

Logistics Industry Readiness in Application Policy Over Dimension Overloading (ODOL)

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ABSTRACT

The existence of vehicles with excess loads and dimensions or called ODOL is a problem that public transport service providers often face. The author compiled this paper to find out indicators of the readiness of the logistics industry in supporting the Zero ODOL policy which will become effective in January 2023. By definition, overload is a condition when a vehicle carries a load that exceeds the specified load limit. While overdimension is a condition when the dimensions of the vehicle carrier do not match production standards and regulatory provisions. This study is a type of qualitative research with a discussion model in the form of data descriptions in verbal form. The data collection technique used is a literacy study derived from secondary data sources. The main focus to be built in this study is to find out the readiness of the logistics industry for implementing ODOL. Broadly speaking, ODOL is not only a transportation problem, but has spread to the socio-economic sector because this problem is prone to occur from upstream to downstream of the logistics process. ODOL causes a domino effect that causes losses of up to IDR 43 trillion every year. In order to realize this policy, readiness indicators are needed. But unfortunately, In order to realize this policy, readiness indicators are needed. But unfortunately, In order to realize this policy, readiness indicators are needed. But unfortunately, the impact resulting from the Zero ODOL policy discourse is considered too heavy for the industry because they are currently struggling to recover after the co-19 pandemic. So we need a recommendation strategy that can optimize policies while minimizing negative impacts on the logistics industry.

Keywords: Zero ODOL; logistics industry; the impact of ODOL policy.

INTRODUCTION

Currently, transportation of goods by land still dominates logistics in Indonesia or reaches 90% of the total modes of transportation of goods. Meanwhile, the existence of vehicles with excess loads and dimensions or often known as over dimension overloading (ODOL) is one of the problems that are often faced by public transport service providers. The Minister of Transportation, Budi Karya Sumadi (2021) stated that in order to overcome this problem, the right policy is needed so that the implementation of goods transportation runs safely, safely, smoothly and in an orderly manner. To overcome the ODOL problem, the Ministry of Transportation (Kemenhub) assisted by several stakeholders has carried out law enforcement efforts such as cargo transfers, electronic ticketing, vehicle normalization in order to realize Zero ODOL. by definition, overload is a condition when a vehicle whose transport load exceeds the specified load limit. While overdimension is a condition when the dimensions of the vehicle carrier are not according to production standards. ODOL is not only a transportation problem, but has spread to the socio-economic sector because this problem is prone to occur from upstream to downstream of the logistics process. Vaishnavi et. al (2019) designed a vehicle tracking and overload detection system for public transportation using the internet of things (IoT). To detect overloaded vehicles, weight sensors are used in the vehicle's suspension. The device automatically detects the number of incoming and outgoing passengers/goods. Weight sensors collect data from the vehicle, passing this data to an onboard data analyzer (usually to be located at an authority station). The authority station marks the time and location of the vehicle at that point. Later all the data is used to analyze the vehicle in full.

Problems with the transportation of goods related to ODOL vehicles are often troubling because the impact is not light. ODOL vehicles/transportation cause damage to infrastructure such as reduced road life, broken bridges or accidents. There needs to be awareness and commitment from the community and stakeholders to resolve the ODOL problem considering that ODOL will have a direct impact on transport owners/drivers such as reduced speed and high operational costs. For this reason, efforts are needed to maintain the life of the road, avoid premature damage to the road, reduce the number of accidents involving the transportation of goods and reduce operational costs. Supervision of goods cars for overloading violations or over dimension violations has been regulated in the "Circular Letter of the Minister of Transportation Number: SE 21 2019". Supervision as referred to in the circular letter involves among others the Directorate General of Land Transportation, agent companies, car body companies, BUMN, BUMD, public transportation companies, goods owners and Provincial and Regency/City Transportation Services. An overloaded truck increases the likelihood of an accident through truck imbalance and braking failure. In developing countries, this problem is severe, where transportation of goods mostly occurs by road transport (Morovatdar et. al 2020; Han et. al 2015). The impact of overload on infrastructure can be serious. This can cause permanent damage to the pavement and can cause a serious threat to road safety, as it increases the risk of accidents by causing truck instability, tier overheating,

