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ANALYSIS OF THE LOGISTICAL PROCESS INVOLVED IN SETTING UP A VEHICLE INSPECTION STATION IN POLAND – A CASE STUDY

Aleksandra WIERZBICKA

Silesian University of Technology, Institute of Management and Logistics; aleksandra.wierzbicka@polsl.pl, ORCID: 0000-0003-2373-6830

Purpose: The purpose of this paper is to detail the steps necessary to re-launch the operations of a District Vehicle Inspection Station in the context of current legislation and administrative procedures. The objective of the paper is to identify the fundamental elements of the logistical process, including the preparation of the technical infrastructure, the completion of the documentation, the procurement of the necessary certificates and the integration with the CEPiK system. The primary objective of this publication is to furnish entrepreneurs and industry specialists with the knowledge necessary to successfully establish or re-establish a vehicle control station in Poland.
Design/methodology/approach: The paper employs the case study method, focusing on the process of reopening a specific District Vehicle Control Station in the Mikołów district. The selection of this method was predicated on its capacity to analyse in meticulous detail the actual logistical, procedural and administrative steps that must be taken in practice. The case study method enables the demonstration of both the formal requirements and the actual difficulties encountered by the entrepreneur, in addition to the solutions that were found throughout the process.
Findings: Consequently, the study yielded the development of a comprehensive procedural diagram for entrepreneurs contemplating the establishment of a vehicle inspection station in Poland. The provision of a practical tool is of paramount importance in supporting the implementation of the process in accordance with current legislation and technical and organisational requirements.
Research limitations/implications: The study does not cover the stage of building a district vehicle testing station, obtaining building permits or purchasing new diagnostic equipment. The scheme has been developed for entrepreneurs who intend to recommence operation of an existing station that meets the requisite technical requirements and is equipped with the necessary apparatus.
Originality/value: The paper's value lies in its practical presentation of a structured scheme of activities. This scheme has the potential to provide real support for entrepreneurs planning to renew the activity of vehicle inspection stations in Poland.
Keywords: VIS, opening of a vehicle inspection station.
Category of the paper: Research paper.

1. Introduction

In developed countries, road safety is considered a fundamental component of transport policy, given its direct impact on the quality of life of citizens and the efficiency of the economy. The objective of contemporary societies is to minimise the number of road accidents and their deleterious consequences. The level of road traffic safety is contingent on a number of factors, including the quality of road infrastructure, the behaviour of road users, the effectiveness of surveillance systems, and, albeit less frequently recognised, the technical condition of vehicles on the roads. In this regard, vehicle inspection stations (VIS) assume a pivotal function, as they are entrusted with the responsibility of conducting compulsory technical inspections within Poland. Vehicle inspection stations represent a pivotal component within the overarching framework of the logistical supply chain, as they serve to guarantee the technical integrity and safety of vehicles employed in the transportation of individuals and goods (Bakje, Karpiński, 2015). In accordance with prevailing legislation, motor vehicles are required to undergo a series of technical inspections at designated intervals, facilitating the timely identification of defects that could compromise safety for road users (Art. 81 Road Traffic Act, 1997). A pivotal element of the VIS's operations pertains to the aggregation and examination of data concerning the technical status of vehicles, a process that is instrumental in the effective oversight of the transport fleet and the implementation of its preventative maintenance measures. The data obtained during technical inspections assists transport operators in planning maintenance activities, thereby ensuring enhanced fleet reliability and reduced risk of breakdowns during operation. The regular undertaking of technical inspections facilitates the identification of irregularities prior to the occurrence of breakdowns, a process of paramount importance within the transport sector, where the assurance of uninterrupted service and safety is of the essence. Moreover, as a consequence of these inspections, defects that may compromise safety can be identified early on, and transport efficiency can be enhanced, thereby contributing to a reduction in long-term transport costs. The necessity for VIS to provide continuous staff training is imposed by technical and certification requirements, which are important for the continuity and quality of logistics services (Kuranc et al., 2014). The collaboration of VIS with supervisory authorities, such as the Transport Technical Supervision TDT and GITD, serves to ensure the maintenance of safety standards, thereby enhancing the reliability of road transport. The evaluation of the technical condition of vehicles has been demonstrated to influence the sustainability of transport by controlling exhaust emissions and wear and tear on consumables. In the contemporary context of mounting concern for climate change and sustainability, the management of exhaust emissions assumes paramount importance, as older or inadequately maintained vehicles have been shown to generate markedly elevated levels of air pollution. The regular maintenance of these vehicles is instrumental in ensuring their effective removal from circulation, thereby exerting a favourable influence on the quality of the atmosphere, particularly within urban areas (Melas et al., 2021).

