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PROPOSAL

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To:	Ms Thérèse BLANCHET, Secretary-General of the Council of the European Union
No. Cion doc.:	COM(2025) 180 final
Subject:	Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2014/45/EU on periodic roadworthiness tests for motor vehicles and their trailers and Directive 2014/47/EU on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union

Delegations will find attached document COM(2025) 180 final.

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Roadworthiness package

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive 2014/45/EU on periodic roadworthiness tests for motor vehicles and their trailers and Directive 2014/47/EU on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union

(Text with EEA relevance)

{SEC(2025) 119 final} - {SWD(2025) 96 final} - {SWD(2025) 97 final} -
{SWD(2025) 98 final} - {SWD(2025) 99 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

This explanatory memorandum accompanies the proposal for the revision of two Directives:

(1) Directive 2014/45/EU of the European Parliament and of the Council on periodic roadworthiness tests for motor vehicles and their trailers[1];

(2) Directive 2014/47/EU of the European Parliament and of the Council on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union[2].

Road transport plays a vital role in connecting businesses and consumers across the EU, facilitating trade and supporting economic growth and employment. However, it is also a source of certain problems, such as road crashes and air pollution.

Road crashes are one of the most devastating consequences of road transport, with significant costs to society. The main causes of road crashes are speeding, driving under the influence of alcohol or drugs, distracted driving, and various driver errors (such as misjudging a situation or driving while tired). Other causes include the poor state or design of infrastructure (such as slippery surfaces, inadequate markings and poor maintenance) and vehicle defects. Due to EU type-approval rules and a well-developed system of technical inspections during a vehicle's lifetime, vehicle defects are the cause of only a small percentage of road crashes in the EU. However, this also means that avoidable crashes caused by vehicle defects still occur. The Safe System approach requires action on all these fronts, recognising that the different parts of the entire system – including users, vehicles, infrastructure and emergency response – work together as a whole[3].

Air pollutant emissions from road transport are the principal source of nitrogen oxides (NO_X), responsible for 35.5% of emissions in 2021, and account for a significant share of particulate matter (PM) emissions (8.1% of $PM_{2.5}$ and 9.5% of PM_{10} emissions)[4]. In particular in cities, these percentages are expected to be even higher and lead to high exposure to these pollutants from road transport. It was estimated that in 2018 up to 70 000 premature deaths in the EU were attributed to road transport emissions[5]. To reduce these emissions, revised rules on ambient air quality and cleaner air for Europe were set out in Directive (EU) 2024/2881[6]. The Directive aims to put the

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1 Directive 2014/45/EU of the European Parliament and of the Council of 3 April 2014 on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive 2009/40/EC (OJ L 127 29.4.2014, p. 51, ELI: http://data.europa.eu/eli/dir/2014/45/2023-05-20).

2 Directive 2014/47/EU of the European Parliament and of the Council of 3 April 2014 on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union and repealing Directive 2000/30/EC, (OJ L 127 29.4.2014, p. 134, ELI: http://data.europa.eu/eli/dir/2014/47/2022-09-27).

3 European Commission (2020), Directorate-General for Mobility and Transport, Next steps towards 'Vision Zero' – EU road safety policy framework 2021-2030, Publications Office, 2020, https://data.europa.eu/doi/10.2832/391271.

4 National air pollutant emissions data viewer 2005-2022 | European Environment Agency's home page, EEA (2024), Air Pollution in Europe; 2024 reporting status, https://www.eea.europa.eu/publications/national-emission-reduction-commitments-directive-2024.

5 SWD(2022) 359 Impact assessment accompanying the Euro 7 proposal: https://single-market-economy.ec.europa.eu/publications/euro-7-standard-proposal_en

6 Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (OJ L, 2024/2881, 20.11.2024, http://data.europa.eu/eli/dir/2024/2881/oj).

EU on a path to achieve zero pollution for air by 2050 at the latest while aligning air quality standards more closely with the World Health Organization's guidelines, which require tougher measures to reduce emissions at their source.

This initiative builds on the 2014 roadworthiness package (RWP), which is composed of the following three directives.

- **Directive 2014/45/EU on periodic roadworthiness tests** requires that road transport vehicles are periodically tested to ensure compliance with a set of minimum requirements. It applies to all cars, vans, trucks, buses, heavy trailers, faster tractors, and since January 2022, larger two- and three-wheel vehicles and quadricycles.
- **Directive 2014/47/EU on technical roadside inspections** complements Directive 2014/45/EU by requiring Member States to carry out roadside inspections of heavy passenger and freight vehicles and their trailers.
- **Directive 2014/46/EU**[7] **on the registration documents for vehicles** provides for the electronic recording of the data of all vehicles registered in every Member State and harmonised procedures for suspending a vehicle's registration.

The 2014 RWP complements the safety and environmental requirements that vehicles must meet to be able to circulate on EU roads, i.e. the respective EU type-approval regulations[8] for motor vehicles. These regulations also set out the market surveillance requirements for motor vehicles. However, the focus of the RWP is different. Whereas market surveillance provisions aim to ensure that vehicles continue to meet their type-approval requirements when placed on the market and for a limited period[9] after that and focus on the manufacturer's responsibilities, the RWP focuses on ensuring that minimum standards are maintained by owners throughout a vehicle's lifetime. In addition, while market surveillance requires testing a limited number of vehicles per model, periodical technical inspections (PTIs) apply to almost all registered vehicles. Therefore, the RWP complements the market surveillance legislation in ensuring road safety and vehicles' environmental performance during their lifetime.

Along with the 2014 RWP and the adoption of other related EU legislation since, there have been improvements in vehicle technology, including active safety and intelligent driver assistance systems in new vehicles. However, despite this progress, unsafe vehicles still circulate on EU roads, contributing to crashes, either as the main cause or as a contributing factor. Some unsafe vehicles are identified at PTIs or roadside inspections (RSIs), i.e. vehicles with major or dangerous deficiencies. Others may not be detected either because PTIs or RSIs cannot detect them or because they are not subject to testing. These situations include vehicles with tampered safety features and vehicles with cargo that has been improperly secured.

Another problem is the insufficient checks on vehicle air pollutant and noise emissions. Some of the tests used in today's PTIs are no longer sensitive enough to detect emission failures of modern vehicles, and the current testing procedures are not fit to meet the EU policy goals for air pollution and noise. The measurement of NO_X emissions or particle number (PN) values for new cars is still not covered by the current RWP, and there are currently no EU rules on testing whether vehicles have tampered or defective NO_X aftertreatment systems or of particulate filters. Given these

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7 Directive 2014/46/EU of the European Parliament and of the Council of 3 April 2014 amending Council Directive 1999/37/EC on the registration documents for vehicles (OJ L 127, 29.4.2014, p. 129, ELI: http://data.europa.eu/eli/dir/2014/46/oj).

8 See e.g. https://eur-lex.europa.eu/EN/legal-content/summary/eu-approval-and-market-surveillance-measures-for-motor-vehicles-and-their-trailers.html.

9 Currently 5 years and 100 000 km, to be extended under Regulation (EU) 2024/1257 (Euro 7)

shortcomings, the RWP's contribution to reducing the number of high-emitting vehicles has become less effective.

Moreover, Directives 2014/45/EU and 2014/47/EU are not effective in helping enforce rules on EU cross-border traffic and the trade in vehicles.

Although these Directives were slightly amended through delegated acts[10] to align them with updated vehicle categories in type-approval legislation[11] and to introduce testing eCall[12] in PTIs, the main rules have remained the same since 2014. The Sustainable and Smart Mobility Strategy[13] called for adjustments to the roadworthiness legislative framework to ensure a vehicle's lifetime compliance with emission and safety standards, thereby contributing to the EU road safety policy framework 2021-2030[14] and supporting the European Green Deal's objectives.

This initiative aims to further improve road safety in the EU, contributing to sustainable mobility and facilitating the free movement of people and goods in the EU. The objectives to unlock the full potential of the RWP, in particular Directives 2014/45/EU and 2014/47/EU, are described below.

(1) **Ensure the consistency, objectivity and quality of roadworthiness testing of today and tomorrow's vehicles**. In particular, testing electric vehicles (EVs) and electronic safety, including advanced driver assistance systems (ADAS), must be ensured before most new vehicles equipped with such systems are due for their first PTI. To tackle existing emission tests' inability to identify high-emitting vehicles, newly developed test methods need to be incorporated into PTIs and RSIs.

(2) **Significantly reduce tampering and improve the detection of defective vehicles** with faulty or tampered safety and emission control systems, as well as tampered odometers. This can be achieved by: (i) improving emission testing (air pollution and noise); (ii) providing better tools to detect modifications to safety features, especially vehicle software; and (iii) making inspections more frequent and more targeted. Today, some defective vehicles are not tested often enough or at all, which allows such deficiencies to go undetected.

(3) **Improve electronic storage and the exchange of relevant vehicle identification and status data** to address the problem of insufficient data availability and facilitate mutual recognition by enforcement authorities. More accurate status data (such as mileage) and an efficient and effective exchange of information among Member States will also help identify vehicles with tampered odometers.

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10 Commission Delegated Directive (EU) 2021/1717 of 9 July 2021 amending Directive 2014/45/EU of the European Parliament and of the Council as regards the updating of certain vehicle category designations and the addition of eCall to the list of test items, methods, reasons for failure and assessment of deficiencies in Annex I and Annex III to that Directive (OJ L 342, 27.9.2021, p. 48, ELI: http://data.europa.eu/eli/dir_del/2021/1717/oj) and Commission Delegated Directive (EU) 2021/1716 of 29 June 2021 amending Directive 2014/47/EU of the European Parliament and of the Council as regards modifications to the vehicle category designations stemming from amendments to the type-approval legislation (OJ L 342, 27/09/2021, p. 45 ELI: http://data.europa.eu/eli/dir_del/2021/1716/oj).

11 Regulations (EU) No 168/2013, (EU) No 167/2013 and (EU) No 2018/858 of the European Parliament and of the Council.

12 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 ELI: http://data.europa.eu/eli/reg/2015/758/oj).

13 COM(2020) 789 final, EUR-Lex - 52020DC0789 - EN - EUR-Lex (europa.eu).

14 http://eur-lex.europa.eu/resource.html?uri=cellar%3A0e8b694e-59b5-11e8-ab41-01aa75ed71a1.0003.02/DOC_2&format=PDF.

- **Consistency with existing policy provisions in the policy area**

The proposed revision of the RWP, in particular Directives 2014/45/EU and 2014/47/EU, is consistent with the objectives set in the **EU road safety policy framework**[15] and will contribute to achieving the objective of reducing fatalities and serious injuries by 50% by 2030. The proposed revision will also ensure alignment with the 2023 road safety package, i.e. the proposals to amend the **Directive on driving licences** and the **Directive on facilitating cross-border exchange of information on road-safety-related traffic offences**[16]. This proposal sets out the rules on vehicle registration documents, the possible future digitalisation of documents, and the exchange of vehicle-related information among Member States for enforcement.

The revision is also consistent with the EU's clean air policy objectives, including those of the **Ambient Air Quality Directives**[17] and the **National Emission Reduction Commitments Directive**[18], which require Member States to take measures to reduce air pollutants in the atmosphere in line with the Zero Pollution Action Plan goals[19].

To a large extent, roadworthiness testing relies on the **Type-Approval Regulations**[20]. The proposal is aligned with the safety and environmental requirements set out in those rules, and it includes measures that aim to ensure that minimum standards are maintained by owners throughout the lifetime of the vehicle. It is consistent with the **General Safety Regulation**[21] and its predecessors, as well as with the Euro emission standards, and will ensure that any new equipment introduced that complies with these regulations will work as expected and, as a result, deliver the expected benefits. The proposal ensures alignment between PTI and RSI testing and the type-approval process, including the use of electronic technical inspections (ePTIs). The use of remote sensing in RSIs of all vehicles is particularly relevant for market surveillance as it allows for screening a large part of the vehicle fleet. This gives valuable insights into recurrent issues with specific technologies/solutions used as part of emission control systems, vehicle models, model years etc. There are also expected synergies with the

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15 SWD(2019) 283 final, https://transport.ec.europa.eu/system/files/2021-10/SWD2190283.pdf.

16 COM(2023) 127 and COM(2023) 126 final, https://transport.ec.europa.eu/news-events/news/european-commission-proposes-updated-requirements-driving-licences-and-better-cross-border-2023-03-01_en.

17 Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast), (OJ L, 2024/2881, 20.11.2024, ELI: http://data.europa.eu/eli/dir/2024/2881/oj).

18 Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC, (OJ L 344, 17.12.2016, p. 1. ELI: http://data.europa.eu/eli/dir/2016/2284/oj).

19 https://environment.ec.europa.eu/strategy/zero-pollution-action-plan_en

20 For example, Regulation (EU) 2018/858 for most passenger and freight vehicles and their trailers, Regulation (EU) 167/2013 for tractors, and Regulation (EU) 168/2013 for two- and three-wheel vehicles and quadricycles.

21 Regulation (EU) 2019/2144 of the European Parliament and of the Council of 27 November 2019 on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 of the European Parliament and of the Council and Commission Regulations (EC) No 631/2009, (EU) No 406/2010, (EU) No 672/2010, (EU) No 1003/2010, (EU) No 1005/2010, (EU) No 1008/2010, (EU) No 1009/2010, (EU) No 19/2011, (EU) No 109/2011, (EU) No 458/2011, (EU) No 65/2012, (EU) No 130/2012, (EU) No 347/2012, (EU) No 351/2012, (EU) No 1230/2012 and (EU) 2015/166, (OJ L 325, 16.12.2019, p. 1, ELI: http://data.europa.eu/eli/reg/2019/2144/oj).

new **Euro 7 Regulation**[22], including the use of on-board monitoring features to help assess NO_X emissions during PTIs and RSIs.

- **Consistency with other Union policies**

The revision of the RWP, in particular Directives 2014/45/EU and 2014/47/EU, is consistent with the **Single Digital Gateway Regulation**[23] by facilitating online access to vehicle-related information, the relevant administrative procedures, and assistance and problem-solving services. It also contributes to the objectives of the **EU's data strategy**[24] for the development of European data spaces for public administrations that can support the enforcement of legislation, including road safety and environmental legislation. Rules on the protection of personal data also apply to exchanging information on vehicle registration certificates and roadworthiness certificates, as well as related vehicle registration data, in particular Regulation (EU) 2016/679 (General Data Protection Regulation)[25].

The Commission is also currently working on an initiative for fair and non-discriminatory **access to in-vehicle data**, which is crucial for technical inspection centres to be able to carry out their daily tasks. That initiative will complement the **Data Act**[26] with guidance, possibly followed by a legislative proposal, on access to vehicle data, functions and resources[27], which are essential for providing data-dependent services in the automotive sector. It will standardise the relevant datasets and ensure effective, non-discriminatory and secure access for aftermarket and mobility services. A range of automotive service providers, including vehicle repair and inspection companies and authorities have called for an ambitious Commission proposal to ensure a level playing field and unhindered access to the relevant in-vehicle data[28]. The revision of Directive 2014/45/EU (and its implementing act on the technical information necessary for roadworthiness testing[29]) will set out specific provisions facilitating access to the data required for technical inspections.

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22 Regulation (EU) 2024/1257 of the European Parliament and of the Council of 24 April 2024 on type-approval of motor vehicles and engines and of systems, components and separate technical units intended for such vehicles, with respect to their emissions and battery durability (Euro 7), (OJ L, 2024/1257, 8.5.2024, ELI: http://data.europa.eu/eli/reg/2024/1257/oj).

23 Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012 (OJ L 295, 21.11.2018, p. 1. ELI: http://data.europa.eu/eli/reg/2018/1724/oj).

24 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A European strategy for data (COM/2020/66 final).

25 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 (OJ L 119, 4.5.2016, p. 1, ELI: http://data.europa.eu/eli/reg/2016/679/oj).

26 Regulation (EU) 2023/2854 of the European Parliament and of the Council of 13 December 2023 on harmonised rules on fair access to and use of data and amending Regulation (EU) 2017/2394 and Directive (EU) 2020/1828 (OJ L, 2023/2854, 22.12.2023, ELI: http://data.europa.eu/eli/reg/2023/2854/oj).

27 https://transport.ec.europa.eu/document/download/89b3143e-09b6-4ae6-a826-932b90ed0816_en?filename=Communication%20-%20Action%20Plan.pdf.

28 See, for example, open letter from CITA: https://citainsp.org/wp-content/uploads/2023/03/L2023-006-Data-Act.pdf.

29 https://eur-lex.europa.eu/eli/reg_impl/2019/621/oj.

Lastly, the **EU Decision on the Digital Decade Policy Programme 2030**[30] sets out that the European Parliament, the Council, the Commission and Member States should cooperate to achieve digital targets in the EU by 2030. This includes a target for the digitalisation of public services: 100% of key public services should be available online and, where relevant, people and businesses in the EU should be able to interact with public administrations online.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

• Legal basis

The legal basis of the proposal is Article 91(1) of the Treaty on the Functioning of the EU (TFEU)[31]. Article 91(1)(c) TFEU sets out that the EU has competence in the field of transport to lay down measures to improve transport safety, including road safety.

• Subsidiarity (for non-exclusive competence)

The EU already has competence in the field of roadworthiness, by virtue of current Directives 2014/45/EU and 2014/47/EU. Various measures have been introduced at EU level since 1977, when Directive 77/143/EEC[32] introduced the requirement for motor vehicles to undergo periodic roadworthiness tests. The latest change in this area was brought about by the adoption of the RWP in 2014. The new rules to be introduced in this proposal remain within the competences conferred upon the EU under Article 91(1) TFEU, and given their connection to the already existing framework of roadworthiness, they can only be achieved adequately at EU level.

