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A8-0151/110

Amendment 110

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on behalf of the Committee on the Internal Market and Consumer Protection

Report

A8-0151/2019

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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
(COM(2018)0286 – C8-0194/2018 – 2018/0145(COD))

Proposal for a regulation

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AMENDMENTS BY THE EUROPEAN PARLIAMENT*

to the Commission proposal

REGULATION (EU) 2019/...

OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of ...

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 and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009

(Text with EEA relevance)

* Amendments: new or amended text is highlighted in bold italics; deletions are indicated by the symbol **■**.

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 Committee¹,

After consulting the Committee of the Regions **■**,

Acting in accordance with the ordinary legislative procedure²,

Whereas:

- (1) Regulation (EU) 2018/**858** of the European Parliament and of the Council³ **■** lays down administrative provisions and technical requirements for the type-approval of 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.

¹ OJ C 440, 6.12.2018, p. 90.


² Position of the European Parliament of ... (not yet published in the Official Journal) and decision of the Council of ...

³ Regulation (EU) 2018/**858** of the European Parliament and of the Council on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) No 715/2007 and (EC) No 595/2009 and repealing Directive 2007/46/EC (OJ L 151, 14.6.2018, p. 1)

- (2) This Regulation is a regulatory act for the purposes of the EU type-approval procedure laid down by Regulation (EU) 2018/858, **and consequently** 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 in 2017 on Union roads, a figure that has stagnated in the last four years. Moreover, 135 000 people are seriously injured in collisions every year¹. The Union should do its utmost to reduce or to eliminate accidents and injuries in road transport. In addition to the 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 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.

¹ https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/vademecum_2018.pdf

- (4) *Type-approval provisions should ensure that motor vehicle performance levels must be 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 that may 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 should be further adapted to the technical progress following assessment and review process in order to cover all road users without protective bodywork, such as scooters, self-balancing vehicles and wheelchair users.*

- (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 package* of the relevant new technologies need to be introduced.
- (6) Within the context of Regulation (EC) No 661/2009 of the European Parliament and of the Council¹, 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 vehicle 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 in December 2016 entitled "Saving Lives: Boosting Car Safety in the EU" . The 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.

¹ Regulation (EC) No 661/2009 of the European Parliament and of the Council of 13 July 2009 concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 200, 31.7.2009, p. 1).

- (7) *To ensure technology neutrality as regards tyre pressure monitoring systems, the performance requirement should allow both direct and indirect tyre pressure monitoring systems.*
- (8) *The regulatory measures proposed can be more effective, in reducing fatalities, decreasing the number of road accidents and mitigating injuries and damage if they will be designed so as to be convenient for the 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 so as to support the driver. The functioning of the systems and features provided for in this Regulation 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 perceived 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 systems *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 be used for the deployment of automated vehicles too. *Any such safety system should function without 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, strictly adhering to the principle of privacy and data protection, and to reduce or to 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 the intelligent speed assistance, for instance, when a driver experiences false warnings or inappropriate feedback as a result of inclement weather conditions, temporary conflicting road markings in construction zones and misleading, defective or missing road signs. Such switch-off feature should be under the control of the driver, last as long as necessary and have the option of being easily switched 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 whether the system is on or off.*

(12) *It is widely recognised that the safety-belt is 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 this reason, the Regulation (EC) No 661/2009 made the safety-belt reminder system already compulsory for the driver seat in all new passenger cars since 2014. This was achieved through the implementation of UN Regulation 16 that contained the relevant technical provisions. Thanks to the adaptation to technical progress of that UN Regulation, it will now also become obligatory to fit all front and rear seats of M₁ and N₁ vehicles, as well as all front seats of N₂, N₃, M₂ and M₃ vehicles with safety-belt reminder systems as from 1 September 2019 for new types 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 *road accident* (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 advanced *driver* distraction, should be carried out in accordance with *Union* legislation on data protection, in particular *Regulation (EU) 2016/679 of the European Parliament and of the Council*¹. *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 driver 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 safeguards².

¹ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1).

² Regulation (EU) 2015/758 of the European Parliament and of the Council of 29 April 2015 concerning type-approval requirements for the deployment of the eCall in-vehicle system based on the 112 service and amending Directive 2007/46/EC (OJ L 123, 19.5.2015, p. 77).

(15) *Advanced emergency braking 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 last for a period when the system is not fully operational only. Drivers may 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 ensures that the vehicles are at all times under the driver's control. Nevertheless the systems could also recognise instances where the driver is incapacitated and therefore intervention by the system is needed in order to prevent the worsening of an accident.*

- (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 Regulations of the United Nations Economic Commission for Europe (UN Regulations) that are mandatory under Council Decision 97/836/EC¹. 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 United Nations 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.

¹ Council Decision 97/836/EC of 27 November 1997 (OJ L 346, 17.12.1997, p. 78).

- (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 it is kept up-to-date.
- (19) Regulation (EC) No 78/2009 of the European Parliament and of the Council¹ 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 approval of vehicles with regard to their front structure and for the 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 United Nations level to take account of technical progress. UN Regulation No 127² currently also applies in the Union in respect to type-approval of motor vehicles.

¹ Regulation (EC) No 78/2009 of the European Parliament and of the Council of 14 January 2009 on the type approval of motor vehicles with regard to the protection of pedestrians and other vulnerable road users, amending Directive 2007/46/EC and repealing Directives 2003/102/EC and 2005/66/EC (OJ L 35, 4.2.2009, p. 1).

² Regulation No 127 laying down uniform provisions concerning the approval of motor vehicles with regard to their pedestrian safety performance.

- (20) Following the adoption of Regulation (EC) No 79/2009 of the European Parliament and of the Council¹, the technical requirements and test procedures for the approval of hydrogen-powered vehicles and hydrogen systems and components, have been further developed at United Nations level to take account of technical progress. UN Regulation No 134² 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.

¹ Regulation (EC) No 79/2009 of the European Parliament and of the Council of 14 January 2009 on the type approval of hydrogen-powered motor vehicles and amending Directive 2007/46/EC (OJ L 35, 4.2.2009, p. 32).

² 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).

- (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 for truck accidents involving vulnerable road users. The number of casualties could be reduced significantly by improving direct vision. Requirements should therefore be introduced to improve the direct vision *so as to enhance the direct visibility of pedestrians, cyclists and other vulnerable road users from the driver's position, by reducing to the greatest possible extent the blind spots in front and to the side of the driver. Specificities of different categories of vehicles should be taken into account.*

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- (23) Automated vehicles may be able to make a huge contribution in reducing road fatalities since *more than* 90 per cent of road accidents are estimated to result from *some level of* human error. As automated vehicles will gradually be taking over tasks of the driver, harmonised rules and technical requirements for automated vehicle systems, *including in regard to verifiable safety assurance for automated vehicles decision-making*, should be adopted at Union level, *while respecting the principle of technological neutrality, and promoted at international level in the framework of the UNECE WP.29*.
- (24) *Road users like pedestrians and cyclists as well as drivers of non-automated vehicles that cannot receive electronic vehicle-to-vehicle information about the behaviour of an automated vehicle should be kept informed by conventional means as foreseen in UN Regulations or other regulatory acts as soon as possible after their entry into force.*

(25) Vehicle platooning has the potential to bring about safer, cleaner and more efficient transport in the future. In anticipation of the introduction of platooning technology and the relevant standards, a regulatory framework with harmonised rules and procedures will be needed. ■

(26) *The connectivity and automation of vehicles increase the possibility for unauthorised, remote access to in-vehicle data and illegal modification of software over-the-air; to take into account the upcoming risks resulting of that, UN Regulations or other regulatory acts on cyber security should be applied mandatory as soon as possible after their entry into force.*

- (27) *Software modifications can change vehicle functionalities in a significant manner. Harmonised rules and technical requirements for software modifications in line with the type-approval processes should be established. Therefore, UN Regulations or other regulatory acts on software update processes should be applied mandatory as soon as possible after their entry into force. However, those security measures should not compromise the obligations of the vehicle manufacturer to provide access to comprehensive diagnostic information and in-vehicle data relevant to repair and maintain a vehicle.*

- (28) The Union should continue to promote the development of technical requirements for tyre noise, rolling resistance and wet grip performance of tyres at the United Nations level. This is because UN Regulation No 117 now contains these detailed provisions. The process of adapting the requirements on tyres to take account of technical progress should ***be rapidly and ambitiously continued*** at United Nations level, in particular to ensure that tyre performance is also assessed at the end of a tyre's life in its worn ***condition*** and to promote the idea that tyres should meet the requirements throughout their life and not be replaced prematurely. Existing requirements in Regulation (EC) No 661/2009 relating to tyre performance should be replaced by equivalent UN Regulations.

(29) In order to ensure the effectiveness of this Regulation, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission to *supplement this Regulation* in respect of type-approval requirements concerning *advanced vehicle systems and to amend Annex II to take into account technical progress and regulatory developments*. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making¹. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

¹ OJ L 123, 12.5.2016, p. 1.

- (30) *In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council¹.*
- (31) In view of the alignment of the Union legislation referring to the regulatory procedure with scrutiny with the legal framework introduced by the Treaty on the Functioning of the European Union and in order to further simplify the Union legislation in the field of vehicle safety, the following Regulations should be repealed and replaced by *implementing* acts adopted under this Regulation:

¹ *Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).*

- Commission Regulation (EC) No 631/2009¹,
- Commission Regulation (EU) No 406/2010²,
- Commission Regulation (EU) No 672/2010³,
- Commission Regulation (EU) No 1003/2010⁴,

¹ Commission Regulation (EC) No 631/2009 of 22 July 2009 laying down detailed rules for the implementation of Annex I to Regulation (EC) No 78/2009 of the European Parliament and of the Council on the type-approval of motor vehicles with regard to the protection of pedestrians and other vulnerable road users, amending Directive 2007/46/EC and repealing Directives 2003/102/EC and 2005/66/EC (OJ L 195, 25.7.2009, p. 1).

² Commission Regulation (EU) No 406/2010 of 26 April 2010 implementing Regulation (EC) No 79/2009 of the European Parliament and of the Council on type-approval of hydrogen-powered motor vehicles (OJ L 122, 18.5.2010, p. 1).

³ Commission Regulation (EU) No 672/2010 of 27 July 2010 concerning type-approval requirements for windscreen defrosting and demisting systems of certain motor vehicles and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 196, 28.7.2010, p. 5).