The Directorate of Road Transportation Facilities records that in the period from January to April 2021, surveillance of goods transport vehicles located in 81 Motorized Vehicle Weighing Units (UPPKB) has been carried out with a total of 621,504 vehicles inspected. The types of action taken for violations are 41,071 warnings, 34,229 driver tickets and 5,884 transfers of cargo. The number of violations is quite a lot in a period of four months. The ODOL violations and their impact on many parties became the background for outreach activities to drivers and owners of freight transport. The socialization activity was carried out by distributing brochures as a medium of communication accompanied by an explanation of the negative impacts arising from ODOL violations.

RESEARCH METHODS

This research method was carried out using data collection techniques based on literature studies and data sources with secondary data types. The discussion in this study can be described qualitatively based on the results of data processing that has been collected previously. The literature study method allows researchers to apply rigorous and reliable analysis of scientific sources (Hulland & Houston, 2020; Paul, Merchant, et al., 2021). Several scientific review methods exist such as a literature-based review (Paul & Feliciano-Cestero, 2021), using a framework as a methodology (Xie et al., 2017), theory-based (Xie et al., 2017), reviews aimed at developing theory (Paul & Mas, 2020), hybrid type (Dabić et al., 2020), and bibliometric analysis (Ruggericet al., 2019). Given the research gap,

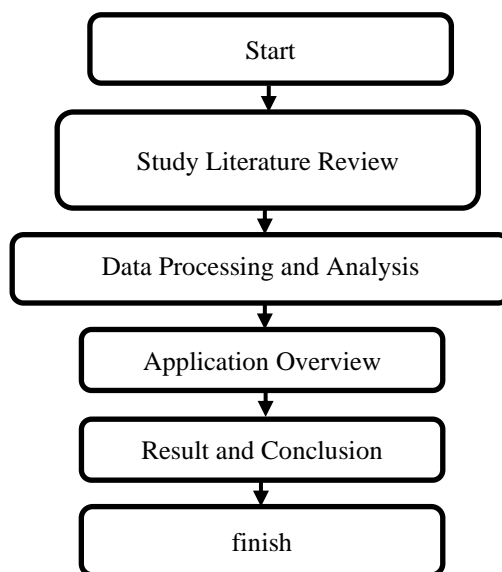


Figure 1. Research Methodology Scheme

RESULTS AND DISCUSSION

Government Readiness in Implementing Zero ODOL

Lookman (2018: 2) says "the paradigm of excess vehicle dimensions which results in overloading of cargo carrying capacity was originally a habit after the 1998 reform, when the government would apply regulations for handling violations of over dimensions and overloading consistently". The magnitude of business resistance is the issue of rising prices of goods, inflation and other economic effects, but they do not think about the social and environmental effects, namely traffic jams, increased travel time, high costs for goods distribution or road damage, up to repair costs of IDR 43 trillion per year.

Responding to this problem, a policy was designed with the intention of minimizing cases of overload violations on the highway. The implementation of policy supervision without ODOL (Zero ODOL) is carried out according to a joint agreement between ministries namely the Ministry of Transportation, Ministry of PUPR, Ministry of Industry, Ministry of BUMN, Indonesian National Police, and Industry Associations. All Zero ODOL policies will be effective starting January 1, 2023. Meanwhile, this regulation also stipulates that every vehicle that violates it, in addition to being fined in accordance with applicable laws and regulations, is also required to move its cargo or be prohibited from continuing the journey. Wu et. al (2012) proposed four strategies to achieve government parity in overload control,

To determine the level of readiness for implementing the Zero ODOL policy, there are several indicators used as a reference, namely:

