THE INSTITUTION SUPERVISING TECHNICAL INSPECTIONS OF VEHICLES IN POLAND – PROPOSAL FOR SYSTEM CHANGES AND ADAPTATION TO THE EUROPEAN REQUIREMENTS

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Abstract:

Assumptions for the reform of the system of supervision over technical inspections of vehicles in Poland by introducing re-tests as one of the most important elements of supervision. Evolutionary adaptation of the system of inspections and supervision to the EU requirements. The problem related to ensuring high competences of supervisory employees.

Keywords:

technical inspections of vehicles, supervision, quality of periodic technical inspections

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Introduction – Legal regulations currently in force in Poland and differences resulting from Directive 2014/45

The issue of supervision is regulated by Art. 83b. Road Traffic Act [1].

Art. 83b. [Supervision over the vehicle inspection stations]

1. Supervision over vehicle inspection stations is exercised by the district governor.

2. As part of the supervision performed, the district governor:

   1) at least once a year, inspects vehicle inspection stations with respect to:

      a) compliance of the station with the requirements referred to in Art. 83 section 3,

      b) correctness of technical inspections of vehicles,

      c) correctness of maintaining the required documentation;

   2) issues post-inspection recommendations and sets a deadline for removing violations of the conditions for conducting business activities in the field of running vehicle inspection stations;

   3) issues a decision prohibiting the entrepreneur from operating a vehicle inspection station, deleting the entrepreneur from the register of regulated activities, if the entrepreneur:

      a) submitted the declaration referred to in Art. 83a section 4, inconsistent with the actual situation,

      b) failed to remove violations of the conditions for conducting business activities in the field of running vehicle inspection stations within the deadline set by the district governor,

      c) grossly violated the conditions for conducting business activities in the field of running a vehicle inspection station.

2a. The decision referred to in section 2 point 3 shall be immediately enforceable.

2b. In the event of issuing the decision referred to in section 2 point 3, if the entrepreneur conducts business activities covered by the entry also on the basis of entries in other registers of regulated activities in the same scope of economic activity, the entrepreneur is also deleted from these registers of regulated activities ex officio.

3. The district governor may, by agreement, entrust inspection activities to the Director of Transport Technical Supervision.

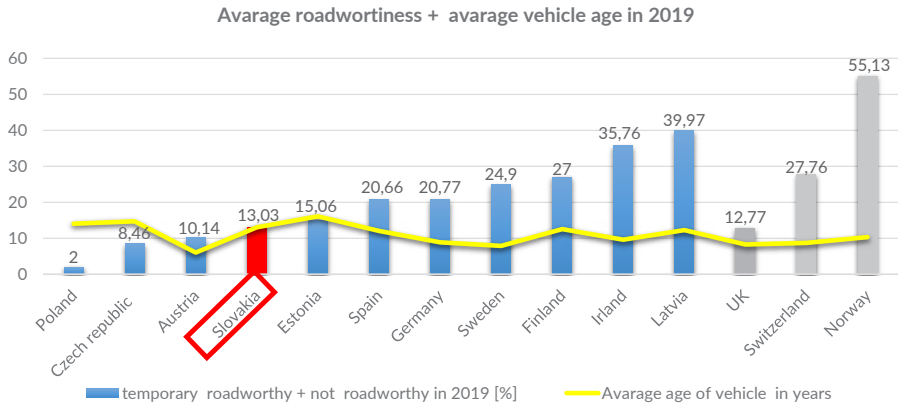
Directive 2014/45/EC [2] in Annex V sets out the Rules and procedures relating to the supervisory authorities established by the Member States. Much of the Road Traffic Law contains these minimum requirements for supervisory authorities. Below is a list of elements that are included in the EU requirements and which cannot be found in the Polish legal order.
- refresher training for diagnosticians;
- refresher training for supervisory inspectors;
- audit for training centres;

Monitoring using measures such as:
- re-testing of a statistically significant part of the tested vehicles,
- "mystery client" tests (use of a damaged vehicle is optional),
- analysis of roadworthiness test results (statistical methods),
- verification tests,
- investigation of complaints.

The requirements applicable to staff employed by the supervisory authority cover the following areas:
- technical competences,
- impartiality,
- qualification and training standards.

As can be seen from the above, there are not many differences, but they are sufficiently important that the quality indicator, which is the share of the number of negative inspections results in the number of all tests in Poland, fluctuates around 2%, while in the countries such as the Netherlands or Italy [4] reaches dozen percent, while in Ireland, where the organization of the system is unusual (in the entire country, inspections are performed by one exclusive company – a company that won the tender to conduct technical tests for 10 years) it has the highest value, exceeding 35%. In recent years, Germany, the Netherlands, Belgium and Switzerland have introduced (the implementation was delayed by the pandemic) measurement of the particulate number concentration into technical inspection of a vehicle equipped with a particulate filter [5]. Only due to emission measurement in these countries, the share of the number of inspections with negative test results is approximately 10%. This measurement will also be implemented in Poland. It is necessary to consider how to effectively enforce measurements using this method, which will ultimately eliminate vehicles, from the road traffic, in which the particulate filter has been removed. Measurements using this method give a clear answer to the question whether the particulate filter is installed, what condition it is in, or whether it has been removed, and are extremely effective.