In the context of ensuring road safety, effective information flow, and the efficient transport of people and goods from point A to point B, the prompt launch of a Vehicle Inspection Station (SKP) becomes extremely important. Efficiently operating SKPs are a vital element of the country's logistical infrastructure, as they enable ongoing assessment of the technical condition of vehicles participating in road traffic, which directly impacts the fluidity and safety of the entire transportation system. With the growing number of registered vehicles in Poland in recent years, there has also been an increased demand for diagnostic services (GUS, 2025). Therefore, it can be expected that the number of vehicle inspection stations will steadily increase, and the efficiency of the processes related to their launch will become crucial for maintaining a functional and safe transport system. The article includes an introduction, a literature review presenting the significance of vehicle inspection stations in the context of logistics, transport safety, and process management, as well as a case study on the launch of a District Vehicle Inspection Station in the Mikołów, including a detailed analysis of the stages, disruptions, and recommendations for entrepreneurs. The article concludes with a summary presenting practical and logistical conclusions drawn from the study. The article attempts to answer the following research questions: What are the key stages of the logistical process related to the reactivation of a vehicle inspection station in Poland? And what logistical problems and disruptions may occur during the reactivation of an inactive vehicle inspection station?

2. Literature review

2.1. Importance of vehicle inspection stations for transport and logistics

It is evident that the ongoing surge in the prevalence of road transportation is largely attributable to the advancement of urban centres and their associated infrastructure. The potential for exploration into previously inaccessible regions is increasing (Krysiuk et al., 2015). Research conducted in Germany demonstrates that approximately 80% of all transport undertaken in urban areas is facilitated by road transport (Kijewska, Iwan, 2011). Vehicle inspection stations (VISs) are instrumental in ensuring the safety and efficiency of road transport, constituting the cornerstone of the vehicle technical inspection system. A basic VIS is an establishment that has been authorised to carry out periodic and additional technical inspections of light vehicles. The term 'light vehicles' refers to cars, motorbikes, light vans and trailers with a maximum weight of 3.5 tonnes. The scope of inspection encompasses a range of vehicle components and systems, including braking, steering, suspension, lighting, exhaust emissions, and the condition of tyres and number plates (Napierała, 2021). In accordance with the stipulated formal requirements, such a station is required to be equipped with the necessary technical apparatus, including measuring devices, a gas detector and an exhaust gas analyser.

Furthermore, the personnel at such stations are obligated to undergo periodic training in order to ensure the proper utilisation of the equipment and the accuracy of the measurements taken (Kuranc et al., 2014). The district VIS is responsible for a significantly broader range of tasks. It conducts all technical inspections, encompassing heavy vehicles, buses, tractor units, specialised vehicles, historic vehicles, and those following accidents or conversions.

The regular undertaking of technical examinations by VIS is instrumental in the identification and eradication of defects that have the potential to compromise road safety. In the context of goods and passenger transport, their role is of particular importance, given that transport vehicles are exposed to intensive use, which increases the risk of breakdowns. Furthermore, VISs facilitate the maintenance of the fleet in optimal technical condition, a pivotal aspect for transport organisations that must ensure the uninterrupted functioning of logistics operations. It was demonstrated (Łukasik, 2016) that adequate technical diagnostics at the VIS can prevent serious vehicle breakdowns during use, which can lead to delays, road accidents or even disasters. It is important to note that the systematic monitoring of the technical condition of vehicles by specialised workshops performing seasonal maintenance (inspections more frequent than those enforced by regulations) is not insignificant for road safety. However, given that this is not compulsory, few users, especially those with older vehicles, i.e. more than 10 years old, opt for such preventive technical inspections. As a vehicle ages, the probability of a malfunction occurring increases (Jarosinski, 2014).

Vehicle inspection stations have been shown to have a significant impact on the reduction of fleet maintenance costs. This is due to the fact that they enable problems to be detected at an early stage, and subsequently rectified with ease. Moreover, the implementation of regular inspection procedures has been demonstrated to mitigate the likelihood of necessitating costly emergency repairs, a pivotal consideration for transport companies. In addition to their primary function, VISs are equipped with the capability to monitor exhaust emissions, thereby enhancing air quality and adhering to environmental standards. This aligns with the principles of sustainable transport policies, contributing to the promotion of environmentally responsible mobility. In the context of public transport development, the presence of these stations has been demonstrated to contribute to passenger comfort and safety by ensuring that buses or trams meet the requisite technical requirements.

