

IMPACT OF CHANGE OF CONSIGNOR ON RESPONSIBILITY FOR LOADING AND FASTENING OF GOODS IN A VEHICLE IN THE SLOVAK REPUBLIC

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Abstract

From the point of view of road safety and traffic flow, it is very important to follow the rules laid down by the law. One such rule is to comply with the maximum permissible weights and dimensions of road vehicles and to secure the goods correctly so that they do not move during transport. From the customer's position, it is most advantageous to transport as many goods as possible, and therefore the goods are sometimes loaded to the maximum capacity of the vehicle, regardless of its maximum permissible weight. Failure to follow these rules can result in the destruction of property, faster wear and tear on roads and, in some cases, the death of a person. The aim of the paper is to explain who in the Slovak Republic is responsible for loading and fastening the goods in the vehicle. We also want to state what penalties are imposed on the person responsible for loading and fastening the goods if the permitted weight of the vehicle is exceeded or the goods are insufficiently secured. Based on statistical data, we want to prove that there is a constant overload of vehicles in the Slovak Republic. In recent years, the transport documents used in road transport have been neutralized in order to change some of the information written in them, and the aim is also to find out whether such activity has any impact on the responsibility for loading and fastening the goods in the vehicle.

Keywords: consignor; loader; maximum permissible weight; administrative fee; neutralization

1. Introduction

Within Europe, road transport is one of the most widely used modes of transport [16]. Its share increases every year. Its main advantage is the possibility of direct delivery of goods from customer to customer [19]. From the customer's position, it is most advantageous in case of interest in his goods to transport as much cargo as possible in one transport, due to the reduction of his transport unit costs [9, 18]. Often, goods are loaded to the maximum capacity of the vehicle, regardless of its maximum permissible

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weight. In some cases, the legally specified permissible weights may be exceeded. There are types of goods that cannot be transported by road without exceeding the legally prescribed weights. That is why the definition of excessive transport was created. Such transport requires the provision of a special permit, which is subject to a fee [2]. Vehicles that are overloaded and do not have this permit should not use the road. Each road has been designed for a certain load, and if the vehicles often exceed the permissible weight, this accelerates its wear [24]. It should not be forgotten, especially in summer, that overloaded vehicles push asphalt to the sides and thus create "tracks" [8]. Furthermore, overload causes a change in the stability of the vehicle, the vehicle moves more sideways and has a longer braking distance. Ultimately, all this can lead to a traffic accident where there is a risk of death [6]. This is a consequence that cannot be remedied in any financial way. You can buy a new vehicle, the roads can be repaired, the goods are made new, but life is not. It is therefore important that the rules laid down are followed in order to avoid unnecessary accidents and to increase the safety and fluidity of road transport. Someone has to be responsible for the problems of overloading vehicles and insufficient fastening of loads in order to reduce the proportion of such non-compliant transport. The aim of this article is to answer the question: Who in the Slovak Republic is responsible for loading and fastening of goods in the vehicle? We also want to state what the financial consequences are for the person responsible for exceeding the permitted weight and insufficient fastening of the goods. We would like to prove that overloading is constantly occurring and determine the evolution of the number of overloaded vehicles in recent years. Lastly, we want to find out whether changing the consignment note for another (neutralization of the consignment note) has an impact on the responsibility for loading and fastening the load.

2. Responsibility for loading and fastening of goods

According to statistics from most EU countries, 25% of truck accidents are caused by incorrect or insufficient fastening of cargo [21]. There are several standards that specialize in properly fastening cargo in road vehicles [7]. There are several publications that focus on testing the proper fastening and layout of cargo [21, 22]. Proper fastening is important not only in road transport but also in other modes of transport [20]. Thus, several publications deal with either security aids or how goods need to be fastened in a vehicle. However, it is not directly stated who must know all this information and therefore who is responsible for loading and fastening the goods in order to comply with legal requirements.