Use of Technology

The initial step taken by the government in preparing for the implementation of the policy is to design equipment that is used to facilitate monitoring of logistics transportation that passes at certain points. Moreover, with the era of the industrial revolution 4.0, the renewal of the equipment used must be in accordance with the development of information technology that exists today. Integrated Information and Communication Technology (ICT) enables policy makers to digitally retrieve all types of data related to ODOL, monitoring systems, operating systems and performance measurement, monitoring and evaluation systems, to systems that support policy implementation and investment. Swapan Bagui et. al (2013) conducted research on how to control overload in BOT (Build Operate and Transfer) projects highlighting a reasonable way to control overload through strict implementation. Project Build Operate and Transfer (BOT) is a project delivery method in

which the private sector receives support from the public sector, the projects can be used to control overload by placing weight restrictions on vehicles and the Weight in Motion (WIM) system can be integrated with a toll revenue system that will be more effective because WIM can enable high efficiency and through toll operations. Through the study it was found that the installation of weighbridges is economically more efficient because 14 bridges have been installed at each end of the road. Mohamed Rehan Karim et. al (2014) in his research suggested that the weight in motion (WIM) system could function as a vehicle weight sorting tool that could be used as a substitute for a static vehicle weight system. Data collection was carried out during the study of the developed system to explore how the WIM system could be effective. The results show that the WIM system is effective and efficient in the application of current vehicle weights and will therefore be beneficial in generating sufficient revenue. Reducing overload can be optimal because the impact of accidents is reduced and the budget for road maintenance is also reduced. WIM has been proven to be an effective technique for controlling vehicle overload so this technique is integrated with various techniques to make it more efficient and effective in various ways. Anusha Gaira et. al (2020) in his research on Vehicle Overloading: A Review, it was concluded that the use of different technologies such as GSM, GPS, RFID, BOT (build Operate transfer), WIM (Weighin-motion), FOS (Fiber Optic Sensor) can effectively monitor overloaded vehicle.

Regulatory Completion

Controlling ODOL trucks is an important concern for the government. The Director General of Land Transportation of the Ministry of Transportation has said that in 2021 Indonesia will be free from ODOL trucks. The government has carried out cross-agency integrity from the Department of Transportation, Police and toll road managers. The government's effort to deal with ODOL is through improving regulations, such as the revision of the regulations for weighing motorized vehicles on the road as seen in the change to "Regulation of the Minister of Transportation Number PM 134 of 2015 regarding the Implementation of Weighing Motorized Vehicles on the Road".

UPKKB Infrastructure Improvement

After being evaluated, there are still problems with the implementation of the Zero ODOL policy, which can be seen that there are still frequent ODOLs on the roads that don't comply with government regulations, UPPKB that have not implemented BLU-e, and weighbridge units that have not implemented Online Weighbridges (JTO). The Transportation Research and Development Agency provided several recommendations regarding efforts to implement policies to achieve Indonesia Zero ODOL, namely the first simultaneous construction of UPPKBs in several locations in the weighbridge master plan so that they can be implemented quickly, such as on toll roads, ports, industrial areas, warehouses and roads. -strategic roads, because only a few areas are using JTO.

UPPKB Operational Cooperation and the Industrial Sector

The indicator of preparation in implementing the Zero ODOL policy is by collaborating with relevant stakeholders as mediators or policy drivers. Currently various communications have been attempted with players in the logistics industry sector to actively participate in contributing to the success of the program that has been discussed by the government. As a result, there have been various inputs from the industry regarding this policy, especially regarding the relaxation of the policy implementation period which was extended to January 1, 2025. The reason is that the industry needs at least 2 years to recover from the pandemic. Meanwhile, they also need time to carry out transportation rejuvenation, repairs and all forms of renewal to be able to adapt transportation facilities to the existing regulations.

Accreditation of Motor Vehicle Periodic Test Executor Unit

The Zero ODOL policy is important to implement with the aim of ensuring the safety of the vehicle and other drivers around it to avoid accidents due to being overloaded. Testing of motorized vehicles is the activity of checking the technical requirements and testing of predetermined thresholds as well as validating the roadworthiness of motorized vehicles. In order to do this, competent human resources are needed so that the test results are credible and can be accounted for.