As road transport and the automotive industry are international sectors, it is much more efficient and effective to address the issues at EU level than at national level. While national practices differ historically, a minimum level of harmonisation in vehicle testing and commonly agreed solutions to exchange vehicle data between Member States is more effective than multiple uncoordinated national solutions. With common rules applied to testing modern vehicle technologies (EVs, ADAS and the most recent emission control equipment), Member States will enjoy economies of scale and manufacturers of testing equipment will be able to operate in a more uniform market. The functioning of the single market will also be improved because vehicles will be subject to similar tests under similar conditions, and transport operators will have similar costs and will have to meet similar minimum requirements.

There is widespread agreement among national authorities and industry experts that the current Directives are no longer aligned with the latest regulatory and technological developments in vehicle safety and emission control. In the absence of EU level action, Member States would continue to carry out periodic and roadside inspections. However, it is very unlikely that test methods and the scope of inspections required by EU legislation (e.g. testing brakes, suspension, electronic safety systems and emissions reduction equipment) would be applied in a harmonised or coordinated manner. Member States would apply different piecemeal solutions, which would lead to even larger differences in vehicles' safety

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30 Decision (EU) 2022/2481 of the European Parliament and of the Council of 14 December 2022 establishing the Digital Decade Policy Programme 2030 (OJ L 323, 19.12.2022, p. 4, ELI: http://data.europa.eu/eli/dec/2022/2481/oj).

31 OJ C 115, 9.5.2008, p. 85, ELI: http://data.europa.eu/eli/treaty/tfeu_2008/art_91/oj.

32 Council Directive 77/143/EEC of 29 December 1976 on the approximation of the laws of the Member States relating to roadworthiness tests for motor vehicles and their trailers, (OJ L 47, 18.2.1977, p. 47, ELI: http://data.europa.eu/eli/dir/1977/143/oj).

and environmental performance than today. This would risk distorting the single market and creating further barriers to free movement. The initiative therefore addresses safety and environmental protection needs of 'Union relevance'.

- **Proportionality**

In line with the principle of proportionality set out in Article 5(4) of the Treaty on European Union, the measures in this proposal do not go beyond what is necessary to achieve the objectives of the Treaties – improving road safety, contributing to sustainable mobility and facilitating the free movement of people and goods in the EU.

In general, the scope of the proposal is limited to what can best be achieved at EU level to harmonise testing methods and scope. For example, vehicles that are mostly used locally, such as mopeds and tractors are not targeted by the proposal.

As for the choice of instrument for EU action, revising the existing Directives 2014/45/EU and 2014/47/EU is considered to be the most appropriate solution. This allows for achieving the objectives of gradual harmonisation in this area, while leaving sufficient room for manoeuvre for Member States to implement the changes in a way that suits their specific national context by continuing to apply well-established national arrangements in roadworthiness testing. This choice, using minimum requirements instead of a one-size-fits-all approach, will also enable industry to develop the most efficient technical solutions that this continuously evolving field requires.

- **Choice of the instrument**

To ensure clear and consistent legal drafting, the most suitable legal solution is a revision of Directive 2014/45/EU and Directive 2014/47/EU, amending both in one proposal for a Directive.

3. RESULTS OF *EX POST* EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- ***Ex post* evaluations/fitness checks of existing legislation**

In 2023, the Commission conducted an evaluation of the 2014 RWP, assessing its relevance, EU added value, coherence, effectiveness and efficiency. The evaluation concluded that the RWP was partially successful in achieving its objectives, contributing to better road safety and helping reduce air pollutant emissions from road transport. However, defective vehicles may still not always be detected as some categories of vehicles are not subject to PTIs or RSIs in some Member States or the frequency or scope of the testing is not adapted to those categories' higher safety and environmental risks. The identified weaknesses in the current RWP, in particular Directives 2014/45/EU and 2014/47/EU, require the Directives to be adapted to address not only current needs but also future challenges.

The conclusions of the evaluation are described below.

(1) The RWP is not adapted to the latest technologies, such as advanced driver assistance systems and electronic safety features. It lacks specific testing protocols that would ensure the compliance and maintenance of electric and hybrid vehicles, including software updates. Technical inspections would have to be updated for acquiring important safety-related data efficiently and monitoring new sensors and features.

(2) On emissions, some PTI tests and equipment must be adapted as they are no longer capable of detecting emission failures in the most recent internal combustion engine

vehicles. Opacity measurement is outdated as it cannot detect diesel vehicles with defective particle filters or a tampered catalyst, which lead to high particle and NO_X emissions. Instead, PN and NO_X measurement should be used to check newer diesel and petrol vehicles for defects and tampering with emission control systems.

(3) The current framework for exchanging information on test results between Member States has not been effective. Although the legislation mentions electronic data exchanges between Member States authorities as a possibility, not all of them implement it. Even if the harmonisation of vehicle registration documents made it easier for people to register vehicles from other Member States and the EEA, there is room to improve the data exchange and digitalisation process. Re-registration can still be a cumbersome process, and there is scope to improve the mutual recognition of PTIs between Member States.

(4) The RWP should make better use of the benefits of digital data exchange and harmonise vehicle documents more to reduce the administrative burden and costs. In addition, digital vehicle registration documents could further facilitate digitalising vehicle registration and data-keeping processes and help reduce costs.

The consistency between the RWP, in particular Directives 2014/45/EU and 2014/47/EU, and relevant EU instruments could be improved by standardising safety-relevant vehicle data and the related responsibilities of manufacturers during the vehicle's lifecycle. Clarifying responsibilities and mandating that certain information is made available for PTIs across Member States could reduce uncertainty and the time spent searching for information, which could improve the overall accuracy and efficiency of inspections. The RWP, in particular Directives 2014/45/EU and 2014/47/EU, should be also better aligned with the General Safety and Euro 7 Regulations.

- **Stakeholder consultations**

The consultations had two objectives. The first was to assess the performance of the RWP against the five evaluation criteria, identify possible issues with the existing legal framework and, on this basis, draw conclusions for future action. The second objective was to work with stakeholders to validate the Commission's understanding of the issues at hand, draw up a list of possible policy measures and assess their likely impact on the various categories of stakeholders.

The consultations also gathered evidence on the expected costs and benefits of the policy measures under consideration. They helped to identify gaps in the intervention logic or areas requiring further attention. The consultation activities consisted of public consultations (via an inception impact assessment and an open public consultation published on the Commission's Have your say website) and targeted consultations, including surveys and interviews. The targeted consultation activities were carried out throughout the evaluation and impact assessment process and covered all relevant aspects. The focus of the survey and interviews were on drawing up the different policy measures to meet the objectives set as part of the RWP's revision, particularly to identify and quantify the costs and potential impact of these measures. The problem drivers and the possible policy measures of the RWP were also extensively discussed with stakeholders, e.g. in the Roadworthiness Expert Group, and are also a result of the evaluation's stakeholder consultation activities.

A broad range of stakeholders was consulted, including: (i) public authorities in charge of road safety (including their representative associations, such as EReg[33] and CORTE[34]); (ii) industry associations and companies (including their representative associations, such as CITA[35] and EGEA[36], vehicle manufacturers and vehicle component suppliers); (iii) user group representatives; (iv) research organisations and road safety NGOs; and (v) the public.

- **Collection and use of expertise**

A wide range of experts from Member States, industry and other stakeholder groups was consulted during the preparatory work on the issues related to roadworthiness testing, roadside inspection and vehicle registers. Three dedicated workshops took place where the members of the Expert Group on Roadworthiness and Vehicle Registration Documents (RWEG) discussed the technical elements of the proposal. The Commission contracted two external consultants to carry out specific support studies underpinning the evaluation and the impact assessment. This input was complemented by ad hoc consultations of industry experts and the Commission's own experience in monitoring and implementing the Directives.

- **Impact assessment**

This proposal is accompanied by an impact assessment report, a draft of which was submitted to the Regulatory Scrutiny Board (RSB) on 20 November 2023. The RSB issued a positive opinion with reservations on 15 December 2023[37]. The impact assessment report was adjusted accordingly to address the RSB's comments. The analysed policy options are summarised below.

Four policy options (PO1a, PO1b, PO2, PO3) were designed to address the identified problems. All policy options include the following measures:

– adapt PTIs to electric vehicles and include new test items through ePTIs (including testing software integrity of safety- and emission-relevant systems);

– new emission test methods for particles and NOX, which are necessary to adapt to more recent emission control technologies and to identify high-emitting vehicles, including those that have been tampered with;

– require a roadworthiness test following any significant change to, for example, the propulsion system or the emission class;

– digitalising the roadworthiness certificate;

– linking national vehicle registers and extending the set of harmonised vehicle data in those registers;

– require Member States to record odometer readings in national databases and make those records available to other Member States when a vehicle is re-registered.

In addition to the common measures, policy option PO1a focuses on a more efficient use of vehicle (registration and status) data, including issuing registration certificates in digital format. Policy option PO1b focuses on more effective technical inspections using remote sensing technology,

33 Association of European Vehicle and Driver Registration Authorities, https://www.ereg-association.eu/.
34 Confederation of Organisations in Road Transport Enforcement, https://www.corte.be/.
35 Worldwide association of authorities and authorised companies active in the field of vehicle compliance, https://citainsp.org/.
36 European Garage Equipment Association, https://www.egea-association.eu/.
37 Ares (2023)8616336.

which helps to identify potentially high-emitting vehicles that can be either: (i) inspected at a subsequent roadside check immediately after being identified; or (ii) invited to a roadworthiness centre for an emission test. This option would also: (i) remove the possibility to exempt motorcycles from PTIs; (ii) require yearly emission testing of light commercial vehicles; (iii) make the inspection of cargo securing mandatory; and (iv) bring in mandatory annual PTIs for vehicles older than 10 years. PO1b would facilitate the free movement of people by requiring that the Member State registering a vehicle recognises the PTI certificate issued by another Member State for a period of up to six months, provided that the next PTI is conducted in the Member State of registration.

Policy option PO2 combines most of the measures proposed in PO1a and PO1b. It includes an additional measure on data governance, aiming to set out the procedures and the means of access to vehicle technical information (including in-vehicle data). PO2 also introduces roadside inspections for light commercial vehicles.

Policy option PO3 is the most ambitious policy option as it goes even further on harmonising the scope and methods of roadworthiness testing and the mutual recognition of PTI certificates. In addition to PO2's measures, PO3: (i) extends the scope of PTI to cover all motorcycles, without exception, and light trailers; (ii) extends RSI to all motorcycles; and (iii) requires that PTI certificates issued in any other Member State are recognised by the Member State of registration without restrictions.

The impact assessment concludes that the preferred option is policy option PO2. This option is considered to be effective in reaching the intended policy objectives, presenting high efficiency and high net benefits and being proportionate to the initiative's objectives. It is also coherent with the well-established national policies in the field.

The policy options are expected to **improve road safety** in the EU by more effectively identifying vehicles with major and dangerous defects, which should lead to a reduction in road crashes caused by technical defects. As a result, the number of fatalities and injuries (both serious and light) should decrease. The policy options also include other measures contributing to road safety, which relate to better implementation and enforcement of the roadworthiness legislation (such as the exchange of data among Member States' authorities).

Under the preferred policy option PO2, it is estimated that around 7 000 lives will be saved and around 65 000 serious injuries will be avoided between 2026 and 2050, compared with the baseline scenario. In monetary terms, the reduction in the external costs of accidents is estimated at around EUR 74.2 billion, expressed as present value over the same period, compared with the baseline.

All policy options will also **contribute to sustainable mobility** by reducing air pollutant and noise emissions. This will lead to a reduction in the external costs of these emissions: the savings in PO2 are estimated to be EUR 83.4 billion.

All policy options will **facilitate the free movement of people and goods in the EU** by removing obstacles to re-registering vehicles in another Member State. PO1a, PO2 and PO3 are expected to be similarly effective, while PO1b is expected to be less effective due to the absence of measures on digital vehicle registration certificates and additional data included in the vehicle register.

On removing obstacles related to roadworthiness testing, PO3 is expected to be the most effective option because it extends EU-wide recognition, by the Member State of registration, of PTI certificates issued in another Member State to all vehicles, followed by PO2 and PO1b (limited EU-wide recognition of PTI certificates). PO1a is expected to be the least effective, relying on bilateral agreements for the recognition of PTI certificates.

The safety of vehicles is a core element of the Safe System approach and a core principle of the 2020 United Nations Stockholm Declaration on road safety[38]. The initiative also contributes to UN Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages), including targets 3.6 (halving the number of deaths and injuries from road traffic accidents) and 3.9 (substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination). It is also consistent with the environmental objectives of the European Green Deal and the European Climate Law[39].

- **Regulatory fitness and simplification**

As part of the regulatory fitness programme (REFIT)[40], this proposal contributes to increasing the efficiency of the existing legislation in various ways by: (i) replacing obsolete test methods with state-of-the-art solutions both at periodic checks and at roadside checks by requiring the use of the most recent measurement techniques and technology to more effectively detect a large number of high-emitting vehicles; (ii) introducing simple yet meaningful tests to assess the safety and environmental performance of modern vehicles in a harmonised way; and (iii) interconnecting national databases to help share and access vehicle data, rather than relying on more cumbersome procedures. The initiative is expected to significantly reduce fraud related to emission and safety-relevant systems, as well as mileage tampering in used vehicles, especially in cross-border sales. This would lead to significant savings in external costs as well as in avoided cost and damage to consumers.

The initiative encompasses the 'digital by default' principle[41], promoting digital transformation where possible. For example, the mandatory electronic format of roadworthiness certificates should have a positive impact on digital transformation in the EU. For the re-registration process, authorities and the public will save time and money by moving away from exchanging information and data via email. Authorities and the public will also save time and money thanks to the digital registration certificate, which will make accessing and exchanging the relevant information easier and faster.

Applying the 'one in, one out' approach

The 'one in, one out' approach *offsets any new burden for people and businesses resulting from the Commission proposals by removing an equivalent existing burden in the same policy area*. This proposal is part of the RWP package, which is expected to result in administrative costs for PTI centres and vehicle manufacturers due to the data governance measure, while garages, motor vehicle dealers, tyre service and repair stations will face costs related to the odometer readings measure. Overall, the additional one-off administrative costs relative to the baseline relevant for the 'one in one out approach' in the preferred option are estimated at EUR 218 million in 2026. Expressed as annualised net present value over the relevant period they amount to EUR 25.5 million. In addition, the recurrent administrative costs relative to the

[38] https://www.roadsafetysweden.com/contentassets/b37f0951c837443eb9661668d5be439e/stockholm-declaration-english.pdf.

[39] Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (OJ L 243, 9.7.2021, p. 1, ELI: http://data.europa.eu/eli/reg/2021/1119/oj).

[40] 2023 Commission work programme – key documents (europa.eu), Annex II: REFIT initiatives, headline A – A European Green Deal.

[41] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – 2030 Digital Compass: the European way for the Digital Decade, COM(2021) 118.

baseline amount to EUR 26.4 million per year. Thus, the total additional administrative costs (one-off and recurrent) relevant for the 'one in one out approach' are estimated at EUR 51.9 million per year relative to the baseline.

- **Fundamental rights**

The proposal maintains full respect for human and fundamental rights, and it will have no negative impact on the fundamental rights set out in the Charter of Fundamental Rights of the European Union[42] (the Charter).

The proposal contains measures to help reduce the level of air pollutant emissions from vehicles (annual emission testing for light commercial vehicles, yearly testing of vehicles that are 10 years old or older and NO_X measurement in RSI by remote sensing and plume chasing). These measures will help to improve the quality of the environment, in line with Article 37 of the Charter. Adapting PTI methods to test electric vehicles, including training inspectors, and making inspections of cargo securing in RSI mandatory will provide a safer work environment for vehicle inspectors and for professional drivers (Article 31). Measures designed to combat odometer fraud will help increase consumer protection in line with Article 38 of the Charter. Providing for the mutual recognition of roadworthiness certificates and digitalising the registration process will contribute to the freedom of movement and residence, in line with Article 45 of the Charter. Measures to ensure that owners of non-tampered vehicles are not disadvantaged compared with those of tampered vehicles will help promote equality before the law in line with Article 3 of the Charter.

The proposal includes a measure on odometer readings, which has as impact on the right to protection of personal data when data is stored and exchanged. It requires Member States to record odometer readings in a national database and make the records available to other Member States in the case of re-registration. Furthermore, it establishes a requirement for roadworthiness certificate to be issued in electronic format, with a paper printout as an option. From a road safety perspective, the automatic accessibility of certificates through a shared system holds significant advantages, particularly in facilitating cross-border inspections and enhancing consumer convenience. The data processing related to these measures was assessed as necessary and proportionate, and it can be used only for specific purposes specified in the proposal.

4. BUDGETARY IMPLICATIONS

The implications for the EU budget are mainly related to extending the features of the IT data exchange system (the MOVE-HUB). This includes one-off adaptation costs and recurrent updates and maintenance costs. These are required to add new data elements to the vehicle registers, providing electronic access to relevant data (including on PTI reports stored in national databases) and enabling the exchange of odometer readings from Member States' databases. The associated costs are estimated at EUR 0.2 million in one-off costs and EUR 0.05 million per year in recurrent costs, covering the overall implementation of the RWP

[42] https://commission.europa.eu/aid-development-cooperation-fundamental-rights/your-rights-eu/eu-charter-fundamental-rights_en.