Act no. 106/2018 on the operation of vehicles in road traffic is in force in the Slovak Republic since 20 May 2018. §69 stipulates special obligations in connection with the loading and fastening of goods. The law is based on Directive (EU) no. 2014/47, according to which the fastening of goods is of fundamental importance from the point of view of road safety. The transported goods must therefore be secured in such a way that, when accelerating, decelerating the vehicle in traffic, it does not make it impossible to drive safely or endanger life, health, property or the environment. The loader is responsible for loading and securing the load in the vehicle. The law defines a loader as a person who loads cargo into a vehicle or intermodal freight unit, an intermodal freight unit on

a vehicle or a combination of vehicles. The loader must load, stow and secure the goods in such a way that the loading and fastening of the goods correspond to the strain arising from intermodal transport [1]. The loader also acts as a participant in the transport of dangerous goods [4].

The loader or other person who has closed the load compartment of the vehicle with a lock or seal is responsible for stowing and fastening the load in the load compartment of the vehicle. Information on the location of the seal or lock, including the contact details of the person responsible for its location, is part of the documents needed to drive the vehicle in road traffic. When transporting intermodal freight units, containers or other similar units, the carrier is responsible for securing these units to the vehicle or combination of vehicles. This also applies to the correct securing of the hydraulic arm, lifting front, sides, stanchions and similar devices against loosening on the vehicle or combination of vehicles. However, if it is contractually agreed that the goods shall be secured by the carrier, the loader must provide the carrier instructions on how to secure the goods, taking into account the nature of the goods and the type of vehicle. The loader is obliged to specify the fastening means that the carrier should have available to fasten the goods. The loader must not allow the following weights to be exceeded when loading the vehicle [23]:

- the technically permissible maximum mass of the vehicle or combination of vehicles,
- the maximum permitted dimensions of the vehicle or combination of vehicles unless a permit for the special use of roads for oversized transport has been issued for the carriage of goods,
- the maximum permissible masses of the vehicle or combination of vehicles unless a permit for the special use of roads for excessive transport has been issued for the carriage of goods.

The maximum mass of the goods which may be loaded on the vehicle shall be determined as the maximum permissible total mass of the vehicle or combination minus the operating mass of the vehicle or combination determined from the vehicle registration certificate increased by 3% if the mass of the vehicle or combination has not been determined by weighing before loading. The maximum permissible weights and dimensions are not uniform within the EU, so there may be different permissible weights in each EU country [12, 13]. In the Slovak Republic, the maximum permitted weight of a vehicle is 40 t.

Before loading, the loader must request from the transport undertaking data on the operating weights of the vehicle, on the maximum technically permissible weights of the vehicle. The carrier is obliged to provide this information to the loader. The loader or other person is obliged to issue a weight declaration. This declaration is part of the documents required to drive the vehicle in road traffic. The loader shall keep a copy of the declaration for a period of five years from the date of issue of the declaration. The weight declaration must contain the following information:

- identification data of the loader or other person using the specified mass gauges,
- type of scales and accuracy class,
- the date of the next verification of the scales,
- the numbers of the verification protocols of the scales,

- vehicle weight before loading,
- vehicle weight after loading,
- the mass of the vehicle on each axle if the vehicle is weighed on an axle or wheel scales,
- weight of the loaded goods,
- date of loading of the vehicle,
- identification and contact details of the person responsible for issuing the declaration,
- signature of the responsible person.

If the vehicle contains cargo from several loader, the carrier is responsible for ensuring that the maximum permissible weights and dimensions are not exceeded.

2.1. Road technical inspection

The weight of the vehicle, including the goods, can be determined in several ways, which are based on different technologies. In principle, it is possible to determine the weight of vehicles at rest (stationary weighing) and while driving (dynamic weighing) [6, 10, 11]. During the roadside inspection, the police officer can check the weight of the vehicle and the securing of the goods. The purpose of the check is to verify that during all types of vehicle operation, including emergency situations, goods:

- may only minimum change its relative position or position in relation to the walls or floor surfaces of the vehicle,
- cannot leave the load compartment or move outside the load compartment.

The inspection is performed by a police officer or a roadside inspection technician who is properly trained for visual inspection. It is checked by a method of visual assessment of the proper use of the required number of appropriate measures or by measuring the tensile forces, calculating the efficiency assurance, or checking protocols and certificates [5]. If the inspection reveals serious deficiencies which pose a serious risk to the public interest in safety and health, the authorized persons are entitled to order the inspected person to restrict or suspend the activity.

