ACEA

European
Automobile
Manufacturers
Association

REVISION OF THE GENERAL SAFETY REGULATION

PASSENGER CARS AND VANS

FRONTAL FULL WIDTH IMPACT

What is it about? Strengthening the safety systems of a vehicle for a car-to-car frontal impact collision with an overlap of 100%.

Effectiveness? Proven to be effective.

Supported by ACEA?

✓

DROWSINESS AND ATTENTION DETECTION

What is it about? Safety systems to assess the driver's alertness (for example by monitoring how long someone has been driving) and warn the driver to take a break when needed.

Effectiveness? Can make a real difference.

Supported by ACEA?

✓

ALCOHOL INTERLOCK INSTALLATION FACILITATION

What is it about? Providing a standardised interface description to facilitate the fitment of alcohol-interlock devices in motor vehicles; eg to prevent recidivist drunk drivers from operating a vehicle under the influence of alcohol.

Effectiveness? Enables installation of interlock without driving up car prices.

Supported by ACEA?

✓

AUTONOMOUS EMERGENCY BRAKING

What is it about? Autonomous emergency braking (AEB) systems start warning or braking automatically if a collision is imminent and the driver is not taking any action (or not fast enough).

Effectiveness? Very effective. AEB can detect a potential collision and activate the brakes to avoid a collision, or at least to mitigate the impact.

Supported by ACEA?

✓

REVERSING DETECTION

What is it about? Detection technology (eg a camera or sensors) to make the driver aware of people and objects at the rear of the vehicle when reversing.

Effectiveness? For passenger cars and vans, this is an effective way of drawing the attention of the driver to vulnerable road users, such as pedestrians.

Supported by ACEA?

✓

EMERGENCY STOP SIGNAL

What is it about? Flashing brake lights (or comparable solutions) to indicate to other road users behind the vehicle that the driver is breaking heavily / rapidly slowing down.

Effectiveness? Good way to alert other road users.

Supported by ACEA?

✓

REAR IMPACT

What is it about? Strengthening the structure (eg passenger compartment and fuel tank) of a vehicle for a car-to-car rear impact collision.

Effectiveness? These design measures can limit the effect of a crash significantly.

Supported by ACEA?

✓

LANE KEEPING SYSTEMS

What is it about? Safety systems that warn the driver if he or she leaves a marked lane without using the indicator or if the vehicle is drifting out of its travel lane.

Effectiveness? Very effective, but there is no evidence that lane keeping assistance (LKA) is more effective than lane departure warning (LDW).

Supported by ACEA?

– ACEA believes that the requirement should be technology-neutral and that lane departure warning should be added as an alternative.

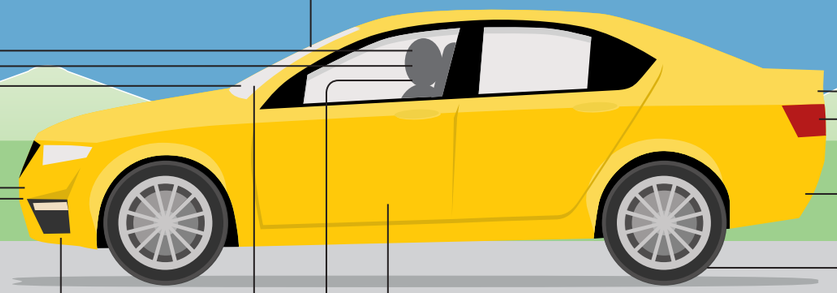
TYRE PRESSURE MONITORING

What is it about? Systems that monitor the air pressure of the tyres and report this information in real time to the driver, eg a 'low pressure' warning light.

Effectiveness? Can prevent accidents caused by under-inflated tyres.

Supported by ACEA?

– ACEA believes that the requirement should be technology-neutral, allowing for both direct and indirect systems.



COMPLEX PROCEDURES TO SWITCH OFF SYSTEMS

What is it about? Proposal to switch off safety systems only one at a time, at standstill and with the parking brake engaged, following a complex sequence of actions.

