

Netherlands position paper on the revision of the Roadworthiness Package (RWP)

Introduction

In the Smart and Sustainable Mobility Strategy, the EU reconfirmed its commitment to come to zero road fatalities by 2050 ('Vision Zero') and called for lifetime compliance of vehicles in relation to safety and emission standards. Ensuring that vehicles are roadworthy by having regular checks could contribute to these goals.

The Netherlands welcomes the revision of the RWP by the European Commission (EC), which comes at a good time. Many new developments will have an impact on how we will test vehicles in the future. The General Safety Regulation (GSR) outlines new safety features for vehicles. Furthermore, upcoming legislative developments such as Euro 7/VII and changes in RRR¹ and End-of-Life Vehicles (ELV), show that this is an excellent time to ensure lifetime compliance with a comprehensive testing and supervision scheme for vehicles. Inspections need to be better adapted to potential tampering with safety or emission-related systems. Finally, vehicle data and digitalisation play an increasingly important role. The improvement of data exchange between the Member States (MS), the digitalisation of registration documents and further harmonisation of the re-registration process will most likely result in more transparency, help to prevent fraud and reduce administrative burdens.

This position paper, a collaboration between the Dutch Ministry of Infrastructure and Water Management and the Netherlands Vehicle Authority (RDW), outlines the Netherlands' views and priorities regarding the revision of the three Directives of the RWP:

- Directive 2014/45/EC on periodic roadworthiness tests for motor vehicles and their trailers (PTI Directive)
- Directive 2014/46/EC on the registration documents for vehicles
- Directive 2014/47/EC on the technical roadside inspection of the roadworthiness of commercial vehicles circulating in the Union (RSI Directive)

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¹ "Triple R" Directive 2005/64/EC: Type-approval of motor vehicles with regard to their reusability, recyclability and recoverability

Directive 2014/45/EC – PTI Directive

General objectives

➤ **Lifetime compliance of vehicles in relation to safety and emissions standards**

The Netherlands is in favour of coherent European vehicle legislation based on a lifecycle approach, e.g. from design to final processing of the vehicle at the end of its life. This requires a continued link between manufacturers, authorities, repair and maintenance market and vehicle owners throughout the lifecycle of the vehicle in order to ensure lifetime compliance of the emission and safety control systems.² Vehicles should not be allowed to be altered, throughout the lifetime of the vehicle, in a way that it diminishes the original functioning of the emission and safety control, without further legal checks. It should be easy to check any deviations or alterations during a PTI or a road side inspection (RSI).

➤ **High quality, low costs**

The Netherlands believes that, across the EU, there should be uniform quality standards for the vehicle fleet subjected to PTI so that vehicles can be assessed according to a minimum standard, thereby improving vehicle safety. A general definition of the quality of PTI inspections and clear Key Performance Indicators (KPIs) can help achieve this. With an agreed standard, all Member States can take the appropriate national measures to ensure the quality standard is met.

The RDW is responsible for the enforcement of PTI under Directive 2014/45/EC in the Netherlands. The physical PTI is carried out by the automotive sector (by recognition holders and qualified PTI inspectors) and the RDW oversees the correct execution of PTI. The current Dutch PTI system ensures quality of control via its system of supervision and random spot checks.³ A significant advantage of the system is the low threshold for consumers to get their vehicles tested and repaired close to their home at a relatively low cost.

➤ **Maintain a system of reasonable and efficient testing**

Vehicles need to comply with safety and environmental performance criteria throughout their lifetime. Safety and emission-limiting systems must remain fully functional and up-to-date and should not be tampered with, this includes automated systems. The responsibility for this lies primarily with the owner of the vehicle and the manufacturer. However, during PTI, a check on the status of the vehicle can be done by extracting information from the vehicle for monitoring and data analysis, such as mileage (mileage charge), on board fuel consumption monitoring (OBFCM), battery status (EV), On Board Monitoring (OBM) fault history, software status, etc. In accordance with privacy legislation, only data required to conduct a PTI would be extracted.