⁴ Commission Regulation (EU) No 1003/2010 of 8 November 2010 concerning type-approval requirements for the space for mounting and the fixing of rear registration plates on motor vehicles and their trailers and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 291, 9.11.2010, p. 22).

- Commission Regulation (EU) No 1005/2010¹,
- Commission Regulation (EU) No 1008/2010²,
- Commission Regulation (EU) No 1009/2010³,
- Commission Regulation (EU) No 19/2011⁴,

¹ Commission Regulation (EU) No 1005/2010 of 8 November 2010 concerning type-approval requirements for motor vehicle towing devices and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 291, 9.11.2010, p. 36).

² Commission Regulation (EU) No 1008/2010 of 9 November 2010 concerning type-approval requirements for windscreen wiper and washer systems of certain motor vehicles and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 292, 10.11.2010, p. 2).

³ Commission Regulation (EU) No 1009/2010 of 9 November 2010 concerning type-approval requirements for wheel guards of certain motor vehicles and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 292, 10.11.2010, p. 21).

⁴ Commission Regulation (EU) No 19/2011 of 11 January 2011 concerning type-approval requirements for the manufacturer's statutory plate and for the vehicle identification number of motor vehicles and their trailers and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 8, 12.1.2011, p. 1).

- Commission Regulation (EU) No 109/2011¹,
- Commission Regulation (EU) No 458/2011²,
- Commission Regulation (EU) No 65/2012³,
- Commission Regulation (EU) No 130/2012⁴,

¹ Commission Regulation (EU) No 109/2011 of 27 January 2011 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council as regards type-approval requirements for certain categories of motor vehicles and their trailers as regards spray suppression systems (OJ L 34, 9.2.2011, p. 2).

² Commission Regulation (EU) No 458/2011 of 12 May 2011 concerning type-approval requirements for motor vehicles and their trailers with regard to the installation of their tyres and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 124, 13.5.2011, p. 11).

³ Commission Regulation (EU) No 65/2012 of 24 January 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council as regards gear shift indicators and amending Directive 2007/46/EC of the European Parliament and of the Council (OJ L 28, 31.1.2012, p. 24).

⁴ Commission Regulation (EU) No 130/2012 of 15 February 2012 concerning type-approval requirements for motor vehicles with regard to vehicle access and manoeuvrability and implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor (OJ L 43, 16.2.2012, p. 6).

- Commission Regulation (EU) No 347/2012¹,
- Commission Regulation (EU) No 351/2012²,
- Commission Regulation (EU) No 1230/2012³,
- Commission Regulation (EU) 2015/166⁴.

¹ Commission Regulation (EU) No 347/2012 of 16 April 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council with respect to type-approval requirements for certain categories of motor vehicles with regard to advanced emergency braking systems (OJ L 109, 21.4.2012, p. 1).

² Commission Regulation (EU) No 351/2012 of 23 April 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council as regards type-approval requirements for the installation of lane departure warning systems in motor vehicles (OJ L 110, 24.4.2012, p. 18).

³ Commission Regulation (EU) No 1230/2012 of 12 December 2012 implementing Regulation (EC) No 661/2009 of the European Parliament and of the Council with regard to type-approval requirements for masses and dimensions of motor vehicles and their trailers and amending Directive 2007/46/EC of the European Parliament and of the Council (OJ L 353, 21.12.2012, p. 31).

⁴ Commission Regulation (EU) 2015/166 of 3 February 2015 supplementing and amending Regulation (EC) No 661/2009 of the European Parliament and of the Council as regards the inclusion of specific procedures, assessment methods and technical requirements, and amending Directive 2007/46/EC of the European Parliament and of the Council, and Commission Regulations (EU) No 1003/2010, (EU) No 109/2011 and (EU) No 458/2011 (OJ L 28, 4.2.2015, p. 3).

- (32) Given that approvals issued in accordance with Regulation (EC) No 78/2009, Regulation (EC) No 79/2009, Regulation (EC) No 661/2009 and their implementing measures should be considered equivalent, unless the relevant requirements are changed by this Regulation or until they are modified by the implementing legislation, transitional provisions should ensure that such approvals are not invalidated.
- (33) As concerns the dates for refusal to grant EU type-approval, refusal of vehicle registration and prohibition of the placing on the market or entry into service of components and separate technical units, these dates should be laid down for each regulated item.

(34) Since the objective of this Regulation, namely ensuring the proper functioning of the internal market through the introduction of harmonised technical requirements concerning the safety and environmental performance of motor vehicles and their trailers, cannot be sufficiently achieved by the Member States and can therefore, by reason of its scale and effects, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective.

(35) Detailed technical requirements and *adequate* test procedures, *as well as provisions concerning uniform procedures and technical specifications*, for type-approval of motor vehicles and their trailers, and of systems, components and separate technical units should be laid down in delegated acts *and implementing acts sufficiently in advance* before *their* date of application *in order to allow enough time for* manufacturers **■** to adapt to the requirements of this Regulation and the delegated acts *and implementing acts* adopted pursuant to it. *Some vehicles are produced in small quantities. Therefore, it is appropriate that requirements set out in this Regulation and the delegated acts and implementing acts adopted pursuant to it take into account such vehicles or classes of vehicles where such requirements are incompatible with the use or design of such vehicles, or where the additional burden imposed by them is disproportionate.* Therefore, the application of this Regulation should be deferred,

HAVE ADOPTED THIS REGULATION:

CHAPTER I
SUBJECT MATTER, SCOPE AND DEFINITIONS

Article 1

Subject matter

This **Regulation** establishes requirements:

- (a) for the type-approval of vehicles, and systems, components and separate technical units designed and constructed for vehicles, with regard to their general characteristics and safety, and to the protection **and safety** of vehicle occupants and vulnerable road users;
- (b) for the type-approval of vehicles, in respect of tyre pressure monitoring systems, with regard to their safety, fuel efficiency and CO₂ emissions; and
- (c) for the type-approval of newly-manufactured tyres with regard to their safety and environmental performance.

Article 2

Scope

This Regulation applies to vehicles of categories M, N and O, as defined in Article 4 of Regulation (EU) 2018/858, and to systems, components and separate technical units designed and constructed for such vehicles, subject to Articles 4 to 11 of this Regulation.

Article 3

Definitions

For the purposes of this Regulation, the definitions laid down in Article 3 of Regulation (EU) 2018/858 shall apply.

In addition, the following definitions shall apply:

- (1) 'vulnerable road user' means **■** non-motorised road *users, including, in particular, cyclists and pedestrians, as well as users of powered two-wheelers;*

- (2) 'tyre pressure monitoring system' means a system fitted on a vehicle which can evaluate the pressure of the tyres or the variation of pressure over time and transmit corresponding information to the user while the vehicle is running;
- (3) 'intelligent speed assistance' means a system to aid the driver in *maintaining* the appropriate speed for the road environment by providing *dedicated and appropriate* feedback ■ ;
- (4) 'alcohol interlock installation facilitation' means a standardised interface facilitating the fitment of aftermarket alcohol interlock devices in motor vehicles;
- (5) 'driver drowsiness and attention *warning*' means a system assessing the driver's alertness through vehicle systems analysis and warning the driver if needed;
- (6) 'advanced *driver* distraction *warning*' means a system capable *to assist* the driver *in keeping attention* to the traffic situation and warning the driver *when distracted*;

- (7) 'emergency stop signal' means **a light-signalling function** to indicate to other road users to the rear of the vehicle that a high retardation force is being applied to the vehicle relative to the prevailing road conditions;
- (8) 'reversing detection' means a **■** system to make the driver aware of people and objects at the rear of the vehicle with the primary aim to avoid collisions upon reversing;
- (9) 'lane departure warning system' means a system to warn the driver that the vehicle is drifting out of its travel lane;
- (10) 'advanced emergency braking system' means a system which can automatically detect a potential collision and activate the vehicle braking system to decelerate the vehicle with the purpose of avoiding or mitigating a collision;
- (11) '**emergency** lane-keeping system' means a system **assisting the driver in keeping a safe** position of the vehicle with respect to the lane **or road** boundary, at least when a lane departure occurs or is about to occur and a collision may be imminent;

- (12) '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 normal operation mode;
- (13) 'event ■ data recorder' means a system *with the only purpose of* recording and storing critical crash-related parameters and information *shortly* before, during and *immediately* after a collision;
- (14) 'frontal protection system' means a separate structure or structures, such as a bull bar, or a supplementary bumper which, in addition to the original-equipment bumper, is intended to protect the external surface of the vehicle from damage in the event of a collision with an object, with the exception of structures having a mass of less than 0,5 kg, intended to protect only the vehicle's lights;

- (15) 'bumper' means any front, lower, outer structures of a vehicle, including attachments thereto, which are intended to give protection to a vehicle when involved in a low speed frontal collision with another vehicle; it does not include however any frontal protection system;
- (16) 'hydrogen-powered vehicle' means any motor vehicle that uses hydrogen as fuel to propel the vehicle;
- (17) 'hydrogen system' means an assembly of hydrogen components and connecting parts fitted on a hydrogen-powered vehicle, excluding the hydrogen-powered propulsion system or the auxiliary power unit;
- (18) 'hydrogen-powered propulsion system' means the *energy converter* used to propel the vehicle;

- (19) 'hydrogen component' means hydrogen containers and all other parts of hydrogen-powered vehicles that are in direct contact with hydrogen or which form part of a hydrogen system;
- (20) 'hydrogen container' means the component within the hydrogen system that stores the primary volume of hydrogen fuel;
- (21) 'automated vehicle' means a motor vehicle designed and constructed to move autonomously for *certain* periods of time without continuous *driver* supervision ***but on which the driver intervention is still expected or required;***
- (22) ***'fully automated vehicle' means a motor vehicle designed and constructed to move autonomously without any driver supervision;***

- (23) 'driver availability monitoring system' means a system to assess whether the driver is in a position to take over the driving function from an automated vehicle in particular situations, where appropriate;
- (24) 'vehicle platooning' means the linking of two or more vehicles in a convoy using connectivity technology and automated driving support systems which allow the vehicles to maintain automatically a set, close distance between each other when connected for certain parts of a journey and to adapt to changes in the movement of the lead vehicle with little to no action from the drivers;
- (25) 'maximum mass' means the technically permissible maximum laden mass stated by the manufacturer;
- (26) 'A-pillar' means the foremost and outermost roof support extending from the chassis to the roof of the vehicle.

