EGEA position paper - Public consultation

Revision of the EU Roadworthiness Package

July 2025

Introducing EGEA:

EGEA is the "European Garage Equipment Association," representing the European industry from EU Member States and non-EU Member States, providing technical equipment and services to diagnose, inspect, repair, and maintain combustion engine, hybrid, as well as electric vehicles of all categories.

EGEA members typically develop and provide the entire equipment chain needed for PTI inspection lanes to the respective inspection authorities. Today, this includes equipment to diagnose the vehicle via the OBD port, emission testing devices, headlight testers, test benches for brakes, etc.

Customers of these tools, other than inspection authorities, include vehicle manufacturers (VMs) and their authorised dealers, independent workshops, specialists (e.g., glass replacement companies, tire workshops), as well as fleet operators and the police.

All workshops (authorised dealerships as well as independent workshops) require equipment to prepare vehicles for PTI testing, to verify a detected deficiency and repair it effectively, and to perform routine servicing

EGEA has many years of experience in the electronic communication/transmitting test results of testing equipment. **EGEA** industry standard 'Workshop-Net, the network powered by **EGEA**', which was introduced back in 1998, is widely supported by the European test equipment suppliers' industry.

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Executive Summary:

EGEA welcomes the EU Commission's proposal for the revision of the Roadworthiness Package.

In the opinion of EGEA, the proposal will enhance road safety, promote environmental protection, and facilitate the mutual exchange of information among member states.

The following points are EGEA's key positions and recommendations with the intention to support the initiative to achieve the targets of the proposal:

1. Emission Testing – Support for Expansion

EGEA strongly supports the inclusion of **Particle Number (PN)** testing for all ICE (Internal Combustion Engine) vehicles, highlighting public health concerns and statistical evidence from pioneering Member States with PN test on diesel vehicles. It recommends that **tailpipe tests measure CO and Lambda at high idle**, sufficient for NOx control in petrol cars.

Recommendation:
Include PN testing for all ICE vehicles and maintain high idle tailpipe test thresholds to ensure effective NOx control.

2. Access to Vehicle Data (EOBD/OBM/ePTI/RSI)

EGEA stresses the critical need for **regulated and harmonised access to vehicle data**, particularly using the **VIN for identification purposes**. Current EOBD protocols are inconsistent and often incomplete, limiting the reliability of inspections and fraud detection.

Recommendation:
Mandate open access to key vehicle data for inspection purposes and standardise data availability via VIN-based protocols.

3. ADAS

EGEA is of the opinion that a proper performance verification is critical for those safety systems that play an active role in road safety and in which a reduction in performance or a calibration loss could create road danger because of drivers' over-reliance on them.

Recommendation:
To add, for each mandatory and active ADAS, an apparent reference to the need for performance verification.

4. Noise

EGEA endorses systematic **noise measurements** for L-category vehicles, already proven effective in several Member States.

Recommendation:
EGEA supports the requirements already covered in the Roadworthiness Package.

5. Suspension Testing

EGEA supports the mandating of automated suspension testing as part of the roadworthiness package, a non-proprietary, robust system validated through millions of inspections in Belgium.

Recommendation:
Incorporate the Phase-Shift suspension testing method in Annex I and the Phase-Shift suspension tester in Annex III.

6. Advanced Lighting Systems (Headlight Testing)

EGEA proposes EU-wide testing standards using camera-based equipment for alignment, intensity (Lumen and Candela) and glare zone assessment.

Recommendation:
Define the EU standard and digital measurement protocols of all headlights including adaptive and intelligent headlight systems.

7. Electric Vehicle Inspection Standards

EGEA supports safety testing of EV and Hybrid vehicles. There are substantial gaps in the current provisions for **EV safety checks**, especially regarding high-voltage systems, insulation resistance, and charging equipment.

Recommendation:
Update Annex III to include mandatory, standardised EV testing requirements, referencing international safety regulations (e.g. UNECE R100) and European Standards.

8. Brakes and Road Tests – Preserve Integrity

EGEA highlights that recent revisions risk undermining brake test accuracy by relying on unverifiable, non-calibrated reference sensor data. It recommends preserving **current performance-based testing protocols**.

