Regulation (EU) 2019/2144 of the European Parliament and of the Council of 27 November 2019 on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 of the European Parliament and of the Council and Commission Regulations (EC) No 631/2009, (EU) No 406/2010, (EU) No 672/2010, (EU) No 1003/2010, (EU) No 1005/2010, (EU) No 1008/2010, (EU) No 1009/2010, (EU) No 19/2011, (EU) No 109/2011, (EU) No 458/2011, (EU) No 65/2012, (EU) No 130/2012, (EU) No 347/2012, (EU) No 351/2012, (EU) No 1230/2012 and (EU) 2015/166 (Text with EEA relevance)

REGULATION (EU) 2019/2144 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 27 November 2019

on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 of the European Parliament and of the Council and Commission Regulations (EC) No 631/2009, (EU) No 406/2010, (EU) No 672/2010, (EU) No 1003/2010, (EU) No 1005/2010, (EU) No 1008/2010, (EU) No 1009/2010, (EU) No 19/2011, (EU) No 109/2011, (EU) No 458/2011, (EU) No 65/2012, (EU) No 130/2012, (EU) No 347/2012, (EU) No 351/2012, (EU) No 1230/2012 and (EU) 2015/166

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee[(1)],

After consulting the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure[(2)],

Whereas:

(1) Regulation (EU) 2018/858 of the European Parliament and of the Council[(3)] lays down administrative provisions and technical requirements for the type-approval of all new vehicles, systems, components and separate technical units, with a view to ensuring the

proper functioning of the internal market and in order to offer a high level of safety and environmental performance.

(2) This Regulation is a regulatory act for the purposes of the EU type-approval procedure laid down by Regulation (EU) 2018/858. Therefore, Annex II to Regulation (EU) 2018/858 should be amended accordingly. The administrative provisions of Regulation (EU) 2018/858, including the provisions on corrective measures and penalties, are fully applicable to this Regulation.

(3) Over the past decades, developments in vehicle safety have contributed significantly to the overall reduction in the number of road fatalities and severe injuries. However, 25 300 people died on Union roads in 2017, a figure that has remained constant in the last four years. Moreover, 135 000 people are seriously injured in collisions every year[(4)]. The Union should do its utmost to reduce or to eliminate accidents and injuries in road transport. In addition to safety measures to protect vehicle occupants, the implementation of specific measures to prevent fatalities and injuries of vulnerable road users, such as cyclists and pedestrians, is needed to protect road users outside of the vehicle. Without new initiatives on general road safety, the safety effects of the current approach will no longer be able to off-set the effects of increasing traffic volumes. Therefore, the safety performance of vehicles needs to be further improved as part of an integrated road safety approach and in order to protect vulnerable road users better.

(4) Type-approval provisions should ensure that motor vehicle performance levels are assessed in a repeatable and reproducible manner. Therefore, the technical requirements in this Regulation only refer to pedestrians and cyclists, as only these presently exist as formally harmonised testing target subjects. Besides pedestrians and cyclists, vulnerable road users, in general, also include other non-motorised and motorised road users who might use personal mobility solutions without protective bodywork. Moreover, current technology creates a reasonable expectation that advanced systems will also react to other vulnerable road users under normal driving conditions, despite not being specifically tested. The technical requirements in this Regulation should be further adapted to technical progress following an assessment and review process in order to cover all road users who use personal mobility solutions without protective bodywork, such as scooters, self-balancing vehicles and wheelchairs.

(5) Technical progress in the area of advanced vehicle safety systems offers new possibilities for reducing casualty numbers. In order to minimise the number of severe injuries and fatalities, a set of new technologies needs to be introduced.

(6) Within the context of Regulation (EC) No 661/2009 of the European Parliament and of the Council[(5)], the Commission assessed the feasibility of extending the existing requirement in that Regulation to install certain systems (for example, advanced emergency braking systems and tyre pressure monitoring systems) in certain categories of vehicles so that it applied to all vehicle categories. The Commission also assessed the technical and economic feasibility and market maturity of imposing a new requirement to install other advanced safety features. Based on those assessments, the Commission published a report for the European Parliament and the Council on 12 December 2016 entitled ‘Saving Lives: Boosting Car Safety in the EU’. The Commission Staff Working

Document accompanying that report identified and put forward 19 potential regulatory measures that would be effective in further reducing the number of road accidents and road fatalities and injuries.