By cooperating with technical supervision authorities such as the Transport Technical Supervision (TDT) and the General Inspectorate of Road Transport (GITD), VISs are able to maintain high safety standards. In addition, from an international perspective, the regular undertaking of technical inspections of vehicles is instrumental in ensuring adherence to EU standards, thereby facilitating cross-border transport (Kulakowska, 2013). The utilisation of contemporary diagnostic technologies by contemporary VISs has resulted in enhanced precision and expediency in their inspection procedures, thereby optimising service efficiency. Consequently, within the logistics sector, vehicle inspection stations have been shown to contribute to the optimisation of transport costs, thereby improving the quality of transport

services. From an urban perspective, the organisation and efficiency of transport systems has been demonstrated to have a number of benefits. These include the mitigation of road congestion, the optimisation of network capacity, and the impact on air quality, greenhouse gas emissions, climate change, public health, and the environment (Bastiaanssen et al., 2021).

2.2. Start-up of vehicle inspection stations as a logistical process

In the contemporary business landscape, there is an observable trend of organisations realigning their objectives to prioritise the delivery of products and services that are aligned with the needs and expectations of customers. Consequently, there has been a transition from the conventional functional management model to a process-oriented approach. In this view, an enterprise is regarded as an open system, comprising interrelated processes and elements, the primary function of which is to create value for the customer (Pacholski, Cempel, Pawlewski, 2009, p. 30). A process can be defined as 'a sequential order of activities, starting with the acquisition and processing of information and material resources, which after processing become resources for subsequent sequences of activities performed by internal customers' (Nowosielski, 2008, p. 45). In contrast, Blaik offers a distinct definition of a process as 'an integrated, purposeful system or chain of activities, which is both the result of integration and structuring of activities, and the object of integrated management' (Blaik, 2010, p. 155). The primary objective of employing the process approach in management is to ensure the smooth and rapid flow of materials, goods, products and information through the links of the manufacturing process up to the delivery of value to customers (Misztal, 2017).

The establishment of a vehicle inspection station (VIS) is a complex undertaking, which, in the author's opinion, fully fits into the framework of logistics processes. These are understood as a structured set of activities aimed at effectively managing the flow of physical, information and human resources. The process commences with the identification of market requirements and the undertaking of a location analysis, which corresponds to the strategic planning phase in logistics. The subsequent phase entails the procurement of a suitable technical infrastructure that adheres to stringent normative and spatial criteria. This undertaking necessitates collaboration with public administration institutions and regulatory bodies.

A further element of establishing a VIS is to ensure the provision of specialised technical equipment, in accordance with the provisions of the Regulation of the Minister of Infrastructure and the guidelines of the Transport Technical Supervision (TDT). In this context, the focus is on supply logistics, encompassing the selection of suppliers, delivery scheduling and quality control. The logistics process is also subject to consideration of the human resources aspect, i.e. the recruitment, training and certification of diagnostic staff. This corresponds to personnel and competence logistics (Zawadzka, Jakubczak, Paszko).

Information logistics is of pivotal significance in the process under consideration, incorporating the digitalisation of documentation, the implementation of systems for the recording of technical tests, and communication with the central vehicle database.

It is imperative that all activities are meticulously coordinated in terms of both time and space. The seamless integration of these activities is paramount to ensure the timely and compliant initiation of VIS's operational activities. It is important to note that this process is only completed when the relevant permits are obtained and the station is registered in a list maintained by the district authority.

From a logistical perspective, the commissioning of an VIS can be classified as a unique, multi-stage project that necessitates risk management, quality control, and resource allocation. The system incorporates both physical flows (e.g. diagnostic equipment) and information flows (technical documentation, certificates), thereby confirming the complexity of the underlying processes. Moreover, optimising investment costs, reducing lead times and ensuring the continuity and quality of technical services once the station is operational are pivotal logistics objectives in this context. Consequently, the establishment of a VIS can be regarded as a comprehensive logistics process, necessitating the implementation of the principles of project, operational and information logistics, in accordance with the system and process perspective of logistics (cf. Blaik, 2010; Nowosielski, 2008).

The analysis of available scientific literature indicates that the issue of reactivating vehicle inspection stations is either overlooked or only marginally mentioned. Existing publications mainly focus on technical aspects, the equipment of VIS, and their role in the transportation system and road safety. However, there is a lack of detailed studies describing the logistical process involved in reactivating an existing station. This article aims to fill this research gap through a case study and analysis of the practical aspects of such an undertaking. There is also a lack of current, up-to-date scientific literature on the topic of reactivating vehicle inspection stations. Most available sources are from several years ago and do not take into account the current legal, organizational, and technological realities related to the functioning of VIS. Thus, this article responds to the need for an update in knowledge on this subject and brings a fresh perspective on the logistical and managerial aspects of reactivating the operations of a station.

