EXPLANATORY MEMORANDUM TO

THE ROAD VEHICLES (TYPE-APPROVAL) (AMENDMENT) (NO. 3) REGULATIONS 2025

2025 No. 1110

1. Introduction

1.1 This Explanatory Memorandum has been prepared by the Department for Transport and is laid before Parliament by Command of His Majesty.

2. Declaration

2.1 Simon Lightwood MP, Parliamentary Under Secretary of State for Roads and Buses at the Department for Transport confirms that this Explanatory Memorandum meets the required standard.

2.2 Phil Earl, Deputy Director for International Vehicle Standards, at the Department for Transport confirms that this Explanatory Memorandum meets the required standard.

3. Contact

3.1 Douglas Hannah at the Department for Transport can be contacted by email at the following address with any queries regarding the instrument: ivs.enquiries@dft.gov.uk

Part One: Explanation, and context, of the Instrument

4. Overview of the Instrument

What does the legislation do?

4.1 This instrument amends assimilated law on road vehicle type-approval[1] to set the minimum technical standards for vehicles to ensure that vehicles are designed to incorporate effective cybersecurity management systems throughout their life, and that software updates are issued safely. Specifically, it mandates two United Nations Economic Commission for Europe (UNECE) Regulations, namely, UN (United Nations) Regulation No. 155 on cyber-security and cyber-security management systems ("R155") and UN Regulation No. 156 on software updates and software update management systems ("R156") for new vehicles seeking type-approval through the Great Britain (GB) type-approval scheme for road vehicles.

Where does the legislation extend to, and apply?

4.2 The extent of this instrument (that is, the jurisdiction(s) which the instrument forms part of the law of) is England and Wales, Scotland and Northern Ireland (NI).

4.3 The territorial application of this instrument (that is, where the instrument produces a practical effect) is in principle identical to the extent, with the exception of NI. The instrument does not apply in NI further to the implementation of the Windsor Framework (see section 7A of the European Union (EU) (Withdrawal) Act 2018).

[1] Type-approval is the confirmation that vehicles, vehicle systems, or parts meet specified safety and environmental performance standards. This is demonstrated through a process whereby manufacturers are required to test representative vehicles or components against the standards and obtain approval from a government body prior to placing it on sale.

5. Policy Context

What is being done and why?

5.1 Before a new vehicle enters the market, it is subject to a process known as type-approval, where it is certified that the vehicle complies with a variety of applicable technical standards, covering safety and environmental performance. In the United Kingdom (UK), type-approval certification is carried out by the Vehicle Certification Agency (VCA), an executive agency of the Department for Transport.

5.2 Due to the global nature of the automotive industry, many of these standards are established at an international level, through the World Forum for the Harmonisation of Vehicle Regulations, Working Party 29 ("WP.29") of the UNECE's Inland Transport Committee. Implementing international standards reduces regulatory burdens for manufacturers, many of whom sell vehicles across multiple markets and benefit by not having to adapt production to meet different requirements in individual markets.

5.3 Recent technological developments concerning vehicles have led to an increased presence of connectivity and the degree of automation available on them. Connected vehicles transmit and receive data for various purposes, such as route planning or diagnostics. Automated systems in vehicles can influence the longitudinal and lateral motion, such as braking when a potential collision is anticipated or correcting steering if an inadvertent lane change is detected.

5.4 As these aspects become more integral and sophisticated on vehicles, risks and threats to them may emerge that require mitigation. These could range from software bugs impacting user experience to potential intervention from hostile actors.

5.5 WP.29 has supported the mitigation of these risks and threats to protect vehicle users and the wider public through the development of new technical standards, specifically, UN Regulation No. 155[2] and UN Regulation No. 156[3] . Mandating these regulations in the GB type-approval scheme will ensure that these protections are incorporated in GB, which realises the policy objective of ensuring the cyber-security of vehicles via the most effective means.

5.6 R155 requires manufacturers to implement a Cyber Security Management System to ensure robust cybersecurity practices are utilised. The management system needs to address their processes for risk assessment and mitigation, threat detection, and incident response. These requirements are applicable for the whole of the vehicle's lifecycle, from concept and development through to post-production. The duty placed on manufacturers also extends to requiring them to ensure compliance throughout their supply chain.

5.7 R156 is designed to complement R155, acknowledging that technology and related threats will continue to evolve once the vehicle has been sold to the consumer. It requires manufacturers to implement a Software Update Management System that addresses their processes for configuration management, compatibility validation, safety impact assessment, and security measures for updating software to provide safe and secure 'over the air' updates.

[2] UN Regulation No.155: https://unece.org/transport/documents/2021/03/standards/un-regulation-no-155-cyber-security-and-cyber-security

[3] UN Regulation No. 156: https://unece.org/transport/documents/2021/03/standards/un-regulation-no-156-software-update-and-software-update

5.8 Manufacturers will be required to demonstrate compliance with R155 and R156 by maintaining relevant records, and will be subject to audits, both internal and through the type-approval authority.

What was the previous policy, how is this different?