5. OTHER ELEMENTS

• Implementation plans and monitoring, evaluation and reporting arrangements

The Commission will monitor the implementation and effectiveness of this initiative through several actions and a set of core indicators that will measure progress towards achieving the operational objectives. To measure the success of the initiative, the following operational objectives are set: (i) apply newly available safety and emission testing methods; (ii) interconnect Member States' vehicle registers and odometer databases through a common hub; (iii) digitalise vehicle documents; and (iv) reduce the number of defective and tampered vehicles on EU roads. The data for assessing these operational objectives will draw on regular reporting by Member States as well as ad hoc data collection efforts, including the use of data exchange systems, such as the MOVE-HUB.

Five years after the revised legislation enters into application, the Commission will carry out an evaluation to assess to what extent the objectives of the initiative have been reached.

• Explanatory documents (for directives)

Member States have implemented Directives 2014/45/EU and 2014/47/EU in different ways, and a significant number of amendments are being proposed. As a result, Member States' notifications of their transposition measures must be accompanied by one or more documents explaining the relationship between the parts of both directives and the corresponding parts of the national laws.

• Detailed explanation of the specific provisions of the proposal

The proposal for revising Directives 2014/45/EU and 2014/47/EU is structured around the three main policy objectives set out in Chapter 1. These objectives are interrelated and aim to improve road safety in the EU, contribute to sustainable mobility and facilitate the free movement of people and goods in the EU. The main provisions that substantially change the Directives or add new elements are described below.

Article 1(1) amends Article 2 of Directive 2014/45/EU on scope

To improve its coherence, the article is amended to include electrically powered motorcycles in the scope next to those equipped with internal combustion engines, which are already in scope. For the same reason, the option to exclude motorcycles from the scope of roadworthiness testing is removed.

Article 1(2) amends Article 3 of Directive 2014/45/EU on definitions

The definitions of 'connected vehicle' and 'temporary roadworthiness certificate' are added to specify the terms used in connection with the provisions on recording odometer readings (new Article 4a of Directive 2014/45) and on recognising roadworthiness certificates (amended Article 4), respectively.

Article 1(3) replaces Article 4 of Directive 2014/45/EU on responsibilities

To facilitate the free movement of people and goods, the existing requirement that roadworthiness tests must be carried out by the Member State registering the vehicle is complemented with the following provisions.

The article is amended to introduce the possibility for the owners or holders of passenger cars to take periodic roadworthiness tests in a Member State other than the Member State of registration. The temporary roadworthiness certificate issued in this case will be valid for six months. The subsequent PTI must take place in the Member State of registration, unless that

Member State unilaterally recognises roadworthiness certificates issued by other Member States. This option is available to Member States for any vehicle category.

The article also specifies that vehicle manufacturers must make the technical information necessary for roadworthiness testing available to Member States' competent authorities free of charge. These authorities must then make the data available to their testing centres. In addition, the Commission is empowered to specify the technical information, data format and access procedures through implementing acts.

Article 1(4) inserts a new Article 4a in Directive 2014/45/EU on recording odometer readings

The article extends the obligation to record odometer readings beyond PTI centres to any service provider that carries out repairs or maintenance work on a vehicle for payment. The recorded readings may be stored in a dedicated national database or in the national vehicle register.

Vehicle manufacturers must also send regular odometer readings from their connected vehicles. The article also requires Member States to share odometer history with inspectors, the holder of the registration certificate and competent the authorities in the Member States.

Article 1(5) amends Article 5 of Directive 2014/45/EU on the date and frequency of testing

Point (a) of Article 5(1) is amended to require annual testing of cars and vans that are more than 10 years old. It also requires vans to be subject to exhaust emissions tests every year following their date of first registration. This point also specifies how the date of the subsequent PTI is to be calculated following the expiry of a temporary roadworthiness certificate referred to in Article 4 of Directive 2014/45/EU.

Article 5(2) of Directive 2014/45/EU is amended to align with the change made in Article 2 on including electrically powered motorcycles in the scope of PTIs.

Finally, the conditions under which Member States or the competent authorities may require a vehicle to undergo a roadworthiness test before the expiry date of its roadworthiness certificate are simplified. While four of the existing five possibilities listed in paragraph 4 of Article 5 of Directive 2014/45/EU are removed, the one concerning significant modifications to the safety and environmental systems of the vehicle, which require a test, becomes part of a new paragraph 2a.

Article 1(6) amends Article 6 of Directive 2014/45/EU on contents and methods of testing

The article is amended to accommodate the extension of scope to electrically powered motorcycles and to allow Member States to exempt only those vehicles from exhaust emissions or noise testing that successfully passed a corresponding technical RSI during the six months before the PTI.

Article 1(7) replaces Article 8 of Directive 2014/45/EU on roadworthiness certificates

While the existing rules (paragraph 2 of Article 8) already allow the use of 'electronically produced' roadworthiness certificates, that article is amended so that the digital version becomes the default solution. The person presenting the vehicle will be able to request a certified printout. These certificates, including temporary ones, will have to be recognised by all Member States.

Article 1(8) amends Article 9 of Directive 2014/45/EU on follow-up of deficiencies

Paragraphs 2 and 3 of Article 9 are amended to provide for the necessary exchange of information, including when a registration is suspended, between the Member State of registration and the Member States where the vehicle has undergone a roadworthiness test.

Paragraph 4 is added to provide for effective penalties for obvious tampering with a vehicle's components, including emission control and safety systems.

Article 1(9) replaces Article 16 of Directive 2014/45/EU with a new Article 16 on the exchange of data between Member States' authorities

The new Article 16 introduces an obligation on Member States to connect their national vehicle registers and roadworthiness databases with the MOVE-HUB platform developed by the Commission, for relevant data to be exchanged during periodic roadworthiness testing. The exchange of information includes vehicle registration data, data on the content of the certificate of conformity, the last roadworthiness certificate and of any roadside inspection report.

Under paragraph 2 of the new Article 16, the Commission will have to lay down detailed rules on the arrangements, data formats and message content to implement the data exchange within two years after the entry into force of this amending directive. The data exchange will have to be operational within one year after that.

Article 1(10) amends Article 17 of Directive 2014/45/EU on delegated acts

Article 17 is amended to include the delegation of power to the Commission to specify the methods for the new emission tests (introduced for vehicle categories M and N equipped with internal combustion engines) in Section 8.2 of Annex I.

Article 1(11) replaces Article 20 of Directive 2014/45/EU on reporting

Article 20 is amended to reflect the most significant changes to the rules on which the Commission will have to report.

Article 1(12) inserts a new Article 20a in Directive 2014/45/EU on communication of information to the Commission

Article 20a is introduced to feed into the Commission's report on the implementation of Directive 2014/45/EU. While Member States already report on technical roadside inspections carried out in their territories every two years, similar information has not been systematically available to the Commission on PTIs. This Article aims to fill this gap by requiring Member States to communicate a minimum set of information related to PTIs every three years. The reporting format will be laid down in an implementing act to be adopted by the Commission.

Article 1(13) replaces Article 22 of Directive 2014/45/EU on extension of validity of roadworthiness certificates in case of crisis

This new Article 22 is introduced to provide for the possibility to extend the validity of roadworthiness certificates where a crisis, such as a pandemic, would prevent carrying out PTIs in a timely manner.

Article 2(1) replaces Article 1 of Directive 2014/47/EU on subject matter

The article is updated to include remote sensing of vehicle emissions.

Article 2(2) amends Article 2 of Directive 2014/47/EU on scope

In paragraph 1 of Article 2 of Directive 2014/47/EU, vans are added to the scope (point (aa)). Furthermore, a second subparagraph is added to specify that the provisions on remote sensing also apply to cars and motorcycles. Paragraph 2 is adjusted to reflect the changes in paragraph 1.

Article 2(3) amends Article 3 of Directive 2014/47/EU on definitions

The most significant changes are the addition of definitions for 'remote sensing' and 'plume chasing'

Article 2(4) replaces Article 4 of Directive 2014/47/EU on roadside inspection systems

The article is updated to include a reference to remote sensing.

Article 2(5) inserts a new Article 4a on remote sensing

This new article is added to require Member States to make use of remote sensing technology to screen the noise and exhaust emissions of large parts of their vehicle fleet to identify potentially high-emitting vehicles (of any vehicle category). Paragraph 3 requires that Member States check the emissions of those vehicles either at a roadside check or by inviting the owner or holder of the vehicle to a PTI centre. Paragraph 4 provides for the methods to check the emissions of vehicles registered in a Member State other than the one where the remote sensing measurement took place.

Article 2(6) amends Article 5 of Directive 2014/47/EC on the percentage of vehicles to be inspected

The article is updated to link the existing 5% target (of the total number of heavy commercial vehicles) to each Member State instead of it being an EU-wide target.

In addition, a 2% target is proposed for RSIs of light commercial vehicles, i.e. vans of category N1.

Article 2(7) amends Article 6 of Directive 2014/47/EU on the risk rating system

The only change to Article 6 is the addition of a reference to vans (definition (aa) in Article 2(1)).

Article 2(8) amends Article 7 of Directive 2014/47/EU on responsibilities

Paragraph 1 of Article 7 is updated to require the recognition of electronic evidence, such as the most recent PTI certificate.

Article 2(9) replaces Article 9 of Directive 2014/47/EU on the selection of vehicles for initial technical roadside inspection

The article is updated to include remote sensing as a possible basis for the selection of a vehicle for RSI.

Article 2(10) amends Article 10 of Directive 2014/47/EU on the contents and methods of technical roadside inspections

Points (a) and (c) are amended to align them with the amendments related to roadworthiness certificates and cargo securing requirements.

Article 2(11) replaces Article 13 of Directive 2014/47/EU on the inspection of cargo securing

Article 13 is amended to make cargo securing checks (in line with Annex III) mandatory for Member States rather than optional.

Article 2(12) of Directive 2014/47/EU replaces Article 14 of Directive 2014/47/EU on the follow-up in the case of major or dangerous deficiencies

A fourth paragraph is added to Article 14 to provide for effective penalties for obvious tampering with a vehicle's components, including emission control and safety systems.

Article 2(13) amends Article 16 of Directive 2014/47/EU on the inspection report and databases on technical roadside inspections

Paragraph 2 of Article 16 is amended to provide an electronic version of the report by default.

Article 2(14) of Directive 2014/47/EU amends Article 18 of Directive 2014/47/EU on cooperation between Member States.

Article 18 is updated to refer to the implementing rules already adopted by the Commission on notifying major and dangerous deficiencies found in roadside checks of vehicles registered in another Member State.

Article 2(15) inserts a new Article 18a in Directive 2014/47/EU on the exchange of data between Member States' authorities

Like the new Article 16 of Directive 2014/45/EU, this new Article 18a introduces an obligation on Member States to connect their national vehicle registers and roadworthiness databases with the MOVE-HUB platform developed by the Commission, for relevant data to be exchanged during roadside inspections. The exchange of information includes vehicle registration data, data on the content of the certificate of conformity, the last roadworthiness certificate and of any roadside inspection report.

Under paragraph 2 of the new Article 18a, the Commission will have to lay down detailed rules on the arrangements, data formats and message content to implement the data exchange within two years after the entry into force of this amending directive. The data exchange will have to be operational within one year after that.

Article 2(16) replaces Article 20 on communication of information to the Commission

Article 20 is updated to streamline and simplify reporting requirements in the following ways: (i) less detailed reports will be required (see changes to Annex V to Directive 2014/47/EU); (ii) these reports will be required every three years instead of every two years; and (iii) Member States will use a common reporting platform rather than sending emails with Excel files attached.

Article 2(17) of Directive 2014/47/EU amends Article 21 of Directive 2014/47/EU on delegated acts

The fourth and fifth indents are added to empower the Commission to: (i) adopt delegated acts to set common limit values for remote sensing measurement; and (ii) specify the test methods for measuring particle number and nitrogen oxides at roadside checks.

Article 2(18) replaces Article 24 of Directive 2014/47/EC on reporting.

The article is updated to reflect the most significant changes to the rules on which the Commission will have to report.

Annex I amends the following annexes to Directive 2014/45/EU.

- Annex I – MINIMUM REQUIREMENTS CONCERNING THE CONTENTS AND RECOMMENDED METHODS OF TESTING

The annex is amended to include: (i) new test items relevant for battery electric and hybrid vehicles (Section 4.14 on high-voltage systems); (ii) new emission tests to measure ultrafine particle and nitrogen oxide emissions from petrol and diesel vehicles (Section 8.2); and (iii) a new Section 10 on testing electronic safety systems using the vehicle's electronic interface. In addition, a number of small changes are made to other items to reflect the views of the experts in this area.

- Annex III – MINIMUM REQUIREMENTS CONCERNING ROADWORTHINESS FACILITIES AND TEST EQUIPMENT

Points 16 and 17 are added to require testing centres to be equipped with the devices needed to measure particle numbers and nitrogen oxides at PTIs.

- Annex IV – MINIMUM REQUIREMENTS CONCERNING THE COMPETENCE, TRAINING AND CERTIFICATION OF INSPECTORS

The annex is updated to require training for inspectors so they can test alternative propulsion systems (including high-voltage, hybrid and hydrogen systems).

Annex II amends the following annexes of Directive 2014/47/EU.

- Annex II – SCOPE OF TECHNICAL ROADSIDE INSPECTIONS

Similar to Annex I to Directive 2014/45/EU, this annex is amended to include new test items for: (i) battery electric and hybrid vehicles (Section 4.14 on high-voltage systems); (ii) new emission tests to measure ultrafine particle and nitrogen oxide emissions from petrol and diesel vehicles (Section 8.2); and (iii) a new Section 10 on testing electronic safety systems using the vehicle's electronic interface. In addition, a number of small changes are made to other items to reflect the views of the experts in this area.

- Annex III – CARGO SECURING

The first sentence in Chapter II. Section 3 is amended to make the rules inspecting the specific items of cargo securing listed in Table 1 compulsory.

- Annex IV – MORE DETAILED TECHNICAL ROADSIDE INSPECTION REPORT INCORPORATING A CHECKLIST

Point 6 of the specimen is updated to include N1 (vans) among the vehicle categories. Point 10 is updated to include the new test items on high-voltage systems (4.14), emission testing (revised item 8.2) and electronic safety systems (new item 10).

- Annex V – STANDARD FORM FOR REPORTING TO THE COMMISSION

The form is updated by adding the required columns for N1 vehicles, correcting the list of countries of registration, and simplifying the reporting requirement by removing the 'defect details' part.

2025/0097 (COD)

Proposal for a

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

amending Directive 2014/45/EU on periodic roadworthiness tests for motor vehicles and their trailers and Directive 2014/47/EU on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 91(1) thereof,

Having regard to the proposal from the European Commission,

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

Having regard to the opinion of the European Economic and Social Committee[43],

Having regard to the opinion of the Committee of the Regions[44],

Acting in accordance with the ordinary legislative procedure,

Whereas:

(1) Provisions regarding roadworthiness testing have been part of Union legislation for decades. They are however subject to gradual harmonisation. Union law to that effect was last revised in 2014 with the "Roadworthiness Package"[45]. To improve enforcement, consecutive revisions of those rules gradually extended the scope of vehicles to be tested and the scope of the harmonised rules, including those on roadside inspections and vehicle registration documents. They specified and updated the required test methods, procedures and related documents to reflect technological progress.

(2) Directive 2014/45/EU sets out the minimum content and frequency of testing for each vehicle category, except for motorcycles, where Member States have a broader discretion. That Directive also sets out minimum requirements for the independence of testing centres and training of inspectors, testing equipment, and the content of the

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43 OJ C , , p. .

44 OJ C , , p. .

45 Directive 2014/45/EU of the European Parliament and of the Council of 3 April 2014 on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive 2009/40/EC (OJ L 127, 29.4.2014, p. 51, ELI: http://data.europa.eu/eli/dir/2014/45/oj), Directive 2014/47/EU of the European Parliament and of the Council of 3 April 2014 on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union and repealing Directive 2000/30/EC (OJ L 127, 29.4.2014, p. 134, ELI: http://data.europa.eu/eli/dir/2014/47/oj) and Directive 2014/46/EU of the European Parliament and of the Council of 3 April 2014 amending Council Directive 1999/37/EC on the registration documents for vehicles (OJ L 127, 29.4.2014, p. 129, ELI: http://data.europa.eu/eli/dir/2014/46/oj).

roadworthiness certificate. The validity of that certificate, as well as any other proof of testing, is to be recognised by Member States for the purposes of free circulation and re-registering a vehicle already registered in another Member State.

(3) Directive 2014/47/EU complements Directive 2014/45/EU by requiring Member States to carry out roadside inspections on heavy commercial vehicles above 3.5 tonnes, including buses, lorries, and their trailers with the aim of inspecting 5% of the Union fleet each year. Those inspections include an initial roadside inspection and, if deemed necessary by the inspector, a more detailed technical roadside inspection. The items tested in the detailed inspections are the same as those tested at periodic tests and may also include the inspection of cargo securing. Where a major or dangerous deficiency is found during a roadside inspection, the Member State where the inspection took place is required to notify the Member State of registration in order to enforce the repair of the vehicle that has been suspended from traffic.

(4) Due to rapid technological progress, some of the current rules for testing vehicles have become outdated and should be amended to adapt them to newer technologies and vehicles. The testing framework should further contribute to reducing emissions from transport and to accelerating and benefiting from digitalisation in the transport sector. The framework should also be better adapted to developments in evolving vehicle technology, fleet composition and testing methods.

