# Implementation of Safety Management System and Minimum Service Standards(Case Study: Container Land Transport Companies)

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**ABSTRACT:** Land transportation still dominates goods transportation in Indonesia, and reaches a total of 90% (Director General of Land Transportation, 2023). Meanwhile, traffic accidents in 2022 caused by goods transportation will reach 12%, involving a total of 21,463 vehicles (Korlantas Polri 2022). Land transportation of goods in containers, which plays a role in the first or last mile of international trade transportation via sea, has the potential to be involved in accidents, if safety factors are not prioritized. Ignoring safety factors results in accidents which cause many losses including: cost overruns, disruption of the logistics system chain, and even loss of life. The government has issued various regulations and one of them is Minister of Transportation Regulation number 85/2018 concerning Public Transport Company Safety Management Systems. Various forms of socialization of regulations are carried out regularly every year until now. However, it is believed that most freight transport companies have not implemented this. It has been proven that only 9 public goods transportation companies have been registered in the SMKPAU system (Data from the Director General of Land Transportation as of February 2022). This research aims to find out how the Safety Management System and Minimum Service System are implemented in container freight companies and the obstacles faced in implementing them. The research is limited to a population sample of container freight companies registered in the city of Surabaya. The methodology used is a literature review and a combined method of quantitative and qualitative, namely by collecting data through questionnaires and interviews. It is hoped that the results of this research can provide recommendations to container land transportation companies regarding the proper implementation of the Safety Management System and provide an overview to the public about the field conditions for implementing these regulations in Surabaya.

**KEYWORDS:-** Freight transportation, container transportation, safety management system, minimum service system

# I. INTRODUCTION

Land transportation safety for goods is an important factor in land transportation modes. Land transportation of goods by container is part of the land transportation mode, as the first mile or last mile of international trade transportation. Goods transportation in Indonesia is still dominated by land transportation, which reaches up to 90% (Directorate General of Land Transportation, 2023) and the freight accident rate contributes 12% to the total causes of accidents that occur. Accidents result in various losses, including: delays in the delivery of goods, congestion, disruption of the logistics chain, additional costs, damage to infrastructure, air pollution and even loss of life. Based on data from the Director General of Land Transportation in 2021, 61 road (land) goods transport accidents were caused by driver factors. %, facilities and environmental factors 30% and vehicle factors, namely meeting roadworthy technical requirements, amounting to 9%. The National Transportation Safety Committee (KNKT) in a discussion forum group of land transportation safety experts in March 2022, provided recommendations regarding factors related to transportation safety, namely control and supervision factors, regulations, infrastructure and facilities or vehicles, where all of these factors influence each other.

Even though the government has issued various regulations, including Minister of Transportation Regulation number 85 of 2012 concerning Public Transport Company Safety Management Systems, it is currently believed that their implementation has not gone as expected. Data from the Director General of Land Transportation as of February 2022 shows that only 9 public goods transportation companies are registered with the safety management system. Meanwhile, it is known that the number of land transportation companies that are members of the Land Transport Organization (ORGANDA) and the Indonesian Truck Entrepreneurs Association (APTRINDO) in Indonesia has reached around 2.2 million companies. This does not include

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transport companies registered with the ALFI association, which can reach thousands. We need to be aware of this and the implementation of this regulation needs to be maximized immediately to prevent accidents and improve land transportation safety in the future.

#### Formulation of the problem

Based on the data and facts presented previously, this research will answer the following two basic questions how is and what are the obstacles faced by operator during the implementation of Safety Management System and Minimum Service System in container land transportation companies currently?

## **Research Objectives**

The final results of this research are: undestrand the licensing requirements for the establishment and operation of container land transportation companies, identify the process of implementing the Safety Management System and Minimum Service System in container land transportation companies and also the obstacles faced by container land transportation companies in implementing a Safety Management System.

#### **Benefits of Research**

Managerial contributions that can result from this research can be obtained by first provide information regarding procedures for implementing the Safety Management System and Minimum Service System for Container land transportation company, and for government or regulator is Providing information regarding the current development of the implementation of the Safety Management System and Minimum Service System.

#### **Problem Limitations**

The scope of the research is limited to a population sample of container land transportation companies registered in Surabaya and still actively carrying out container land transportation activities for the last 3 years.

#### **Research methodology**

- 1. Literature review. This is done to understand the theories and concepts related to land transportation of container goods as part of the international trade system, industrial supply chain and understand the Safety Management System regulations and Minimum Service System for land transportation.
- 2. Questionnaires and interviews. Data was collected through questionnaires from drivers, administrators and management from a population sample of container land transportation companies. Meanwhile, to gain an in-depth understanding, interviews will be conducted with the management of selected container land transportation companies and institutions/institutions related to land transportation safety.