I

CHAPTER II
OBLIGATIONS OF MANUFACTURERS

Article 4

General obligations and technical requirements

1. Manufacturers shall demonstrate that all new vehicles that are placed on the market, registered or entered into service, and all new systems, components and separate technical units that are placed on the market or entered into service, are type-approved in accordance with the requirements of this Regulation and of the delegated acts *and implementing acts* adopted pursuant to it.

2. Type-approval in accordance with the UN Regulations listed in Annex I shall be considered as EU type-approval in accordance with the requirements of this Regulation and of the delegated acts *and implementing acts* adopted pursuant to it.

3. The Commission is empowered to adopt delegated acts in accordance with Article 12 to amend Annex I in order to take account of technical progress and regulatory developments by introducing and updating references to the UN Regulations, and relevant series of amendments, that apply on a compulsory basis.
4. Manufacturers shall ensure that vehicles are designed, constructed and assembled so as to minimise the risk of injury to vehicle occupants and vulnerable road users.
5. Manufacturers shall also ensure that vehicles, systems, components and separate technical units comply with the applicable requirements listed in Annex II with effect from the dates specified in that Annex and with the detailed technical requirements and test procedures laid down in the delegated acts ***and with the uniform procedures and technical specifications laid down in the implementing acts*** adopted pursuant to this Regulation, including the requirements relating to:

- (a) restraint systems, crash testing, fuel system integrity and high voltage electrical safety;
- (b) *vulnerable road users*, vision and visibility;
- (c) vehicle chassis, braking, tyres and steering;
- (d) on board instruments, electrical system, vehicle lighting and protection against unauthorized use including cyberattacks;
- (e) driver and system behaviour;
- (f) general vehicle construction and features;

6. The Commission is empowered to adopt delegated acts in accordance with Article 12 to amend Annex II in order to take account of technical progress and regulatory developments, in particular in relation to the matters listed in points (a) to (f) of paragraph 5 of this Article *as well as those referred to in points (a) to (g) of Article 6(1), Article 7(2), (3), (4) and (5), Article 9(2), (3) and (5) and Article 11(1)* and with a view to ensuring a high level of general safety of vehicles, systems, components and separate technical units and a high level of protection of vehicle occupants and vulnerable road users, *by introducing and updating references to UN Regulations, as well as to delegated and implementing acts.*
7. **█** The *Commission shall by means of implementing acts adopt provisions concerning uniform procedures and technical specifications* for *the* type-approval of vehicles, systems, components and separate technical units with regard to the requirements listed in Annex II.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 13(2). They shall be published at least 15 months before the relevant dates specified in Annex II.

Article 5

Specific provisions relating to tyre pressure monitoring systems and tyres

1. Vehicles shall be equipped with an accurate tyre pressure monitoring system capable of giving an in-vehicle warning to the driver when a loss of pressure occurs in a tyre **■** over a wide range of road and environmental conditions.
2. Tyre pressure monitoring systems shall be designed to avoid resetting or recalibration at a low tyre pressure.
3. All tyres placed on the market shall meet the safety and environmental performance requirements set out in the respective regulatory acts listed in Annex II.

4. The Commission *shall by means of implementing* acts *adopt provisions concerning uniform procedures and technical specifications*:

- (a) the type-approval of vehicles with regard to their tyre pressure monitoring systems;
- (b) the type-approval of tyres, including technical *specifications* concerning their installation.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 13(2). They shall be published at least 15 months before the relevant dates specified in Annex II.

Article 6

Advanced vehicle systems for all categories of motor vehicle

1. Motor vehicles shall be equipped with the following advanced vehicle systems:
 - (a) intelligent speed assistance;
 - (b) alcohol interlock installation facilitation;
 - (c) driver drowsiness and attention *warning*;
 - (d) advanced *driver* distraction *warning*;
 - (e) emergency stop signal;
 - (f) reversing detection;
 - (g) *event data recorder*.

2. Intelligent speed assistance systems shall have the following minimum specifications:
- (a) it shall be possible for the driver *to be made aware* through the *accelerator control, or dedicated, appropriate and effective feedback*, that the applicable speed limit is exceeded;
 - (b) it shall be possible to switch off the system. *Information about the speed limit may still be provided, and the intelligent speed assistance system shall be in normal operation mode upon each activation of the vehicle master control switch;*
 - (c) *the dedicated and appropriate feedback shall be based on speed limit information obtained through observation of road signs and signals, based on infrastructure signals or electronic map data, or both, made available in-vehicle;*

- (d) it *shall not affect the drivers' possibility to exceed* the system's prompted vehicle speed **■** ;
- (e) *its performance targets shall be set in order to avoid or minimise the error rate in real driving conditions.*

3. *Driver drowsiness and attention warning and advanced driver distraction warning systems shall be designed in such a way that those systems do 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, that data shall not be accessible or made available to third party at any time and shall be immediately deleted after processing. Those systems shall also be designed to avoid overlap and shall not prompt the driver separately and concurrently or in a confusing manner in case one action triggers both systems.*

4. *Event data recorders shall meet the following requirements in particular:*
- (a) *the data that they are capable of recording and storing with respect of the period shortly before, during and immediately after a collision shall include the vehicle's speed, braking, position and tilt of the vehicle on the road, the state and rate of activation of all its safety systems, 112-based eCall in-vehicle system, brake activation and relevant input parameters of the on-board active safety and accident avoidance systems, with high level of accuracy and ensured survivability of data;*
 - (b) *it shall not be possible to deactivate the devices;*
 - (c) *the way in which they are capable of recording and storing data shall be such that:*
 - (i) *they operate on a closed-loop system;*

- (ii) the data collected is anonymised and protected against manipulation and misuse;*
 - (iii) precise vehicle type, version and variant, and in particular the active safety and accident avoidance systems fitted to the vehicle, can be identified;*
 - (d) the data can be made available to national authorities, on the basis of Union or national law only for the purpose of accident research and analysis, including for the purposes of type approval of systems and components and in compliance with Regulation (EU) 2016/679, over a standardised interface.*
- 5. *An event data recorder shall not be capable of recording and storing the last four digits of the vehicle indicator section of the vehicle identification number or any other information which could allow the individual vehicle itself, its owner or holder, to be identified.***

6. The Commission *shall* adopt delegated acts in accordance with Article 12 *supplementing this Regulation by laying* down detailed rules concerning the specific test procedures and technical requirements for:
- (a) the type-approval of vehicles with regard to the advanced vehicle systems listed in paragraph 1;
 - (b) the type-approval of the advanced vehicle systems listed in points (a), (f) *and* (g) of **■** paragraph 1 as separate technical units.

Those delegated acts shall be published at least 15 months before the relevant dates specified in Annex II.

Article 7

Specific requirements relating to passenger cars and light commercial vehicles

1. In addition to the other requirements of this Regulation and of the delegated acts *and implementing acts* adopted pursuant to it that are also applicable to vehicles of categories M₁ and N₁, vehicles of those categories shall meet the requirements set out in paragraphs 2 to 5 and in the *implementing* acts adopted under paragraph 6.

2. Vehicles of categories M₁ and N₁ shall be equipped with advanced emergency braking systems designed and fitted in two phases and providing for:
 - (a) detection of ***obstacles and of*** moving vehicles ■ ahead of the motor vehicle in the first phase;
 - (b) extending the detection capability to also include ***pedestrians and cyclists*** ahead of the motor vehicle in the second phase.
3. Vehicles of categories M₁ and N₁ shall be equipped with ***an emergency*** lane-keeping system.
4. Advanced emergency braking systems and ***emergency*** lane-keeping systems shall meet the following requirements in particular:
 - (a) it shall be possible to switch off systems only one at a time ■ by a ■ sequence of actions to be carried out by the driver;

- (b) the systems shall be in normal operation mode upon each activation of the vehicle master control switch;
- (c) it shall be possible to easily suppress audible warnings, but such action shall not at the same time suppress system functions other than audible warnings;
- (d) *it shall be possible for the driver to override the systems.*

■

- 5. Vehicles of categories M₁ and N₁ shall be designed and constructed so as to provide for an enlarged head impact protection zone with the aim of enhancing the protection of vulnerable road users and mitigating their potential injuries in the event of a collision.
- 6. The Commission *shall by means of implementing* acts *adopt provisions concerning uniform procedures and technical specifications* for ■ the type-approval of vehicles with regard to the requirements laid down in paragraphs 2 to 5 of this Article.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 13(2). They shall be published at least 15 months before the relevant dates specified in Annex II.

Article 8

Frontal protection systems for passenger cars and light commercial vehicles

1. Frontal protection systems, either fitted as original equipment to vehicles of categories M₁ and N₁ or made available on the market as separate technical units for such vehicles, shall comply with the requirements laid down in paragraph 2 **■** and ***with the technical specifications set out in the implementing acts referred to in paragraph 3 ■*** .
2. Frontal protection systems made available on the market as separate technical units shall be accompanied by a detailed list of vehicle types, variants and versions for which the frontal protection system is type-approved, as well as by clear assembly instructions.

3. The Commission *shall by means of implementing acts adopt provisions concerning uniform procedures and technical specifications* for the type-approval of frontal protection systems referred to in paragraph 1 of this Article, including technical *specifications* concerning their construction and installation.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 13(2). They shall be published at least 15 months before the relevant dates specified in Annex II.

Article 9

Specific requirements relating to buses and trucks

1. In addition to the other requirements of this Regulation and of the delegated acts and *implementing acts* adopted pursuant to it that are also applicable to vehicles of categories M₂, M₃, N₂ and N₃, vehicles of those categories shall meet the requirements laid down in paragraphs 2 to 5 and *the technical specifications set out* in the *implementing acts* adopted under paragraph 7. Vehicles of categories M₂ and M₃, shall also meet the requirement laid down in paragraph 6.