3. Case study – District Vehicle Inspection Station in the Mikołów district

Case study constitutes a qualitative research technique that is extensively utilised in a variety of disciplines, including the social sciences, economics, technology, management and logistics. The primary objective of this approach is to cultivate a profound comprehension and meticulous analysis of a distinct phenomenon, process or organisational unit within a defined context. The utilisation of a case study facilitates the demonstration of the intricacies inherent in the issue under scrutiny, whilst concomitantly enabling the identification of the interconnections between the diverse factors exerting influence upon it (Grzegorczyk, 2015).

In the domain of logistics and organisational research, this approach facilitates the analysis of specific investment projects, decision-making processes, the implementation of new systems, and the organisation of the supply chain (Wójcik, 2013). The application of this method facilitates a comprehensive examination of the practical aspects of the business, the identification of barriers and success factors, which is of particular importance in infrastructure projects such as the start-up of a vehicle inspection station (VIS).

The present paper employs the case study method to illustrate the practical course of the investment, to identify critical stages, and to assess the compliance of activities with technical and formal requirements. Moreover, it facilitates the identification of optimal practices and avenues for enhancement that would be beneficial for prospective investors.

3.1. Study object

The research for the presented case study focuses on a District Vehicle Inspection Station (DVIS) located in the Mikołów district, Silesia voivodeship. The facility is located approximately 600 metres from the town centre, which provides it with convenient transport access for both individual customers and businesses. The station was originally constructed in 2009 by a private investor and has been in operation for a period of nearly thirteen years, during which time it has conducted technical vehicle inspections in accordance with current legislation. In 2022, the original proprietor elected to terminate operations, a decision that consequently resulted in the facility being placed on temporary hold.

In December 2024, the decision was taken to lease the station to a new operator. The process of completing the administrative and legal formalities, as well as negotiating the terms of the lease agreement, took several months. Finally, in the final days of April 2025, a formal handover of the facility to the new tenant was conducted, and the latter immediately initiated activities to recommence operations at the station. The sequence of events, from the assumption of control of the facility to the execution of remedial and adaptive measures, has been subjected to a meticulous logistical examination in this paper.

The facility is equipped with a full set of diagnostic equipment necessary to carry out technical tests on vehicles in accordance with current standards. According to the provisions stipulated in the agreement, the former proprietor was obligated to undertake a technical inspection of all equipment and to rectify any malfunctions identified, prior to the commencement of the new operating period. It was imperative that cleaning work be carried out both inside and outside the building, due to the fact that the facility had been out of service for a period exceeding two years. These tasks were expeditiously undertaken by the tenant, thus enabling the facility to be prepared for the resumption of diagnostic activities.

3.2. The logistical and administrative process of setting up a vehicle inspection centre in Poland

The initial phase in establishing a vehicle testing station in Poland entails the verification of the operational integrity, documentation, and certification of the various diagnostic pathway equipment. Concurrently, the preparation of the technical facility documentation is initiated. A comprehensive compendium of data pertaining to the requisite equipment and facilities can be ascertained within the regulatory framework stipulated by the Minister of Transport and Construction, which delineates the detailed requirements for stations entrusted with the responsibility of conducting technical inspections of vehicles. In consideration of the fact that the station under review had only recently recommenced its operations, the present proprietor concentrated on the inspection of the control, measuring and technological equipment. In the case of new facilities, due to the strict guidelines for the building, the testing station and the auxiliary area, it is recommended that the project be prepared and implemented by a specialised company. In accordance with the aforementioned regulation, the test and measurement equipment of a basic vehicle inspection station should include at least the following devices and instruments:

- roller or plate device (overrun device) to check the operation of the brakes,
- device for assessing the correct alignment of the vehicle's road wheels,
- instrument for measuring and adjusting the air pressure in the vehicle tyres,
- instrument to measure the alignment and luminosity of a vehicle's headlights,
- instrument for measuring the light transmission coefficient in vehicle windows,
- sound level meter,
- exhaust gas meter,
- instrument for checking the vehicle-trailer electrical connection,
- device for exerting controlled pressure on the overrun brake control mechanism of a trailer,
- device for forcing the vehicle's road wheels to jerk,
- diagnostic information reader for OBD II/EOBD system,
- multi-component exhaust gas analyser for spark-ignition engines,
- retarder to check brake function,
- assembly tool kit,
- basic set of general-purpose measuring instruments.

The district vehicle inspection station should additionally have:

- wheel and axle alignment measuring instrument,
- electronic gas leak detector for checking gas leaks,
- device to check the effectiveness of the suspension damping of a vehicle with a maximum permissible weight of up to 3.5 t,
- set of torque spanners from 20 to 400 Nm.