Recommendation:
Avoid weakening existing brake efficiency standards and maintain the use of certified brake testers or controlled road tests as defined in current standards.

9. Clarity on L-Category Vehicle Testing

EGEA recognises that the current language lacks clarity on appropriate testing methods for powered, two- and three-wheelers.

Recommendation:
Define test items, procedures, and approval methods for L3e–L7e vehicles explicitly within the directive.

10. Electronic communication

EGEA recognizes that the revision of the Roadworthiness package in general, that the amendments of the Directive 2014/45/EU aims to establish “electronic communication” starting from the testing centers, (Article 8 – paragraph 6) to the national databases of the Member States, establishing the necessary exchange of information through the MOVE-HUB.

Recommendation:
Establish electronic communication **starting from the test equipment directly**. Add electronic communication as an additional minimum requirement for test equipment to ANNEX III.

EGEA's key positions and recommendations in detail

To 1: Emission Testing – Support for Expansion

Emission testing – PN

EGEA is very pleased that the joint efforts of the NPTI group, JRC and ourselves (EGEA) have borne fruit in the introduction of particle measurement in the pioneering countries of Belgium, the Netherlands, Germany and Switzerland.
Statistical data now covering millions of vehicles has confirmed the trends identified in earlier studies.
It is also particularly interesting to note that, after two years, the downward trend in the figures shows an improvement in the vehicle fleet and therefore the continued relevance of this new control measure.
The acceptance threshold of 250,000 and the application of this measure to Euro 5B vehicles will enable a significant proportion of the European vehicle fleet to be maintained in good condition and will reduce the air pollution in a significant way.
The extension to petrol vehicles is particularly relevant given the particle emission levels of these vehicles. Studies show very dramatically that these smaller particles are going deep into our lungs and into the bloodstream and can cause a lot of health problems including cancer. The numbers of petrol vehicles is rising dramatically, whereas diesel engines are reducing. Therefore it´s time and necessary to extend the PN measurement to include petrol engines along with Diesel engines . The project AeroSolft (managed by VERT in Switzerland) is providing results and proposals on how to measure PN of petrol cars.
EGEA would like to draw your attention to the development of 'delegated acts', including the particulate control procedure for petrol vehicles, which JRC presented. **EGEA** was involved in the preliminary work of this project. The procedure utilises engine loading by starting up electrical consumers (air conditioning, rear window defrosting etc.) combined with an accelerated idle speed, **the loading is sufficient for the vehicle to enter a test condition.**

Emission testing – NOx

The same engine loading procedure was followed during the study and test campaign conducted in Spain as a possible method for measuring NOx referenced in "PTI Methodology for Inspections of NOx and Particle Matter Emissions conducted by Universidad Carlos III, ISFVA and AECA.
The results of the study are conclusive, which is why CITA has recommended this procedure for measuring NOx.
Generally, statement on NOx to petrol cars: If there is a tailpipe measurement procedure as described in the new proposal 2024/45, it´s not necessary to measure NOx separately with an NOx gas analyser on petrol cars, because the only component reducing the emissions is the 3-way-catalyst. If there is established a tailpipe measurement at high idle with the strong reference values of 0,1 % CO and Lambda +/-0,03, then NOx will be reduced automatically in the same way then the other emission components and therefore it´s sufficient to measure the so called "leading components" CO and Lambda. During the UBA study conducted in Germany some years ago, NOx on 4 petrol vehicles has been measured and compared with a regular PTI-test. A well working and established tailpipe test guarantees, that NOx reduction is also working properly.

JRC NOx testing procedure on diesel cars is one approach, a possible alternative solution is that, if the warmup is not possible, then the test procedure recommended by CITA for NOx measurement could be utilised. Supplementary investigations should be done on the warmup procedure. To support these measuring procedures during PTI specific emission related information on EOBD could be used and should therefore be mandatory.

EGEA recommends that the Commission Recommendation (EU) 2023/688 in Section 3, 4 and 5 referenced in

Annex I, should also be adopted in Annex III instead of the text below:
"*(16) device to measure particle number emissions with sufficient accuracy*".