(5) The digital transition is one of the Union's priorities. In the context of updating the current rules on testing vehicles, it is also important to harmonise, simplify and digitalise administrative procedures and to remove the remaining barriers to free movement. These barriers include the non-recognition of periodic technical inspections conducted in Member States other than the Member State of registration. This can impede the free movement of people within the Union and their right to take up residence in a Member State other than the one where the vehicle is currently registered.

(6) Some of the current emission test methods are inadequate for testing vehicles with modern air pollutant emission control technology and low baseline emissions. There is also potential to further reduce pollutant emissions through more appropriate tests and checks. Applying the best available test methods would help Member States reach stricter air quality standards, namely the limit values for the protection of human health set by Directive (EU) 2024/2881 of the European Parliament and of the Council[46], especially for fine particulate matter and nitrogen oxides (NO_X).

(7) The number of fatalities and serious injuries on Union roads remains at an unacceptably high level, with 20 400 deaths in 2023. Therefore, further action is required in order to reach the targets for road safety set out in EU road safety policy framework 2021-2030[47].

(8) Testing the roadworthiness of motorcycles has clear benefits for road safety. This has also been demonstrated by the number of Member States that already include motorcycles in their roadworthiness testing systems. As a result, the current possibility of an opt-out for motorcycles with an engine capacity above 125 cm^3 is no longer

[46] Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast), (OJ L, 2024/2881, 20.11.2024, ELI: http://data.europa.eu/eli/dir/2024/2881/oj).

[47] SWD(2019) 283 final https://transport.ec.europa.eu/system/files/2021-10/SWD2190283.pdf.

appropriate, and periodic testing should be mandatory for such vehicles without exception.

(9) According to the feedback received from Member States and industry representatives, the current legal requirements aiming to ensure that the technical data needed to carry out periodic technical inspections are available to testing centres have proven to be ineffective. It is therefore necessary to specify that a minimum set of information should be made available free of charge and without undue delay to the competent authorities, which should then ensure that the testing centres authorised by them also have the required access.

(10) The Member State of registration should recognise a temporary roadworthiness certificate issued by another Member State for a period of up to six months, provided that the subsequent periodic technical inspection is conducted in the Member State of registration. That will contribute to facilitating the free movement of people while respecting the basic requirement that vehicles are generally to be tested in the Member State of registration.

(11) For the same reason, a Member State of registration should be able to choose to recognise roadworthiness certificates issued by another Member State. If it does so, it should inform the other Member States and the Commission. The roadworthiness certificates concerned should be considered by all Member States as equivalent to certificates issued by the Member State of registration.

(12) To combat fraud related to the mileage of used vehicles, recording odometer readings is included in periodic roadworthiness testing. However, the effectiveness of the measure has been limited because the first test is only carried out four years after the first registration in most Member States and only every two years after that in many of them. To further tackle odometer fraud, Member States should ensure that odometer readings are taken whenever a service provider carries out maintenance or repair work on a vehicle and that the readings are recorded in a national database or register. Member States should make those readings available in an anonymised format to inspectors, the competent authorities and the holder of the registration certificate. In addition, Member States should require manufacturers to transmit the odometer readings of connected vehicles every three months. In order to enable consumers to detect odometer fraud before purchasing a vehicle, Member States should also inform consumers of the availability of odometer history to the holder of the registration certificate, in particular in the context of vehicle sales. To enhance the availability of statistics on vehicle use without additional reporting burden on national administrations, Member States should make the odometer readings available, in an anonymised form, to the national statistical institutes and to the Commission (Eurostat).

(13) Although electric vehicles, including hybrid electric vehicles, have been in circulation for many years, and their numbers have been steadily increasing, there are no harmonised rules on the roadworthiness testing of the high-voltage systems of such vehicles, resulting in Member States developing different test protocols. To ensure the safe operation of such vehicles throughout their useful life and avoid conflicting testing practices in the Member States, relevant test items should be included in the minimum requirements for the contents of and recommended methods for testing.

(14) Regulation (EU) 2019/2144 of the European Parliament and of the Council[48] requires the installation of a variety of advanced driver assistance systems, designed to avoid crashes and reduce casualties and severe injuries. However, the expected benefits will not be achieved if these systems deteriorate over time or are subject to tampering. Therefore, those new electronic systems should be included in periodic and roadside inspections to ensure that they deliver their expected safety benefits. To ensure the safe operation of automated vehicles and the testing of electronic safety systems throughout their useful life, relevant items to be tested should be included in the minimum requirements concerning the contents of and recommended methods for testing set out in the respective Annexes to Directives 2014/45/EU and 2014/47/EU.

(15) While road transport contributes to significant shares of harmful air pollutant emissions in particular NO_X and fine particles, the current testing methods for exhaust emissions are not adapted to more recent vehicles and technologies. Commission Recommendation (EU) 2023/688[49] was a first step in harmonising particle number measurement during roadworthiness testing. In the interests of public health, environmental protection and fair competition, the relevant items to be tested during periodic technical inspections set out in the annexes to Directives 2014/45/EU and 2014/47/EU should now include particle number measurement and the measurement of NO_X.

(16) Older vehicles tend to have more defects, are more frequently involved in crashes, and represent a higher proportion of high-emitting vehicles. Inspecting older cars and light commercial vehicles annually can contribute significantly to reducing crashes and harmful emissions. Cars and light commercial vehicles should therefore be inspected annually at the latest after 10 years from the date of first registration.

(17) Furthermore, since light commercial vehicles are used more intensively than private cars, often in densely populated areas, they should be inspected for emissions annually after one year from the date of first registration.

(18) In addition to scheduled periodic technical inspections, vehicles should also be subject to a roadworthiness test if the safety or environmental systems and components of the vehicle have been significantly altered or modified. This includes cases where there is a change of vehicle category or emission levels, for example following the installation of a particle filter or when a vehicle is converted to run on an alternative fuel.

(19) To facilitate the digital transition and to reduce costs for testing centres, roadworthiness certificates should be issued in a standardised electronic format. A

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48 Regulation (EU) 2019/2144 of the European Parliament and of the Council of 27 November 2019 on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 of the European Parliament and of the Council and Commission Regulations (EC) No 631/2009, (EU) No 406/2010, (EU) No 672/2010, (EU) No 1003/2010, (EU) No 1005/2010, (EU) No 1008/2010, (EU) No 1009/2010, (EU) No 19/2011, (EU) No 109/2011, (EU) No 458/2011, (EU) No 65/2012, (EU) No 130/2012, (EU) No 347/2012, (EU) No 351/2012, (EU) No 1230/2012 and (EU) 2015/166 (OJ L 325, 16.12.2019, p. 1, ELI: http://data.europa.eu/eli/reg/2019/2144/oj).

49 Commission Recommendation (EU) 2023/688 of 20 March 2023 on particle number measurement for the periodic technical inspection of vehicles equipped with compression ignition engines, (OJ L 90, 28.3.2023, p. 46, ELI: http://data.europa.eu/eli/reco/2023/688/oj).

paper printout of the roadworthiness certificate should also be issued to the person who presented the vehicle for testing upon request. Member States should accept both formats when the ownership of the vehicle is changed or when the vehicle is re-registered in another Member State. For similar reasons, the report of the more detailed roadside inspection should be issued in electronic format.

(20) It should be ensured that personal data processing for the implementation of this Directive complies with the data protection framework of the Union, in particular Regulation (EU) 2016/679 of the European Parliament and of the Council[50]. In line with the principle of data protection by default, verification techniques not requiring transmission of personal data on individual certificates should be employed for the verification of roadworthiness certificates.

(21) To provide for adequate follow-up of deficiencies where a vehicle fails a periodic technical inspection due to one or more major deficiencies in a Member State other than the Member State of registration, the result of the test and the deadline for the subsequent test should be notified to the Member State of registration and recorded in the vehicle register. The deadline for the subsequent test should be no more than two months and should take place in either Member State. In addition, when a vehicle has failed the periodic technical inspection due to one or more dangerous deficiencies, to avoid immediate risks to road safety or the environment, the Member State or competent authority should be able to decide that the vehicle in question is not to be used on public roads and request the Member State of registration to suspend the vehicle's authorisation for use in road traffic, until the deficiencies are rectified. The suspension should be recorded in the vehicle register of the Member State of registration.

(22) Tampering or manipulating any component of a vehicle should be considered to be a major or dangerous deficiency and therefore should be punishable by effective, proportionate, dissuasive and non-discriminatory penalties.

(23) The current requirements set out in Directives 2014/45/EU and 2014/47/EU for Member States to cooperate with each other when implementing those Directives do not enable Member States to check a vehicle's legal and technical status in cross-border situations. To ensure greater effectiveness, including in such situations, Member States should assist one another in implementing the Directive more systematically. Therefore, it is necessary to set out rules on the exchange of information and vehicle data to allow Member States to consult each other's vehicle registers and roadworthiness databases, including the content of roadworthiness certificates and technical roadside inspection reports.

(24) For the exchange of information on vehicles registered in the Union, the MOVE-HUB message exchange platform has been developed by the Commission to interconnect Member States' national electronic registers[51]. The platform currently hosts the interconnection of road transport undertaking registers (ERRU), driving licence

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50 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 (OJ L 119, 4.5.2016, p. 1, ELI: http://data.europa.eu/eli/reg/2016/679/oj).

51 Commission Implementing Regulation (EU) 2016/480 of 1 April 2016 establishing common rules concerning the interconnection of national electronic registers on road transport undertakings and repealing Regulation (EU) No 1213/2010 (OJ L 87, 2.4.2016, p. 4. ELI: http://data.europa.eu/eli/reg_impl/2016/480/oj).

registers (RESPER), professional driver training registers (ProDriveNet), tachograph driver card registers (TACHOnet), and the notification of vehicle roadside inspection failures (RSI)[52].

(25) The functionalities of the MOVE-HUB should be extended to enable the necessary exchange of information and vehicle data for the purposes of Directives 2014/45/EU and 2014/47/EU. Member States should therefore connect their electronic systems containing information on roadworthiness certificates and odometer history to MOVE-HUB. The exchange of information and data through the MOVE-HUB should be operational within one year after the adoption of the corresponding implementing acts pursuant to Article 16 of Directive 2014/45/EU and Article 18a of Directive 2014/47/EU.

(26) Crises brought about by serious events, occurring inside or outside the Union, may significantly disrupt the operation of its roadworthiness system. During times of crisis, Member States should be able to extend the validity of roadworthiness certificates, including temporary roadworthiness certificates. Subject to the Commission's authorisation, Members States should be allowed to extend the administrative validity of expiring roadworthiness certificates and temporary roadworthiness certificates by six months. Where the crisis persists, it should be possible to further extend the validity.

(27) Given the increased number of light commercial vehicles in circulation within the Union, to promote a level playing field for commercial operators across the Union and to further improve their safety and environmental performance, light commercial vehicles should also be subject to roadside inspections.

(28) For roadside inspections, the screening of the exhaust emissions of large numbers of vehicles by using remote sensing equipment is an effective measure for identifying high-emitting vehicles. It increases detection rates significantly compared to mandatory test methods. Member States should therefore use remote sensing equipment systematically to screen large shares of the vehicle fleet in real on-road conditions. One single remote sensing measurement indicating high emissions above the legal limits could be related to various factors, such as temporary acceleration or a cold engine. However, multiple measurements systematically indicating significantly higher-than-average emissions could indicate a faulty emission control system or unauthorised modifications, such as tampering. Since such defects and modifications generate excessive emissions that pose risks to human health and the environment, they should be repaired, and any tampering should be sanctioned.

(29) As a result, such screening by remote sensing should form part of each Member State's roadside inspection system. For the screening to be effective, each Member State should screen the equivalent of at least 30% of its registered fleet of motor vehicles, including cars and motorcycles. On the basis of that remote sensing data, Member States should check the exhaust emissions and the noise level of any vehicle that is suspected to emit more than double the average level of similar vehicles, or more than 3 dB above the average level. That check could be carried out in a roadside inspection immediately after a remote sensing measurement or in a roadworthiness

[52] Commission Implementing Regulation (EU) 2017/2205 of 29 November 2017 on detailed rules concerning the procedures for the notification of commercial vehicles with major or dangerous deficiencies identified during a technical roadside inspection (OJ L 314, 30.11.2017, p. 3, ELI: http://data.europa.eu/eli/reg_impl/2017/2205/oj).

testing centre in the Member State of registration. For vehicles registered in another Member State, the competent authority where the remote sensing measurement took place should notify the measurement result and the result of any subsequent roadside inspection to the competent authority of Member State of registration.

(30) Directive 2014/47/EU specifies a minimum share of heavy commercial vehicles to be tested at the roadside each year in the Union but sets no target at Member State level, with the result that it is difficult to ensure the enforcement of that minimum share. To ensure that roadside inspections of commercial vehicles contribute to improved road safety and reduced air pollution across the Union, each Member State should carry out a total number of initial technical roadside inspections every year, corresponding to at least 5% of the total number of heavy commercial vehicles registered in their territory.

(31) To promote digital transformation and to reduce costs in the transport sector, Member States should require their competent authorities to accept electronic evidence of roadside inspections.

(32) Given that inadequate or dangerous cargo securing can pose a serious threat to road safety and to the environment, inspections of cargo securing should be a mandatory part of roadside inspections in all Member States.

(33) To ensure uniform conditions for the implementation of this Directive, implementing powers should be conferred on the Commission to specify: (a) the set of technical information and data necessary for roadworthiness testing that must be made available to the competent authorities, (b) interoperability features and security measures applicable to the QR codes introduced on roadworthiness certificates, (c) the necessary features and requirements for the format and content of the information and data to be exchanged, and (d) the format in which the data on periodic testing and roadside inspections are to be communicated. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council[53].

(34) In order to achieve the objectives of this Directive, in particular to adapt the annexes to Directives 2014/45/EU and 2014/17/EU to any technical, operational or scientific developments, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission to (a) specify the methods for the PN measurement of positive ignition engines and for the NO_X measurement of compression and positive ignition engines; and (b) set the common limits for exhaust or noise emissions or both that should be used to identify high-emitting vehicles. 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 line with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making[54]. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council should receive all documents at the same time as Member States' experts, and their experts should systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

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53 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, ELI: http://data.europa.eu/eli/reg/2011/182/oj).

54 OJ L 123, 12.5.2016, p. 1, ELI: http://data.europa.eu/eli/agree_interinstit/2016/512/oj.

(35) The objectives of this Directive, namely, to improve road safety, facilitate the free movement of persons and reduce pollutant emissions cannot be sufficiently achieved by the Member States acting alone as national rules governing those vehicle checks would lead to diverging requirements. Consequently, such objectives are better achieved at Union level by laying down minimum common requirements and harmonised rules concerning periodic technical inspections and technical roadside inspections of vehicles circulating within the Union. Therefore, 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 Directive does not go beyond what is necessary in order to achieve those objectives.

(36) Although data on the operation of roadworthiness testing regimes is available at national level, such data is not available at Union level. That lack of data hampers the analysis and evaluation of the roadworthiness testing system. To address those shortcomings, Member States should, in the implementation of Directive 2014/45/EU, report regularly to the Commission key data on the number of testing centres in each Member State, the total number of vehicles inspected per category, the areas checked, the items failed, and information on roadworthiness tests conducted on vehicles registered in another Member State. On roadside inspections, the current reporting obligations on Member States should be reduced and simplified, with less frequent reporting required.

(37) To minimise the administrative burden while ensuring the usefulness of the reported information, Member States should report on the implementation of Directives 2014/45/EU and 2014/47/EU every three years.

(38) The roadworthiness system has a direct impact on road safety, noise and emissions and should therefore be reviewed periodically. On the basis of the input from Member States' authorities, the Commission should report to the European Parliament and Council on the effectiveness of the provisions of Directive 2014/45/EU, including those on the scope, frequency of testing and recognition of temporary roadworthiness certificates, and Directive 2014/47/EU, including that on remote sensing.

(39) The European Data Protection Supervisor was consulted in accordance with Article 42(1) of Regulation (EU) 2018/1725 and delivered an opinion on [DD/MM/YYYY].

(40) In accordance with the Joint Political Declaration of 28 September 2011 of Member States and the Commission on explanatory documents[55], Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the legislator considers the transmission of such documents to be justified.

(41) Directive 2014/45/EU and 2014/47/EU should therefore be amended accordingly,

HAVE ADOPTED THIS DIRECTIVE:

Article 1

[55] OJ C 369, 17.12.2011, p. 14.

Amendments to Directive 2014/45/EU

Directive 2014/45/EU is amended as follows:

(1) Article 2 is amended as follows:

(a) in paragraph 1, the sixth indent is replaced by the following:

‘– two- or three-wheel vehicles – vehicle categories L3e, L4e, L5e and L7e with an engine capacity of more than 125 cm^3, or with a maximum continuous rated or net power above 11 kW;

– wheeled tractors of categories T1b, T2b, T3b, T4.1b, T4.2b and T4.3b the use of which mainly takes place on public roads with a maximum design speed exceeding 40km/h.’;

(b) in paragraph 2, the seventh indent is deleted;

(2) Article 3 is amended as follows:

(a) the following point (6a) is inserted:

‘(6a) ‘connected vehicle’ means any vehicle with a device installed which is designed to allow a wireless connection or communication with external devices, vehicles, networks or services;’;

(b) point (10) is replaced by the following:

‘(10) ‘approval’ means a procedure whereby a Member State certifies that a vehicle satisfies the relevant administrative provisions and technical requirements referred to in Regulations (EU) No 167/2013, (EU) No 168/2013 and (EU) 2018/858;’;

(c) point (12) is replaced by the following:

‘(12) ‘roadworthiness certificate’ means a roadworthiness test report issued by the competent authority or a testing centre;’;

(d) the following point (12a) is inserted:

(12a) ‘temporary roadworthiness certificate’ means a roadworthiness certificate issued by the competent authority, or a testing centre established in a Member State other than the Member State of registration of the vehicle in accordance with Article 4(3);’;

(3) Article 4 is replaced by the following:

‘Article 4

Responsibilities

1. Each Member State shall ensure that vehicles registered in its territory are periodically tested in accordance with this Directive.