It is imperative that each of the diagnostic devices included in the equipment of the vehicle inspection station is accompanied by a complete set of technical documentation, encompassing instructions for use and a certificate confirming compliance with the applicable standards. In the absence of an instruction manual, it is necessary to apply to the manufacturer for its re-issue. Furthermore, the absence of a certificate of conformity necessitates the initiation of action to obtain it. This can be done either by obtaining it directly from the manufacturer or, in cases where there is justification, through the Office of Technical Inspection. In the case in question, all diagnostic equipment remained fully operational and had complete, up-to-date technical and operational documentation, meeting the formal and technical requirements set by the institutions supervising the commissioning of the station.

The subsequent stage of the process is to prepare and submit an application for the issuance of a certificate of conformity for the equipment and premises of the VIS with the requirements, respectively, to the scope of tests to be carried out to the Transport Technical Supervision. The official website of the Transport Technical Supervision provides access to a template of the application. The application contains detailed information on the technical equipment of the facility, including the names of manufacturers of individual devices, their serial numbers and certificate numbers. It is therefore imperative that all documents are prepared in advance. The application, upon completion, should be submitted in its original form to the office of the Transport Technical Supervision. The application may be dispatched via post to the address aforementioned, or alternatively submitted electronically via email. It is also possible to submit the application at a TDT branch office. However, it should be noted that when submitting an application in electronic form, it is imperative that it is signed with a qualified signature. In the event of errors being detected in the application, it will be returned with a request to remedy the identified deficiency or to correct the data contained therein. In the case in question, the application was submitted online and returned on two occasions. The initial instance pertained to the absence of a signature on the document, as it contained solely a handwritten signature and lacked an electronic signature. The subsequent instance concerned the absence of a postal code. Following a thorough evaluation, the application was ultimately approved. Subsequent to the submission of the requisite documentation, the proprietor was contacted by an inspector, who scheduled an inspection of the station.

The third stage of the process of resuming the operation of a district vehicle inspection station is the inspection of the station by the TDT inspector. The following documentation must be prepared for the inspection:

- lease, rental agreement or title deed,
- structural and construction design of the building and the inspection pit in the original version,
- instructions and certificates for control and measurement devices and process equipment,
- information on the assessment criteria for the vehicles tested,

- applicable legislation setting out the requirements for the technical conditions and technical tests of vehicles, in accordance with the scope of the tests carried out by the station, including:
  - Act of 20 June 1997 - Road Traffic Law,
  - Act of 21 April 2005 amending the Act on Value Added Tax and amending certain other acts (Journal of Laws No. 90, item 756),
  - Printed regulations on:
    - technical conditions for vehicles and the scope of their necessary equipment,
    - level of fees relating to the operation of vehicle testing stations and the carrying out of technical inspections of vehicles,
    - scope and manner of carrying out technical tests of vehicles and the specimens of documents used for these tests,
    - detailed manner and procedure for assigning and fitting identification features to vehicles,
    - testing the conformity of historic and SAM vehicles with technical conditions,
  - European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), done at Geneva on 30 September 1957, including annexes,
- a copy of the decision on the permission to use the building.

When inspecting a vehicle inspection station (VIS), an inspector of the Transport Technical Supervision (TDT) carries out a comprehensive assessment of the facility's compliance with the applicable technical and organisational regulations. He/she first verifies the technical documentation of the station, including the design of the facility, declarations of conformity of equipment and CE certificates. Next, he/she assesses the technical equipment, checking the presence, technical condition and completeness of measuring equipment in accordance with the requirements of the Regulation of the Minister of Infrastructure. The inspector checks the arrangement of the equipment at the diagnostic station and its adaptation to the tests foreseen for a given category of VIS. He/she also checks the lighting, ventilation and labelling of the stands, which must comply with health and safety standards and technical conditions. Should irregularities be detected, the inspector may issue post-inspection recommendations or suspend the operation of the station. The inspection is concluded with the formulation of a protocol, which establishes the foundation for subsequent administrative measures. In the case under consideration, an inspection conducted by an inspector of the Transport Technical Supervision revealed that the documentation did not contain any information regarding the permissible overloading of the inspection pit flange by 25% above its nominal load capacity. Consequently, a post-inspection recommendation was issued, stipulating that the station owner must furnish the missing technical data. Following the submission of the requisite documentation, which delineated the allowable overload parameters of the structure, the owner was granted a positive formal verification. Finally, the Transport Technical Supervision

Department issued a document via post, thereby confirming that the facility met the requisite technical and formal requirements. This permitted the subsequent commissioning of the station.