Effectiveness? Not recommended, as there are still specific situations in which systems have to be switched off. Should remain possible (see UNECE regulation).

Supported by ACEA?

✗

FRONTAL OFF-SET IMPACT (<3.5T)

What is it about? Strengthening the structure of a vehicle for a car-to-car frontal impact collision with an overlap of 40%.

Effectiveness? Heavy vehicles (eg vans and SUVs) risk jeopardising the safety of smaller cars. Moreover, heavier vehicles already have a high level of occupant protection.

Supported by ACEA?

✗

SIDE IMPACT (<3.5T)

What is it about? Strengthening the structure of a vehicle for side-impact accident types.

Effectiveness? Heavy vehicles (eg vans and SUVs) risk jeopardising the safety of smaller cars. Moreover, heavier vehicles already have a high level of occupant protection.

Supported by ACEA?

✗

ADVANCED DISTRACTION RECOGNITION

What is it about? Safety systems capable of recognising the level of visual attention of the driver to the traffic situation and warning the driver if needed.

Effectiveness? Technology to identify a 'distracted' driver has strong limitations, as everybody drives differently. Facial recognition is also hampered by practical issues such as reflective glasses. Finally, using cameras to monitor drivers also raises serious privacy concerns.

Supported by ACEA?

✗ Effective alternatives are enforcement, driver education, autonomous emergency braking, lane keeping systems, etc.

INTELLIGENT SPEED ASSISTANCE (ISA)

What is it about? Systems that actively prevent drivers from exceeding the speed limit using road-sign recognition cameras and GPS-linked speed limit databases.

Effectiveness? In practice, ISA systems still show too many false warnings due to incorrect road signs or outdated information – something that most consumers would not accept. Moreover, cameras cannot anticipate all scenarios, eg when traffic signs are covered up.

Supported by ACEA?

✗ Speed limit information (SLI) systems are an effective alternative.

PEDESTRIAN AND CYCLIST ENLARGED HEAD IMPACT ZONE

What is it about? Including the windscreen of the vehicle (besides the bonnet, etc) in the so-called 'head impact zone'. In practice, this means that windscreens would have to be soft to reduce the impact.

Effectiveness? Very limited, as today's windscreens are already soft. Research shows that autonomous emergency braking systems are much more effective in protecting vulnerable road users than enlarging the head impact zone.

Supported by ACEA?

✗

SPEEDING: HOW CAN ACTIVE SAFETY HELP TO PREVENT ACCIDENTS?

Speeding is still the main cause in 30% of all fatal accidents on Europe's roads. Today's passenger cars come increasingly equipped with active safety systems to help drivers avoid speed-related traffic accidents.

Speed limit information (SLI) systems, for example, **inform the driver of the current speed limit by displaying it on the dashboard and/or navigation system**, using a camera to recognise road signs or speed-limit data from the navigation system (many combine both).

Looking ahead, **intelligent speed assistance (ISA)** technology holds promise for the future. ISA systems can actively **prevent drivers from exceeding the speed limit** using road-sign recognition cameras and GPS-linked speed limit databases.

Today, however, there are still many infrastructure-related issues holding back its widespread application.

In practice, ISA systems still show too many **false warnings due to incorrect or outdated information**. For example, because road signs are not harmonised across Europe. Digital maps are also not fully populated with speed limit information for all roads, and data are not always updated. Moreover, camera-based systems cannot anticipate all scenarios, such as when traffic signs are covered up.

ISA: INCORRECT OR OUTDATED SPEED-LIMIT INFORMATION

Contradicting speed limit signs

Digital maps not up-to-date

Poor visibility of signs

That is why ISA systems should be introduced gradually in cars to provide enough time to update our infrastructure, including new solutions for providing reliable information to the vehicle. In the meantime, **speed limit information (SLI) systems are an effective alternative**.

Visit **www.acea.be** for more information or contact us at **communications@acea.be**