3. Methodology

In our research, we deal with the issue of neutralization of transport documents. We carried out an electronic questionnaire survey, which was attended by 208 Slovak carriers, which according to the Sample Size Calculator represents a representative sample. Almost 70% of respondents stated that they have experience with neutralization, we also found that neutralization is also used in transports from/to Slovakia. More than 40% of respondents said they had been instructed to neutralize the consignment note in order to change the original consignor to another consignor, while the other data did not change. Therefore, we focused on the consequences that this change may cause. Given that the person responsible for loading and fastening the cargo is a loader under the new law, in most cases the consignor, we wanted to find out what the consequences

are for the new consignor. Unfortunately, the new sender may not even realize what he is in danger of. To confirm that, despite the adoption of the new law, vehicle congestion continues to occur, we worked with statistics on the number of detected congested vehicles. We used data from SCC, which carries out such inspections. Given that we have verified that the congestion of vehicles is constantly occurring, even if the responsible person has changed, we wanted to point out the financial consequences that threaten the consignor. Therefore, it was necessary to identify the amounts of fines and administrative charges related to the infringed legislation regarding compliance with the permitted maximum weights and fastening of the goods.

4. Research

In the territory of the Slovak Republic, inspections associated with the measurement of weight, axle pressures and dimensions of the vehicle are provided by the administrators of motorways, roads, and local roads in cooperation with the Police Force. The administrator of roads and local roads is Slovenská správa ciest (SSC), that annually compiles a statistical overview of the number of vehicles inspected. SSC, through its contractual partner, performs official measurements of axle loads and total weight of vehicles and combinations of vehicles on first-class roads. Inland, performance is provided by four mobile workplaces. The results of the measurement, including the value of administrative fees for 2019, are shown in the following Table 1.

Tab. 1. Number of measured and overloaded vehicles in 2019, [17]

Mobile workplace	Number of measured vehicles	Number of overloaded vehicles	Administrative fees (€)
MW 1	1605	67	177 000
MW 2	3522	94	206 500
MW 3	3058	44	129 750
MW 4	11 196	64	143 000
Together	19 381	269	656 250

In 2019, 19381 road motor vehicles were inspected by four mobile workplaces. There were 269 overloaded road motor vehicles, for which the administrative authorities set administrative fees in the estimated total amount of 656250 €. On average, the administrative fee for one overloaded vehicle was 2440 €. The result of the official measurement is the finding that carriers significantly violate the limits set by applicable legislation, and thus SSC, as the administrator of the road, after which carriers perform illegal transport, incurs damage in the form of excessive wear and tear, which has a negative impact on its service life, operability and it is against the conditions of road safety. The following Figure 1 shows a graphical overview of overloaded motor vehicles in the inland of the Slovak Republic for the years 2009–2019 expressed in the number of vehicles.

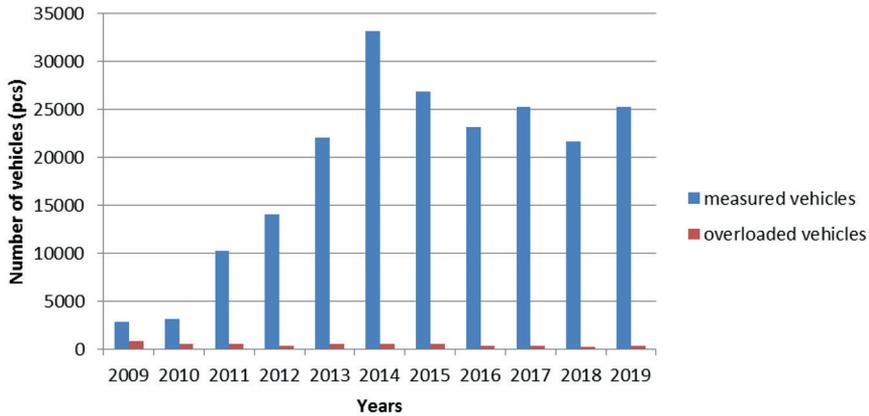


Fig. 1 Number of measured and overloaded vehicles from 2009 to 2019, [17]

From 2009 to 2014, there was a gradual increase in the number of inspected vehicles and at the same time a decrease in the number of detected overloaded vehicles. After 2014, there was a repeated decrease and increase in the number of inspected vehicles, while the number of overloaded vehicles continued to decline. The share of detected overloaded vehicles in the total measured vehicles is shown in the following Figure 2.