The next stage is to submit an application for entry in the register of entrepreneurs operating vehicle inspection stations (VISs) to the Mikołów District Office. This stage begins with the preparation of a set of required documents. The entrepreneur must submit an application for entry containing company data, the address of the VIS and the scope of the planned technical tests. The application must be accompanied by a certificate of compliance with the technical requirements issued by the Transport Technical Supervision (TDT). Copies of the qualifications of the diagnosticians who will perform technical tests at the station are also required. Documents confirming the right to dispose of the premises (e.g. title deed or lease agreement) and confirmation of entry in CEIDG or KRS must also be attached. The application may be submitted in person at the Department of Transport of the District Starost Office in Mikołów, or alternatively it may be dispatched via post. The responsibility for formal and content-related verification of the documentation is that of officials. Following a favourable evaluation, the entrepreneur is formally registered with the VIS and is subsequently permitted to commence commercial activities. The process culminates in the issuance of a certificate of entry, a document which is requisite for the lawful operation of the station, and the allocation of the station number.

Stage 5 of the process involves the submission of an application to the CEPiK system, otherwise known as the Central Register of Vehicles and Drivers. This stage requires the submission of two separate applications: the first is for a card system operator, and the second is for devices (VPN, PKCS 12). A system operator, i.e. an individual who operates a device with access to CEPiK (e.g. a diagnostician), is required to submit an application for an access card (the so-called cryptographic card) to the Central Informatics Centre (CIC). It is evident that the application under scrutiny contains personal data, personal ID No. data and VIS data, in which the work is to be performed. It is imperative that this application be submitted in either an electronic or a hard-copy format. The address to which submissions should be addressed is indicated within the application itself. Concurrently, the VIS proprietor is obliged to submit an application to CEPiK for equipment (VPN and PKCS12 certificate). It is a mandatory procedure for any vehicle inspection station (VIS) that wishes to transmit data from technical tests to the central register. The application is submitted by the owner of the VIS or an authorised representative and aims to gain access to the CEPiK production environment via a secured VPN connection and an authentication certificate (PKCS#12). The initial step in the process entails the download of the application form from the website of the Central Informatics Centre (CIC), followed by its completion. In the application form, the following details are to be provided: the VIS's identification details, its location, region number and the contact details of the technical administrator. This step is necessary because each station and each diagnostician must have active CEPiK privileges in order to legally perform technical tests and send their results to the central register. It is not possible to submit applications that bypass the preceding stages,

as these require the station number that is assigned by the Starost's office after entry in the register of entrepreneurs running a vehicle inspection station.

The subsequent stage is to procure the software that facilitates the operation of the diagnostic station and to establish a connection with CEPiK. Examples of software include: SKP PRO, SKP-KOMET, MotoSoft SKP, ProSKP and Auto-Stacja. It is noteworthy that all of these programmes are CEPiK 2.0 compliant, a feature which facilitates the electronic transmission of technical inspection data. The software in question has been developed for the purpose of supporting diagnosticians' cryptographic cards and PKCS#12 certificates, in addition to integrating with diagnostic equipment. The organisation also provides archiving of documentation, report generation and a user-friendly interface adapted to the work of VIS.

In the case under review, the SKP PRO software was selected on the basis of the owner's prior positive experience with its use. It is recommended that the TeamViewer programme be installed. This is a software solution employed by CEPiK technical support to remotely configure the connection with the central system. The process under discussion does not necessitate the utilisation of sophisticated IT expertise on the part of the proprietor. The proprietor's involvement is confined to the provision of passwords and a segment of the installation code stipulated in the application for the purpose of establishing a connection to CEPiK. Following the establishment of a connection with the central system, the selected software should be installed and linked with the CEPiK certificates received. This process enables the vehicle inspection station to commence formal operation.

The final stage in the process of establishing a District Vehicle Inspection Station is to provision the facility with the equipment necessary to manage payments. In order to comply with current tax legislation, it is necessary to purchase a fiscal cash register and to order a payment terminal from a banking institution that is authorised to handle non-cash transactions. From a legal standpoint, both elements are considered obligatory in the context of providing services to individual and institutional customers.

Following the fulfillment of all technical, formal and organisational requirements, the investigated District Vehicle Inspection Station, located in the Mikołów district, was officially inaugurated on 9 June 2025, thereby resuming operations after a period of more than two years of downtime. The sequence of events that must be followed in order to recommence operations at the District Vehicle Inspection Station is illustrated in Figure 1.