5.9 Previously the GB type-approval scheme had no requirements for cyber-security or software updating. This is because historically vehicles did not have remote connectivity, and security was preserved due to them being isolated systems. Therefore, there has not been any preceding policy and there is no directly comparable standard that these regulations seek to replace.

6. Legislative and Legal Context

How has the law changed?

6.1 The purpose of type-approval legislation is to ensure that vehicles and their systems, components[4], and separate technical units[5] meet prescribed safety and environmental standards. The GB type-approval scheme for road vehicles (passenger vehicles including cars, and goods vehicles and their trailers) is set out in a large body of assimilated law, of which the principal instrument is Regulation (EU) 2018/858.

6.2 Subsequent to EU-Exit, Regulation (EU) 2018/858 was incorporated into UK law in accordance with the European Union (Withdrawal) Act 2018, which preserved EU and EU-derived law as it stood immediately before the UK left the EU.

6.3 Under the Windsor Framework, the body of EU Regulations governing type-approval remain directly applicable in NI. Consequently, NI is governed by the EU type-approval scheme, rather than the GB type-approval scheme.

6.4 The deficiencies in the relevant assimilated law were corrected by the Road Vehicles and Non-Road Mobile Machinery (Type-Approval) (Amendment and Transitional Provisions) (EU Exit) Regulations 2022, SI 2022/1273 in order to enable the continued operation of the regulatory framework domestically.

6.5 This instrument amends Annex XII of Regulation 2018/858 which lists UN Regulations which are compulsory in GB type-approval and their dates of applicability. References to R155 and R156 have been introduced to apply those standards along with two tables of dates which set out when they become mandatory for particular categories of vehicles.

6.6 This instrument also amends Article 8, as well as Annexes I and VIII of Regulation (EU) 2020/683, which deals with the administrative requirements associated with type-approval. The specific changes concern the document templates regarding the information document[6] and Certificate of Conformity[7]. They ensure that the relevant information is provided to the type-approval authority and captured to record compliance with R155 and R156 for relevant vehicles.

[4] Are systems or parts that can be type-approved independently of a vehicle.
[5] Are systems or parts that are type-approved in relation to one or more vehicle models.
[6] A document which contains a complete set of information on the characteristics of the type of vehicle that is necessary for the approval authority to identify the type of vehicle and to properly conduct the type-approval procedure.
[7] The document issued by the manufacturer for each vehicle produced which certifies that the vehicle conforms to the type-approved vehicle and complies with all regulatory acts that were applicable at the time of its production.

Why was this approach taken to change the law?

6.7 Type-approval is a long-established mechanism for ensuring the safety and environmental performance of new vehicles and the automotive industry is well versed in its functioning and the mechanisms by which new requirements are introduced. R155 and R156 are widely recognised technical standards, which the automotive industry is already working towards due to their application in other markets. Therefore, mandating compliance with R155 and R156 through the GB type-approval scheme is the most effective means of achieving the policy goal of mitigating the risks associated with increased automation and connectivity.

6.8 Mandating R155 and R156 in domestic law also ensures that the GB type-approval scheme is aligned with the EU on the cyber security and software updating of vehicles. Consequently, it will remove a divergence in the UK internal market between GB and NI.

6.9 The UK is required to incorporate at least our acceptance of vehicles approved to R155 and R156 into domestic law in order to meet its international obligations as a contracting party to the UNECE.

7. Consultation

Summary of consultation outcome and methodology

7.1 Under Article 82(3) of Regulation (EU) 2018/858, the Secretary of State is required to consult with such representative organisations as they think fit, before making these Regulations. The Department conducted a public consultation, from 26 February to 28 April 2025 and an email was sent to inform stakeholders deemed likely to have an interest in this intervention.

7.2 The consultation sought to establish participants' views on requiring approval to UN Regulations Nos. 155 and 156 under the GB type-approval scheme covering passenger cars, vans, trucks, trailers and buses. Although not part of this instrument, the consultation also included a call for evidence on potential future legislation.

7.3 A total of 30 responses were received of which 27 were provided on behalf of organisations and 3 were received from private individuals. Of the 27 responses provided by organisations, 6 were from trade associations, such as the Society of Motor Manufacturers and Traders, 5 from vehicle manufacturers while the remainder included vehicle convertors, members of the insurance industry, and automotive suppliers.

7.4 There was broad support from the respondents for the proposals. Trade associations representing a number of manufacturers stated that many global manufacturers have actively contributed to the development of these UN Regulations and are most likely to have already implemented measures for compliance in other markets or are aware of the measures required to meet these regulations. Additionally, views reflected that the regulations would not only help protect against security threats and ensure the safe deployment of software updates but would also help align the GB type-approval scheme with other parts of the world.

7.5 However, respondents raised concerns over the originally proposed implementation dates for compliance with the UN Regulations as being ambitious, both for newly introduced models and for existing models. Despite R155 and R156 being already mandated in the EU and the majority of manufacturers being likely to use the same vehicle models that were already compliant, there was a desire to have sufficient notice to administer the change in GB. It was also noted that there is limited

compliance for manufacturers only operating in GB as they do not currently have to comply, which further added to the challenge of the originally proposed implementation dates.