EGEA strongly recommend that regarding ANNEX III "*MINIMUM REQUIREMENTS CONCERNING ROADWORTHINESS FACILITIES AND TEST EQUIPMENT*", in Chapter II, Calibration of equipment used for measurements, which reads *(iii) 12 months for the measurement of gaseous emissions*.
The sentence should be corrected to read as follows:
(iii) ***12 months for the measurement of gaseous emissions, opacity, Particulate Number and noise***

To 2. Access to Vehicle Data (EOBD/OBM/ePTI/RSI)

EOBD/OBM

Vehicle data

The systems and components that are fitted to the specific vehicle should be tested; related information for this is available via the **VIN** from the vehicle manufacturer.

This information must be readily available, accurate, and consistent. In some instances, there is information that relies on the EOBD protocol, unfortunately it has been the experience of **EGEA** that even mandatory information is lacking.

EGEA highlights that the vehicle information by VIN can be inconsistent, and there is no provision under Type Approval for the accuracy and consistency of this type of information.

OBFCM (onboard fuel consumption monitoring) is also providing evidence that EOBDs are not properly verified during Type Approval. This can lead to inaccuracy and inconsistency in data, a legacy issue since the introduction of the EOBD decades ago.

There are no established channel/feedback systems for reporting these anomalies when identified to ensure they are corrected on a mandatory basis.

EGEA has concerns that no approval is forecasted for OBM (onboard monitoring) systems.

This information must be part of the minimum data set that vehicle manufacturers must make available, without restriction, based solely on the key piece of information—the VIN.

EGEA is of the opinion that OBM could be used to assist the PTI test, however, it is our option that that this should not replace the PTI test (sensor tampering, lack of calibration, self-assessment,…). To be able to use OBM signals or information during the PTI, it is mandatory, as mentioned above, that this information is available for all vehicle makes and models.

ePTI – testing of electronic safety features

As expressed in Annex I point 3 of the RWP Update, "*As regards electronic periodic technical inspection (ePTI) using the electronic vehicle interface, an ePTI system list is defined in EN ISO 20730-3:2021.*"

The 62 electronic safety systems referred to in Item 10 in the table must be identified to be manageable using the electronic vehicle interface (ePTI) compliant with the ISO 20730-3:2021 standard.

EGEA recommends regarding "*ANNEX III MINIMUM REQUIREMENTS CONCERNING ROADWORTHINESS FACILITIES AND TEST EQUIPMENT*"

The text "*(14) A device to connect to the electronic vehicle interface, such as an OBD scan tool*" should be amended

to read as follows:

"(14) A device to connect the electronic vehicle interface, such as an OBD scan tool or any other device capable of reading the data."

EGEA recommends that the ePTI standard be revised and become mandatory and to be included in the Type Approval.

EGEA further recommends that a delegated act be established to specify how to test those 62 features in practice. It is crucial to have access to in-vehicle data from the Vehicle Manufacturers (using the VIN) in a transparent and standardised way to perform the PTI, as previously mentioned in this document.

RSI:

According to "(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*."

EGEA is aware that this real phenomenon must be curbed, but not only through multiple studies and 'shock' actions. According to the vehicle manufacturers, however, software manipulations may well not be easily detected in every case, even using brand-specific testing equipment.
As previously outlined in this position papers, hardware and software fraud is difficult to identify due to the lack of standardisation in system information access (VIN specific data).
EGEA recommends that the same provision for data access present in 2014/45 (new article 4, paragraphs 5 and 6), should also be added to 2014/47. This would allow access to data for roadside inspection (RSI) and an enhanced possibility to combat tampering, with no additional cost, as the task is already required for testing in PTI centres . This would also allow for effective verification on electronic safety systems functionality checks, already added to the list of items to be checked in Annex 2, point 10 of the table.

As previously explained, we agree that the introduction of NOx measurement with a clear and controlled test method would be the most effective way to ensure that the emission control equipment works correctly during the life-cycle of the vehicle and would reduce 'emission fraud'. A first step could be to integrate the NOx measurement in the OIML R99 standard.