2. Without prejudice to paragraphs 3 and 4, roadworthiness tests shall be carried out by the Member State of registration of the vehicle, by a public body entrusted with that task by that Member State or by bodies or establishments designated and supervised by that Member State, including authorised public or private bodies.

3. In the case of M_1 vehicles, roadworthiness tests may also be carried out in a Member State other than the Member State of registration of the vehicle. The result of such roadworthiness test shall be included on a temporary roadworthiness certificate, which shall be valid for six months. The competent authority shall communicate the result of the test to the Member State of registration, which shall record it in the national vehicle register. However, unless the Member State of registration recognises roadworthiness certificates issued by the Member State concerned in accordance with paragraph 4, the subsequent roadworthiness test shall take place in the Member State of registration of the vehicle.

4. Member States may recognise a roadworthiness certificate, other than the temporary roadworthiness certificate referred to in paragraph 3, issued by a Member State other than the Member State of registration of the vehicle. In such cases, that roadworthiness certificate shall be considered equivalent to the roadworthiness certificate issued by the Member State of registration. Member States which decide to recognise a roadworthiness certificate issued by another Member State shall inform the Commission and the other Member States accordingly.

5. The Commission shall adopt implementing acts to specify the set of technical information necessary for roadworthiness testing of the items to be tested, on the use of the recommended test methods, and to establish detailed rules concerning the data format, and the procedures for accessing the relevant technical information. Such technical information may include, in particular, instructions and data on the use of the electronic vehicle interface, diagnostic trouble codes, and software versions, and descriptions and illustrations of warning indicators or tell-tales.

   Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 19(2).

6. In accordance with the principles laid down in Regulation (EU) 2018/858, vehicle manufacturers shall make available the set of technical information referred to in paragraph 5 free of charge, and without undue delay, to relevant competent authorities, in a non-discriminatory manner and in a machine-readable format. Those competent authorities shall make that technical information available to the testing centres authorised by them.

7. Member States shall ensure that the responsibilities for keeping a vehicle in a safe and roadworthy condition are set out in national law.';

(4) the following Article 4a is inserted:

'*Article 4a*

Recording of odometer readings

1. Each Member State shall take the measures necessary to enable the recording of odometer readings in a national database or in the national vehicle register. They shall require that, in addition to testing centres, any service provider who issues an invoice or other document in connection with any repair or maintenance work carried out on a vehicle, records the odometer reading in that database or national vehicle register when that work is carried out. Member States shall also require vehicle manufacturers to transmit the odometer readings of connected vehicles which they have produced every three months starting from the date of first registration of the vehicle.

2. Member States shall make the odometer history of vehicles registered by them available to inspectors, to the holder of the registration certificate and to competent authorities in the Member States responsible for roadworthiness testing, vehicle registration, and vehicle approval.

3. Member States shall take appropriate measures to inform potential buyers of second-hand vehicles, about the availability of odometer history referred to in paragraph 2.

4. Member States shall also make available the odometer data stored in the national databases and national vehicle registers referred to in paragraph 1, in an anonymised form including only the first 10 characters of the vehicle identification number, to the national statistical institutes and to the Commission (Eurostat) in accordance with Articles 17a and 17b of Regulation (EC) No 223/2009*.

* Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and repealing Regulation (EC, Euratom) No 1101/2008 of the European Parliament and of the Council on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, Council Regulation (EC) No 322/97 on Community Statistics, and Council Decision 89/382/EEC, Euratom establishing a Committee on the Statistical Programmes of the European Communities (OJ L 87, 31.3.2009, p. 164, ELI: http://data.europa.eu/eli/reg/2009/223/oj).';

(5) Article 5 is replaced by the following:

'Article 5

Date and frequency of testing

1. Vehicles shall be subject to a roadworthiness test at least within the following intervals, without prejudice to the period of flexibility applied in Member States under paragraph 4:

   (a) vehicles of category M_1 and N_1: four years after the date on which the vehicle was first registered, and thereafter every two years until 10 years after the date on which the vehicle was first registered, and thereafter annually; however, vehicles of category N_1 shall also be subject to a roadworthiness test for the items listed in Section 8.2 of Annex I, one year after the date on which the vehicle was first registered, and thereafter annually;

   (b) vehicles of category M_1 used as taxis or ambulances, vehicles of categories M_2, M_3, N_2, N_3, O_3 and O_4: one year after the date on which the vehicle was first registered, and thereafter annually;

   (c) wheeled tractors of categories T1b, T2b, T3b, T4.1b, T4.2b and T4.3b the use of which mainly takes place on public roads for commercial road haulage purposes: four years after the date on which the vehicle was first registered, and thereafter every two years.

   For the purposes of point (a) of the first subparagraph, in the case of the roadworthiness tests referred to in Article 4(3), the expiry date of the subsequent roadworthiness certificate shall be counted as from the expiry date of the temporary roadworthiness certificate issued as a result of that test.

2. Member States shall establish appropriate intervals within which vehicles of categories L3e, L4e, L5e and L7e with an engine capacity of more than 125 cm3 or

with a maximum continuous rated or net power above 11 kW, are to be subject to a roadworthiness test.

3. Notwithstanding the date of a vehicle's last roadworthiness test, vehicles shall undergo a roadworthiness test when the safety and environmental systems and components of the vehicle have been significantly altered or modified.

4. Member States or competent authorities may establish a reasonable period during which the roadworthiness test is to be carried out, not exceeding the intervals laid down in paragraph 1.';

(6) Article 6 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. For vehicle categories falling within the scope of this Directive, with the exception of categories L3e, L4e, L5e and L7e, Member States shall ensure that roadworthiness tests cover at least the areas referred to in point 2 of Annex I.';

(b) paragraph 3 is replaced by the following:

'3. For vehicle categories L3e, L4e, L5e and L7e, with an engine capacity of more than 125 cm^3 or with a maximum continuous rated or net power above 11 kW, Member States shall determine the areas, items and appropriate methods of testing.';

(c) the following paragraph 4 is added:

'4. The Member State of registration may decide not to require the testing of items 8.1 or 8.2 of point 3 of Annex I to this Directive during the roadworthiness test of a vehicle where that vehicle successfully passed a corresponding exhaust test or noise test, or both, involving the checking of item 8.1 or 8.2 or both of point 3 of Annex to Directive 2014/47/EU during the six months preceding the due date of the roadworthiness test.';

(7) Article 8 is replaced by the following:

'Article 8

Roadworthiness certificate

1. Member States shall ensure that testing centres or, where relevant, the competent authorities, which have carried out a roadworthiness test on a vehicle issue a roadworthiness certificate for that vehicle indicating at least the standardised elements of the corresponding harmonised Union codes as laid down in Annex II. Member States shall ensure roadworthiness certificates are issued as electronic attestations of attributes to European Digital Identity Wallets in accordance with Regulation (EU) No 910/2014 of the European Parliament and of the Council**.

Member States shall ensure that roadworthiness certificates contain the information necessary for authentication and validation of those certificates.

Member States shall inform the Commission of trusted issuers of roadworthiness certificates which they shall keep up to date. The Commission shall make a list of those issuers publicly available through a secure channel and in an electronically signed or sealed form suitable for automated processing.

2. Member States shall require that testing centres or, where relevant, the competent authorities, provide, on request, a certified printout of the roadworthiness certificate to the person presenting the vehicle for testing. Those printouts shall be user-friendly and shall contain an interoperable [barcode][QR code], which allows the verification of its authenticity, validity and integrity. By six months after the adoption of the implementing acts referred to in paragraph 9, the [barcode][QR code] shall comply with the technical specifications set out in those implementing acts. The information contained in the certificate shall also be displayed in human-readable form and shall be provided in at least the official language or languages of the issuing Member State.

3. Notwithstanding Article 5, in the case of re-registration of a vehicle already registered in another Member State, each Member State shall recognise the roadworthiness certificate issued by that other Member State, whether in electronic or paper format, as if it had itself issued that certificate, provided that the roadworthiness certificate is still valid in terms of the frequency intervals established for periodic roadworthiness tests by the re-registering Member State. Member States shall communicate any new specimen of the roadworthiness certificate, and the description of the set of data issued to roadworthiness certificates as electronic attestations of attributes to the Commission and to the other Member States without undue delay. The Commission shall publish those specimens and descriptions of the sets of data.

4. In addition to the provisions of paragraph 3, Member States shall recognise the validity of a roadworthiness certificate, whether in electronic or paper format, where there is a change in ownership of a vehicle having a valid proof of periodic roadworthiness test.

5. The Member State of registration shall recognise the validity of a temporary roadworthiness certificate issued in another Member State.

6. Testing centres shall communicate electronically to the competent authority of the Member State concerned, the information included in the roadworthiness certificates which they issue. Such communication shall take place within a reasonable time after each roadworthiness certificate is issued. Member States shall determine the period during which the competent authority is to retain that information. The duration of that period shall not be less than 36 months, without prejudice to the national tax systems of the Member States.

7. Member States shall ensure that the information included in the previous roadworthiness certificate is made available to the inspectors.

8. Member States shall ensure that the results of the roadworthiness test are notified, or made available electronically, as soon as possible to the authority responsible for registration of the vehicle. That notification shall contain the information included in the roadworthiness certificate.

9. By [date of entry into force + 2 years], the Commission shall adopt implementing acts to lay down the technical specifications and rules regarding the following:

   (a) securely issuing and verifying the certificates referred to paragraphs 1 and 2;

   (b) ensuring the protection and security of personal data;

   (c) laying down the common data structure of roadworthiness certificates;

   (d) issuing and verifying a valid, secure and interoperable [barcode][QR code];

(e) notifying trusted issuers of roadworthiness certificates.

Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 19(2).

** Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (OJ L 257, 28.8.2014, p. 73, ELI: http://data.europa.eu/eli/reg/2014/910/oj)';

(8) Article 9 is replaced by the following:

'*Article 9*

Follow-up of deficiencies

1. In the case of minor deficiencies only, the test shall be deemed to have been passed, the deficiencies shall be rectified, and the vehicle shall not be re-tested.

2. In the case of major deficiencies, the test shall be deemed to have been failed. The Member State or the competent authority shall decide on the period during which the vehicle in question may be used before it is required to undergo another roadworthiness test, which shall take place not later than two months after the initial test. The result of the test and the time limit until the subsequent test shall be notified to the Member State of registration and recorded in the vehicle register in accordance with Article 3a(1) of Council Directive 1999/37/EC***. That subsequent test may take place in the Member State where the vehicle failed the initial test, or in the Member State of registration.

3. In the case of dangerous deficiencies, the test shall be deemed to have been failed. The Member State or the competent authority may decide that the vehicle in question is not to be used on public roads and that the authorisation for its use in road traffic is to be suspended for a limited period of time, without requiring a new process of registration. Such request for suspension shall be notified to the Member State of registration and the suspension shall be recorded in the vehicle register in accordance with Article 3a(1) of Directive 1999/37/EC. When the deficiencies are rectified, a new roadworthiness certificate shall be issued without delay testifying that the vehicle is in a roadworthy condition. The new certificate shall be issued by the competent authority that requested the suspension.

4. In the case of obvious tampering or manipulation of any component of the vehicle, including its emission control system, silencer, safety-related systems, or odometers, with the aim of reducing or misrepresenting the distance record of a vehicle, such tampering or manipulation shall be considered as a major or dangerous deficiency and shall be punishable by effective, proportionate, dissuasive and non-discriminatory penalties.

*** Council Directive 1999/37/EC of 29 April 1999 on the registration documents for vehicles, (OJ L 138, 1.6.1999, p. 57, ELI: http://data.europa.eu/eli/dir/1999/37/oj)';

(9) Article 16 is replaced by the following:

'*Article 16*

Exchange of data between Member States' authorities

1. Member States shall assist one another in the implementation of this Directive. They shall exchange information and data in particular with the aim of checking, at the time of roadworthiness testing, the vehicle's legal and technical status, where necessary in the Member State in which it is registered.

   Member States shall provide access to vehicle registration data, data regarding the content of the certificates of conformity, the last roadworthiness certificate, any technical roadside inspection report, and the odometer history of the vehicle stored in national databases, to the competent authorities of and testing centres authorised by other Member States.

   Member States shall interconnect their electronic systems on roadworthiness certificates and on odometer history through the MOVE-HUB electronic system developed by the Commission in such a way that the competent authorities and authorised testing centres of any Member State are able to consult the relevant database or the national vehicle register of any other Member State in real time.

2. By [PLEASE INSERT DATE: 2 years after the entry into force of this directive], the Commission shall adopt implementing acts laying down the necessary arrangements for the implementation of the functionalities of the MOVE-HUB electronic system and specifying the minimum requirements for the format and content of the information and data to be exchanged by Member States regarding vehicles subject to roadworthiness testing. Those implementing acts shall ensure the protection of personal data and shall be adopted in accordance with the examination procedure referred to in Article 19(2).

3. The electronic systems interconnections provided for in paragraph 1 shall be operational within one year after the adoption of the implementing acts referred to in paragraph 2.';

(10) Article 17 is amended as follows:

(a) the first indent is replaced by the following:

'– update only the vehicle category designations referred to in Article 2(1), Article 5(1) and (2), and Article 6(1) and (2) as appropriate in the event of changes to the vehicle categories resulting from amendments to the type-approval legislation referred to in Article 2(1), without affecting the scope and frequency of testing;';

(b) the third indent is replaced by the following:

'– adapt point 3 of Annex I, following a positive assessment of the costs and benefits involved, in respect of the list of test items, methods, reasons for failure and assessment of deficiencies;';

(c) the following fourth indent is added:

'– specify the methods for the particle number (PN) measurement of positive ignition engines and for the nitrogen oxides (NO_X) measurement of compression and positive ignition engines provided for in Section 8.2 of point 3 of Annex I.';

(11) Article 20 is replaced by the following:

'*Article 20*

Reporting

By [two years from the date referred to in Article 20a(1)], the Commission shall submit a report to the European Parliament and the Council on the implementation and effects of this Directive, in particular as regards the effectiveness of the provisions on its scope, notably in relation to L-category vehicles, the frequency of testing, the mutual recognition of roadworthiness certificates in cases of re-registration of vehicles originating from another Member State, and the recognition of temporary roadworthiness certificates. The report shall also analyse whether it is necessary to update the Annexes, particularly in the light of technical progress and practices.';

(12) the following Article 20a is inserted:

'*Article 20a*

Communication of information to the Commission

1. By 31 March 2030, and by 31 March every three years thereafter, Member States shall communicate to the Commission through the online reporting platform referred to in Article 28 of Regulation (EU) 2018/1999 of the European Parliament and of the Council**** ('e-platform'), the data collected relating to each of the previous three calendar years and concerning the vehicles inspected in their territory. Those data shall include the following (per calendar year):

   (a) the number of testing centres per Member State;

   (b) the total number of vehicles inspected;

   (c) the number of vehicles inspected per category;

   (d) the areas checked, and the items failed, in accordance with point 3 of Annex I to this Directive;

   (e) the number, category and [failure rate][test result] of vehicles tested registered in another Member State.

   The first report shall cover the years 2027, 2028 and 2029, separately.

2. The Commission shall adopt implementing acts laying down the format to be used by Member States for communication of the data referred to in paragraph 1 through the e-platform. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 19(2).

   The Commission shall report to the European Parliament and to the Council regarding the data collected pursuant to paragraph 1.

**** Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing

Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1, ELI : http://data.europa.eu/eli/reg/2018/1999/oj).';

(13) Article 22 is replaced by the following:

'*Article 22*

Extension of validity of roadworthiness certificates in case of crisis

1. For the purposes of this Article, the following definitions shall apply:

   (a) 'crisis situation' means an exceptional, unexpected and sudden, natural or human -made event of extraordinary nature and scale that takes place inside or outside of the Union, with significant direct or indirect impacts on the area of road transport and that also prevents or significantly impairs the possibility for the owners or holders of vehicles registered in the Member States or relevant national authorities from carrying out roadworthiness tests;

   (b) 'crisis period' means the period during which a Member State is authorised by the Commission, in accordance with the procedure referred to in paragraph 2, to adopt the measures referred to in this Article.

2. In the event of a crisis situation covering all or part of the territory of a Member State, that Member State may refer the matter to the Commission, by means of a duly motivated request, with a view to the adoption of a decision authorising that Member State to adopt the measures referred to in this Article for all or part of its territory. Such measures may be applied for a maximum period of six months. The Commission may authorise the measures to be extended, at the request of the Member State, for additional periods of six months, as long as the crisis situation persists.

3. The Commission may decide that the crisis period started before the matter was referred by the Member State in question pursuant to paragraph 2.

4. If the Commission receives duly motivated requests by two or more Member States relating to a single crisis situation covering all or part of their territories, it may adopt a single decision applying to all of those Member States.

5. Notwithstanding Article 5(1), Article 10(1) and point 8 of Annex II, the competent authorities of the Members States may extend the period of validity of roadworthiness certificates of all or certain categories of vehicles that have expired or would otherwise expire during the crisis period, for a maximum period of six months. That period may be renewed for successive additional periods of six months, as long as the crisis persists and the Commission authorises it.