Fig. 1. Share of negative technical inspections results in selected European countries (not including emission test results) and average age of vehicles [6]



Source: Ministry of Transport and Construction of the Slovak Republic

Proposed requirements and reorganization of the technical inspections supervision system in Poland

Relatively simple and low-cost elements of adapting Polish law to the requirements of the directive is the introduction of improvement workshops for diagnosticians, called in the directive – a refresher training for diagnosticians, and periodic training for supervisory inspectors.

A Central Register of Diagnostics and Vehicle Inspection Stations should also be created in order to have knowledge about the actual number of vehicle inspection stations and professionally active diagnosticians.

A more difficult task is to guarantee the appropriate competences of the supervisory inspector. Currently, the regulations do not regulate this issue. The inspections are carried out by people delegated to this task, who have very different education and experience in conducting technical inspections of vehicles. As a rule, the controlling person should have higher competences than the controlled person. Below is a proposal for a system solution that will guarantee that those conducting the inspection will be highly proficient in performing technical tests, and therefore this principle will be met.

In the author's opinion, a supervision inspector should, in addition to the diagnostician's qualifications, have at least two years of work experience at a vehicle inspection station, undergo specialist training dedicated to supervision inspectors and take a qualification examination. He should also be subject to periodic refresher training.

The basic surveillance tool mentioned first in the Directive is: re-testing of a statistically significant part of the tested vehicles. The directive therefore requires repeated tests to be carried out by supervisory inspectors. One can use the solution implemented by the Netherlands, adapting it to Polish realities.

Re-testing of a statistically significant part of the tested vehicles (Dutch model) [3]

In the Netherlands, the supervisory authority is the RDW. RDW is a state entity that performs its tasks on behalf of and under the supervision of the Minister of Infrastructure and Environment, and is financed from inspection fees and not from the state budget. As part of the supervision, the RDW is obliged by the contract signed to carry out 3% of vehicle re-tests, which currently amounts to approximately 200,000 re-tests per year. All VISs are divided into three groups based on quality. The first group is performing at the highest level, the second is average and the third is the one with reservations. The likelihood of retesting is related to group membership. Retests are randomly scheduled by computer. After completing the inspection, each diagnostician confirming the inspection receives information whether he or she was selected at random or not. If the inspection is to be repeated, the RDW inspector must appear at the given VIS within 90 minutes. If this time passes, the car and its owner may leave VIS without consequences. If they do not wait these 90 minutes, the inspection is invalidated and the vehicle owner must report to the VIS run directly by the RDW.

Periodic technical inspection at VIS RDW costs approximately EUR 50 for passenger cars and approximately EUR 100 for vehicles over 3,500 kg.

If the vehicle does not wait, VIS immediately informs RDW about this fact. When re-testing the vehicle, if there is full agreement between the assessment of the VIS and the RDW inspector, the diagnostician and the VIS are granted 0.4 positive points and the VIS and the diagnostician move up in the ranking, towards the VISs that perform the tests flawlessly and which are therefore checked less frequently. If a minor defect is detected that was not detected by the diagnostician, 1.5 negative points are assigned, and in the case of a serious one, 3.0 negative points, and then both the VIS and the diagnostician move down in the ranking, where inspections are carried out more frequently.

If the number of negative points is too high, the VIS loses its license and cannot continue to conduct official technical tests. VIS employing several diagnosticians is assessed based on the sum of points obtained by them. During the inspections, a database created by RDW is used. This database contains all data about the vehicle, such as technical data and requirements specific to a given vehicle, mileage history, periodic tests and detected faults, and insurance validity. This database is divided into modules and, depending on their authorizations, different entities have access to it to varying extents. An ordinary citizen can also check the data regarding a given vehicle to a certain extent.

Proposal to introduce a re-examination mechanism in Poland

Poland is a much larger country than the Netherlands and therefore transferring identical re-examination solutions is not possible. In Poland, a supervisory inspector would not be able to reach the site within 90 minutes. Instead of a specific inspection, the computer, according to a specially designed algorithm, would randomly select a diagnostician in connection with a specific VIS. A group of thirty or forty supervisory inspectors scattered throughout Poland would perform repeated tests based on a schedule whose input data would be the result of the draw indicated by the central computer and prepared by the logistician of the supervisory unit. The cost of launching and maintaining the re-testing and supervision system can be estimated at PLN 8.5 million per year. As a result, each diagnostician would be checked at least twice, or more often, three times a year. The sampling algorithm should take into account the number of inspections performed annually by the diagnostician, the statistics of negative results taking into account the type of defects detected, and statistics regarding the compliance between the results of inspections performed by the diagnostician and the supervisory inspector.