(7) To ensure technology neutrality, the performance requirements should allow both direct and indirect tyre pressure monitoring systems.

(8) Advanced vehicle systems can be more effective in reducing fatalities, decreasing the number of road accidents and mitigating injuries and damage if they are designed to be convenient for users. Therefore, vehicle manufacturers should do their utmost to ensure that the systems and features provided for in this Regulation are developed in such a way that supports the driver. The functioning of those systems and features and their limitations should be explained in a clear and consumer-friendly manner in the motor vehicle's user instructions.

(9) Safety features and warnings used in assisting driving should be easily perceivable by every driver, including the elderly and persons with disabilities.

(10) Advanced emergency braking systems, intelligent speed assistance, emergency lane# keeping systems, driver drowsiness and attention warning, advanced driver distraction warning and reversing detection are safety systems that have a high potential to reduce casualty numbers considerably. In addition, some of those safety systems form the basis of technologies which will also be used for the deployment of automated vehicles. Any such safety systems should function without the use of any kind of biometric information of drivers or passengers, including facial recognition. Therefore, harmonised rules and test procedures for the type-approval of vehicles as regards those systems and for the type#approval of those systems as separate technical units should be established at Union level. The technological progress of those systems should be taken into account in every evaluation of the existing legislation, in order to be future# proof, whilst strictly adhering to the principles of privacy and data protection, and to reduce or eliminate accidents and injuries in road transport. It is also necessary to ensure that those systems can be used safely throughout the life cycle of the vehicle.

(11) It should be possible to switch off intelligent speed assistance, for instance, when a driver experiences false warnings or inappropriate feedback as a result of inclement weather conditions, temporarily conflicting road markings in construction zones, or misleading, defective or missing road signs. Such a switch-off feature should be under the control of the driver. It should allow for intelligent speed assistance to be switched off for as long as necessary and to be easily switched back on by the driver. When the system is switched off, information about the speed limit may be provided. The system should be always active when switching the ignition on and the driver should always be made aware of whether the system is on or off.

(12) It is widely recognised that safety-belts are one of the most important and effective vehicle safety features. Safety-belt reminder systems therefore have the potential to further prevent fatalities or mitigate injuries by increasing the safety-belt wearing rates across the Union. For that reason, under Regulation (EC) No 661/2009 the safety-belt reminder system was made compulsory for the driver seat in all new passenger cars from 2014 in implementation of United Nations (UN) Regulation No 16, which established

the relevant technical provisions. As a result of the amendment of that UN Regulation to take account of technical progress, it is obligatory to fit all front and rear seats of M_1 and N_1 vehicles, as well as all front seats of N_2, N_3, M_2 and M_3 vehicles, with safety-belt reminder systems from 1 September 2019 for new types of motor vehicles and 1 September 2021 for all new motor vehicles.

(13) The introduction of event data recorders storing a range of crucial anonymised vehicle data, accompanied by requirements for data range, accuracy, resolution and for its collection, storage and retrievability over a short timeframe before, during and immediately after collision (for example, triggered by the deployment of an airbag) is a valuable step in obtaining more accurate, in-depth accident data. All motor vehicles should therefore be required to be equipped with such recorders. Those recorders should be capable of recording and storing data in such a way that the data can only be used by Member States to conduct road safety analysis and assess the effectiveness of specific measures taken without the possibility of identifying the owner or the holder of a particular vehicle on the basis of the stored data.