6. The measures adopted by the Member States on the basis of this Article shall be immediately notified to the Commission, which shall inform the other Member States and publish a notice in the Official Journal of the European Union.';

(14) Annex I, Annex III and Annex IV are amended in accordance with Annex I to this Directive.

Article 2

Amendments to Directive 2014/47/EU

Directive 2014/47/EU is amended as follows:

(1) Article 1 is replaced by the following:

'Article 1

Subject matter

This Directive lays down minimum requirements for a regime of technical roadside inspections of the roadworthiness of commercial vehicles, and for remote sensing of vehicles, circulating within the territory of the Member States.';

(2) Article 2 is amended as follows:

(a) paragraph 1 is amended as follows:

(i) the following point (aa) is inserted:

'(aa) motor vehicles designed and constructed primarily for the carriage of goods, having a maximum mass not exceeding 3.5 tonnes – vehicle category N1;';

(ii) the following second subparagraph is added:

'Article 4a shall also apply to motor vehicles designed and constructed primarily for the carriage of persons and their luggage comprising not more than eight seating positions in addition to the driver's seating position – vehicle category M1, and to two-, three- or four-wheel motor vehicles referred to in Article 4 of Regulation (EU) No 168/2013 of the European Parliament and of the Council***** – vehicle category L.

***** Regulation (EU) No 167/2013 of the European Parliament and of the Council of 5 February 2013 on the approval and market surveillance of agricultural and forestry vehicles (OJ L 60, 2.3.2013, p. 1, ELI: http://data.europa.eu/eli/reg/2013/167/oj).';

(b) paragraph 2 is replaced by the following:

'2. This Directive shall not affect the right of Member States to carry out technical roadside inspections on vehicles not referred to in paragraph 1, and to check other aspects of road transport and safety, or to carry out inspections in places other than public roads. Nothing in this Directive shall prevent a Member State from limiting the use of a particular type of vehicle to certain parts of its road network for reasons of road safety.';

(3) Article 3 is amended as follows:

(a) point (11) is replaced by the following:

'(11) 'roadworthiness certificate' means a roadworthiness test report as defined in Article 3, point (12), of Directive 2014/45/EU;';

(b) point 18 is deleted;

(c) the following points (21) and (22) are added:

'(21) 'remote sensing' means the screening of vehicles by measuring on-road exhaust emissions, including nitrogen oxides and particulate matter, or noise levels

of vehicles passing in the proximity of fixed or mobile roadside equipment, or by plume chasing in the case of screening vehicles for air pollutant emissions;

(22) 'plume chasing' means the measuring of on-road air pollutant emissions of vehicles followed by a chasing vehicle equipped with an appropriate sampling device and measuring instrument.';

(4) Article 4 is replaced by the following:

'*Article 4*

Roadside inspection system

The technical roadside inspection system shall include the use of remote sensing as referred to in Article 4a, initial technical roadside inspections as referred to in Article 10(1), and more detailed technical roadside inspections as referred to in Article 10(2).'

(5) the following Article 4a is inserted:

'*Article 4a*

Remote sensing

1. Member States shall use remote sensing technology to screen motor vehicles for their air pollutant and noise emissions. Each year, each Member State shall take the measures necessary to screen the equivalent of at least 30 % of the fleet of motor vehicles registered in its territory using that technology.

2. Member States shall use the results of such remote sensing to identify high-emitting vehicles. However, a vehicle shall not be considered to have failed or passed a roadside inspection on the basis of a single remote sensing measurement.

   Member States shall take the measures necessary to verify the exhaust emissions, the noise level or both of any vehicle that, based on remote sensing data of at least three measurements of that vehicle within a period of six months, is suspected to emit above a certain level. For exhaust emissions, that level shall be double the average level for vehicles belonging to the same vehicle category, emission class, and having the same type of ignition, namely positive or compression ignition. For noise, the level shall be 3 dB above the average level for vehicles belonging to the same vehicle category.

   Such verification by Member States may take place as follows:

   (a) immediately after a remote sensing measurement, as part of a technical roadside inspection carried out in accordance with Article 10, including a noise or exhaust emission test or both in accordance with point 3, item 8 of Annex II;

   (b) within 15 days from the last remote sensing measurement in a testing centre referred to in Article 12 of Directive 2014/45/EU, for vehicles registered in the Member State where the remote sensing measurements took place, following notification of the owner by the competent authority within five days from the last remote sensing measurement.

3. Regarding vehicles registered in another Member State, the competent authority shall notify the competent authority of the Member State of registration of the remote

sensing measurements and of any subsequent technical roadside inspection, through the contact points referred to in Article 17 of this Directive. Where no subsequent roadside inspection took place, the Member States of registration shall request the holder of the vehicle registration certificate to present the vehicle in any testing centre referred to in Article 12 of Directive 2014/45/EU at the latest 45 days after the notification received from the Member State where the remote sensing measurements took place.

4. Member States may also verify the exhaust emissions, the noise level, or both, of any vehicle that is suspected to emit more than double, or more than 3 dB above, the average levels referred to in paragraph 2 based on only one or two remote sensing measurements. Such verification shall take in accordance with paragraph 3.';

(6) in Article 5, paragraphs 1 and 2 are replaced by the following:

'1. For vehicles referred to in Article 2(1), points (a), (b), (c) and (d), Member States shall carry out a total number of initial technical roadside inspections, per calendar year, corresponding to at least 5 % of the total number of those vehicles that are registered in their territory.

2. For vehicles referred to in of Article 2(1), point (aa), Member States shall carry out a total number of initial technical roadside inspections, per calendar year, corresponding to at least 2 % of the total number of those vehicles that are registered in their territory.';

(7) in Article 6, paragraph 1 is replaced by the following:

'For the attribution of a risk profile to an undertaking, Member States may use the criteria set out in Annex I. That information shall be used to perform checks on undertakings with a high risk rating score more closely and more often. The risk rating system shall be operated by the competent authorities of the Member States.

For vehicles referred to in Article 2(1), points (a) to (c), Member States shall ensure that the information concerning the number and severity of deficiencies set out in Annex II and, where applicable, Annex III to this Directive found on vehicles operated by individual undertakings is introduced into the risk rating system established pursuant to Article 9 of Directive 2006/22/EC.';

(8) in Article 7, paragraph 1 is replaced by the following:

'1. Member States shall require drivers to have at their disposal the roadworthiness certificate corresponding to the most recent periodic roadworthiness test in electronic format, or a certified printout thereof, and the report of the most recent technical roadside inspection. Member States shall require their authorities to accept electronic evidence of such roadworthiness tests and inspections.';

(9) Article 9 is replaced by the following:

'Article 9

Selection of vehicles for initial technical roadside inspection

When identifying vehicles to be subject to an initial technical roadside inspection, inspectors may select, as a priority, vehicles operated by undertakings with a high-risk profile in accordance with the criteria set out in Annex I to this Directive or as referred to in Directive 2006/22/EC. Vehicles may also be selected randomly for inspection, or where there is a reasonable suspicion that the vehicle presents a risk to road safety or to the environment, including on the basis of remote sensing.';

(10) in Article 10, paragraph 1, the second subparagraph is amended as follows:

(a) point (a) is replaced by the following:

'(a) shall check the latest roadworthiness certificate and technical roadside inspection report, where available, in accordance with Article 7(1) and Article 18a(1);';

(b) point (c) is replaced by the following:

'(c) shall carry out a visual assessment of the securing of the vehicle's cargo in accordance with Article 13;';

(11) Article 13 is replaced by the following:

'Article 13

Inspection of cargo securing

1. During roadside inspections, vehicles shall be subject to an inspection of their cargo securing in accordance with Annex III, in order to ensure that the cargo is secured in such a way that it does not interfere with safe driving, or pose a threat to life, health, property or the environment. Checks shall be carried out to verify that during all kinds of operation of the vehicle, including emergency situations or uphill starting manoeuvres:

(a) loads can only minimally change their position relative to each other, against walls or surfaces of the vehicle;

(b) loads cannot leave the cargo space or move outside the loading surface.

2. Without prejudice to the requirements applicable to the transport of certain categories of goods, such as goods covered by Directive 2008/68/EC of the European Parliament and of the Council******, cargo securing and inspection of the securing of cargo shall be carried out in accordance with the principles and, where appropriate, the standards laid down in Section I of Annex III to this Directive. The latest version of the standards laid down in point 5 of that Section may be used.

3. The follow-up procedures referred to in Article 14 shall also apply in the case of major or dangerous deficiencies related to cargo securing.

4. Member States shall ensure that personnel involved in cargo securing checks are appropriately trained for that purpose.

****** Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods (OJ L 260, 30.9.2008, p. 13, ELI: http://data.europa.eu/eli/dir/2008/68/oj).';

(12) in Article 14, the following paragraph 4 is added:

‘4. Obvious tampering or manipulation of any component of the vehicle, including its emission control system, silencer and safety-related systems, shall be considered as major or dangerous deficiencies and shall be punishable by effective, proportionate, dissuasive and non-discriminatory penalties.’;

(13) in Article 16, paragraph 2 is replaced by the following:

‘2. On completion of a more detailed inspection, the inspector shall draw up a report in accordance with Annex IV. Member States shall ensure that the driver of the vehicle is provided with an electronic copy of the inspection report.’;

(14) in Article 18, paragraph 1 is replaced by the following:

‘1. In cases where major or dangerous deficiencies, or deficiencies resulting in a restriction or prohibition on the use the vehicle, are found in a vehicle not registered in the Member State of inspection, the contact point shall notify the results of the inspection to the contact point of the Member State of registration of the vehicle. That notification shall contain the elements of the roadside inspection report as set out in Annex IV and shall be communicated to the contact point of the Member State of registration through the messaging system (RSI system) referred to in Article 3 of Commission Implementing Regulation (EU) 2017/2205*******.

The Commission shall adopt implementing acts laying down detailed rules concerning the procedures for the notification of vehicles with major or dangerous deficiencies to the contact point of the Member State of registration pursuant to the first subparagraph of this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 23(2).

******* Commission Implementing Regulation (EU) 2017/2205 of 29 November 2017 on detailed rules concerning the procedures for the notification of commercial vehicles with major or dangerous deficiencies identified during a technical roadside inspection, (OJ L 314, 30.11.2017, p. 3, ELI: http://data.europa.eu/eli/reg_impl/2017/2205/oj).’;

(15) the following Article 18a is inserted:

‘*Article 18a*

Exchange of data between Member States’ authorities

1. Member States shall assist one another in the implementation of this Directive. They shall exchange information and data in particular with the aim of checking, at the time of roadside inspection of a vehicle, its legal and technical status, where necessary, in the Member State in which it is registered.

Member States shall provide access to data regarding the content of the certificates of conformity, the last roadworthiness certificate, any technical roadside inspection report, and the odometer history of the vehicle, stored in national databases, to the competent authorities of other Member States.

Member States shall interconnect their electronic systems on roadworthiness certificates and on odometer history through the MOVE-HUB electronic system developed by the Commission, in such a way that the competent authorities of any

Member State are able to consult the relevant database or national vehicle register of any other Member State in real time.

2. By [PLEASE INSERT DATE: 2 years after the entry into force of this directive], the Commission shall adopt implementing acts laying down the necessary arrangements for the implementation of the functionalities of the MOVE-HUB electronic system and specifying the minimum requirements for the format and content of the information and data to be exchanged by Member States regarding the vehicles subject to roadside inspections. Those implementing acts shall ensure the protection of personal data and shall be adopted in accordance with the examination procedure referred to in Article 23(2).

3. The electronic systems interconnections provided for in paragraph 1 shall be operational within one year after the adoption of the implementing acts referred to in paragraph 2.';

(16) Article 20 is replaced by the following:

'*Article 20*

Communication of information to the Commission

1. By 31 March 2030 and by 31 March every three years thereafter, Member States shall communicate to the Commission, through the online reporting platform referred to in Article 28 of Regulation (EU) 2018/1999 of the European Parliament and of the Council********, ('e-platform'), the data collected relating to each of the previous three calendar years and concerning the vehicles inspected in their territory. Those data shall include the following information, per calendar year:

   (a) the total number of vehicles inspected;

   (b) the number of vehicles inspected per category;

   (c) the country of registration of each vehicle inspected;

   (d) in the case of more detailed inspections, the areas checked and the items failed, in accordance with point 10 of Annex IV of this Directive;

   (e) the results of the remote sensing measurements carried out in accordance with Article 4a of this Directive.

   The first report shall cover the years 2027, 2028 and 2029, separately.

2. The Commission shall adopt implementing acts laying down detailed rules concerning the format for communicating the data referred to in paragraph 1 through the e-platform. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 23(2). Until the entry into force of such rules, Member States shall use the standard reporting form set out in Annex V.

   The Commission shall report the data collected to the European Parliament and to the Council.

******** Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament

and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1, ELI : http://data.europa.eu/eli/reg/2018/1999/oj).';

(17) Article 21 is amended as follows:

(a) the second and third indents are replaced by the following:

'– update point 3 of Annex II in respect of methods in the event that more efficient and effective test methods become available, without extending the list of items to be tested;
– adapt point 3 of Annex II, following a positive assessment of the costs and benefits involved, in respect of the list of test items, methods, reasons for failure and assessment of deficiencies in the event of a modification of mandatory requirements relevant for type-approval in Union safety or environmental legislation;';

(b) the following fourth and fifth indents are added:

'– set common [remote sensing] limits for exhaust or noise emissions, or for both, to be used to identify high-emitting vehicles, based on the results communicated by the Member States to the Commission in accordance with Article 20(1), point (e); different limits may be set for identifying vehicles with defective emission control systems and vehicles with tampered emission control systems;
– specify the methods for the particle number (PN) measurement of positive ignition engines and for the nitrogen oxides (NO_X) measurement of compression and positive ignition engines required pursuant to Section 8.2 of point 3 of Annex II.';

(18) Article 24 is replaced by the following:

'*Article 24*

Reporting

By [two years from the date referred to in Article 20(1)], the Commission shall submit a report to the European Parliament and the Council on the implementation and effects of this Directive. The report shall analyse, in particular, its effect in terms of improvement of road safety and reduction in emissions.';

(19) Annexes II, III, IV, and V are amended in accordance with Annex II to this Directive.

Article 3

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by [PLEASE INSERT DATE: 2 years following the entry into force of this Directive]. They shall immediately communicate the text of those measures to the Commission.

When Member States adopt those measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main measures of national law which they adopt in the field covered by this Directive.

Article 4

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

Article 5

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament	*For the Council*
The President	*The President*

LEGISLATIVE FINANCIAL AND DIGITAL STATEMENT

Contents

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

Proposal for a Directive amending Directive 2014/45/EU of the European Parliament and of the Council of 3 April 2014 on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive 2009/40/EC and amending Directive 2014/47/EU of the European Parliament and of the Council of 3 April 2014 on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union and repealing directive 2000/30/EC.

1.2. Policy area(s) concerned

Transport, road safety

1.3. Objective(s)

1.3.1. General objective(s)

The general objective of this initiative is to further improve road safety in the EU, contribute to sustainable mobility and to facilitate the free movement of persons and goods in the EU by unlocking the full potential of the roadworthiness package (RWP).

1.3.2. Specific objective(s)

The specific objectives of the initiative are:

- Ensure the consistency, objectivity, quality of roadworthiness testing of today's and tomorrow's vehicles;
- Significantly reduce tampering and improve the detection of defective vehicles, to allow for the detection of defective/tampered safety and emission (i.e. air pollution and noise emission) control systems, as well as of odometer fraud;
- Improve electronic storage and exchange of relevant vehicle identification and status data.

1.3.3. Expected result(s) and impact

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

The proposal will contribute to increasing road safety in the EU, with the impact estimated at 6 912 lives saved and 64 885 serious injuries avoided. It will also contribute to sustainable mobility by reducing air pollutant and noise emissions, which will lead to external costs savings, estimated at EUR 83.4 billion.

It will contribute to facilitating the free movement of persons and goods in the EU through removal of obstacles to re-registration of vehicles in another Member State and (limited) EU-wide recognition of PTI certificates.

It is also expected to bring significant benefits through introducing test methods for the inspection of electric vehicles, improved emission testing (NO_X and PN measurement), and the introduction of testing methods for ADAS and other safety systems. Benefits are also expected due to the introduction of mandatory cargo securing inspections and new ways of testing, such as plume chasing and remote sensing to monitor pollutant and noise emissions, as well as the data governance measures.

The initiative is expected to lead improved detection and thus fewer defective and tampered vehicles, also through the extension of the roadside inspections to light

commercial vehicles. It is expected to lead to a significant reduction of odometer tampering due to an obligation to record odometer readings and make the records available in the case of re-registration.

It should also bring benefits due to the mandatory electronic roadworthiness certificate, the introduction of the vehicle registration document in digital format, access to PTI reports in national databases and the extension of data included in the national vehicle registers.

Total benefits are estimated at EUR 391.6 billion, expressed as present value over 2026-2050 relative to the baseline.

1.3.4. Indicators of performance

Specify the indicators for monitoring progress and achievements.

Regarding the road safety objective, the Commission regularly monitors *key road safety indicators*, including trends in the number of fatalities, serious and slight injuries per Member State and per vehicle category, age and certain vehicle characteristics. Detailed information on the causes of crashes, notably on vehicle defects is unlikely to become available at large scale soon. In the future, analysis of event data recorders mandated by the General Safety Regulation may provide more detailed insight into the causes of a significant share of crashes. Until then, existing reporting requirements should be updated to better respond to current monitoring needs.

Regarding the reduction of air and noise pollution, trends in *air and noise pollution* are continuously monitored by the EEA. Part of the reduction expected to come over the years will be related to this initiative through better maintenance of vehicles and reduced tampering with emission control systems. Progress towards the objective of contributing to sustainable mobility can be measured through the trends in PTI and RSI results, as well as from remote sensing data.