The Netherlands believes that the ability to extract information as mentioned above should be brand neutral, and as simple and efficient as possible so that PTI remains affordable and accessible to consumers.

Main changes proposed

1) Scope and frequency of PTI

The Netherlands generally supports the extension of the scope of PTIs. As for vehicle categories O1 and O2, we would propose, for now, to only include category O2. O1 is currently not registered in the

² The Netherlands has also stressed the need for lifetime compliance in light of the soon to be published Euro 7 proposal. See a letter to the Dutch parliament for further information: [Kamerbrief over Non-paper Euro 7/VII | Kamerstuk | Rijksoverheid.nl](#).

³ The RDW subjects at least three of every hundred vehicles to a random re-inspection after an inspection has been carried out, for the purpose of monitoring the proper performance of the inspection (Article 86, NL Road Traffic Act 1994).

Netherlands and we believe that to include O1 there should first be a clear indication that this will improve traffic safety and not lead to increased administrative burdens for citizens and businesses.

The current Dutch position on motorcycles and PTI, from a road safety perspective, is that a mandatory PTI might not be the most effective way to protect road safety for motorcycles. Previous research⁴ has indicated that the technical state of the vehicle is rarely the cause of an accident. Currently, the SWOV (Dutch Institute for Road Safety Research) is performing an in-depth study into the causes of motorcycle accidents. The results are expected in 2023. This might give new insights in the impact of the technical state of motorcycles on traffic accidents. The environmental aspect of a PTI for motorbikes has not been part of this current position.

As for frequency based on use, we would like to draw attention to the fact that vehicle characteristics related to frequency and scope must be clear and registered in the vehicle registration register. This should be organised at an EU level. Making the frequency dependent on mileage of the vehicle might be an option that could be further examined. The Netherlands is also in favour of conducting more research on the frequency of testing of electric vehicles.

2) Safety devices in vehicles

During the lifetime of a vehicle, the manufacturer must guarantee that safety systems such as ADAS will continue to function. The type approval authority monitors compliance. Additionally, the market surveillance authorities ensure compliance with requirements in legislation and that vehicles do not endanger health, safety, the environment or any other aspect of public interest protection. The regulation on cyber security should also cover manipulation and should match existing standards for software security such as UN Regulation No. R155 and UN Regulation No. R156. The operation of ADAS can still be adversely affected during the vehicle use phase due to wear and tear, damages or modifications to the vehicle. These are matters for which the owner of the vehicle is responsible. PTI does offer the opportunity to check whether the owner keeps these safety systems in the right condition (i.e. verification of error messages and correct software versions). It still needs to be examined how this can be executed, for example by looking at a link with recall.

3) Access to vehicle data

Modern vehicles are full of safety-related digital systems that hold meaningful data about the condition of a vehicle and the systems present in the vehicle. However, inspection of these systems during PTI can be troublesome or even impossible. Therefore, access to vehicle data is becoming more and more important to efficiently perform a complete inspection of a vehicle. For example monitoring CO₂, testing the eCall system, ensuring compliance with pollutant emission regulations or performing technical inspections and, in the near future, monitoring systems like ALKS.

At the same time vehicle manufacturers are restricting access to vehicle data because of security requirements. A balance needs to be found between providing the necessary safety and leaving room for authorities to efficiently perform their tasks. Authorities like the RDW need access to the required vehicle data to perform their tasks. It is important that data necessary for the performance of a PTI is accessible in a practical way and available free of charge to authorities such as RDW and authorised private bodies performing their legal tasks with the appropriate personal data protection in place.

ePTI

⁴ SWOV (2017). *Motorrijders*. SWOV-factsheet, april 2017. SWOV, Den Haag.

The Netherlands is in favour of developing vehicles such that inspections can be carried out easily and robustly. Requirements such as in the standard ISO20730 (ePTI) can help to make the PTI of a vehicle more efficient. The ISO standard for ePTI describes a vehicle interface to digitally perform a part of the PTI. The vehicle interface gives quick insight in digital systems, error codes, software versions and self-assessments of these systems.