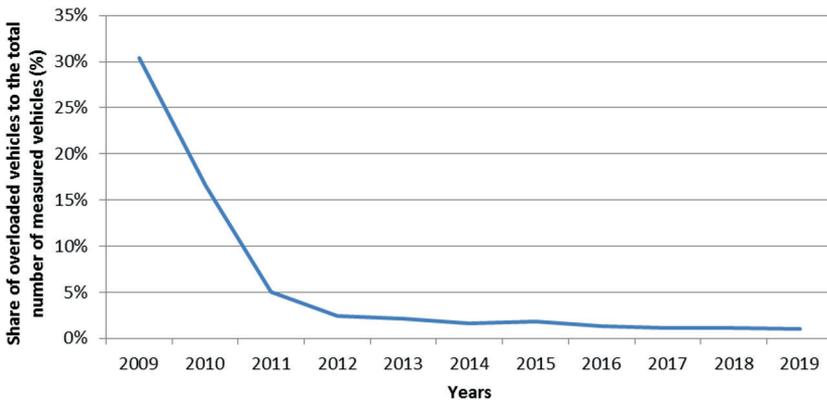


Fig. 2. Share of overloaded vehicles in the total number of measured vehicles for the period 2009-2019, processed by the authors according to [17]

An important finding is that vehicle weight checks are performed more frequently than in the past and, as the figure shows, there is a gradual percentage reduction in overloaded vehicles. It should be noted that the fines imposed by the police, as well as the setting of the administrative fee and its amount, will contribute to the subsequent observance of the law and thus to the increase of road safety.

During the roadside check, in addition to the routine check, the police officer can check the loading and fastening of the goods. When measuring the weight, it may be found that the laden vehicle exceeds the maximum permissible weights, resulting in a fine. There is also a fine for incorrect collocation and fastening of the goods in the vehicle. In some cases, it is necessary to eliminate the deficiency and only then can the vehicle continue to transport, which can also cause a delay in the delivery of goods. The values of fines valid in the Slovak Republic are given in the following Table 2.

Tab. 2. Tariff of fines imposed in block proceedings for offenses against road safety and traffic flow; Source [18]

Exceeding the maximum permissible weight:	Fine
To 10%	50 €
From 10% to 15%	90 €
From 15% to 20%	170 €
From 20% to 25%	280 €
From 25% to 30%	390 €
From 30% to 35%	500 €
More than 35%	650 €
Improper collocation and insufficient fastening of the transported goods, which would endanger the safety and fluency of road traffic	50 €

Furthermore, according to Act 8/2009 §138 Administrative offenses, the Police Force may impose a fine of up to 3500 € on an entrepreneur who, without the driver's knowledge, exceeds the maximum permissible total vehicle weight, the maximum permissible mass on the axles of the vehicle or violates special obligations in relation to the loading and fastening of goods. A fine is up to 7000 € if the entrepreneur infringes again within one year of the fine being imposed [3].

Legislatively, the maximum permissible weight of a vehicle or combination of vehicles is not unified within the EU, therefore there are countries that have a different maximum permissible weight than in the Slovak Republic [14]. If the vehicle or combination of vehicles exceeds the maximum permissible weights, such transport is referred to in the Slovak Republic as excessive transport and is subject to a permit for special road use. This permit is charged in the form of an administrative fee. The values of the administrative fee for exceeding the maximum permitted weight are given in the following Table 3.

Tab. 3. Administrative fee for exceeding the maximum permissible total weight, [2]

Exceeding the maximum permissible gross mass of the mass including the goods is:	Administrative fee
To 40 t	150 €
Over 40 t to 60 t	250 €
Over 60 t to 120 t	350 €
Over 120 t	700 €

The values of the administrative fee for exceeding the maximum permissible weight per axle are given in the following Table 4.

Tab. 4. Administrative fee for exceeding the maximum permissible weight per axle, [2]

Exceeding the maximum permissible mass per axle if the axle load is overloaded by:	Administrative fee
To 10.0%	100 €
Over 10.0% to 11.5%	150 €
Over 11.5% to 12.5%	200 €
Over 12.5%	500 €

It may happen that a roadside check reveals excessive transport. If the carrier does not have a permit for excessive transport, he must additionally obtain one. When determining the charge levied additionally by the decision of the road administrative authority for excessive transport, the partial rates shall be assessed individually according to the percentage overload of the maximum permissible total weight including the goods or axle load.