As for the objective *facilitating free movement*, indicators of success will be the number of Member States recognising PTIs conducted abroad.

To measure the success of the initiative, the following operational objectives are set: 1) Apply newly available safety and emission testing methods; 2) Interconnect Member States' vehicle registers and odometer databases through a common hub; 3) Digitalise vehicle documents; 4) Reduce the number of defective and tampered vehicles on EU roads.

The Commission services will monitor the implementation and effectiveness of this initiative through a number of actions and a set of core indicators that will measure progress towards achieving the operational objectives. Five years after the revised legislation will have been applied, the Commission services should carry out an evaluation to verify to what extent the objectives of the initiative have been reached.

1.4. The proposal/initiative relates to:

☐ a new action

☐ a new action following a pilot project / preparatory action[56]

☒ the extension of an existing action

☐ a merger or redirection of one or more actions towards another/a new action

[56] As referred to in Article 58(2), point (a) or (b) of the Financial Regulation.

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

National public authorities will have to set up a database for recording odometer history of the vehicles registered in their territory, interconnect existing national vehicle registers through the MOVE-HUB messaging platform, add new data elements to these registers and introduce remote sensing, which requires the purchase and installation of new roadside equipment as well as a monitoring system.

PTI centres will have to update test requirements and introduce some new ones, which will require additional investments in equipment, testing capacity and training of inspectors. It is however expected that PTI centres will be able to recover at least part of the additional costs through the additional business opportunities (increased number of tests) and in some cases (depending on the Member State) through somewhat increased PTI charges.

Vehicle repair shops, motor vehicle dealers and other garages will have to update their office software, to allow them to transfer their data to the central national database, due to the requirement to set up a system to record odometer readings from the cars and van.

Automobile manufacturers will have to adjust their systems to a governance framework for providing access to in-vehicle data necessary to carry out PTI and RSI to inspection centres and competent authorities and make the adjustments to their IT systems to ensure access to the relevant data, and maintenance costs.

Some vehicle owners will also face additional PTI and/or roadside inspections. Due to new testing requirements regarding safety, air pollutant emissions and noise, some vehicle owners may need to repair their vehicles to ensure that they can pass the PTI inspection and remain in use.

1.5.2. Added value of EU involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this section 'added value of EU involvement' is the value resulting from EU action, that is additional to the value that would have been otherwise created by Member States alone.

While technological development is likely to further improve vehicle safety, the uptake of new technologies in the EU vehicle fleet would take some time, and some of the new features may also bring about new risks. Similarly, while tampering may be made more difficult by technical solutions, it is unlikely that it would disappear without enabling vehicle testing to detect illegal modifications, notably of the engine management software e.g. through securing better access to in-vehicle data. Thus, in the absence of EU level intervention, the problem is likely to persist.

Member States may take unilateral measures; however, these measures cannot replace the coordinating and harmonising effect of the three Directives, with the risk of possible distortions of the single market and only partially addressing the problem.

The problem of insufficient control of vehicle air pollutant emissions would persist as long as vehicles equipped with internal combustion engines (ICE) are on the roads. Although with stricter emission standards and gradual electrification the number of vehicles generating tailpipe emissions will decrease, they will still be circulating in the EU decades from now. Without updating the current emission test requirements at EU level however,

Member States may not introduce the most effective and efficient test methods already available. Similarly, while more Member States may start experimenting with roadside noise testing, it is unlikely that the problem of noise vehicles would reduce significantly without a more systematic and coordinated approach.

Without EU level intervention, certain Member States may take unilateral or bilateral measures, such as systematic recording (and possibly exchanging) of odometer readings or develop agreements to recognise each other's roadworthiness certificates. However, the systemic problem of insufficient and inefficient exchange of roadworthiness-related vehicle data would remain, hindering effective implementation and enforcement of existing rules.

As road transport and the automotive industry are international sectors, it is much more efficient and effective to address the issues at the EU level than at the level of Member States. While national practices differ historically, a certain minimum level of harmonisation in vehicle testing and commonly agreed solutions to exchange vehicle data between Member States is more effective than multiple uncoordinated national solutions.

With common rules applied to testing modern vehicle technologies (EVs, ADAS, and the most recent emission control equipment), Member States will enjoy economies of scale and testing equipment manufacturers can operate on a more uniform market. The functioning of the single market would also be improved by vehicles being subject to similar tests under similar conditions, and transport operators facing similar costs.

Coordinating the conditions of access and exchange of vehicle data at the EU level will not only be more efficient than bilateral agreements and negotiations with individual manufacturers, but also level the playing field among Member States and put them, collectively, in a stronger position vis-à-vis the automotive industry.

1.5.3. Lessons learned from similar experiences in the past

Various measures have been introduced at EU level since 1977, as Member States had begun developing their own national regulations regarding vehicle roadworthiness testing, leading to a lack of harmonisation. The 2014 RWP built on requirements included in the previous Directives related to the roadworthiness tests, roadside inspections, and rules on the registration documents of vehicles. To meet the objective to enhance the safety of vehicles on the road, the minimum EU standards for periodic roadworthiness tests (PTI) were strengthened and mandatory standards were introduced, together with the introduction of random roadside inspections (RSI). This was seen as essential to avoid reducing the effectiveness of roadworthiness enforcement. To meet the objective of making the necessary data for and from roadworthiness testing available, the PTI Directive also encourages cooperation and information exchange among Member States including records of roadworthiness tests.

The relevance of the RWP has been diminished in recent years by the widening gap between the existing roadworthiness requirements and the new systems installed in modern vehicles. On advanced driver assistance systems (ADAS), Intelligent Transportation Systems (ITS), human-machine interface (HMI) and electronic safety features the three Directives do not seem to provide a sufficiently comprehensive framework. The RWP currently does not cover specific testing protocols to ensure the compliance and maintenance of electric and hybrid vehicles, including software updates, in a safe and efficient manner.

Regarding the RWP's objective to contribute to emissions reduction from road transport, some of the tests used in PTI are no longer sufficiently sensitive to detect emission failures in internal combustion powered vehicles. Modern vehicle engines and exhaust gas systems have critical detection criteria that are not covered by the currently prescribed test methods, and the current RWP's contribution to reducing the number of vehicles in circulation with high emissions has become less relevant**.** Additionally, there are currently no EU roadworthiness provisions for testing vehicles for NO_X manipulation/defect or manipulation/defect of diesel particulate filter.

Regarding improvement of the exchange of information on testing results between Member States, the current framework for information exchange has not been effective. Although the legislation mentions electronic data exchanges between Member States authorities as a possibility, not all countries use this. Even if the harmonisation of vehicle registration documents made it easier for people to register vehicles from other Member States and the EEA, there is room for improvement of the digitalisation process, to make it even easier.

1.5.4. Compatibility with the multiannual financial framework and possible synergies with other appropriate instruments

The proposal is consistent with the objectives and priorities set in the 2020 Sustainable and Smart Mobility Strategy (SSMS) and the EU Green Deal by ensuring that vehicles on the roads maintain an adequate level of safety and environmental performance over time.

It is in line with the objectives set in the EU Road Safety Policy Framework and it is also expected to have a significant contribution towards the EU's clean air policy objectives, including those of the Ambient Air Quality Directives and of the National Emission reduction Commitments Directive, by better identifying and reducing the presence of high polluters that represent a very large share of total emissions from road transport.

The proposal will facilitate online access to vehicle-related information, relevant administrative procedures and assistance and problem-solving services, which is in line with the Single Digital Gateway Regulation. Exchange of information related to roadworthiness and registration data will be aligned with relevant rules on data protection (GDPR).

The proposal is also aligned with the safety and environmental requirements as set out in the Type-Approval Regulations, including with the General Safety Regulation. It includes measures which will ensure that minimum standards are maintained by owners throughout the lifetime of the vehicle. The proposal ensures alignment between PTI and RSI testing and the type-approval process, including in relation to the use of electronic PTI (ePTI). The proposal is also coherent with the requirements of the legislation on end-of-life vehicles (ELV).

The proposal is therefore considered consistent with relevant EU strategies and legal instruments and contributes to EU policy priorities.

1.5.5. Assessment of the different available financing options, including scope for redeployment

The one-off costs in 2027 and ongoing adjustment costs of the Commission are mainly related to the upgrade of the IT system acting as a common interface to

support interactions between governmental authorities/organisations, in particular related to the exchanging vehicle-related information. The information functionality will build on the existing platform (MOVE-HUB) developed and run by the Commission for the purpose of exchanging various road transport-related information among Member States. The upgrade of this system would present the best use of the current organisation and invested resources up to now.

The full implementation of the revised Roadworthiness Package will also require additional human resources at the level of 1 FTE/year from 2027 onwards related to the work on implementing legislation, including support to the Member States to set up the required technical and digital framework.

1.6. Duration of the proposal/initiative and of its financial impact

☒ **limited duration**

– ☐ in effect from [DD/MM]YYYY to [DD/MM]YYYY

– ☐ financial impact from YYYY to YYYY for commitment appropriations and from YYYY to YYYY for payment appropriations.

☐ **unlimited duration**

– Implementation with a start-up period from YYYY to YYYY,

– followed by full-scale operation.

1.7. Method(s) of budget implementation planned[57]

☒ **Direct management** by the Commission

– ☒ by its departments, including by its staff in the Union delegations;

– ☐ by the executive agencies

☐ **Shared management** with the Member States

☐ **Indirect management** by entrusting budget implementation tasks to:

– ☐ third countries or the bodies they have designated

– ☐ international organisations and their agencies (to be specified)

– ☐ the European Investment Bank and the European Investment Fund

– ☐ bodies referred to in Articles 70 and 71 of the Financial Regulation

– ☐ public law bodies

– ☐ bodies governed by private law with a public service mission to the extent that they are provided with adequate financial guarantees

– ☐ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that are provided with adequate financial guarantees

[57] Details of budget implementation methods and references to the Financial Regulation may be found on the BUDGpedia site: https://myintracomm.ec.europa.eu/corp/budget/financial-rules/budget-implementation/Pages/implementation-methods.aspx.

– ☐ bodies or persons entrusted with the implementation of specific actions in the common foreign and security policy pursuant to Title V of the Treaty on European Union, and identified in the relevant basic act

– ☐ bodies established in a Member State, governed by the private law of a Member State or Union law and eligible to be entrusted, in accordance with sector-specific rules, with the implementation of Union funds or budgetary guarantees, to the extent that such bodies are controlled by public law bodies or by bodies governed by private law with a public service mission, and are provided with adequate financial guarantees in the form of joint and several liability by the controlling bodies or equivalent financial guarantees and which may be, for each action, limited to the maximum amount of the Union support.

Comments

The implementation of the proposal requires the update and maintenance of an existing IT system. This system should connect existing networks of national IT systems and interoperable access points, operating under the individual responsibility and management of each Member State, to ensure a secure and reliable exchange of vehicle-related information. The Commission will define appropriate IT solutions in implementing acts, including the design/architecture and technical specifications for an interface platform to interconnect national systems to exchange the information.

The adjustment costs for the Commission are expected to consist of two main cost elements (calculated in present net value), as follows:

- the non-recurring adjustment (one-off) costs in 2027 incurred by the necessary technical update of the IT platform and its testing of the exchange of vehicle-related information between Member States estimated at EUR 200 000;

- ongoing adjustment costs (maintenance and support of the dedicated platform) estimated at approx. EUR 50 000 per year intended for interactive exchange of information between Member States authorities.

The work on implementation of the RWP, including subsequent support to the Member States to set up the required technical and digital framework requires an increase of human resources at the level of 1 FTE/year from 2027 onwards, for a period of at least three years.

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

The tasks directly implemented by DG MOVE will follow the annual cycle of planning and monitoring, as implemented in the Commission and the executive agencies, including reporting the results through the Annual Activity Report of DG MOVE.

Regarding periodical technical inspections, according to the Article 20a of the PTI directive, Member States shall communicate to the Commission through the online reporting platform[58] ('e-platform'), the data collected relating to each of the previous three calendar years and concerning the vehicles inspected in their territory. Those data shall indicate (per calendar year):

– the number of testing centres per Member State;

– the total number of vehicles inspected;

– the number of vehicles inspected per category;

– the areas checked, and the items failed, in accordance with point 3 of Annex I;

– where vehicles registered in another Member State were tested, the number, category and test result of those vehicles.

Regarding roadside inspections, according to the Article 20 of the RSI Directive, Member States shall communicate to the Commission, through the online reporting platform ('e-platform', same as the above), the data collected relating to each of the previous three calendar years and concerning the vehicles inspected in their territory. Those data shall indicate (per calendar year):

– the total number of vehicles inspected;

– the number of vehicles inspected per category;

– the country of registration of each vehicle inspected;

– in the case of more detailed inspections, the areas checked and the items failed, in accordance with point 10 of Annex IV;

– the results of the remote sensing measurements carried out in accordance with Article 4a.

The new reporting period of Member States is extended from current two years to three years in order to help reducing the administrative burden on national authorities. The e-platform is intended to facilitate automatic compilation of data by specific reporting features.

[58] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).

2.2. Management and control system(s)

2.2.1. Justification of the budget implementation method(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed

The unit within DG MOVE in charge of the policy field will manage the implementation of the Directive

The expenditure will be implemented under direct management, in full application of the provisions of the Financial Regulation. The control strategy for procurements and grants in DG MOVE includes specific *ex ante* legal, operational and financial controls on the procedures (including, for procurements; a review by the advisory committee for procurement and contracts) as well as on the signature of contracts and agreements. In addition, expenditure made to procure goods and services is subject to *ex ante* and, when necessary, ex post and financial controls.

2.2.2. Information concerning the risks identified and the internal control system(s) set up to mitigate them

As regards the implementation of the tasks related to the setup of the mechanism, the risks identified are linked to use of procurement procedures: delay, availability of data, timely information to the market, etc. These risks are covered under the Financial Regulation and mitigated by the set of internal controls deployed by DG MOVE for procurement of this value.

2.2.3. Estimation and justification of the cost-effectiveness of the controls (ratio between the control costs and the value of the related funds managed), and assessment of the expected levels of risk of error (at payment & at closure)

The requested budgetary increase applies to the upgrade and maintenance of the IT system. Concerning the control activities related to the IT systems developed or managed by the directorate responsible for the proposal, the IT steering committee is regularly monitoring the directorate databases and progress made, taking into account the simplification and cost-efficiency of the Commission IT resources.

DG MOVE reports annually, in its Annual Activity Report, on the cost of control of its activities. The risk profile and cost of controls for procurement activities are in line with the requirements.

2.3. Measures to prevent fraud and irregularities

The regular Commission prevention and protection measures would apply, specifically:

– payments for any services are checked by the Commission staff prior to payment, taking into account any contractual obligations, economic principles and good financial or management practice. Anti-fraud provisions (supervision, reporting requirements, etc.) will be included in all agreements and contracts concluded between the Commission and recipients of any payments;

– to combat fraud, corruption and other unlawful activities the provisions of Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 25 May 1999 concerning investigations conducted by the European Anti-fraud Office (OLAF) shall apply without restriction.

DG MOVE adopted a revised Anti-fraud Strategy (AFS) in 2020. The MOVE AFS is based on the Commission Anti-fraud Strategy and a specific risk assessment carried

out internally to identify the areas most vulnerable to fraud, the controls already in place and the actions necessary to improve DG MOVE's capacity to prevent, detect and correct fraud.

The contractual provisions applicable to public procurement ensure that audits and on-the-spot checks can be carried out by the Commission services, including OLAF, using the standard provisions recommended by OLAF.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- Existing budget lines

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.[59]	from EFTA countries [60]	from candidate countries and potential candidates [61]	From other third countries	other assigned revenue
01	02.20.04.01	Diff.	NO	NO	NO	NO

- New budget lines requested

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.	from EFTA countries	from candidate countries and potential candidates	from other third countries	other assigned revenue
	[XX.YY.YY.YY]	Diff./Non-diff.	YES/NO	YES/NO	YES/NO	YES/NO
	[XX.YY.YY.YY]	Diff./Non-diff.	YES/NO	YES/NO	YES/NO	YES/NO
	[XX.YY.YY.YY]	Diff./Non-diff.	YES/NO	YES/NO	YES/NO	YES/NO

[59] Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.
[60] EFTA: European Free Trade Association.
[61] Candidate countries and, where applicable, potential candidates from the Western Balkans.

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

– ☐ The proposal/initiative does not require the use of operational appropriations

– ☒ The proposal/initiative requires the use of operational appropriations, as explained below

3.2.1.1. Appropriations from voted budget

EUR million (to three decimal places)

Heading of multiannual financial framework	Number 01	Single Market, Innovation and Digital

DG: MOVE			Year **2024**	Year **2025**	Year **2026**	Year **2027**[62]	**TOTAL MFF 2021-2027**
Operational appropriations							
Budget line 02 20 04 01	Commitments	(1a)				0.25	**0.250**
	Payments	(2a)				0.25	**0.250**
Budget line	Commitments	(1b)					**0.000**
	Payments	(2b)					**0.000**
Appropriations of an administrative nature financed from the envelope of specific programmes[63]							
Budget line		(3)					**0.000**
TOTAL appropriations for DG MOVE	Commitments	=1a+1b+3	**0.000**	**0.000**	**0.000**	**0.250**	**0.250**
	Payments	=2a+2b+3	**0.000**	**0.000**	**0.000**	**0.250**	**0.250**

			Year **2024**	Year **2025**	Year **2026**	Year **2027**	**TOTAL MFF 2021-2027**
TOTAL operational appropriations	Commitments	(4)	0.000	0.000	0.000	0.250	**0.250**

62 Year 2027 is the year in which implementation of the proposal/initiative starts. For subsequent years, ongoing adjustment costs are estimated at the level of EUR 0.05 million, without prejudging the next MFF.