The Netherlands is in favour of this development. To effectively make use of standardising ePTI requirements, it should be included in type approval requirements as the basis of vehicle development. However, the Netherlands would like to raise a few considerations for the European Commission to take into account:

- ISO20730 only mentions access via on-board diagnostics (OBD) while there is also potential in accessing vehicle data over-the-air (OTA). Public authorities performing legal tasks like a PTI should not be excluded from OTA data where needed, e.g. in cases where it can contribute to continuous compliance and proactive vehicle safety interventions;
- The ISO20730 standard also describes a required authorisation between the test equipment and the vehicle, but this might have a large impact on the Dutch PTI system, where around 10.000 workshops perform PTIs. As mentioned, it is important that data necessary for the performance of PTI is and stays accessible in a practical manner.
- There is also a risk that access will only be granted to a certain static minimum data set. This would undermine innovative solutions based on new vehicle data that becomes available over time.

4) Emissions

Directive 2014/45/EC states that a vehicle with a compression ignition engine (diesel) must be subjected to an opacity test. This opacity test is outdated for vehicles of Euro 5 and above.

PN-measurement

The Netherlands believes it is therefore necessary to replace the opacity test with a Particulate Number measurement. Belgium has recently introduced a new way of measuring PN-emissions. The Netherlands will introduce a similar system from January 2023 onwards. The Netherlands advises the EC to stimulate the introduction of PN-measurement systems throughout the EU. This will contribute to a level playing field within the EU. Member States that have introduced, or are about to introduce, PN-measurement in the near future, should be allowed to use a certain degree of flexibility when it comes to the type of tools used.

NOx-test for diesel

Pollutants such as NOx are harmful to people and the environment, causing respiratory illnesses, acidifying soil and surface water, and damaging vegetation. For diesel vehicles, the inspection of NOx emissions is currently not part of a PTI. Although modern diesel vehicles emit less pollutants than older vehicles, they can be subject to tampering and malfunctioning which again can increase emissions. The Netherlands therefore wishes to examine the possibilities for measuring NOx during PTI for diesel vehicles, such as access via the OBD system. Further research is needed to support this.

Directive 2014/46/EC – Registration documents

Main changes proposed

1) Access to and exchange of vehicle data

The access to vehicle data and other relevant safety-related information of vehicles should be improved. Better and more information exchange between the Member States will improve road safety and will help to fight fraud and trafficking in damaged and stolen cars. Therefore, it is important to exchange (more) data related to:

- Odometer readings;⁵
- Damage and history of damage information;
- PTI data and/or reports;
- Vehicle status (registration status, exported, dismantled, etc.);
- Information regarding open and repaired recall on vehicle.

More information exchange between the Member States, with the appropriate personal data protection measures in place, will also improve the re-registration process. This will reduce administrative burdens and thereby contribute to the proper functioning of the internal market.

Re-registration of a vehicle must be based on information of the exporting country. For the effective exchange of (more) data, further harmonisation of data exchange between the Member States is a must. The harmonisation has to be based on the definitions which are set out in the Certificate of Conformity.

Within EReg, the RDW has been working together with fellow European vehicle authorities on this subject for several years. The harmonisation of registration procedures and data quality is an import topic for Topic Group XXI. The delivered 2021 report⁶ on this issue can provide a good starting point for the new legislation. This report includes a minimum set of data elements that should be exchanged by the registration authorities. The Netherlands calls upon the European Commission to include this set of data elements in the mandatory list of Annex I referred to in Article 3(4) of Directive 2014/46/EC.

We also consider EUCARIS the suitable and efficient option for data exchange.

2) Increased digitalisation – mobile registration certificate

The revision of Directive 2014/46/EC should reflect technological developments. Digitalisation of registration documents should be included as an option. Digitalisation of the vehicle registration certificate can deliver the following benefits for the issuing Member States:

- *Frequent synchronisation* – Information in the digital registration certificate can be frequently synchronised with the data in the vehicle register
- *Immediate issuance* – The registration certificate can immediately be issued to the user and used for enforcement purposes
- *Fraud protection* – Better protection against document fraud due to digital protections
- *Improving enforcement* – By using the international standard – ISO18013 reading the document by i.e. enforcement is standardised

⁵ Six countries in the EU have already connected their mileage registration systems to each other via EUCARIS, facilitating information provision about imported cars from one country to the other. This could form a basis for an EU wide exchange.

