicle by means of tracking heartbeat, respiration, movement, or any other sign of life. Direct sensing may or may not allow categorisation and localisation of the subject(s).

Vehicle key – A device with which a vehicle can be locked or unlocked and is required inside the vehicle to operate. Can be physical device or an app on a mobile phone.

Child safety locks – For the purposes of this protocol only, Euro NCAP uses the same definition for child safety locks as that detailed in UN Regulation No. 11.

Child Safety Lock System is a locking device which can be engaged and released independently of other locking devices and which, when engaged, prevents operation of the interior door handle or other release device. The lock release/engagement device may be manual or electric and may be located anywhere on or in the vehicle.

SCORING

Occupant monitoring assessment	Total points 25
Seatbelt Usage	25

1 SEATBELT USAGE

Seatbelt Usage assessment	Total points 25
Seatbelt Reminder	25

1.1 General requirements

The seatbelt reminder system must start at the commencement of each 'journey' (excluding the initialisation period) that the vehicle makes. Short breaks in the journey are allowed where the reminder system is not required to start again. Such short breaks, of up to 30 seconds, are to allow for events such as stalling of the engine where passengers may remain in the vehicle.

All seatbelt reminder systems shall be audio-visual with a clear and obvious link between the audible and visual signals. As soon as the audible part of the seatbelt reminder signal starts, the visual signal must flash and be synchronised (not necessarily at the same frequency, but an integer multiple of each other, e.g. two flashes with every chime) with the audible part.

1.1.1 Visual signal

Any visual signal must be clearly visible to the driver, without the need for the head to be moved from the normal driving position (e.g. instrument panel, head-up display, rear-view mirror, centre console).

The visual signal must remain while the seatbelt is not fastened or is worn incorrectly. If a belt has been buckled, the signal must recommence once a seatbelt is unbuckled.

1.1.2 Audible signal

A 'loud and clear' audible signal is to be deployed before at least one of the following (at the choice of the manufacturer):

- The car has reached a forward speed of 40 km/h, or
- The engine has been running for 90 seconds, or
- The car has been in "Forward Motion" for 90 seconds, or
- The car has been in "Forward Motion" for 1000 meters, or
- The regulatory second level warning is finished.

The duration of the audible signal must be at least 90 seconds not counting gaps exceeding 3 seconds and must start with a positive audible signal (not a gap). There must be no gaps greater than 10 seconds.

1.1.3 End of signal

Once the audible part of the SBR signal has started, it must continue while the seatbelt is unbuckled or incorrectly worn. The signal must only stop when the signal has operated for the required duration or when the related belts are buckled and worn correctly.

1.1.4 Occupant detection

In the case of the driver's seat, occupancy can be assumed, therefore the system does not have to be capable of detecting whether or not the seat is in use. For all front seat adult passengers, seat use must be detected.

1.1.5 Secondary buckles

Monitoring of any seat belt secondary buckles is required. Secondary buckles that require a tool to unlock, do not require monitoring.

1.1.6 Airbag deactivation switch

There must be no link between the front seat passenger airbag and the front seat passenger SBR signals. It is NOT acceptable to Euro NCAP for the passenger's seat SBR to be disabled via the passenger airbag switch.