2. Vehicles of categories M₂, M₃, N₂ and N₃ shall be equipped with a lane departure warning system and an advanced emergency braking system, which comply with the ***the technical specifications*** set out in the ***implementing*** acts adopted under paragraph 7.
3. Vehicles of categories M₂, M₃, N₂ and N₃ shall be equipped with advanced systems capable of detecting ***pedestrians and cyclists*** located in close proximity to the front or nearside of the vehicle and providing a warning or avoiding collision with such vulnerable road users.
4. With respect of systems referred to in paragraphs 2 and 3 of this Article, they shall meet the following requirements in particular:
 - (a) it shall be possible to switch off systems only one at a time ■ by a ■ sequence of actions to be carried out by the driver;
 - (b) ***it shall be possible for the driver to override the systems;***

- (c) the systems shall be in normal operation mode upon each activation of the vehicle master control switch;
 - (d) it shall be possible to easily suppress audible warnings, but such action shall not at the same time suppress system functions other than audible warnings.
5. Vehicles of categories M₂, M₃, N₂ and N₃ shall be designed and constructed so as to enhance the direct visibility of vulnerable road users from the driver seat, ***by reducing to the greatest possible extent the blind spots in front and to the side of the driver, while taking into account the specificities of different categories of vehicles.***
6. Vehicles of categories M₂ and M₃ with a capacity exceeding 22 passengers in addition to the driver and constructed with areas for standing passengers to allow frequent passenger movement shall be designed and constructed so as to be accessible by persons with reduced mobility, including wheelchair users.

7. The Commission *shall by means of implementing acts adopt provisions concerning uniform procedures and technical specifications* for:

- (a) the type-approval of vehicles with regard to the requirements laid down in paragraphs 2 to 5 of this Article;
- (b) the type-approval of the systems referred to in paragraph 3 of this Article as separate technical units.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 13(2).

Where those implementing acts concern the requirements laid down in paragraphs 2, 3 and 4 of this Article, they shall be published at least 15 months before the relevant dates specified in Annex II.

Where those implementing acts concern the requirements laid down in paragraph 5 of this Article, they shall be published at least 36 months before the relevant dates specified in Annex II.

Article 10

Specific requirements relating to hydrogen-powered vehicles

1. In addition to the other requirements of this Regulation and of the delegated acts ***and implementing acts*** adopted pursuant to it that are also applicable to vehicles of categories M and N, hydrogen-powered vehicles of those categories, their hydrogen systems and components of such systems shall comply with the ***technical specifications*** laid down in **■ the *implementing acts referred to in* paragraph 3 ■** .
2. Manufacturers shall ensure that hydrogen systems and hydrogen components are installed in accordance with the ***technical specifications*** set out in the ***implementing acts*** adopted under paragraph 3. Manufacturers shall also make available, if necessary information for the purposes of inspection of hydrogen systems and components during the service life of hydrogen-powered vehicles.

3. The Commission *shall by means of implementing acts adopt provisions concerning uniform procedures and technical specifications for the type-approval of hydrogen-powered vehicles with regard to their hydrogen systems, including material compatibility and fuelling receptacles, and for the type-approval of hydrogen components, including technical specifications for their installation.*

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 13(2). They shall be published at least 15 months before the relevant dates specified in Annex II.

Article 11

Specific requirements relating to automated vehicles *and fully automated vehicles*

1. In addition to the other requirements of this Regulation and of the delegated acts *and implementing acts* adopted pursuant to it that are applicable to vehicles of the respective categories, automated vehicles *and fully automated vehicles* shall comply with the *technical specifications* set out in the *implementing acts referred to in* paragraph 3 relating to:

- (a) systems to replace the driver's control of the vehicle, including *signalling*, steering, accelerating and braking;
- (b) systems to provide the vehicle with real-time information on the state of the vehicle and the surrounding area;
- (c) driver *availability* monitoring systems;
- (d) event **■** data recorders for automated vehicles;
- (e) harmonised format for the exchange of data for instance for multi-brand vehicle platooning;
- (f) *systems to provide safety information to other road users.*

2. *Driver availability monitoring system referred to in point (c) of paragraph 1 shall not apply to fully automated vehicles.*

3. **█** The Commission *shall by means of implementing acts adopt provisions concerning uniform procedures and technical specifications for* the systems and other items listed in points (a) to (f) of paragraph 1 of this Article, and **█** for the type-approval of automated *and fully automated* vehicles with regard to those *systems in order to ensure the safe operation of automated and fully automated vehicles on public roads.*

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 13(2).

CHAPTER III FINAL PROVISIONS

Article 12

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2. The power to adopt delegated acts referred to in Articles 4(3), 4(6) **and** 6(6) ■ shall be conferred on the Commission *for a period of five years from ...* [■ the date of entry into force of this Regulation]. *The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.*
3. The delegation of power referred to in Articles 4(3), 4(6) **and** 6(6) ■ may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted under Article 4(3), 4(6) *and* 6(6) ■ shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 13
Committee procedure

1. *The Commission shall be assisted by the Technical Committee – Motor Vehicles (TCMV). That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.*

2. *Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.*

Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

Article 14
Review and reporting

1. *By ...[five years after the date of application of this Regulation] and every five years thereafter, the Commission shall submit an evaluation report to the European Parliament and to the Council on the achievements of safety measures and systems, including their penetration rates and convenience for the user. The Commission shall investigate whether these measures and systems act as intended by this Regulation. Where appropriate, that report shall be accompanied by recommendations, including a legislative proposal to amend the requirements as regards general safety and the protection and safety of vehicle occupants and vulnerable road users, in order to reduce or to eliminate accidents and injuries in road transport.*

In particular, the Commission shall evaluate the reliability and efficiency of new intelligent speed assistance systems and the accuracy and error rate of such systems in real driving conditions. Where appropriate, the Commission shall present a legislative proposal.

2. *By 31 January of each year, for the previous year, the Commission shall submit to the European Parliament and to the Council a progress report on the activities of the UNECE's World Forum for Harmonization of Vehicle Regulations (WP.29) on the progress made in the implementation of vehicle safety standards with regard to the requirements referred to in Articles 5 to 11 and on the position of the Union related to these matters.*

Article 15
Transitional provisions

1. This Regulation shall not invalidate any EU type-approval granted to vehicles, systems, components or separate technical units which were granted in accordance with Regulation (EC) No 78/2009, Regulation (EC) No 79/2009, Regulation (EC) No 661/2009 and their implementing measures, by ... [] the date immediately preceding the date of application of this Regulation], unless the relevant requirements applying to such vehicles, systems, components or separate technical units have been modified or new requirements have been added by this Regulation and the delegated acts adopted pursuant to it, ***as further specified in the implementing acts adopted pursuant to this Regulation.***
2. Approval authorities shall continue to grant extensions of EU type-approvals referred to in paragraph 1 of this Article.

3. By way of derogation from this Regulation, Member States shall continue to permit until the dates specified in Annex IV the registration of vehicles, as well as the sale or entry into service of components, which do not comply with the requirements of the respective UN Regulations listed in that Annex.

Article 16

Implementation dates

With respect to vehicles, systems, components and separate technical units, national authorities shall:

- (a) with effect from the dates specified in Annex II, for a particular requirement, refuse, on grounds relating to that requirement, to grant EU type-approval or national type-approval in respect of new types of vehicle, systems, components or separate technical units which do not comply with the requirements of this Regulation and of the delegated acts *and implementing acts* adopted pursuant to it;

- (b) with effect from the dates specified Annex II, for a particular requirement, consider, on grounds relating to that requirement, certificates of conformity in respect to new vehicles to be no longer valid for the purposes of Article 48 of Regulation (EU) 2018/858, and prohibit the registration of such vehicles, which do not comply with the requirements of this Regulation and of the delegated acts *and implementing acts* adopted pursuant to it;
- (c) with effect from the dates specified in Annex II, for a particular requirement, prohibit, on grounds relating to that requirement, the placing on the market or entry into service of components and separate technical units, where they do not comply with the requirements of this Regulation and of the delegated acts *and implementing acts* adopted pursuant to it.

Article 17
Amendments to Regulation (EU) 2018/858

Annex II to Regulation (EU) 2018/858 is amended in accordance with Annex III to this Regulation.

Article 18
Repeal

1. Regulations (EC) No 78/2009, (EC) No 79/2009, (EC) No 631/2009 and (EC) No 661/2009 and Regulations (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) No 2015/166 are repealed with effect from the date of application of this Regulation.
2. References to Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 shall be construed as references to this Regulation.

Article 19

Entry into force and date of application

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from ... [**30 months after** the date of entry into force of this Regulation].

However, Article 4(3), Article 4(6), Article 4(7), Article 5(4), Article 6(6), Article 7(6), Article 8(3), Article 9(7), Article 10(3), Article 11(3), Article 12 and Article 13 shall apply from ... [date of entry into force of this Regulation].

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at ...,

For the European Parliament
The President

For the Council
The President

ANNEX I

List of UN Regulations referred to in Article 4(2)

Regulation Number	Subject	Series of amendments published in the OJ	OJ Reference	Scope covered by the UN Regulation
1	Headlamps emitting an asymmetrical passing beam and/or driving beam equipped with filament lamps R2 and/or HS1	02 series of amendments	OJ L 177, 10.7.2010, p. 1	M, N ^(a)
3	Retro-reflecting devices for power-driven vehicles	02 series of amendments	OJ L 323, 6.12.2011, p. 1	M, N, O
4	Illumination of rear-registration plates of power-driven vehicles and their trailers	Original version of the Regulation	OJ L 4, 7.1.2012, p. 7	M, N, O
6	Direction indicators for power-driven vehicles and their trailers	01 series of amendments	OJ L 213, 18.7.2014, p. 1.	M, N, O

7	Front and rear position (side) lamps, stop-lamps and end-outline marker lamps for power-driven vehicles and their trailers	02 series of amendments	OJ L 285, 30.9.2014, p. 1.	M, N, O
8	Motor vehicles headlamps (H1, H2, H3, HB3, HB4, H7, H8, H9, HIR1, HIR2 and/or H11)	05 series of amendments Corrigendum 1 to Revision 4	OJ L 177, 10.7.2010, p. 71	M, N ^(a)
10	Electromagnetic compatibility	05 series of amendments	OJ L 41, 17.2.2017, p. 1	M, N, O
11	Door latches and door retention components	03 series of amendments	OJ L 120, 13.5.2010, p. 1 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁ , N ₁
12	Protection of the driver against the steering mechanism in the event of impact	04 series of amendments	OJ L 89, 27.3.2013, p. 1 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁ , N ₁