- Another possible solution would be for the OBD to record the duration since the AD Blue (including kilometres) was last used, in a mandatory manner and without the ability to delete that data.
- In addition to NOx and PN, we would also suggest testing the 5-gases at once to understand quickly and easily the presence and condition of DPF and AdBlue systems.

A NOx measurement for RSI is a rapid and efficient way to indicate that this vehicle has been tampered with even if the manipulation process is not clearly identified.

EGEA would like to emphasise the use of remote sensing in RSI.

EGEA would like to point out that the PTI is responsible for regularly monitoring combustion and noise emissions, however, too many vehicles are evading this mandatory inspection. It must be noted that these are, of course, precisely the vehicles that are most likely to reveal faults.
Remote sensing requires definitions and specifications for the following equipment:

- Remote sensing /Plume chasing NOx (Requirements for EU solution)

- Remote sensing /Remote sensing CO (Requirements for EU solution)
- Remote sensing /Remote sensing PN* (Requirements for UE solution)
- Sound Level Meter

To 3. ADAS

Recommendation for ADAS

EGEA is of the opinion, that if a vehicle wheel alignment issue is suspected, then a check of the wheel alignment should be done prior to any ADAS testing.

EGEA welcomes the introduction of inspections on the "electronic safety systems", recognising that such systems increase road safety, but could create risks as well, especially if not checked after years into operation. **EGEA** fully supports the recognition from the Commission, that access to data is paramount to be able to perform the necessary verifications.
EGEA is of the opinion that the current proposal lacks consistency, and the wording may allow a superficial functional verification (2014/45 Annex 1, point 3, letter c), instead of a correct performance verification (2014/45 Annex 1, point 3, letter d), thus leaving it open to the creation of road dangers instead of its reduction.

EGEA is of the opinion that a proper performance verification (system check, component plausibility and functional test) is critical for those safety systems that have been inserted as mandatory under (GSR 2019 2144 and implementing acts), play an active role in road safety (e.g. Automatic emergency braking system, Lane keep assist), and in which a reduction in performance or a calibration loss could create road dangers because of drivers over-reliance on them.

EGEA recommends adding in the table in Annex 1, item 10, for each mandatory and active ADAS a clear reference to the need of performance verification.

EGEA also recommends adding to Annex 3 a text for "Tests to check the performance verification of critical ADAS" for consistency.

To 4. Noise

Recommendation for noise

EGEA supports the decision to conduct systematic noise measurements on category L vehicles, including scooters and motorbikes, as a prudent step, given the results of countries that have implemented this provision (Spain, Italy, France, etc.). This measure is applicable without any significant difficulty and is based on Class 2 equipment.

To 5. Suspension Testing

Recommendations for Suspension Testing

With the suspension system being a vital element for the braking and stability of the vehicle under actual driving conditions, a suitable test of this is needed to ensure the roadworthiness of every vehicle on the road. The need for an effective and reliable suspension test is nowadays even more evident with electronic-assisted brake systems and ADAS-equipped vehicles already on the road, with more electric and ADS in the near future.

As of today, a few different testing methods have been used in the automotive aftermarket industry, namely EUSAMA, BOGE and others, these are not considered to be applicable everywhere for several reasons, e.g. non-correlating test results, unsuitability for newer vehicles, proprietary technology, etc.
EGEA presented a solution viable for both periodical technical inspections and roadside inspections, ensuring the roadworthiness of vehicles into the future.
EGEA adopted the improved test method, called "Phase-shift" that leads to a straightforward, quick and reliable inspection test with simple pass/fail criteria.
EGEA solution is based on an open specification therefore, any notified body can type-approve the equipment.
The Phase shift suspension tester was adopted first in Europe by Belgium in the periodical technical inspection on all motor vehicles of categories M1 and N1.
Millions of vehicles tested over 10 years proved that the test applies to vehicles of any type, age and mileage, when properly maintained, pass the test and are roadworthy.

EGEA highly recommend that the suspension Phase-Shift method should be adopted and addressed in Annex I and the Phase-Shift suspension tester in Annex III.

