OVERSIZE CARGO TRANSPORT IN ROAD TRANSPORT
– PROBLEMS AND ISSUES

Summary. Transport of oversize cargo is a specific form of transport service. Specialised equipment is required for its implementation, while the number of people involved in the transport process itself is much higher than in the case of classic road transport form. This paper presents the problems related to permits and penalties that are used in the carriage of oversize cargo and the problems of transport safety in relation to the techniques of fixing oversize loads in road transport.

Keywords: transport, oversize cargo transport, permits and penalties in transporting oversized cargo, cargo transport safety, cargo securing techniques

1. INTRODUCTION

Over-standard cargo (oversized, non-standard, over-metric) is distinguished by its non-standard weight, size and shape that differs from standard loads. Special means of transport are needed to move this type of cargo, as well as handling machines that can carry the load. This form of transport requires special preparation as well as attention to the manner of its implementation. The basic documents regulating the carriage of oversized cargo in road transport are: Dz.U. 1986 no 27, position 133 [21] and the regulation on vehicles performing pilotage [18].

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In turn, the rules, guidelines and other regulations regarding the transport of oversize cargo are regulated by many other national legal acts, inter alia, Act on road transport [9], Act on public roads [10], regulation on detailed conditions and procedure for issuing permits for the passage of oversize vehicles [17], regulation on technical conditions of vehicles and their necessary equipment [16], regulation on road traffic control [19], regulation on road tolls [25], guidelines of the Road Transport Inspectorate [29]. Guidelines for the carriage of oversized cargo have also been formulated for air transport [12], sea transport [11], inland waterway transport [15] and rail transport [20, 23]. On the other hand, the regulation of oversize cargo transport in Europe is governed by Directive 2002/7/WE of the European Parliament and the Council of Europe of 2002 [22].

In the scientific literature on the subject, can be found numerous, multi-faceted works devoted to the problem of oversize cargo transportation (including [2-5, 7, 8, 13, 14, 26-28]).

This paper presents the problems related to permits and penalties that are used in the carriage of oversize cargo and the problems of transport safety in relation to the techniques of fixing oversize loads in road transport.

2. PERMITS AND PENALTIES BROADCAST IN CARRIAGE OF OVERSIZED CARGO TRANSPORT IN ROAD TRANSPORT

In order to carry out the carriage of oversize cargo, a special permit must be obtained for passage [6]. These permits are issued in seven categories. Licenses category I and II are issued for divisible loads. The permits for categories III to VII are issued for indivisible loads. According to the definition of undivided cargo specified in Art. 2 point 35b of the Road Transport Act [9], an undivided load is a load that without disproportionately high costs or the risk of damage cannot be divided into two or more smaller loads. In practice, the following types of permits issued for the carriage of oversize cargo are distinguished [24]:

- category I permit - this type of permit is issued to vehicles whose permissible total weight and dimensions do not exceed the limit values and to vehicles whose axle loads do not exceed one axle maximum of 11.5 tonnes. Permits of this category are issued by the road administrator, after which the vehicle is covered for a period of six or twelve months,

- category II permit - this type of permit is issued to vehicles whose actual total weight, length and height do not exceed the limit values. The axle loads are not greater than those permitted for the specified road. Permits of this category are issued by the staroste, within three days from the date of payment of the fee for the submitted application for a period of twelve months,

- category III permit - this type of permit is issued to vehicles whose axle loads and the actual total weight do not exceed the permissible standards. In turn, the width does not exceed 15 metres, length 3.2 metres for a single vehicle, 23 metres length for a vehicle combination and height up to 4.3 metres. Permits are issued by the staroste for six, twelve or twenty-four months. If the cargo is transported outside of Poland, consent from the customs office issued by the headman is also required,

- category IV permit - this type of permit is issued for vehicles whose actual total weight does not exceed the limit value, maximum length up to 15 metres for a single vehicle, up to 23 metres for a vehicle combination, width up to 3.4 metres, while the height does not exceed 4.3 metres, the axle loads are not greater than 11.5 tonnes. Permits of this category are issued by the General Director of National Roads and Motorways...
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(GDDKiA) for a period of six, twelve or twenty-four months. In the case of transport outside Poland, it is required to obtain a permit for the passage issued by the head of the customs office,

- category V permit - this type of permit is issued to vehicles whose actual total weight and axle loads do not exceed the permissible values. This applies to individual vehicles up to 4.3 metres high, up to 3.4 metres wide, up to 15 metres long. In the case of a vehicle combination up to 23 metres. The permissible total weight does not exceed 60 tonnes. Permits of this category are issued by the General Director of National Roads and Motorways for a period of one, six, twelve or twenty-four months. In the case of transport outside of Poland, it is required to obtain a permit for the passage issued by the head of the customs office,

- category VI permit - this type of permit is issued to vehicles whose width does not exceed 3.4 metres in the case of a single carriageway and to 4.0 metres for a dual carriageway. The height can be up to 4.3 metres, the weight does not exceed 60 tonnes and the pressure of a single axle reaches less than 11.5 tonnes. The length does not exceed 15 metres for a single vehicle and 23 metres for a vehicle combination. Permits are issued in the same way as those for category V vehicles, considering the permits for viaducts and bridges,

- category VII permit - this type of permit is issued for vehicles that do not fall within the limits of the given standards for the aforementioned categories. In such cases, the permit may be issued when the transported cargo is indivisible, it is possible to determine the route with regard to road safety and the consent of the road administrator has been obtained. Permits of this category are issued by GDDKiA within fourteen days from the date of submitting the application. If it is necessary to adapt the road infrastructure to the oversize cargo transport route, this time may be extended to thirty days.