13	Braking of vehicles and trailers	11 series of amendments	OJ L 42, 18.2.2016, p. 1.	M ₂ , M ₃ , N, O ^(b)
13-H	Braking of passenger cars	Original version of the Regulation	OJ L 335, 22.12.2015, p. 1.	M ₁ , N ₁
14	Safety-belt anchorages, ISOFIX anchorages systems and ISOFIX top tether anchorages	07 series of amendments	OJ L 218, 19.8.2015, p. 27 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M, N
16	Safety-belts, restraint systems, child restraint systems and ISOFIX child restraint systems	07 series of amendments	OJ L 109, 27.4.2018, p. 1	M, N
17	Seats, their anchorages and any head restraints	08 series of amendments	OJ L 230, 31.8.2010, p. 81 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M, N

18	Protection of motor vehicles against unauthorized use	03 series of amendments	OJ L 120, 13.5.2010, p. 29	M ₂ , M ₃ , N ₂ , N ₃
19	Power-driven vehicle front fog lamps	04 series of amendments	OJ L 250, 22.8.2014, p. 1	M, N
20	Headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with halogen filament lamps (H4)	03 series of amendments	OJ L 177, 10.7.2010, p. 170	M, N ^(a)
21	Interior fittings	01 series of amendments	OJ L 188, 16.7.2008, p. 32	M ₁
23	Reversing lights for power-driven vehicles and their trailers	Original version of the Regulation	OJ L 237, 8.8.2014, p. 1	M, N, O
25	Head restraints (headrests), whether or not incorporated in vehicle seats	04 series of amendments Corrigendum 2 to Revision 1	OJ L 215, 14.8.2010, p. 1 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁

26	External projections	03 series of amendments	OJ L 215, 14.8.2010, p. 27	M ₁
28	Audible warning devices and signals	Original version of the Regulation	OJ L 323, 6.12.2011, p. 33	M, N
29	Protection of the occupants of the cab of a commercial vehicle	03 series of amendments	OJ L 304, 20.11.2010, p. 21 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	N
30	Pneumatic tyres for motor vehicles and their trailers (Class C1)	02 series of amendments	OJ L 307, 23.11.2011, p. 1	M, N, O
31	Power-driven vehicle's sealed-beam headlamps (SB) emitting an European asymmetrical passing beam or a driving beam or both	02 series of amendments	OJ L 185, 17.7.2010, p. 15	M, N
34	Prevention of fire risks (liquid fuel tanks)	03 series of amendments	OJ L 231, 26.8.2016, p. 41	M, N, O

37	Filament lamps for use in approved lamp units of power-driven vehicles and their trailers	03 series of amendments	OJ L 213, 18.07.2014, p. 36	M, N, O
38	Rear fog lamps for power-driven vehicles and their trailers	Original version of the Regulation	OJ L 4, 7.1.2012, p. 20	M, N, O
39	Speedometer equipment including its installation	01 series of amendments	OJ L 120, 13.5.2010, p. 40 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M, N
43	Safety glazing materials	01 series of amendments	OJ L 42, 12.2.2014, p. 1	M, N, O
44	Restraining devices for child occupants of power-driven vehicles ("child restraint system")	04 series of amendments	OJ L 265, 30.9.2016, p. 1	M, N

45	Headlamps cleaners	01 series of amendments	[PO: scheduled for translation in 2018, please update the references when available]	M, N
46	Devices for indirect vision and their installation	04 series of amendments	OJ L 237, 8.8.2014, p. 24	M, N
48	Installation of lighting and light-signalling devices on motor vehicles	06 series of amendments	OJ L 265, 30.09.2016, p. 125 [PO: scheduled for translation in 2018, please update the references when available]	M, N, O (°)
54	Pneumatic tyres for commercial vehicles and their trailers (Classes C2 and C3)	Original version of the Regulation	OJ L 307, 23.11.2011, p. 2	M, N, O
55	Mechanical coupling components of combinations of vehicles	01 series of amendments	OJ L 153, 15.6.2016, p. 179	M, N, O (°)

58	Rear underrun protective devices (RUPDs) and their installation; Rear underrun protection (RUP)	03 series of amendments	█ [PO: scheduled for translation in 2018, please update the references when available]	M, N, O
61	Commercial vehicles with regard to their external projections forward of the cab's rear panel	█ Original version of the Regulation	OJ L 164, 30.6.2010, p. 1	N
64	Temporary-use spare unit, run-flat tyres/system (and tyre pressure monitoring system)	█ 02 series of amendments	OJ L 310, 26.11.2010, p. 18	M ₁ , N ₁
66	Strength of the superstructure of large passenger vehicles	02 series of amendments	OJ L 84, 30.3.2011, p. 1	M ₂ , M ₃
67	Motor vehicles using LPG	█ 01 series of amendments	OJ L 285, 20.10.2016, p. 1	M, N
73	Lateral protection of goods vehicles	01 series of amendments	OJ L 122, 8.5.2012, p. 1	N ₂ , N ₃ , O ₃ , O ₄

77	Parking lamps for power-driven vehicles	Original version of the Regulation	OJ L 4, 7.1.2012, p. 21	M, N
79	Steering equipment	03 series of amendments Corrigendum	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M, N, O
80	Seats of large passenger vehicles	03 series of amendments to the Regulation	OJ L 226, 24.8.2013, p. 20 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₂ , M ₃
87	Daytime running lamps for power-driven vehicles	Original version of the Regulation	OJ L 4, 7.1.2012, p. 24	M, N
89	Speed limitation devices	Original version of the Regulation	OJ L 4, 7.1.2012, p. 25	M, N ^(d)
90	Replacement brake lining assemblies and drum brake linings for power-driven vehicles and their trailers	02 series of amendments	OJ L 185, 13.7.2012, p. 24	M, N, O

91	Side-marker lamps for motor vehicles and their trailers	Original version of the Regulation	OJ L 4, 7.1.2012, p. 27	M, N, O
93	Front underrun protective devices (FUPDs) and their installation; front underrun protection (FUP)	Original version of the Regulation	OJ L 185, 17.7.2010, p. 56	N ₂ , N ₃
94	Protection of occupants in the event of a frontal collision	03 series of amendments	OJ L 35, 8.2.2018, p. 1	M ₁
95	Protection of occupants in the event of a lateral collision	03 series of amendments	OJ L 183, 10.7.2015, p. 91	M ₁ , N ₁
97	Vehicle Alarm Systems (VAS)	01 series of amendments	OJ L 122, 8.5.2012, p. 19	M ₁ , N ₁ (°)
98	Motor vehicle headlamps equipped with gas-discharge light sources	01 series of amendments	OJ 176, 14.6.2014, p. 64	M, N
99	Gas-discharge light sources for use in approved gas-discharge lamp units of power-driven vehicles	Original version of the Regulation	OJ L 285, 30.09.2014, p. 35	M, N

100	Electric safety	02 series of amendments	OJ L 87, 31.3.2015, p. 1 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M, N
102	Close-coupling device (CCD); fitting of an approved type of CCD	Original version of the Regulation	OJ L 351, 30.12.2008, p. 44	N ₂ , N ₃ , O ₃ , O ₄
104	Retro-reflective markings (heavy and long vehicles)	Original version <i>of the Regulation</i>	OJ L 75, 14.3.2014, p. 29	M ₂ , M ₃ , N, O ₂ , O ₃ , O ₄
105	Vehicles for the carriage of dangerous goods	05 series of amendments	OJ L 4, 7.1.2012, p. 30	N,O
107	M ₂ and M ₃ vehicles	07 series of amendments	OJ L 52 of 23.2.2018, p.1	M ₂ , M ₃
108	<i>Retreaded</i> tyres for passenger cars and their trailers	Original version of the Regulation	OJ L 181, 4.7.2006, p. 1	M ₁ , O ₁ , O ₂
109	<i>Retreaded</i> tyres for commercial vehicles and their trailers	Original version of the Regulation	OJ L 181, 4.7.2006, p. 1	M ₂ , M ₃ , N, O ₃ , O ₄
110	Specific components for CNG	01 series of amendments	OJ L 166, 30.6.2015, p. 1	M, N

112	Motor vehicle headlamps emitting an asymmetrical passing beam or a driving beam or both and equipped with filament lamps and/or LED modules	01 series of amendments	OJ L 250, 22.8.2014, p. 67	M, N
114	Replacement airbag	Original version of the Regulation	OJ L 373, 27.12.2006, p. 272	M ₁ , N ₁
115	LPG and CNG retrofit systems	Original version of the Regulation	OJ L 323, 7.11.2014, p. 91	M, N
116	Protection of motor vehicles against unauthorized use	Original version of the Regulation	OJ L 45, 16.2.2012, p. 1	M ₁ , N ₁ (°)
117	Tyres with regard to rolling sound emissions, adhesion on wet surfaces and rolling resistance (Classes C1, C2 and C3)	02 series of amendments	OJ L 218, 12.08.2016, p. 1	M, N, O

118	Fire resistance of interior materials in buses	02 series of amendments	OJ L 102, 21.4.2015, p.67 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₃
119	Cornering lamps	01 series of amendments	OJ L 89, 25.3.2014, p. 101	M, N
121	Location and identification of hand controls, tell-tales and indicators	01 series of amendments	OJ L 5, 8.1.2016, p. 9	M, N
122	Heating system of vehicles	Original version of the Regulation	OJ L 164, 30.6.2010, p. 231 <i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M, N, O
123	Adaptive front-lighting systems (AFS) for motor vehicles	<i>01 series of amendments</i>	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M, N

124	Replacement wheels	Original version of the Regulation	OJ L 375, 27.12.2006, p. 568	M ₁ , N ₁ , O ₁ , O ₂
125	Forward field of vision	01 series of amendments	OJ L 20, 25.1.2018, p. 16	M ₁
126	Partitioning systems	Original version of the Regulation	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁
127	Pedestrian safety	02 series of amendments	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁ , N ₁
128	Light Emitting Diode (LED) light sources	Original version of the Regulation	OJ L 162, 29.5.2014, p. 43	M, N, O
129	Enhanced child restrained systems	Original version of the Regulation	OJ L 97, 29.03.2014, p. 21	M, N
130	Lane departure warning	Original version of the Regulation	OJ L 178, 18.06.2014, p. 29	M ₂ , M ₃ , N ₂ , N ₃ ^(f)
131	Advanced emergency braking	01 series of amendments	OJ L 214, 19.07.2014, p. 47	M ₂ , M ₃ , N ₂ , N ₃ ^(f)

134	Hydrogen safety	Original version of amendments	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M, N
135	Pole side impact	01 series of amendments	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁ , N ₁
137	Frontal full-width impact	01 series of amendments	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁
139	Brake assist	Original version of the Regulation	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁ , N ₁
140	Stability control	Original version of the Regulation	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁ , N ₁

141	Tyre pressure monitoring	Original version of the Regulation	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁ , N ₁ ^(g)
142	Tyre installation	Original version of the Regulation	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁
145	Child restraint anchorages	Original version of the Regulation	<i>[PO: scheduled for translation in 2018, please update the references when available]</i>	M ₁

Notes to the table

The series of amendments indicated in the table reflects the version that has been published in the *Official Journal* and is without prejudice to the series of amendments that shall be complied with on the basis of the transitional provisions provided therein.