⁶ EReg Topic Group XXI, Harmonisation of registration procedures and data quality, October 2021

- *Different data* – More (types of) data can be made available on the registration certificate for i.e. enforcement
- *Ownership of data* – Because of privacy by design, the owner controls which data is shared
- *Improved usability* – Owners will have all information and cards in one wallet
- *Decreased operating costs* – There will be less costs for producing and sending a physical document to the holder

The Netherlands proposes to include the option of issuing a digital vehicle registration certificate on a mobile device in accordance with the ISO18013 standard for national use, in addition to the paper vehicle registration certificate or the vehicle registration certificate on a smart card.

3) Extend article 3(3) regarding dismantled vehicles

The Netherlands also proposes an extension of the current Article 3, paragraph 3 of Directive 2014/46/EC regarding dismantled vehicles. The current regulations offer room to re-register a vehicle that has been registered as dismantled in another Member States. This should be made impossible to ensure that vehicles are dismantled according to the applicable standards (instead of being traded on as wrecks) and to reduce fraud with vehicles.

Directive 2014/47/EC – Roadside inspections

Main objective

➤ Expand the scope of the Directive

Directive 2014/47/EC currently focuses on inspections related to the technical condition of heavy-duty vehicles. The Netherlands calls for an expansion of the scope of this Directive to include measuring emissions during vehicle use, in addition to checking the technical condition of the vehicle.

In this context, a further expansion can be considered by also looking light commercial vehicles (N1) and motorcycle (L) categories, and adding matters related to measuring emissions and the prevention of noise nuisance from vehicles. In addition, consideration could be given to incorporating plume chasing checks as a roadside inspection. With plume chasing, the emissions are measured by a measuring vehicle that follows the vehicle while driving on the road. By expanding the scope to other vehicle categories, to emissions checks and sound level checks, sustainability, in addition to safety, will be given a fixed value within RSIs.

Additional changes proposed

1) Risk rating system

Article 6 of Directive 2014/47/EC describes that Member States have to prepare a risk profile using Annex 1 of that same Directive in order to calculate a risk score based on a number of factors.

The results of a minor defect, or of a good result, in another Member States are currently not shared. This means that the risk score of the transport operator is not calculated properly. The Netherlands believes that for the correct determination of the risk score, the checks carried out resulting in a minor defect or a good result in another Member States should also be reported and included in the risk rating system.

2) AdBlue

AdBlue-systems in vehicles can be manipulated, or no longer function and not be fixed, during the use phase and as a result the vehicle no longer meets the environmental requirements. Manipulation of AdBlue systems is punishable under EU legislation. During the RSI, the inspector must be able to detect deviations. The OBM should be able to determine and register system inconsistencies.

3) Electronic exchange and storage of data

The Netherlands supports the electronic exchange and storage of data, provision of cross-border access to RSI authorities, including aspects related to cyber security and data protection. Specifically, the electronic storage of RSI reports in national databases and provision of electronic access to RSI relevant data to RSI authorities in other Member States, by connecting national databases. This is currently already done for heavy duty vehicles in the ERRU data exchange system, where information on licenses and transport managers is exchanged between Member States upon request and infringement notifications forwarded to the Member States of registration through the EUCARIS System and an EU hub. RDW is the Dutch National Contact Point for the ERRU data exchange. It will be important to provide a suitable legal basis, and agree retention periods, for the processing of personal data.

We are also in favour of follow-up in the Member States of registration in case of a notification received after a ban or suspension abroad. This includes electronic storage and exchange of RSI information on detected dangerous defects or on defects that have led to a restriction or prohibition of the use of the vehicle, including information on follow-up measures taken by the Member States of registration.