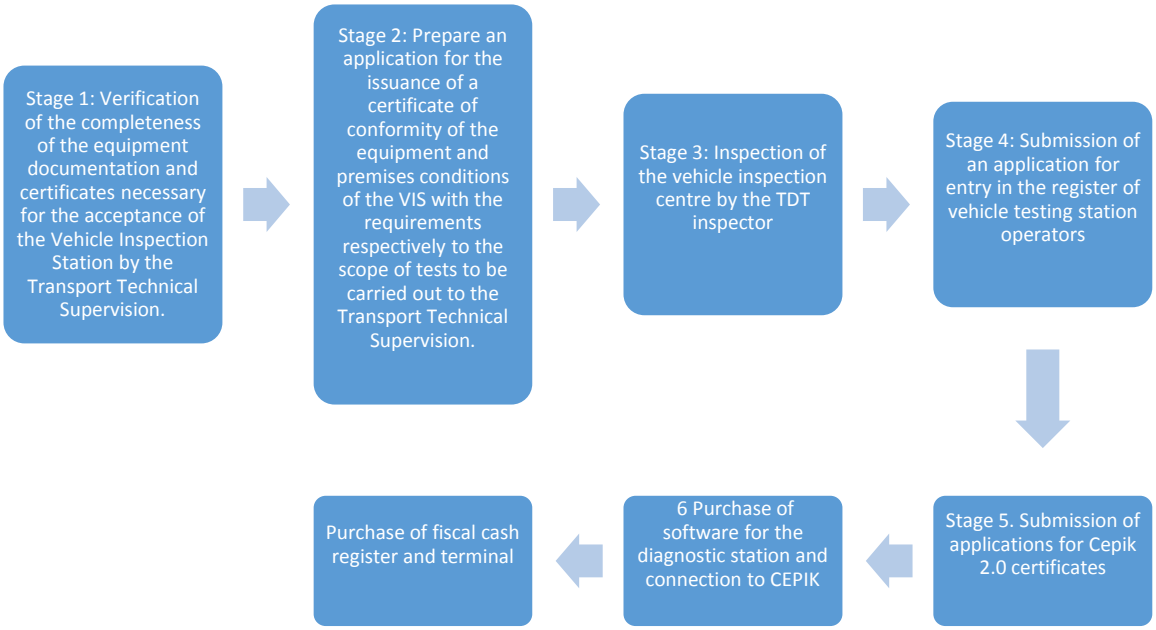

Figure 1. The process of resuming the operation of vehicle inspection stations.
Source: Own study based on conducted research.

3.3. Disruption during the process

The following distortions were identified during the commissioning process of the District Vehicle Inspection Station, which was analysed:

- It was observed that there were deficiencies in the technical documentation of the diagnostic equipment. While the majority of the documentation was found to be complete, the TDT inspector reported a lack of confirmation regarding the permissible overloading of the inspection pit. This resulted in post-inspection recommendations being made, which in turn led to a delay in the acceptance procedure.
- Administrative delays - the process of leasing, paperwork with TDT, obtaining certificates and applying for CEPiK connection may have encountered delays beyond the owner's control.
- Despite the software being compatible, configuration errors and hardware incompatibility have been proven to be problematic, resulting in the reinstallation of certificates.
- Problems with the installation of the diagnostic software, which resulted from the lack of installation instructions.
- Delays in the delivery of a payment terminal or fiscal cash register - dependent on lead times from suppliers, which also affected the start date.
- Staffing problems - the entrepreneur encountered difficulties in recruiting qualified diagnosticians who met the formal requirements, which made it impossible to start the business.

- It was determined that the fabrication of the stamps and the information board should be initiated at an earlier stage. During the process analysis, it was also established that a disruption occurred in relation to the premature production of the station identification elements. The proprietor elected to manufacture the stamps and procure the information board prior to the formal allocation of the station number by the designated district office. It was erroneously hypothesised that the station identification number would remain unchanged since the temporary closure. However, administrative procedures resulted in the assignment of a new number, necessitating the redaction of both the stamps and the information board. This error resulted in unanticipated expenditures and a delay in the commencement of station operations. This underscores the significance of adhering to the prescribed sequence of administrative actions in the logistical process of initiating a VIS.

3.4. Recommendations for entrepreneurs

The establishment of a Vehicle Inspection Station (VIS) is a process that is characterised by numerous challenges that must be given full consideration by entrepreneurs at every stage of the process. In order to ensure both smoothness and compliance with current regulations, it is first necessary to conduct a thorough formal and legal analysis. Prior to initiation of the process, it is imperative to ensure that all requirements, documents and procedures are thoroughly comprehended and meticulously planned.

It is also imperative to adhere to the stipulated administrative sequence. It is imperative that the proprietor of the station does not initiate the procurement of stamps, information boards or promotional materials for the station until the station number has been received from the District Office. Prior to the submission of the station for acceptance by the Transport Technical Supervision (TST), particular attention must be paid to the thoroughness of the technical documentation of the diagnostic equipment. It is imperative that each piece of equipment utilised at the station is accompanied by an operating manual that is current, a certificate of inspection, and the requisite approval for its utilisation. Without these documents, the acceptance process will be unable to proceed, which may result in delays to the commencement of operations.