Compliance with a series of amendments adopted after the particular series indicated in the table shall be accepted as an alternative.

The dates specified in the relevant series of amendments of the UN Regulations listed in the table, as regards the obligations of Contracting Parties to the ‘Revised 1958 Agreement’¹, linked to first registration, entry into service, making available on the market, sale, the recognition of type-approvals, and any similar provisions, apply on a compulsory basis for the purposes of Articles 48 and 50 of Regulation (EU) 2018/858 except where alternative dates are specified in Article 16 of this Regulation in which case those alternative dates are to be followed instead.

In certain instances, a UN Regulation listed in the table provides in its transitional provisions that as from a specified date, Contracting Parties to the ‘Revised 1958 Agreement’ applying a certain series of amendments to that UN Regulation shall not be obliged to accept or may refuse to accept, for the purpose of national or regional type-approval, a type approved in accordance with a preceding series of amendments, or wording with similar intention and meaning. This shall be construed as a binding provision for national authorities to consider the certificates of conformity to be no longer valid for the purposes of Article 48 of Regulation (EU) 2018/858, except where alternative dates are specified in Annex II of this Regulation in which case those alternative dates are to be followed instead.

¹ Council Decision of 27 November 1997 with a view to accession by the European Community to the Agreement of the United Nations Economic Commission for Europe concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted to and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions ('Revised 1958 Agreement') (OJ L 346, 17.12.1997, p. 78).

- (a) UN Regulation Nos 1, 8 and 20 are not applicable for EU type-approval of vehicles.
- (b) The mandatory fitting of a stability control function is required in accordance with the UN Regulations. However, it is also mandatory for vehicles of category N₁.
- (c) Where it is declared by the vehicle manufacturer that a vehicle is suitable for towing loads (point 2.11.5. of the information document referred to in Article 24(1) of Regulation (EU) 2018/858 and any part of a suitable mechanical coupling device, whether fitted or not to the type of motor-vehicle, could (partly) obscure any lighting component and/or the space for mounting and fixing the rear registration plate, the following shall apply:
- the motor-vehicle's user instructions (e.g. owner's manual, vehicle handbook) shall clearly specify that installation of a mechanical coupling device that cannot be easily removed or repositioned is not permitted;
 - the instructions shall also clearly specify that, when fitted, a mechanical coupling device must always be removed or repositioned when it is not in use; and
 - in the case of vehicle system type-approval according to UN Regulation 55, it shall be ensured that the removal, repositioning and/or alternate location provisions are also fully complied with as regards lighting installation and space for mounting and fixing the rear registration plate .
- (d) Only Speed Limitation Devices (SLD) and the mandatory installation of SLD on vehicles of category M₂, M₃, N₂ and N₃ are concerned.
- (e) Devices to prevent unauthorised use shall be fitted on vehicles of categories M₁ and N₁ and immobilizer systems shall be fitted on vehicles of category M₁.
- (f) See explanatory note ⁴ to the table in Annex II.
- (g) ***For vehicles of categories M₁ with a maximum mass ≤ 3 500 kg and N₁, that are not fitted with twin wheels on an axle.***

ANNEX II

List of the requirements referred to in Article 4(5) *and Article 5(3) as well as* the dates referred to in Article 16

Subject	<i>Regulatory acts</i>	Additional specific technical provisions	M ₁	M ₂	M ₃	N ₁	N ₂	N ₃	O ₁	O ₂	O ₃	O ₄	S T U	Co m pon ent
Requirements concerning														
A RESTRAINT SYSTEMS, CRASH TESTING, FUEL SYSTEM INTEGRITY AND HIGH VOLTAGE ELECTRICAL SAFETY														
A1 Interior fittings	UN Regulation No 21		A											
A2 Seats and head restraints	UN Regulation No 17		A	A	A	A	A	A						

A3 Bus seats	UN Regulation No 80			A	A										A	
A4 Safety-belt anchorages	UN Regulation No 14		A	A	A	A	A	A								
A5 Safety-belts and restraint systems	UN Regulation No 16		A	A	A	A	A	A							A	A
A6 Safety belt reminders			<i>A</i>	<i>A</i>	<i>A</i>	<i>A</i>	<i>A</i>	<i>A</i>								
A7 Partitioning systems	UN Regulation No 126		X												B	

A8 Child restraint anchorages	UN Regulation No 145		A												
A9 Child restraint systems	UN Regulation No 44		A ¹	A ¹	A ¹	A ¹	A ¹	A ¹						A	A
A10 Enhanced child restraint systems	UN Regulation No 129		X	X	X	X	X	X						B	B
A11 Front underrun protection	UN Regulation No 93						A	A						A	A
A12 Rear underrun protection	UN Regulation No 58		A	A	A	A	A	A	A	A	A	A	A	A	A

A13 Lateral protection	UN Regulation No 73						A	A			A	A		
A14 Fuel tank safety	UN Regulation No 34		A	A	A	A	A	A	A	A	A	A	A	A
A15 Liquefied petroleum gas safety	UN Regulation No 67		A	A	A	A	A	A						A
A16 Compressed and liquefied natural gas safety	UN Regulation No 110		A	A	A	A	A	A						A
A17 Hydrogen safety	UN Regulation No 134		A	A	A	A	A	A						A

A18 Hydrogen system material qualification		I	A	A	A	A	A	A											A
A19 In-use electric safety	UN Regulation No 100		A	A	A	A	A	A											
A20 Frontal off-set impact	UN Regulation No 94	Applies to vehicle categories M ₁ with a maximum mass ≤ 3 500 kg and N ₁ with a maximum mass ≤ 2 500kg. For vehicles with a maximum mass > 2 500 kg, dates in note B apply.	A																

A21 Frontal full-width impact	UN Regulation No 137	Use of the anthropomorphic test device "Hybrid III" crash dummy is permitted until the test device for human occupant restraint "THOR" is available in the UN Regulation.	B			B								
A22 Protective steering	UN Regulation No 12		A			A							A	
A23 Replacement airbag	UN Regulation No 114		X			X							B	

<i>A24</i> Cab impact	UN Regulation No 29					A	A	A						
<i>A25</i> Side impact	UN Regulation No 95	Applies to all vehicles of categories M ₁ and N ₁ including those with R point of the lowest seat > 700 mm from ground level. <i>For vehicles having R point of the lowest seat > 700 mm from ground level, dates in Note B apply.</i>	A			A								
<i>A26</i> Pole side impact	UN Regulation No 135		B			B								

<i>A27</i> Rear impact	UN Regulation No 34	Applies to vehicle categories M ₁ <i>with a maximum mass ≤ 3 500 kg</i> and N ₁ ■ . Post-crash electrical safety requirements shall be ensured.	<i>B</i>			<i>B</i>								
Requirements concerning <i>B VULNERABLE ROAD USERS, VISION AND VISIBILITY</i>														
<i>B1</i> Pedestrian leg and head protection	UN Regulation No 127		A			A								

B2 ■ Enlarged head impact zone	UN Regulation No 127	Child and adult headform test area are bounded by the "adult wrap-around-distance" of 2 500 mm or "windscreen rear reference line" whichever is more forward. Headform contact with A-pillars, windscreen header and cowl is excluded, but shall be monitored.	<i>C</i>			<i>C</i>								
B3 Frontal protection system		■	X		X							A		

B4 Advanced emergency braking for pedestrian and cyclist			C			C								
B5 Pedestrian and cyclist collision warning				B	B		B	B						B
B6 Blind spot information system				B	B		B	B						B
B7 Reversing <i>detection</i>			B	B	B	B	B	B	■	■	■	■		B
B8 Forward vision	UN Regulation No 125	Applies to vehicle categories M ₁ and N ₁	A			C								

B9 Heavy duty direct vision				D	D		D	D						
B10 Safety glazing	UN Regulation No 43		A	A	A	A	A	A	A	A	A	A		A
B11 Defrost/demist			A	A ²	A ²	A ²	A ²	A ²						
B12 Wash/wipe			A	A ³	A ³	A ³	A ³	A ³					A	
B13 Indirect vision devices	UN Regulation No 46		A	A	A	A	A	A						A

**Requirements concerning
VEHICLE CHASSIS, BRAKING, TYRES AND STEERING**

C1 Steering equipment	UN Regulation No 79		A	A	A	A	A	A	A	A	A	A		
C2 Lane departure warning <i>system</i>	UN Regulation No 130			A ⁴	A ⁴		A ⁴	A ⁴						
C3 Emergency lane keeping <i>system</i>			B ⁶			B ⁶								
C4 Braking	UN Regulation No 13 UN Regulation No 13-H		A	A	A	A	A	A	A	A	A	A		

C5 Replacement braking parts	UN Regulation No 90		X	X	X	X	X	X	X	X	X	X	X	A	
C6 Brake assist	UN Regulation No 139		A			A									
C7 Stability control	UN Regulation No 13 UN Regulation No 140		A	A	A	A	A	A	A	A	A	A	A		
C8 Advanced emergency braking on heavy duty vehicles	UN Regulation No 131			A ⁴	A ⁴		A ⁴	A ⁴							

C9 Advanced emergency braking on light duty vehicles			B			B								
C10 Tyre safety and environmental performance	UN Regulation No 30 UN Regulation No 54 UN Regulation No 117	<i>A test procedure for worn tyres shall also be ensured; the dates in note C apply.</i>	X	X	X	X	X	X	X	X	X	X	X	A
C11 Spare wheels and run-flat systems	UN Regulation No 64		A ¹			A ¹								

C12 Retreaded tyres	UN Regulation No 108 UN Regulation No 109		X	X	X	X	X	X	X	X	X	X	X	A
C13 Tyre pressure monitoring for light duty	UN Regulation No 141	Applies to vehicle categories M ₁ <i>with a maximum mass ≤ 3 500 kg</i> and N ₁ .	A			B								
C14 Tyre pressure monitoring for heavy duty				B	B		B	B			B	B		