To 6. Advanced Lighting Systems (Headlight Testing)

Recommendation for headlight testing

As mentioned in the revision directive project, the horizontal deviation (direction) of the headlight is crucial in the case of the new headlights, where only a portion of the light is masked for anti-glare purposes.

1. Comparability and reproducibility

Headlight testing (including type approvals for headlight testers) there exists many differences between the applied regulations within the EU member states.
There is a need to create specifications for the following headlight aligning influencing factors:

- The headlight testing area (vehicle standing area requirements) is the main influencing factor in the case of comparability between the different testing stations. Currently there are great differences in the regulation of testing area between the UE Member States.
- The judgment of the headlight alignment can be different from test engineer to test engineer.
  To increase the comparability and reproducability, there is a need for unique judgment criteria for the alignment. Digital headlight testers can help with the judgment and documenting of the headlight alignm ent.

2. Passing beam

To ensure the correct functionality of these headlights, **EGEA** suggests the following checks to meet the minimum requirements:

- Position:
  - Necessity of the harmonisation of tolerance ranges
  - Besides the inclination, the horizontal deviation should be added to the minimum requirements
- Intensity check:
  - Intensity check should be added for the blinding intensity and the hot-spot area

- The measured intensity depends on the alignment of the passing beam, which may lead to inaccurate results. For this reason, **EGEA** recommends assessing intensity over an area rather than at individual points. An intensity check should be introduced for driving beam and fog beam

EGEA recommends the following to ensure the correct functionality of these headlights:

- a) Create a specification for AFS (adaptive front lighting system) and ADB (adaptive driving beams).
- b) Create a specification for an intensity check. (Candela and Lumens values)
- c) Create a specification for a glare zone test.
- d) Create a specification for the headlight testing area.

To ensure comparability and reproducibility across member states, harmonisation of the legislation within EU member states and the use of digital values for objectivity and accuracy are paramount.

To 7. Electric Vehicle Inspection Standards

Recommendation for electric vehicles

Multiple signals are mentioned, e.g. Isolation resistance (4.14.6), software (4.14.1, 4.14.3), which should be measured or checked via OBD. To be sure that this could be done, especially in the future and with standard EOBD equipment, it must be mandatory that these signals are implemented in all vehicles. All the signals are defined in SAE 1979 standard, but it's not referenced in the Type Approval legislation, that these signals are mandatory for all vehicle manufacturers.
It should also be pointed out that with the onboard integrated isolation measurement system, only the isolation resistance after the AC/DC converter is covered and can be controlled. The isolation resistance from the charging inlet to the AC/DC transformer inside the vehicle is not covered by this method and must be measured separately with other equipment, which is available on the market.

EGEA recommends the following references be made mandatory as these are all part of electrical safety of electric vehicles as referenced in the RWP Annex I item 4 of the EU Commission proposal.
4.14.4.3 Ground continuity (X) [2]: why this point is mentioned as non-mandatory, taking into consideration that its key point is part of the R100 regulation.
Some of the values mentioned are inaccurate and need revision.
4.14.5. High voltage electrical and electronical equipment (X)[2] and daughter tests

- 4.14.5.1. High voltage electrical and electronical equipment
- 4.14.5.2. Traction motor
- 4.14.5.3 Electronic converters, motor, and inverter

4.14.6. Insulation resistance (X)[2] : why this point is mentioned as non mandatory taking in consideration that this key point is part of the R100 regulation.
4.14.5.2. Traction motor, how to be able to double check this: Incorrect version of type-approved hardware and software not in accordance with the requirements as defined in the ECE R100
4.14.4.5 Charging inlet: why no equipotential bonding/continuity of the vehicle load socket with a 100 mΩ limit
4.14.4.6 Charging cable: why no Insulation resistance of vehicle charging cable with a 100 mΩ limit
4.14.5.1 High voltage electrical and electronical equipment why no Equipotential bonding/Continuity to the vehicle mass with a 100 mΩ limit.
EGEA has concerns about how the evaluation and operational readiness of the following topics be evaluated: can be achieved as the required data is currently unavailable:

- 4.14.1 Electrical safety: b) Software version or integrity incorrect
- 4.14.5.1. High voltage electrical and electronical equipment: c) leaking?
- 4.14.4.5 Charging inlet: b) Foreign material or moisture
- 4.14.5.2. Traction motor : f) Wrong version of type-approved hardware and software not in accordance with the requirements as defined in the ECE R100
- 4.14.5.3 Electronic converters, motor, and inverter g) Wrong version of type-approved hardware and sensors are already widely used in the workshop market).