If the maximum permissible total mass of vehicle including goods, is exceeded, if the overload is expressed in %:

- up to and including 10% – five times the value of the administrative fee rate
- over 10% – ten times the value of the administrative fee rate

If the permissible axle load and overload are exceeded and it is expressed in %:

- up to and including 10% – five times the value of the administrative fee rate
- over 10% – ten times the value of the administrative fee rate

The resulting fee is determined as the sum of the partial rates of the administrative fees.

5. Discussion

The aim of the paper is also to find out what impact the neutralization of the transport document can have on the responsibility for loading and fastening the goods in the vehicle. Neutralization of transport documents is used in the transport sector, although it is not legally defined. It is a replacement of the original consignment note by another consignment note, while the cargo is not handled during transport and only some data is changed in the second or subsequent consignment note [15]. The survey, which was used to identify the use of neutralization of transport documents, shows that in most cases there is a change in the consignor and thus a change in the transport route. It is, therefore, necessary to be aware of the impact that neutralization of the consignment note can have on the responsibility for loading and fastening the goods in the vehicle. It follows from the law that the loader is responsible for loading and fastening the cargo, i.e. that person who loads the goods into the vehicle or intermodal freight unit. It is not precisely defined whether the loader is the consignor or some other hired company. The carrier may be responsible for fastening the goods if this has been contractually agreed upon, and the loader must provide him with instructions for fastening the goods. If the transport documents are neutralized and there is a change of consignor, this also changes the loader. It follows that the new consignor will be responsible for loading and fastening the goods without actually engaging in this activity or checking the loading and fastening of the goods. Thus, neutralization shifts the responsibility for loading and fastening the goods from the original consignor to the new consignor. If the goods are loaded and secured correctly, neutralization does not pose a risk to the consignor. The problem can only occur if the goods are damaged or if the vehicle is stopped due to a roadside check. During the roadside check, in addition to the routine check, the police officer can check the loading and fastening of the load. When measuring the weight, it may be found that the laden vehicle exceeds the maximum permissible weights, which implies the imposition of a fine and the payment of an additional administrative fee. As can be seen from the analysis of vehicle weight measurements, vehicles are still being overloaded, albeit to a lesser extent. There is also a fine for incorrect collocation and fastening of the goods in the vehicle.

6. Conclusion

Act no. 106/2018 on the operation of vehicles in road traffic is in force in the Slovak Republic since 20 May 2018. Paragraph 69 of this Act stipulates special obligations in connection with the loading and fastening of cargo. It stipulates that the loader, i.e. the person who loads the goods into the vehicle, is responsible for loading and fastening goods. If contractually agreed, the carrier may be responsible for fastening the goods but must receive instructions from the consignor according to which he must secure the goods. If a roadside inspection reveals any doubt as to the loading or fastening, the loader may be fined and, in addition, an additional administrative fee must be paid. According to SSC's analysis of the national measurements carried out by mobile workplaces, the maximum permissible vehicle weights are still being infringed. In 2019, an administrative fee of an average of 2440 € was determined for one overloaded vehicle. If the carrier neutralizes the transport documents in order to change the original

consignor to another consignor, it is necessary to realize that there is also a change in the person responsible for loading and fastening the cargo. Therefore, it is necessary to be aware of the risk taken by the other consignor, who did not actually participate in the loading and fastening of the cargo. In the event of a problem related to loading and fastening, the other consignor is responsible and bears the costs in the form of fines and administrative fees. It should be in the interest of loaders to avoid overloading vehicles. This should then be reflected in better protection of roads, road infrastructure and also in increasing road safety. In the future, it would also be appropriate to focus on possible situations in which the new consignor (loader) will be a fictitious company and it will not be possible to find it and then punish it. In this case, who will be responsible for loading and securing the goods? Furthermore, it would be appropriate to explore ways to prevent a change of loader in connection with the neutralization of the consignment note.

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8. Nomenclature

EU European Union

SSC company name – Slovenská správa ciest

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