Law enforcement

Law is a coercive rule and must be obeyed by all legal subjects in it. The purpose of enforcing this law is to provide legal certainty in a fair and equitable manner so as to create a sense of justice and benefit. If the law can be enforced properly, the potential for legal compliance will increase due to guarantees and certainty of punishment for violators. Law enforcement on the Zero ODOL policy can start from the basics. Compliance and a culture of orderly traffic are a fundamental part of the success of this policy. Law enforcement efforts are process and result oriented and do not cause negative impacts which can actually thwart policy implementation. This can be achieved with the professionalism of professional law enforcement, transparent and accountable. If law enforcement can run according to the functions and objectives that have been set, it will create traffic safety and security on road transportation while creating an orderly and cultured society.

However, if the applicable law is violated by a legal subject, there are consequences that must be accepted. Based on Law no. 22 of 2009 there are four types of ODOL policy violations namely; "violations of technical and road-worthiness requirements, violations of cargo, violations of permits and violations of signs and markings". In article 227 of Law no. 22 of 2009 clearly states that:

"Anyone who imports Motorized Vehicles, trailers, and attached carriages to the territory of the Republic of Indonesia, makes, assembles, or modifies causing a change in type, trailers, attached carriages, and special vehicles operated within the country that do not fulfill the type test obligation as in Article 50 paragraph (1) shall be subject to imprisonment for a maximum of one year (1 year) or a maximum fine of Rp. 24,000,000.00 (twenty four million rupiah). Article 138 paragraph (3), public transportation of funds or goods is only carried out by public motorized vehicles.

Optimization of Zero ODOL Preparation in Order to Minimize Negative Impacts on the Logistics Transportation Industry

The results of the study by the UGM Research Team show that every 1% decrease in the efficiency of land transportation and logistics service activities due to the implementation of Zero ODOL will have an impact on reducing Indonesia's real GDP by 0.057%. Implementation of the Zero ODOL Policy requires planning with the right targets so as not to have a negative effect and cause a shock to the macro-economy, especially industrial development. There are 3 (three) important things to note and need to be resolved first, namely: Adjustment of KEUR/KIR contained in vehicle design and road class, Multi-axle application policy and Improvement of road carrying capacity according to road class. Several policies that can be taken to support the implementation of Zero ODOL, include:

- a. Completed 3 points of proposal so that the implementation of the Zero ODOL policy could be implemented better and more effectively.
- b. Efficiency in choosing the mode of transportation by selecting the appropriate vehicle for the load and volume transported (multimodal transportation). It is expected that the development of modes of transportation of goods other than trucks such as ships and trains can be further intensified as mandated in Presidential Regulation number 26 of 2012 concerning the Blueprint for the Development of the National Logistics System so that it does not depend on land transportation in the form of trucks.
- c. Earmarking of non-tax state revenues obtained from ODOL fines for the road repair budget.
- d. Controlling price inflation by providing compensation for cutting toll road rates for vehicles that comply with ODOL regulations.
- e. Providing incentives in the form of PPh or other than PPh given to Logistic Entrepreneurs or Land Transportation Business Actors.
- f. Prioritizing monitoring (supervision), legislation, and education as the implementation of ODOL implemented and carried out by other countries.

CONCLUSION

The existence of loaded vehicles and excess dimensions or ODOL is a problem that is often faced by public transport service providers. To solve the problem already carry out law enforcement efforts, namely cargo transfers, electronic ticketing, vehicle normalization to achieve Zero ODOL. To determine the level of readiness for implementing the Zero ODOL policy, there are several indicators that are used as references, namely: use of technology, refinement of regulations,

improvement of UPKKB infrastructure, operational cooperation between UPPKB and the industrial sector, accreditation of units carrying out periodic testing of motorized vehicles and law enforcement, currently the logistics industry is still in the stage of finalizing preparations to support the future Zero ODOL policy. To optimize this, there are several recommendations that can be made, namely: completing the 3 (three) points of the proposal, efficiency in choosing a mode of transportation by selecting a vehicle that is suitable for the load and volume transported,

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