EGEA recommends that the minimum equipment requirements for testing electric vehicles should be addressed in Annex III.

To 8. Brakes and Road Tests – Preserve Integrity

Recommendation for brakes testing

According to the RWP proposals, vii) in the table, items 1.2.1 and 1.2.2 are replaced by the following:

In point 1.2.2 Efficiency in the second column:

Test with a brake tester or, if one cannot be used for technical reasons, by a road test using a deceleration recording instrument to establish the braking ratio which relates
(a) to the maximum authorised mass or,
(b) in the case of semi-trailers, to the sum of the authorised axle loads, or
(c) to reference values.

Vehicles or a trailer with a maximum permissible mass exceeding 3,5 tonnes must be inspected following the standards given by ISO 21069 or equivalent methods.
For vehicles not inspected following the standards given by ISO 21069 or equivalent methods, if the minimum figure of braking ratio is not achieved, at least meaningful brake testing must be performed. Meaningful brake testing is performed if brake efficiency is below the service, secondary or parking values prescribed in 1.2.2 or 1.3.2 or 1.4.2 but all the following conditions are met:
— the braking system is in good condition with no obvious defects,
— wheels of all axles lock because adhesion between the tyre and brake tester surface was exhausted during the brake test; if wheels on some axles do not lock, it must be safely concluded that the braking efficiency values prescribed in 1.2.2 or 1.3.2 or 1.4.2 would be achieved when the vehicle is loaded,
— brake actuation level by the inspector must always be proportional to the current load of the axle.

Information on system values may be retrieved using electronic vehicle interface.
Road tests should be carried out under dry conditions on a flat, straight road. In cases where vehicles of R or T category are tested on the road, meaningful brake testing is performed if all the above conditions are met.
In case of doubt, the braking efficiency shall be demonstrated in loaded or partially loaded condition.

EGEA insists that the new wording of the points above creates a technical loophole in efficiency testing and accuracy, and should be deleted to prevent dangerous vehicles on the road.
Secondly, the reference values method raises our concerns about the accuracy of vehicle sensors, which is why the current version should be maintained, as follows:

Test with a brake tester or, if one cannot be used for technical reasons, by a road test using a deceleration recording instrument to establish the braking ratio which relates to the maximum authorised mass or, in the case of semi-trailers, to the sum of the authorised axle loads.

Vehicles or a trailer with a maximum permissible mass exceeding 3,5 tonnes must be inspected following the standards given by ISO 21069 or equivalent methods.

Road tests should be carried out under dry conditions on a flat, straight road.

In point 1.2.2 Efficiency in the third column, there are no limits for R-category vehicles.

To 9. Clarity on L-Category Vehicle Testing

Recommendation for L-category vehicles

According to the RWP update proposals, Article 6 will be amended as follows:
(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 cm3 or with a maximum continuous rated or net power above 11 kW, Member States shall determine the areas, items and appropriate methods of testing*.'.

EGEA would like to illustrate that it is unclear what to test, what the appropriate methods are, and who will approve them. This point needs clarification. Minimum requirements should be referred to the Directive.

To 10. Electronic communication

Recommendation for electronic communication

EGEA has decades of experience in the electronic communication of testing equipment. **EGEA** industry standard '**Workshop-Net, the network powered by EGEA**', which was introduced back in 1998, is widely supported by the European test equipment supplier industry.

EGEA urgently recommends using the revision of the roadworthiness package to establish a mandatory secure electronic communication interface for smart test equipment, to achieve e.g. the digital targets of the EU by 2030 (Digital Decade Policy Programme 2030).

EGEA proposes that the minimum requirements for test equipment, specified in Annex III, paragraph I, be supplemented as follows:

"The test equipment listed above in (3), (4), (10), (11), (12) and (14) must be supplied with an electronic interface via which the measurement and test results are transmitted tamper-proof, encrypted and in a machine-readable format."