C15 Tyre installation	UN Regulation No 142	Applies to all vehicle categories.	A	A	A	A	A	A	A	A	A	A		
C16 Replacement wheels	UN Regulation No 124		X			X			X	X				B
Requirements concerning														
<i>D ON BOARD INSTRUMENTS, ELECTRICAL SYSTEM, VEHICLE LIGHTING AND PROTECTION AGAINST UNAUTHORISED USE, INCLUDING CYBERATTACKS</i>														
D1 Audible warning	UN Regulation No 28		A	A	A	A	A	A						A

D2 Radio interference (electromagnetic compatibility)	UN Regulation No 10		A	A	A	A	A	A	A	A	A	A	A	A	A
D3 Protection against unauthorised use, immobilizer and alarm systems	UN Regulation No 18 UN Regulation No 97 UN Regulation No 116		A	A ¹	A ¹	A	A ¹	A ¹						A	A
D4 Protection of vehicle against cyberattacks			B	B	B	B	B	B						B	B

D5 Speedometer	UN Regulation No 39		A	A	A	A	A	A						
D6 Odometer	UN Regulation No 39		A	A	A	A	A	A						
D7 Speed limitation devices	UN Regulation No 89			A	A		A	A						A
D8 Intelligent speed assistance			B	B	B	B	B	B					B	
D9 Identification of controls, tell-tales and indicators	UN Regulation No 121		A	A	A	A	A	A						

D10 Heating systems	UN Regulation No 122		A	A	A	A	A	A	A	A	A	A		A
D11 Light signalling devices	UN Regulation No 4													
	UN Regulation No 6													
	UN Regulation No 7													
	UN Regulation No 19													
	UN Regulation No 23													
	UN Regulation No 38		X	X	X	X	X	X	X	X	X	X		A
	UN Regulation No 77													
	UN Regulation No 87													
	UN Regulation No 91													

D12 Road illumination devices	UN Regulation No 31																	
	UN Regulation No 98																	
	UN Regulation No 112	X	X	X	X	X	X											A
	UN Regulation No 119																	
	UN Regulation No 123																	

D13 Retro-reflective devices	UN Regulation No 3 UN Regulation No 104		X	X	X	X	X	X	X	X	X	X	X		A
D14 Light sources	UN Regulation No 37 UN Regulation No 99 UN Regulation No 128		X	X	X	X	X	X	X	X	X	X	X		A
D15 Installation of light signalling, road illumination and retro-reflective devices	UN Regulation No 48		A	A	A	A	A	A	A	A	A	A	A		

D16 Emergency Stop Signal			B	B	B	B	B	B	■	■	■	■		
D17 Headlamp cleaners	UN Regulation No 45		A ¹	A ¹	A ¹	A ¹	A ¹	A ¹						A
D18 Gear shift indicator			A											
Requirements concerning E DRIVER AND SYSTEM BEHAVIOUR														
E1 Alcohol interlock installation facilitation		EN 50436:2016	B	B	B	B	B	B						

<i>E2 Driver drowsiness and attention warning</i>			B	B	B	B	B	B						
<i>E3 Advanced driver distraction warning</i>		Distraction avoidance by technical means may also be taken into consideration	C	C	C	C	C	C						
<i>E4 Driver readiness monitoring system</i>			B ⁵	B ⁵	B ⁵	B ⁵	B ⁵	B ⁵						
<i>E5 Event data recorder</i>			B	<i>D</i>	<i>D</i>	B	<i>D</i>	<i>D</i>					B	

E6 Systems to replace driver's control			B ⁵	B ⁵	B ⁵	B ⁵	B ⁵	B ⁵						
E7 Systems to provide the vehicle with information on state of vehicle and surrounding area			B ⁵	B ⁵	B ⁵	B ⁵	B ⁵	B ⁵						
E8 Platooning			■	B ¹	B ¹	■	B ¹	B ¹						

**Requirements concerning
GENERAL VEHICLE CONSTRUCTION AND FEATURES**

F1 Registration plate space			A	A	A	A	A	A	A	A	A	A		
F2 Reversing motion			A	A	A	A	A	A						
F3 Door latches and hinges	UN Regulation No 11		A			A	■	■						
F4 Door entry steps, handholds and running boards			A			A	A	A						

F5 External projections	UN Regulation No 26		A												
F6 External projections of commercial vehicle cabs	UN Regulation No 61					A	A	A							
F7 Statutory plate and vehicle identification number			A	A	A	A	A	A	A	A	A	A			
F8 Towing devices			A	A	A	A	A	A							

F9 Wheel guards			A											
F10 Spray suppression systems						A	A	A	A	A	A	A		
F11 Masses and dimensions			A	A	A	A	A	A	A	A	A	A		
F12 Mechanical couplings	UN Regulation No 55 UN Regulation No 102		A ¹	A ¹	A ¹	A ¹	A ¹	A ¹	A	A	A	A	A	A

F13 Vehicles intended for the transportation of dangerous goods	UN Regulation No 105					A	A	A	A	A	A	A		
F14 General bus construction	UN Regulation No 107		A	A										
F15 Bus strength of superstructure	UN Regulation No 66		A	A										
F16 Flammability in buses	UN Regulation No 118			A										A

Notes to the table

A: Date for the prohibition of the registration of vehicles, as well as the placing on the market and entry into service of components and separate technical units:

[] *the date of application of this Regulation*

B: Date for refusal to grant EU type-approval:

[] *the date of application of this Regulation*

Date for the prohibition of the registration of vehicles, as well as the placing on the market and entry into service of components and separate technical units:

[] *24 months after the date of application of this Regulation*

C: Date for refusal to grant EU type-approval:

24 months after the date of application of this Regulation

Date for the prohibition of the registration of vehicles, as well as the placing on the market and entry into service of components and separate technical units:

48 months after the date of application of this Regulation

D: Date for refusal to grant EU type-approval:

42 months after the date of application of this Regulation

Date for the prohibition of the registration of vehicles, as well as the placing on the market and entry into service of components and separate technical units:

78 months after the date of application of this Regulation

X: The component or separate technical unit in question applies to the vehicle categories as indicated.

¹ Compliance is required if fitted.

² Vehicles of this category shall be fitted with an adequate windscreen defrosting and demisting device.

³ Vehicles of this category shall be fitted with adequate windscreen washing and wiping devices.

4 The following vehicles are exempted:

- semi-trailer towing vehicles of category N₂ with a maximum mass exceeding 3,5 tonnes but not exceeding 8 tonnes;
- vehicles of categories M₂ and M₃ of Class A, Class I and Class II as defined in paragraph 2.1 of UN Regulation No 107;
- articulated buses of category M₃ of Class A, Class I and Class II as defined in paragraph 2.1 of UN Regulation No 107;
- off-road vehicles of categories M₂, M₃, N₂ and N₃;
- special purpose vehicles of categories M₂, M₃, N₂ and N₃; and
- vehicles of categories M₂, M₃, N₂ and N₃ with more than three axles.

5 Compliance is required in case of automated vehicles.

6 ***For motor vehicles with hydraulic power assisted steering systems dates in Note C apply. Those vehicles, however, shall be equipped with a lane departure warning system instead.***

ANNEX III

Amendments to Annex II to Regulation (EU) 2018/858

Annex II to Regulation (EU) 2018/858 is amended as follows:

- (1) in the table in Part I, in the entry for item 3A, the reference in the third column to 'Regulation (EC) No 661/2009' is replaced by the following:

'Regulation (EU) 2019/...*+'

- * Regulation (EU) 2019/... of the European Parliament and of the Council of [...] 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 and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 [OJ ..., p...]

and each subsequent reference to 'Regulation (EC) No 661/2009' throughout Annex II is replaced by a reference to 'Regulation (EU) 2019/...', unless otherwise provided in the succeeding provisions of this Annex;

- (2) Part I is amended as follows:

- (a) the table is amended as follows:

- (i) the following entry is inserted in the appropriate place by item number:

⁺ [OP: Please insert relevant details in the text and in the footnote.]

'55A	Pole side impact	Regulation (EU) 2019/... ⁺ UN Regulation No 135	X			X';								
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(ii) the entry for item 58 is replaced by the following:

'58	Pedestrian protection	Regulation (EU) 2019/... ⁺ UN Regulation No 127	X			X								X';
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(iii) the entries for items 62 and 63 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134	X	X	X	X	X	X					X
63	General safety	Regulation (EU) 2019/... ⁺	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾ ;

(iv) the entries for items 65 and 66 are replaced by the following:

'65	Advanced emergency braking system	Regulation (EU) 2019/... ⁺ UN Regulation No 131		X	X		X	X					
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66	Lane departure warning system	Regulation (EU) 2019/... ⁺ UN Regulation No 130		X	X		X	X';					
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(b) the explanatory notes are amended as follows:

(i) explanatory notes 3 and 4 are replaced by the following:

'⁽³⁾ The fitting of vehicle stability function is required in accordance with Article 4(5) of Regulation (EU) 2019/...⁺

'⁽⁴⁾ The fitting of an electronic stability control system is required in accordance with Article 4(5) of Regulation (EU) 2019/...⁺

(ii) explanatory note 9A is replaced by the following:

'^(9A) The fitting of a tyre pressure monitoring system is required in accordance with Article 5(1) of Regulation (EU) 2019/...⁺;

(iii) explanatory note 15 is replaced by the following:

'⁽¹⁵⁾ Compliance with Regulation (EU) 2019/...⁺ is mandatory. However, type-approval under this specific item is not envisaged as it merely represents the collection of individual items listed elsewhere in the table that make reference to Regulation (EU) 2019/...⁺!;

(3) in Appendix 1 of Part I, Table 1 is amended as follows:

(a) the entry for item 46A is replaced by the following:

'46A	Installation of tyres	Regulation (EU) 2019/... ⁺ UN Regulation No 142		B';
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(b) the entry for item 58 is replaced by the following:

'58	Pedestrian protection	Regulation (EU) 2019/... ⁺ UN Regulation No 127		C <i>Date for refusal to grant EU type-approval:</i> <i>[42 months after the date of application of this Regulation]</i> <i>Date for the prohibition of the registration of vehicles:</i> <i>[144 months after the date of application of this Regulation]'</i> ;
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(c) the entries for items 62 and 63 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134		X
63	General safety	Regulation (EU) 2019/... ⁺		Compliance with Regulation (EU) 2019/... ⁺ is mandatory. However, type-approval under this specific item is not envisaged as it merely represents the collection of individual items listed elsewhere in the table that make reference to Regulation (EU) 2019/... ⁺ ;