(14) Any processing of personal data, such as information about the driver processed in event data recorders or information about the driver's drowsiness and attention or the driver's distraction, should be carried out in accordance with with Union data protection law, in particular Regulation (EU) 2016/679 of the European Parliament and of the Council[(6)]. Event data recorders should operate on a closed-loop system, in which the data stored is overwritten, and which does not allow the vehicle or holder to be identified. In addition, the driver drowsiness and attention warning or advanced driver distraction warning should not continuously record nor retain any data other than what is necessary in relation to the purposes for which they were collected or otherwise processed within the closed-loop system. Furthermore, the processing of personal data collected through the 112-based eCall in-vehicle system is subject to specific safeguards set out in Regulation (EU) 2015/758 of the European Parliament and of the Council[(7)].

(15) Advanced emergency braking systems or emergency lane-keeping systems might not be fully operational in some cases, in particular due to shortcomings in road infrastructure. In those cases, the systems should deactivate themselves and give information about the deactivation to the driver. If they do not deactivate automatically, it should be possible to switch them off manually. Such deactivation should be temporary and should only last for the period when the system is not fully operational. Drivers might also need to override advanced emergency braking system or emergency lane keeping system where the functioning of the system could lead to greater risk or harm. This would ensure that the vehicles are under the driver's control at all times. Nevertheless such systems could also recognise instances where the driver is incapacitated and intervention by the system is therefore needed in order to prevent an accident being worse than it would otherwise be.

(16) Regulation (EC) No 661/2009 exempted vans, sport utility vehicles (SUVs) and multi# purpose vehicles (MPVs) from safety requirements due to seating height and vehicle mass characteristics. Given the increased rate of market penetration of such vehicles (up from only 3 % in 1996 to 14 % in 2016) and the technological developments in post-

crash electric safety checks, those exemptions are outdated and unjustified. Therefore, the exemptions should be removed and the whole range of advanced vehicle system requirements should be applied to those vehicles.

(17) Regulation (EC) No 661/2009 achieved significant simplification of Union legislation by replacing 38 Directives with equivalent UN Regulations that are mandatory under Council Decision 97/836/EC[8]. In order to achieve further simplification, more Union rules should be replaced with existing UN Regulations that apply in the Union on a compulsory basis. Furthermore, the Commission should promote and support the on-going work at UN level in order to establish, without any delay, and in accordance with the highest road safety standards available, technical requirements for the type-approval of the vehicle safety systems provided by this Regulation.

(18) UN Regulations and the amendments thereto which the Union has voted in favour of or that the Union applies, in accordance with Decision 97/836/EC, should be incorporated within the Union type-approval legislation. Accordingly, the power should be delegated to the Commission to amend the list of UN Regulations that apply on a compulsory basis to ensure that that list is kept up-to-date.

(19) Regulation (EC) No 78/2009 of the European Parliament and of the Council[9] sets out requirements for the protection of pedestrians, cyclists and other vulnerable road users in the form of compliance tests and limit values for the type-approval of vehicles with regard to their front structure and for the type-approval of frontal protection systems (for example, bull-bars). Since the adoption of Regulation (EC) No 78/2009, technical requirements and test procedures for vehicles have developed further at UN level to take account of technical progress. UN Regulation No 127 laying down uniform provisions concerning the approval of motor vehicles with regard to their pedestrian safety performance ('UN Regulation No 127') currently also applies in the Union in respect to type-approval of motor vehicles.

(20) Following the adoption of Regulation (EC) No 79/2009 of the European Parliament and of the Council[10], the technical requirements and test procedures for the type-approval of hydrogen-powered vehicles and hydrogen systems and components, have been further developed at UN level to take account of technical progress. UN Regulation No 134 on uniform provisions concerning the approval of motor vehicles and their components with regard to the safety-related performance of hydrogen-fuelled vehicles (HFCV)[11] ('UN Regulation No 134') currently also applies in the Union in respect of type-approval of hydrogen systems in motor vehicles. In addition to those requirements, criteria for the quality of the materials and fuelling receptacles used in hydrogen vehicle systems should be established at Union level.

(21) In the interests of clarity, rationality and simplification, Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 should be repealed and replaced by this Regulation.

(22) Historically, Union rules have limited the overall length of truck combinations, which resulted in the typical cab-over-engine designs as they maximise the cargo space. However, the high position of the driver led to an increased blind-spot area and poorer direct visibility around the truck cab. This is a major factor in truck accidents involving