Justification to amend ANNEX III:

a) According to **EGEA's** findings and experience, the EU's digital objectives can only be successfully achieved,

if the electronic communication is starting directly at the testing equipment, and not from the testing centers, as mentioned in article 8 – paragraph 6.

A "digital gap" between the testing equipment and the productive system of the testing center counteracts all efforts to achieve most of the digital targets of the EU!

b) The equipment communication must be tamper-proof, in general, no operator or any third party may tamper with any measurement or test results generated by the testing equipment, in particular the transmitted data are not stored non-volatile within the testing equipment.
c) The equipment communication must be encrypted to cover data protection and cyber security.
d) The transmitted test and result data must be in machine-readable standard format (such as XML or JSON, etc) an example of which is available upon request.
e) To enable the EU member states to improve the quality management system of the PTI regime (according to ISO 17020), the transmitted result data should include the following additional information:
   - National homologation number of the testing equipment
   - Serial number of the testing equipment
   - Identification number of the calibration certificate of the last calibration of the testing equipment
   - Time stamps of the start and completion time of the calibration date
   - Identification of the inspection operator

Additional information on the European status quo of electronic equipment communication

a. All smart testing equipment, used today for PTI in the EU can communicate electronically, because they are equipped with an electronic interface ex works already.
b. Some EU member states use established communication concepts, which are already in accordance with the recommendation from **EGEA**, such as:
   "OTC-LAN" in France
   "MCTCnet" in Italy
   "Workshop-Net" in Germany, Austria, Ireland.
   All the other member states may implement their equipment communication by a software update.
c. All this established communication concepts are based on TCP/IP-communication ("Ethernet"). Local Area Networks (LAN) exist in all testing centers all over the EU.
d. The following testing devices stated in ANNEX III may be equipped with an electronic interface:
   (5) Deceleration meter
   (9) Sound level meter
   (13) Drive over tire profile measurement machines

Positive effects of EGEA recommendations on electronic communication:

Direct communication, starting with the testing equipment, supports the following digital targets of the EU:

a) 2025/0097 (COD) - Paragraph 19: "*Digital transition ... in a standardised electronic format*" … ff.
b) 2025/0097 (COD) – Paragraph 25: *"Extend the functionalities of MOVE-HUB …"* ff.
c) Amendment 2014/45/EU - Article 8 "Roadworthiness certificate"
   Paragraph 6: "*Testing centres shall communicate electronically …*" ff.
d) Amendment 2014/45/EU - Article 16 "Exchange of data between Member States' authorities" ff
e) Amendment 2014/45/EU - Article 20a "Communication of information to the Commission" ff
f) Amendment 2014/47/EU - Article 18a "Exchange of data between Member States' authorities" ff
g) Amendment 2014/47/EU - Article 20 "Communication of information to the Commission" ff
h) LEGISLATIVE FINANCIAL AND DIGITAL STATEMENT – 1.3.2 Specific objectives:
   "Reduction of tampering …" ff
i) LEGISLATIVE FINANCIAL AND DIGITAL STATEMENT – 1.5.1 Requirements:

"National public authorities will have to set up …" ff

"Vehicle repair shops, motor vehicle dealers … " ff

j) LEGISLATIVE FINANCIAL AND DIGITAL STATEMENT – 1.5.3 Lessons learned:

"Regarding improvement of the exchange of information…" ff

k) LEGISLATIVE FINANCIAL AND DIGITAL STATEMENT – 1.5.5 Assessment ff

l) 4. DIGITAL DIMENSIONS – Requirements R1, R2, R5 and R6.

Conclusion

EGEA fully supports the revision process and encourages the European Commission and legislators to adopt **clear, enforceable, and future-proof technical standards**. Standardised access to vehicle data, the integration of validated testing methods, and harmonised procedures across Member States will be essential to achieving the goals of this legislative update.

EGEA places their technical experts at the disposal of the European Commission for any clarification required in this **EGEA** position paper.

Yours sincerely,

Marcin Barankiewicz

EGEA's Secretary General