It is imperative to give due consideration to the issue of technical downtime, particularly in instances where the station has been inoperative for a considerable duration. The necessity for equipment to be overhauled, calibrated or repaired can incur additional costs and require a significant time investment. It is also considered good practice to make financial provisions for unforeseen expenses that may arise during the preparatory phase for operation of the station.

The selection of appropriate software is a pivotal factor in determining the efficiency and compatibility of the station with the CEPiK system. It is incumbent upon entrepreneurs to ensure that the selected software is compatible with the requirements of the CEPiK 2.0 system,

supports the required certificates and provides technical support. This will ensure that the process of transferring technical test data to the CEPiK system is smooth and uninterrupted.

Furthermore, it is recommended that the opening of the station is planned with sufficient time allowance. It is important to note that administrative processes, technical acceptance or registration in state systems can often be subject to delays. Therefore, it is advisable to allocate sufficient time for potential delays that may be incurred due to equipment deliveries or procedures at government offices.

Finally, entrepreneurs are advised to ensure that each stage of the station start-up process is meticulously documented. It is important to note that, if the relevant documentation is completed meticulously at the outset, the subsequent process of undergoing inspections, audits or appeal procedures will be less onerous. This approach has been shown to minimise the risk of errors and increase the transparency of the process.

Adherence to these recommendations is instrumental in ensuring the seamless establishment of Vehicle Inspection Stations, thereby mitigating the risk of disruption, delays, and superfluous expenditures.

4. Summary

The establishment of a District Vehicle Inspection Station (DVIS) is a complex logistical process, necessitating meticulous management of the individual stages. These include the preparation of documentation, ensuring compliance with standards, and the implementation of technology to support the service of technical tests. The entire process is inextricably linked to logistics, as it encompasses the movement of material resources (e.g. diagnostic equipment, software, documentation) and information resources (e.g. vehicle data, test results, certificates). A logistical approach to the launch of an inspection station involves the management of the entire chain of activities, starting with an analysis of the technical condition of diagnostic equipment, through its certification, up to the integration of computer systems with the central system for vehicle records - CEPiK 2.0. In this context, the organisation and coordination of activities such as the selection of appropriate software, the implementation of payment systems or the management of documentation are fundamental to ensure the smooth launch of the station and its subsequent efficient operation.

The management of the process of launching an VIS is therefore of paramount importance from the perspective of optimising logistical activities, which must follow a strict sequence. Entrepreneurs contemplating the establishment of such a station are obligated to consider a number of formalities, ranging from the procurement of requisite authorisations and certifications for diagnostic equipment, to the meticulous organisation of the integration process into the state system, to the assurance of adequate tools for the management of the customer

service process. As is the case in any logistical process, it is imperative to minimise the risk of delays and disruptions. Such delays and disruptions may take the form of administrative errors (e.g. misplaced stamps that require correction), documentation problems or software configuration errors.

Moreover, the establishment of Vehicle Inspection Stations is of paramount importance from the perspective of road safety, which is recognised as one of the fundamental cornerstones of transport policy in developed countries. The management of the diagnostic process in the context of VIS also has an impact on the ecology and sustainability of transport. The evaluation of the technical condition of vehicles encompasses the analysis of exhaust emissions, a pivotal consideration in the context of mitigating the adverse environmental impact of transport.

The launch of the District Vehicle Inspection Station in Poland required the completion of many administrative and technical formalities. It was necessary to prepare the appropriate equipment, submit an application to the Transport Technical Supervision (TDT), and register with the Central Vehicle and Driver Registration (CEPiK). The process concerned a station that, after several years of inactivity, was to resume operations, which required the updating of documentation. During the inspection by the TDT inspector, the absence of required technical information was discovered, which delayed the entire process. After the irregularities were addressed and the TDT issued a positive decision, it was possible to submit the documents to the District Office and begin the next steps. The station also had to install and test computer systems for customer service and communication with CEPiK. Additionally, a payment terminal was purchased, and necessary contracts with service providers were signed. Despite numerous organizational challenges, the station was eventually launched on June 9, 2025.

To summarise, the initiation of a District Vehicle Inspection Station is a complex logistical process that necessitates meticulous management of material resources, information, and adherence to prevailing legal regulations. The efficient management of this process is pivotal in ensuring the operational efficiency of the station, whilst concurrently contributing to road safety and environmental protection. It is incumbent upon entrepreneurs planning to establish such a station to adhere to robust logistical practices in order to mitigate the risk of delays and errors, and to ensure the quality of the diagnostic services provided.

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