(4) in the explanatory notes to Table 1 of Appendix 1, the final paragraph is deleted;

(5) in Appendix 1 of Part I, Table 2 is amended as follows:

(a) the entry for item 46A is replaced by the following:

'46A	Installation of tyres	Regulation (EU) 2019/... ⁺ UN Regulation No 142		B';
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(b) the entry for item 58 is replaced by the following:

'58	Pedestrian protection	Regulation (EU) 2019/... ⁺ UN Regulation No 127	C <i>Date for refusal to grant EU type-approval:</i> <i>[42 months after the date of application of this Regulation]</i> <i>Date for the prohibition of the registration of vehicles:</i> <i>[144 months after the date of application of this Regulation]'</i> ;
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(c) the entries for items 62 and 63 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134		X
63	General safety	Regulation (EU) 2019/... ⁺		Compliance with Regulation (EU) 2019/... ⁺ is mandatory. However, type-approval under this specific item is not envisaged as it merely represents the collection of individual items listed elsewhere in the table that make reference to Regulation (EU) 2019/... ⁺ ;

(6) in Appendix 2 of Part I, point 4 is amended as follows:

(a) the table headed 'Part I: Vehicles belonging to category M₁' is amended as follows:

(i) the entry for item 58 is replaced by the following:

'58	UN Regulation No 127 Regulation (EU) 2019/...+ (Pedestrian protection)	Vehicles shall be fitted with an electronic antilock braking system acting on all wheels. The requirements of UN Regulation No 127 shall apply. Any frontal protection system shall either be an integral part of the vehicle and thus compliant with the requirements of UN Regulation No 127 or be type-approved as separate technical unit';
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(ii) the following entry is inserted in the appropriate place by item number:

'62	UN Regulation No 134 Regulation (EU) 2019/... ⁺ (Hydrogen system)	The requirements of UN Regulation No 134 shall apply. Alternatively, it shall be demonstrated that the vehicle complies with: <ul style="list-style-type: none">- Substantive requirements of Regulation (EC) No 79/2009 in its version applicable on [] <i>the date immediately preceding the date of application of this Regulation</i>];- Attachment 100 – Technical Standard For Fuel Systems Of Motor Vehicle Fueled By Compressed Hydrogen Gas (Japan);- GB/T 24549-2009 Fuel cell electric vehicles – safety requirements (China);- International standard ISO 23273:2013 Part 1: Vehicle functional safety and Part 2: Protection against hydrogen hazards for vehicles fuelled with compressed hydrogen; or- SAE J2578 – General Fuel Cell Vehicle Safety';
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(b) the table headed 'Part II Vehicles belonging to category N₁' is amended as follows:

(i) the entry for item 58 is replaced by the following:

'58	UN Regulation No 127 Regulation (EU) 2019/...+ (Pedestrian protection)	Vehicles shall be fitted with an electronic antilock braking system acting on all wheels. The requirements of UN Regulation No 127 shall apply. Any frontal protection system shall either be an integral part of the vehicle and thus compliant with the requirements of UN Regulation No 127 or be type-approved as separate technical unit';
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(ii) the following entry is inserted in the appropriate place by item number:

'62	UN Regulation No 134 Regulation (EU) 2019/... ⁺ (Hydrogen system)	The requirements of UN Regulation No 134 shall apply. Alternatively, it shall be demonstrated that the vehicle complies with: <ul style="list-style-type: none">- Substantive requirements of Regulation (EC) No 79/2009 in its version applicable on [] <i>the date immediately preceding the date of application of this Regulation</i>];- Attachment 100 – Technical Standard For Fuel Systems Of Motor Vehicle Fueled By Compressed Hydrogen Gas (Japan);- GB/T 24549-2009 Fuel cell electric vehicles – safety requirements (China);- International standard ISO 23273:2013 Part 1: Vehicle functional safety and Part 2: Protection against hydrogen hazards for vehicles fuelled with compressed hydrogen; or- SAE J2578 – General Fuel Cell Vehicle Safety';
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(7) in Part II, in the table, the entries for items 58, 65 and 66 are deleted;

(8) Part III is amended as follows:

(a) in Appendix 1, the table is amended as follows:

(i) the entry for item 58 is replaced by the following:

'58	Pedestrian protection	Regulation (EU) 2019/... ⁺ UN Regulation No 127	X	X';		
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(ii) the entries for items 62 and 63 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134	X	X	X	X
63	General safety	Regulation (EU) 2019/... ⁺	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾ ;

(iii) the entries for items 65 and 66 are replaced by the following:

'65	Advanced emergency braking system	Regulation (EU) 2019/... ⁺ UN Regulation No 131			N/A	N/A
66	Lane departure warning system	Regulation (EU) 2019/... ⁺ UN Regulation No 130			N/A	N/A';

(b) in Appendix 2, the table is amended as follows:

(i) the following entry is inserted in the appropriate place by item number:

'55A	Pole side impact	Regulation (EU) 2019/... ⁺ UN Regulation No 135	N/A		N/A';							
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(ii) the entry for item 58 is replaced by the following:

'58	Pedestrian protection	Regulation (EU) 2019/... ⁺ UN Regulation No 127	N/A					N/A';					
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(iii) the entries for items 62 and 63 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134	X	X	X	X	X	X					
63	General safety	Regulation (EU) 2019/... ⁺	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾ ';

(iv) the entries for items 65 and 66 are replaced by the following:

65	Advanced emergency braking system	Regulation (EU) 2019/... ⁺ UN Regulation No 131		N/A	N/A		N/A	N/A				
66	Lane departure warning system	Regulation (EU) 2019/... ⁺ UN Regulation No 130		N/A	N/A		N/A	N/A';				

(c) Appendix 3 is amended as follows:

(i) in the table, the following entry is inserted in the appropriate place by item number:

'55A	Pole side impact	Regulation (EU) 2019/... ⁺ UN Regulation No 135	N/A';
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(ii) in the table, the entry for item 58 is replaced by the following:

'58	Pedestrian protection	Regulation (EU) 2019/... ⁺ UN Regulation No 127	G';
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(iii) in the table, the entries for items 62 and 63 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134	X
63	General safety	Regulation (EU) 2019/... ⁺	X ⁽¹⁵⁾ ;

(iv) the following point is added:

'5. Points 1. to 4.2. also apply to vehicles of category M₁ that are not categorised as special purpose vehicles but are wheelchair accessible.';

(d) in Appendix 4, the table is amended as follows:

(i) the following entry is inserted in the appropriate place by item number:

'55A	Pole side impact	Regulation (EU) 2019/... ⁺ UN Regulation No 135			A';							
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(ii) the entry for item 58 is replaced by the following:

'58	Pedestrian protection	Regulation (EU) 2019/... ⁺ UN Regulation No 127			A';							
-----	-----------------------	---	--	--	-----	--	--	--	--	--	--	--

(iii) the entries for items 62, 63, 65 and 66 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134	X	X	X	X	X					
-----	-----------------	---	---	---	---	---	---	--	--	--	--	--

63	General safety	Regulation (EU) 2019/... ⁺	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾	X ⁽¹⁵⁾
65	Advanced emergency braking system	Regulation (EU) 2019/... ⁺ UN Regulation No 131	N/A	N/A		N/A	N/A					
66	Lane departure warning system	Regulation (EU) 2019/... ⁺ UN Regulation No 130	N/A	N/A		N/A	N/A';					

(e) in Appendix 5, in the table, the entries for items 62, 63, 65 and 66 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134	X
63	General safety	Regulation (EU) 2019/... ⁺	X ⁽¹⁵⁾
65	Advanced emergency braking system	Regulation (EU) 2019/... ⁺ UN Regulation No 131	N/A
66	Lane departure warning system	Regulation (EU) 2019/... ⁺ UN Regulation No 130	N/A';

(f) in Appendix 6, in the table, the entries for items 62, 63, 65 and 66 are replaced by the following:

'62	Hydrogen system	Regulation (EU) 2019/... ⁺ UN Regulation No 134	X	
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63	General safety	Regulation (EU) 2019/... ⁺	X ⁽¹⁵⁾	X ⁽¹⁵⁾
65	Advanced emergency braking system	Regulation (EU) 2019/... ⁺ UN Regulation No 131	N/A	
66	Lane departure warning system	Regulation (EU) 2019/... ⁺ UN Regulation No 130	N/A';	

(g) the Explanatory Notes are amended as follows:

(i) the explanatory note for X is replaced by the following:

'X The requirements set out in the relevant regulatory act are applicable.';

(ii) explanatory notes 3 and 4 are replaced by the following:

'⁽³⁾ The fitting of vehicle stability function is required in accordance with Article 4(5) of Regulation (EU) 2019/...⁺

'⁽⁴⁾ The fitting of an electronic stability control system is required in accordance with Article 4(5) of Regulation (EU) 2019/...⁺;

(iii) explanatory note 9A is replaced by the following:

'^(9A) Applies only if vehicles are fitted with equipment covered by UN Regulation No 64. However, tyre pressure monitoring system is compulsory in accordance with Article 5(1) of Regulation (EU) 2019/...⁺;

(iv) explanatory note 15 is replaced by the following:

'⁽¹⁵⁾ Compliance with Regulation (EU) 2019/...⁺ is mandatory. However, type-approval under this specific item is not envisaged as it merely represents the collection of individual items listed elsewhere in the relevant table.';

(v) explanatory notes 16 and 17 are deleted.

ANNEX IV

Transitional provisions referred to in Article 16(3)

UN Regulation	Specific requirements	Final date for registration of non-compliant vehicles as well as sale or entry into service of non-compliant components ⁽¹⁾
117	Tyres with regard to rolling sound emissions, adhesion on wet surfaces and rolling resistance	30 April 2023
	Tyres of class C3 shall comply with Stage 2 rolling resistance requirements	

Notes to the table

- (¹) The dates as laid down in Regulation (EC) No 661/2009 in respect of types of vehicle, system and component complying with the requirements in its version applicable on [the date immediately preceding the date of application of this Regulation] and Regulation (EC) No 78/2009 in respect of types of vehicle and system complying with the requirements in its version applicable on [the date immediately preceding the date of application of this Regulation].

Or. en