7.6 There were also concerns about the impact on vehicle convertors, who modify or further develop vehicles built by another manufacturer (e.g., buses, wheelchair accessible vehicles), due to the potential technical challenges in complying whilst converting the existing vehicle. These challenges extended to technical experience, since convertors are typically small businesses that have not traditionally considered such topics, and the need for expertise in cyber security and software management in order to comply with these UN Regulations.

7.7 Respondents also raised concerns that the originally proposed implementation date for new vehicle models may create additional workload for the VCA at a critical time, as the proposed date coincided with the date for mandating GB type-approval for existing models.

7.8 As a result of these responses, the implementation dates have been revised; with new vehicle models needing to comply by 1st June 2026, and certain vehicle convertors (such as those producing wheelchair accessible vehicles) not being required to conform until 7th July 2029. These changes were made following careful consideration on potential risks, and to support British businesses, particularly smaller businesses who may have found the previous timetable particularly challenging.

7.9 The consultation and its response have been published on the Department's website[8]. Hard copies may be obtained from the Department for Transport, Great Minster House, 33 Horseferry Road, London, SW1P 4DR.

8. Applicable Guidance

8.1 The Department considers the provision of guidance on this instrument unnecessary. Affected manufacturers are in regular dialogue with the VCA in the course of obtaining their GB type-approvals and will be informed of the obligation to comply with these regulations via these standard communication channels.

Part Two: Impact and the Better Regulation Framework

9. Impact Assessment

9.1 A full Impact Assessment has not been prepared for this instrument because the Equivalent Annual Net Direct Cost to Business (EANDCB) has been assessed as below the +/-£10m per year de minimis threshold. The UN Regulations that this instrument mandates are focused on ensuring processes are in place rather than any specific or measurable technical development. Additionally, due to compliance being required in the EU, it is considered that there would be minimal cost to most manufacturers in complying with GB requirements, since they typically sell the same models in both markets. However, the minority which sell into only the GB market are expected to incur the majority of the cost. The Department has assessed the central EANDCB to be £1.4m and a low and high estimate of £1.0 - £1.8m. A De Minimis Assessment is published alongside the Explanatory Memorandum on the legislation.gov.uk website.

[8] Department's published consultation and response: https://www.gov.uk/government/consultations/gb-type-approval-scheme-cyber-security-and-software-update-requirements

Impact on businesses, charities and voluntary bodies

9.2 The impact on business is that, if they are involved in the automotive industry (either as a vehicle manufacturer or tier 1 parts supplier), these measures will likely apply to them and they will be required to implement management processes to deal with cyber security and software updating. These will need to be audited and verified before new vehicles can be sold on the market. The majority of businesses affected are likely to already have these systems in place due to R155 and R156 already being enforced in other territories, as well as such measures being best practice. Although most of the impact will be felt by businesses selling only in GB, the number of businesses which cater to only the GB market and are within scope is relatively small. As such, the impact on businesses overall has been estimated to be minimal. There is no, or no significant, impact on charities or voluntary bodies because this legislation is not applicable or directly relevant to them.

9.3 The legislation does impact small or micro businesses.

9.4 To minimise the impact of the requirements on small or micro businesses (employing up to 50 people), the approach taken is to exempt small and micro businesses from the requirements of R155 and R156 provided they can use the small series (limited number of vehicles annually) approval route. We have also delayed implementation dates for vehicle convertors to provide more time to make the necessary changes where we have considered a full exemption not possible.

9.5 There is no, or no significant, impact on the public sector because it is manufacturers of vehicles who will be required to implement and maintain the necessary systems to satisfy the regulations and VCA, the type-approval authority, operate on a cost-recovery basis.

10. Monitoring and review

What is the approach to monitoring and reviewing this legislation?

10.1 The approach to monitoring this legislation is that the Department and VCA will continue their regular liaison meetings with stakeholders about the functioning of the GB type-approval scheme, with the aim of continuous improvement. The Department will monitor developments in cyber security and automation, along with the functioning of these UN Regulations, bringing forward proposals for amendment to the regulations to the WP.29 forum where necessary.

10.2 The instrument does not include a statutory review clause, and, in line with the requirements of the Small Business, Enterprise and Employment Act 2015, the Parliamentary Under Secretary of State, Simon Lightwood MP, has made the following statement:

"The Department has assessed the net benefits to industry of this instrument as amounting to less than the £10 million De Minimis threshold. Regulation (EU) 2018/858 on type-approval, places an obligation (Article 6(8)) on the Secretary for State to carry out a review of type-approval activities every four years. Conducting a five-year review on top of this is considered disproportionate duplication. Given this, a statutory review clause has not been included."

Part Three: Statements and Matters of Particular Interest to Parliament

11. Matters of special interest to Parliament

11.1 None.

12. European Convention on Human Rights

12.1 As the instrument is subject to negative procedure and does not amend primary legislation, no statement is required.

13. The Relevant European Union Acts

13.1 This instrument is not made under the European Union (Withdrawal) Act 2018, the European Union (Future Relationship) Act 2020 or the Retained EU Law (Revocation and Reform) Act 2023 ("relevant European Union Acts").