During the re-examination, if differences are detected in the inspection results, regarding the detection of serious (two or more) or dangerous defects by the supervisory inspector, which were not detected by the diagnostician, the diagnostician would be obliged to complete a refresher course within

90 days. If a diagnostician exhausts the limit of three refresher courses within three years, he or she would lose the authorization to perform tests the fourth time and the next referral would be a referral to a qualifying examination.

Re-examination procedure

The supervision inspector, in accordance with the adopted schedule, visits the VIS where the controlled diagnostician works and reports to CEPIK his readiness to carry out the inspection. When the diagnostician confirms the inspection result, he or she receives information from CEPIK that another test will be performed soon. At the same time, the supervision inspector receives information that the vehicle is ready for re-testing. The supervisory inspector proceeds to perform another inspection without having access to the results and any defects found during the inspection performed by the diagnostician, which guarantees impartiality and mutual validation of the inspection performed by the diagnostician and the supervisory inspector. This solution also ensures that the mutual relationship between the controller and the controlled is balanced, and no one proves anything to anyone else. This solution, by directly involving supervision in technical inspections of vehicles, also allows for the identification of all system defects and imperfections and their correction. A certain problem will be validating the work of a diagnostician who statistically performs fewer than 365 tests per year. In such a case, the market share is negligible and, alternatively, this tool could be abandoned or the "mystery customer" procedure could occasionally be used, providing a vehicle specially prepared for testing which will have serious defects.

Solutions included in the draft road traffic law, form UC48

The solutions proposed in the project were an attempt at a compromise solution in terms of the division of competences regarding supervision between the TDT Director and the local government units that have so far exercised supervision. The project includes several good solutions, such as the creation of a central register of diagnosticians and VISs. However, in terms of supervision tools, apart from changing the body that would carry out this task, it did not change much qualitatively. The competence of supervision inspectors and their proficiency in performing technical inspections of vehicles are questionable. The draft act allowed for the supervision inspector to acquire his competences by inspecting diagnosticians. Moreover, according to the project, supervision inspectors would not perform technical inspections of vehicles. According to the author, the project assumed an oppressive nature of supervision, and its implementation did not guarantee a significant improvement in the quality of research. A supervisory inspector who has never worked at a vehicle inspection station, has never performed technical inspections of vehicles and, as a supervisory employee, has also had no experience performing inspections, is the solution that is currently in place. Systemically, the project did not require the highest competencies from supervisory employees, beyond those of diagnosticians. It gave very broad prerogatives for TDT, but in the author's opinion, not guaranteeing that the quality of the inspections performed would change to the level that is enforced in EU member states such as the Netherlands, Slovakia, Ireland or Belgium.

Summary: Introduction of supervision over technical inspections based on re-examinations

Such an approach would allow for a smooth increase in the quality of inspections from the current level to that which can be observed in the countries where the system is at a high level and the share of negative inspection results in all tests is dozen percent. At the same time, such an approach would not eliminate many diagnosticians overnight, but would allow them to adapt to the new situation, but as a consequence it would ultimately exclude those who are definitely not suitable for this job. It should be noted that an educated diagnostician with practice is the most valuable link in the process of technical vehicle inspection and that entrepreneurs operating in this field have been dealing with a deepening personnel crisis for several years (as evidenced by the problem of finding people willing to work as diagnosticians and average age of those employed in this capacity). This proposal is of a preliminary nature, in the second phase, when it would be possible to assess how the system works, the requirements could be slightly tightened, achieving an even better result.

An example of such an evolution in conducting technical inspections of vehicles was the Motor Transport Institute issuing opinions on the premises and equipment of vehicle inspection stations in the second half of the 1990s, when most stations did not meet absolutely any requirements. The opinion included a list of inconsistencies and deficiencies in the premises and equipment and allowed the district governor, who performed the supervision, to indicate the time by which the entrepreneur must supplement and remove the deficiencies and shortcomings. This process, along with the introduction of official fees for technical inspections, allowed entrepreneurs to adapt to the requirements and the image of Polish vehicle inspection stations changed dramatically. When Poland joined the EU, it had one of the most modern and best-equipped stations among the member states.

Other tools to improve the quality of technical inspections of vehicles that should be implemented in parallel is the introduction of documenting the inspection with photos, vehicle mileage and possible defects. It is also possible to consider the introduction of cameras monitoring in a time loop recording images from control stations with access for the supervision unit. This solution has been introduced and works well in Slovakia [6]. Another very important tool is the analysis of the statistics of detected faults and their type by the supervision unit. This is an element that says a lot about the quality of the inspections being conducted. This statistical data would be an important element of the algorithm indicating which diagnostician and VIS should be subject to inspection and re-examination.

All these measures would lead to a significant increase in the quality of inspections conducted in Poland and compliance with EU standards in this area, guaranteeing a smooth change of the system.

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