In the transport of oversize cargo for non-compliance with the conditions of carriage and irregularities in the carriage of goods, penalties are granted. In the law on road traffic and the Act on public roads, the rules for sanctioning exceedances regarding the permissible total weight, vehicle dimensions and axle loads are indicated. For the passage of a non-normative vehicle without a permit, or if the transit does not comply with strictly defined conditions, a fine is imposed for the permit, through administrative decisions. The fine is imposed on:

- the entity that performs the journey,
- the entity that performs other activities related to transport, namely, a shipper, forwarder, recipient, sender or organiser of transport, if there are circumstances or evidence that the entity has accepted or had an impact on the carriage of the transport conditions.

Proceedings to impose fines may be discontinued or not initiated if [6] the circumstances of the case and evidence indicate that the entity has acted with due diligence in the performance of activities related to the passage or the entity had no impact on the violation or the real gross weight of the non-normative vehicle exceeds the permissible size or the size specified in the permit, and the overrun applies only to the axle load of the vehicle in the case of bulk and timber transport. Administrative penalties were formulated on the basis of Art. 140a of the Road Traffic Act. In Polish conditions, the financial penalty is set at [6]:

- PLN 1,500 - for lack of category I and II licenses,
- PLN 5,000 - for lack of category III and VI licenses,
- for lack of permit of a category VII, it is PLN 500 - when the pressure of one or more axles, the actual total weight or dimensions of the vehicle exceed the permissible values by not more than 10% or 2,000 PLN - when the pressure of one or more axles, the actual total weight or dimensions vehicles exceed the permissible values by more than 10% and not more than 20% or even 15,000 PLN - in other cases,
- PLN 5,000 - for a non-normative vehicle crossing a bridge or viaduct without a confirmed notification of the road administrator, in connection with the permission of categories V and VI,
- PLN 3,000 - for a non-normative vehicle crossing a bridge or viaduct contrary to the conditions set by the road administrator, in connection with the permission of categories V and VI,
- PLN 6,000 - for a non-normative vehicle crossing a bridge or viaduct in the objection declared by the road administrator in connection with the permission of categories V and VI,
- PLN 2,000 - for failure to meet the transit conditions specified for a category VII permit or given in this document.

The entity to which the financial penalty has been imposed may be appealed by a superior body within fourteen days of receipt of the decision. This decision shall be made thirty days after its receipt. The penalty is withheld when the complaint is filed with the court. The obligation to pay a financial penalty expires after five years from the end of the calendar year in which the penalty should be paid.

3. SAFETY OF CARRIAGE AND WAYS TO LOADS PROTECTION IN THE CARRIAGE OF OVERALL OVERSIZE CARGO TRANSPORT

Securing excessive cargo results from the need to immobilise it during transportation by means of transporting in such a way that it remains in an unaltered state of geometry, shape and dimension, that is, undamaged, it is moved from the source place to its destination, thus not posing any threats to people and means of transport. When attaching an oversize load to a given means of transport, there are several important mandatory rules. First, people should be aware of the fact that the load if incorrectly attached is a huge threat both for people who deal directly with its transport as well as for outsiders who are close to the cargo being carried. An improperly attached load may slip causing vehicle traffic disruptions, which could result in injury or even lead to death in the course of manoeuvres such as emergency braking or accident. Proper placement of the load on the vehicle and its attachment has a big influence on the driving. The rules for fixing oversize cargo are strictly regulated by the European Commission guidelines [1]. Most of the conditions apply directly to drivers of oversized vehicles who, as persons physically carrying cargo to their destination, are directly exposed to hazards associated with the transport. These rules are as follows [1]:
- before loading, it is necessary to check the loading platform, the body, as well as the devices used to attach the load and determine their efficiency,
- the load must be secured in such a way that it will not be able to move as a result of vibration, rolling or so it can not fall off the vehicle,
- the fixing method must be determined, which is best adapted to the characteristics of the load,
- check that the recommendations issued by the vehicle manufacturers and the fastening equipment are met,
- check that the load securing attachment is suitable for the conditions that may be encountered during transport. Braking in an emergency situation, violent turns to avoid an obstacle, poor road and weather conditions should be treated as normal elements of travel, which the fastening hardware must be able to withstand,
- before transport begins while the load is being loaded or unloaded, it should be checked for overload as well as incorrect weight distribution. The centre of gravity of the entire load must be as close as possible to the longitudinal axis,
- if it is possible, the load securing should be checked systematically during transport. The first inspection should be carried out after a few kilometres, during a stop in a safe place. Other checks must be carried out after sudden braking or other incidents while driving,
- if it is possible to attach, use angle strips or non-slip mats,
- during fastening, special care should be taken to ensure that the transported goods are not affected,
- the speed of an oversized vehicle must be adapted to the prevailing traffic and road conditions so as to maintain smooth running. Then, the forces exerted by the load will not exceed the permissible values and driving in such conditions should be done without problems.

The basic ways of fastening loads are: block fastening, locking, fixing by means of lashings that fill the load from above, fixing by means of straight lashings and various types of combinations of the abovementioned methods. The method of fixing must guarantee resistance to the variability of weather conditions.

4. CONCLUSIONS

Constant economic development, as well as the development of broadly understood technologies, prompted the rise in the number of transported goods, including cargoes, whose dimensions exceed specific standards. This paper presents the problems related to permits and penalties that are used in the carriage of oversize cargo and the problems of transport safety in relation to the techniques of fixing oversize loads in road transport. Currently, information on fines as well as rates of penalties related to irregularities in oversize cargo transportation are presented in the Act on Public Roads.

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