63 Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

	Payments	(5)	0.000	0.000	0.000	0.250	**0.250**
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)	0.000	0.000	0.000	0.000	**0.000**
TOTAL appropriations under HEADING 1	Commitments	=4+6	**0.000**	**0.000**	**0.000**	**0.250**	**0.250**
of the multiannual financial framework	Payments	=5+6	**0.000**	**0.000**	**0.000**	**0.250**	**0.250**

			Year **2024**	Year **2025**	Year **2026**	Year **2027**	**TOTAL MFF 2021-2027**
• TOTAL operational appropriations (all operational headings)	Commitments	(4)	0.000	0.000	0.000	0.000	**0.250**
	Payments	(5)	0.000	0.000	0.000	0.000	**0.250**
• TOTAL appropriations of an administrative nature financed from the envelope for specific programmes (all operational headings)		(6)	0.000	0.000	0.000	0.000	**0.000**
TOTAL appropriations Under Heading 1 to 6	Commitments	=4+6	**0.000**	**0.000**	**0.000**	**0.250**	**0.250**
of the multiannual financial framework (Reference amount)	Payments	=5+6	**0.000**	**0.000**	**0.000**	**0.250**	**0.250**

Heading of multiannual financial framework	7	'Administrative expenditure'				
DG: MOVE		Year **2024**	Year **2025**	Year **2026**	Year **2027**[64]	**TOTAL MFF 2021-2027**
• Human resources		0.000	0.000	0.000	0.188	**0.188**
• Other administrative expenditure		0.000	0.000	0.000	0.000	**0.000**
TOTAL DG MOVE	Appropriations	**0.000**	**0.000**	**0.000**	**0.188**	**0.188**

TOTAL appropriations under HEADING 7 of the multiannual financial framework	(Total commitments = Total payments)	**0.000**	**0.000**	**0.000**	**0.188**	**0.188**

EUR million (to three decimal places)

		Year **2024**	Year **2025**	Year **2026**	Year **2027**	**TOTAL MFF 2021-2027**
TOTAL appropriations under HEADINGS 1 to 7	Commitments	**0.000**	**0.000**	**0.000**	**0.438**	**0.438**
of the multiannual financial framework	Payments	**0.000**	**0.000**	**0.000**	**0.438**	**0.438**

64 Technical and digital framework requires additional human resources at the level of 1 FTE/year from 2027 onwards. For subsequent years, this is without prejudging the next MFF.

3.2.2. Estimated output funded from operational appropriations (not to be completed for decentralised agencies)

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs ⇩			Year **2024**		Year **2025**		Year **2026**		Year **2027**		Enter as many years as necessary to show the duration of the impact (see Section1.6)						**TOTAL**	
	OUTPUTS																	
	Type[65]	Average cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	Total No	Total cost
SPECIFIC OBJECTIVE No 1[66]…																		
- Output																		
- Output																		
- Output																		
Subtotal for specific objective No 1																		
SPECIFIC OBJECTIVE No 2 ...																		
- Output																		
Subtotal for specific objective No 2																		
TOTALS																		

65 Outputs are products and services to be supplied (e.g. number of student exchanges financed, number of km of roads built, etc.).

66 As described in Section 1.3.2. 'Specific objective(s)'

3.2.3. *Summary of estimated impact on administrative appropriations*

– ☐ The proposal/initiative does not require the use of appropriations of an administrative nature

– ☒ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below

3.2.3.1. Appropriations from voted budget

VOTED APPROPRIATIONS	Year 2024	Year 2025	Year 2026	Year 2027	TOTAL 2021 - 2027
HEADING 7					
Human resources	0.000	0.000	0.000	0.188	**0.188**
Other administrative expenditure	0.000	0.000	0.000	0.000	**0.000**
Subtotal HEADING 7	**0.000**	**0.000**	**0.000**	0.188	**0.188**
Outside HEADING 7					
Human resources	0.000	0.000	0.000	0.000	**0.000**
Other expenditure of an administrative nature	0.000	0.000	0.000	0.000	**0.000**
Subtotal outside HEADING 7	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
TOTAL	**0.000**	**0.000**	**0.000**	0.188	**0.188**

The appropriations required for human resources and other expenditure of an administrative nature will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together, if necessary, with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

3.2.4. *Estimated requirements of human resources*

– ☐ The proposal/initiative does not require the use of human resources

– ☒ The proposal/initiative requires the use of human resources, as explained below

3.2.4.1. Financed from voted budget

Estimate to be expressed in full-time equivalent units (FTEs)

VOTED APPROPRIATIONS	Year 2024	Year 2025	Year 2026	Year 2027[67]
• Establishment plan posts (officials and temporary staff)				
20 01 02 01 (Headquarters and Commission's Representation Offices)	0	0	0	1
20 01 02 03 (EU Delegations)	0	0	0	0
01 01 01 01 (Indirect research)	0	0	0	0
01 01 01 11 (Direct research)	0	0	0	0
Other budget lines (specify)	0	0	0	0
• External staff (inFTEs)				

[67] Technical and digital framework requires additional human resources at the level of 1 FTE/year from 2027 onwards. For subsequent years, this is without prejudging the next MFF.

20 02 01 (AC, END from the 'global envelope')		0	0	0	0
20 02 03 (AC, AL, END and JPD in the EU Delegations)		0	0	0	0
Admin. Support line [XX.01.YY.YY]	- at Headquarters	0	0	0	0
	- in EU Delegations	0	0	0	0
01 01 01 02 (AC, END - Indirect research)		0	0	0	0
01 01 01 12 (AC, END - Direct research)		0	0	0	0
Other budget lines (specify) - Heading 7		0	0	0	0
Other budget lines (specify) - Outside Heading 7		0	0	0	0
TOTAL		**0**	**0**	**0**	**1**

Considering the overall strained situation in Heading 7, in terms of both staffing and the level of appropriations, the human resources required will be met by staff from the DG who are already assigned to the management of the action and/or have been redeployed within the DG or other Commission services.

3.2.5. Overview of estimated impact on digital technology-related investments

Compulsory: the best estimate of the digital technology-related investments entailed by the proposal/initiative should be included in the table below.

Exceptionally, when required for the implementation of the proposal/initiative, the appropriations under Heading 7 should be presented in the designated line.

The appropriations under Headings 1-6 should be reflected as "Policy IT expenditure on operational programmes". This expenditure refers to the operational budget to be used to re-use/ buy/ develop IT platforms/ tools directly linked to the implementation of the initiative and their associated investments (e.g. licences, studies, data storage etc). The information provided in this table should be consistent with details presented under Section 4 "Digital dimensions".

TOTAL Digital and IT appropriations	Year **2024**	Year **2025**	Year **2026**	Year **2027**	**TOTAL MFF 2021 - 2027**
HEADING 7					
IT expenditure (corporate)	0.000	0.000	0.000	0.000	**0.000**
Subtotal HEADING 7	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
Outside HEADING 7					
Policy IT expenditure on operational programmes	0.000	0.000	0.000	0.250	**0.250**
Subtotal outside HEADING 7	**0.000**	**0.000**	**0.000**	**0.250**	**0.250**
TOTAL	**0.000**	**0.000**	**0.000**	**0.250**	**0.250**

3.2.6. Compatibility with the current multiannual financial framework

The proposal/initiative:

– ☒ can be fully financed through redeployment within the relevant heading of the multiannual financial framework (MFF)

– ☐ requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation

– ☐ requires a revision of the MFF

3.2.7. Third-party contributions

The proposal/initiative:

– ☒ does not provide for co-financing by third parties

– ☐ provides for the co-financing by third parties estimated below:

Appropriations in EUR million (to three decimal places)

	Year **2024**	Year **2025**	Year **2026**	Year **2027**	Total
Specify the co-financing body					
TOTAL appropriations co-financed					

3.3. Estimated impact on revenue

– ☒ The proposal/initiative has no financial impact on revenue.

– ☐ The proposal/initiative has the following financial impact:

– ☐ on own resources

– ☐ on other revenue

– ☐ please indicate, if the revenue is assigned to expenditure lines

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative[68]			
		Year **2024**	Year **2025**	Year **2026**	Year **2027**
Article …….					

For assigned revenue, specify the budget expenditure line(s) affected.

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

[68] As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20% for collection costs.

4. DIGITAL DIMENSIONS

4.1. Requirements of digital relevance

R1: Require the roadworthiness certificate in electronic format

- Directive 2014/45/EU (PTI), Article 8(2).
- While the current PTI Directive allows the use of "electronically produced" roadworthiness certificates, it requires a certified printout to be handed to the person presenting the vehicle for PTI. The measure will limit the requirement to issuing an electronic document only, while providing a printout only if the person presenting the vehicle so requests.
- The exchange of PTI-related data under R1 will allow enforcing authorities to check the status of any vehicle registered in the EU in the case of a roadside check or for the purpose of re-registration, without the need for the owner of the vehicle to present a printed certificate.
- Stakeholders affected: Member States, vehicle owners.
- Management of existing national vehicle registers and PTI databases.

R2: Provide electronic access to relevant data, including on PTI reports stored in national databases, to the registration authorities of other EU Member States using a common interface

- Revised Directive 1999/37/EC (VRD), Article 15, Directive 2014/45/EU (PTI), Article 16, and Directive 2014/45/EU (PTI), Article 18a Directive 2014/47/EU (RSI).
- This measure will require that Member States provide access to other Member States requesting registration or PTI-related vehicle data and odometer history for the vehicles registered in their territory.
- Stakeholders affected: Member States, the Commission.
- In order to facilitate the data exchange, the measure would require Member States to connect their national databases (vehicle registers and related PTI databases as the case may be) to the existing MOVE-HUB platform developed and run by the Commission for the purpose of exchanging various road transport-related information among Member States.

R3: Introduce issuing the registration certificates in digital format to gradually replace current paper (and smart card) documents

- Revised Directive 1999/37/EC (VRD), Articles 2, 3, and 5, and Annex III.
- The measure will introduce the requirement to issue new registration certificates in a digital format by default. The technical details of the digital/mobile registration certificate will be defined in an implementing act and refer to the relevant ISO standards as in the case of the digital driving licence. Similarly to the mobile driving licence, the digital registration certificate will rely on the eIDAS initiative.
- Stakeholders affected: Member States, vehicle owners.
- The measure applies to all vehicle categories that are subject to registration in the Member States. For the purposes of identifying vehicles in road traffic as well as for re-registration, Member States will have to recognise the digital

version of the registration certificate. As the physical documents, the digital vehicle registration certificate would be used to confirm the registration of the vehicle, to check certain technical data about it (the digital version could store more data than the paper version), and to allow verification by the authorities.

R4: Add new data to the vehicle register – minimum mandatory set (including among others: country of 1st registration, registration status, PTI status, changes due to transformation)

- Revised Directive 1999/37/EC (VRD), Article 6, Annex I and II
- It will provide for a minimum set of mandatory data to be registered by Member States. New data elements could include among others: a. Country where the vehicle was registered for the first time; b. Vehicle status (e.g. de-registered, temporarily de-registered, suspended, exported, end-of-life, destructed) c. PTI status (passed with no or minor defects, limited validity with major defects, failed – critical defects) and validity of the roadworthiness certificate (including expiry date), as well as status of the battery (for EVs): battery identification number; and information if the battery has been repaired or replaced; d. Changes in documentation or transformation – any important vehicle refurbishment to be approved and registered; e. For a vehicle which is permanently de-registered, information on the reasons for de-registration.
- Stakeholders affected: Member States, vehicle owners.
- Management of existing national vehicle registers and PTI databases.

R5: Recording of odometer readings in national databases

- Article 4a of Directive 2014/45/EU (PTI)
- The measure requires that service providers carrying out repairs or maintenance work on a vehicle record the odometer readings in a dedicated national database or in the national vehicle register. Vehicle manufacturers must also send regular odometer readings from their connected vehicles. The article also requires Member States to share odometer history with inspectors, the holder of the registration certificate and competent the authorities in the Member States (cf. R2).
- Stakeholders affected: Member States, vehicle repairers, workshops, vehicle manufacturers, vehicle owners and potential buyers.

R6: Communication of information by Member States to the Commission

- Article 20a of Directive 2014/45/EU (PTI), Article 16 of revised Directive 1999/37/EC (VRD), Article 20 of Directive 2014/47/EU (RSI)
- Similar but simpler and less frequent than the current reporting requirement under the RSI Directive, Member States will be required to communicate a minimum set of information related to PTIs, RSIs, and re-registrations of vehicles every three years. Member States will use a common reporting platform rather than sending emails with Excel files attached. The reporting format will be laid down in an implementing act to be adopted by the Commission.
- Stakeholders affected: Member States.

4.2. Data

No data will be collected at the Commission level, apart from cumulative data as provided by Member States reporting (see R6 above and point 2.1 of this statement on monitoring and reporting for more details). Those data relate to the number of vehicles tested at periodic and roadside inspections, their country of registration and the number and types of deficiencies.

All other relevant requirements (R1, R2, R3, R4, R5 see above) are consistent with the Single Digital Gateway Regulation by facilitating online access to vehicle-related information, relevant administrative procedures and assistance and problem-solving services.

They are also serving the objectives of the EU's Data Strategy for the development of European Data spaces for public administrations that can support enforcement of legislation, including road safety and environmental legislation.

Exchange of information related to roadworthiness and registration data will have to be aligned with relevant rules on data protection (GDPR).

The once-only principle has been followed, and the possibility to reuse existing data has been explored.

4.3. Digital solutions

To facilitate the data exchange, R2 would require Member States to connect their national databases (vehicle registers and related PTI databases as the case may be) to the existing MOVE-HUB platform developed and run by the Commission for the purpose of exchanging various road transport-related information among Member States. There will be no need to develop additional software to gather messaging statistics. MOVE-HUB could also be used to communicate the odometer history of vehicles recorded following R5, at the time of re-registering a vehicle in another Member State.

Other requirements (R1, R3, R4) do not require central solution and will rely on the existing national digital solutions. R5 will require either the setting up of national databases (similar to the Belgian Car-Pass system), or use their national vehicle register to record odometer readings.

All proposed requirements (R1, R2, R3, R4, R5, R6) are coherent with digital policies (the Single Digital Gateway, Data Act) as well as the requirements of the EU cybersecurity framework. No use of AI technologies is envisaged for the stated requirements.

R6 will rely on the online platform established by the Commission ('e-platform'[69]) to facilitate communication between the Commission and Member States.

Regarding both periodical technical inspections and roadside inspections, Member States must communicate to the Commission through the online reporting platform ('e-platform') the data relating to each of the previous three calendar years and concerning the vehicles

[69] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).

inspected in their territory.

The reporting period of Member States is every three years, and the e-platform is intended to facilitate automatic compilation of data by specific reporting features.

4.4. Interoperability assessment

R2 will require that Member States provide access to other Member States requesting registration or PTI-related vehicle data for the vehicles registered in their territory. To facilitate the data exchange, the R2 would require Member States to connect their national databases (vehicle registers and related PTI databases as the case may be) to the existing MOVE-HUB platform developed and run by the Commission for the purpose of exchanging various road transport-related information among Member States.

For interoperability, R1, R2, R3, R4 and R5 will likely have:

1. a positive effect on legal cross-border interoperability because they provide a coherent legal framework for the use and access of the mentioned certificates and documents across borders.

2. A positive effect on semantic cross-border interoperability because they provide a clear framework to clarify a common format and meaning of the exchanged data.

3. A positive effect on technical cross-border interoperability because the structure of the message will make it suitable for use across border. This is further enhanced in case the Member States decides to use the MOVE-HUB solution, which is already provided by the Commission and is used by Member States for message exchange. If the Member States decide to develop their own systems, they need to ensure they do not pose barriers to interoperability.

4. A positive impact on organisational interoperability because it requires Member States to align their processes to allow for the use and access of the mentioned certificates and documents across borders.

4.5. Measures to support digital implementation

To facilitate the smooth implementation of the requirements of digital relevance identified in Section 4.1., the implementing/delegated acts will have to be adopted for the following purposes:

- Specify a minimum set of technical data necessary to carry out periodic technical inspections that must be made available free of charge and without delay to the competent authorities, which will then have to ensure that the testing centres authorised by them have the necessary access to it. Additional technical requirements should be laid down in an implementing act amending Commission Implementing Regulation 2019/621.
- Ensure uniform conditions for the implementation of the digital roadworthiness certificate, implementing powers should be conferred on the Commission to specify interoperability features and security measures applicable to the QR codes introduced on roadworthiness certificates.
- Address cross-border issues, Member States should assist one another in the implementation of the Directives 2014/45/EU and 2014/47/EU. For that purpose, rules on exchange of information and vehicle data are necessary to check a vehicle's legal and technical status, odometer history, the content of

roadworthiness certificates and of technical roadside inspection reports.

- The functionalities of the MOVE-HUB should be further extended to enable the necessary exchange of information and/or vehicle data for the purposes of Directives 2014/45/EU and 2014/47/EU, in particular to specify the format and content of the information/data to be exchanged. Member States should connect their electronic systems containing information on roadworthiness certificates and odometer history with the MOVE-HUB system.
- Ensure uniform conditions for the implementation of the reporting requirements by Member States, who should report on the implementation of the Directive 2014/45/EU and Directive 2014/47/EU every 3 years.