## II. LITERATURE REVIEW

## **Supply Chain, Logistics and Transportation**

A supply chain is a network of several entities that are used together to transform raw materials into products and deliver goods and services to final customers, involving the flow of information, physical distribution and money. Meanwhile, supply chain management is the management of the flow of goods and services including the movement and storage of raw materials, inventory of semi-finished goods and finished materials. In general, the supply chain can be said to be a series of activities by suppliers, logistics processes and final customers

Logistics, as part of the supply chain, is the art and science of sourcing, producing and distributing materials and products, including planning and executing efficient transportation and storage from the point of origin to the end customer. Logistics management can be defined as managing the planning, implementation and control of the flow of goods and storage efficiently and effectively from the point of origin to the point of consumption to meet customer demand. The logistics equation can be described as follows: Logistics = material management + distribution. So the key functions of logistics are warehousing and transportation.

Transportation is the movement of goods (cargo) from one location to another. Transportation management focuses on managing the physical delivery of goods, in an effective and efficient manner within the desired time period to meet customer needs. Transportation is important in the entire supply chain and has a significant impact on the percentage of total costs and smooth operations for the entire system.

With the opening of trade between countries in the world, many companies are entering the global market. And to meet these needs, a wider and more complex global logistics network is needed, which is managed in a complete and integrated manner.

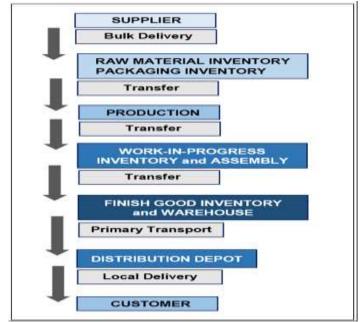


Figure 1. The physical flow of materials and goods from suppliers to customers. Source: The handbook of logistics and distribution management

## International mode of transportation

A meaningful global logistics network includes transportation across national borders, moving materials, products and services to more remote locations. Globalization with high complexity will have an impact on logistics operations. Some of the points resulting from this are: a. Longer supply lead time, b. Production delays with local added value, c. Complicated node management, d. Longer and unreliable transit times, e. A broader understanding of the supply chain system is required. And there is a tradeoff between globalization and the type of supply chain with fast response movements, such as Just In Time.

To reduce the risks mentioned above, the role of international transportation modes becomes increasingly important. All modes of transportation are generally used in the international transportation process. For archipelagic countries like Indonesia, which have maritime boundaries with other countries, it is necessary to use more than 1 mode of transportation for the movement of goods from suppliers to customers. And one mode of transportation that is definitely used is land mode, whether for first mile, middle mile or last mile deliveries.

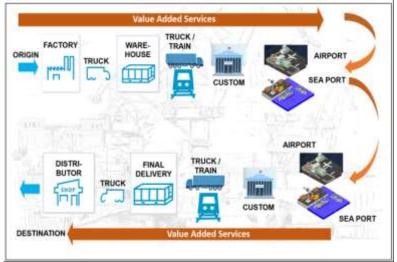


Figure 2. International logistics flow

Several combinations of transportation modes for international shipping, from supplier points to customer points, include:

- a. Land  $\rightarrow$  sea  $\rightarrow$  land mode
- b. Land mode  $\rightarrow$  train  $\rightarrow$  sea  $\rightarrow$  land  $\rightarrow$  train  $\rightarrow$  land
- c. Land mode  $\rightarrow$  air  $\rightarrow$  land
- d. Land  $\rightarrow$  sea  $\rightarrow$  land  $\rightarrow$  air  $\rightarrow$  land modes
- e. Sea  $\rightarrow$  land  $\rightarrow$  sea  $\rightarrow$  land mode

The choice of transportation mode is based on the following:

- a. The need for fast / short transit time. For example, air mode will be much faster than sea mode.
- b. Type and characteristics of goods/cargo. For example, some types of cargo can only be transported by sea.
- c. Suitability of conveyance for the mode of transportation. For example, to send frozen cargo by sea, refrigerated containers are used.
- d. Weight and volume of goods/cargo. For example, for large/large cargo volumes, sea transportation is more efficient.
- e. Transportation costs

Several external factors that influence international logistics operations include:

- a. Infrastructure in the country of origin and destination
- b. Trade tariff barriers (taxes)
- c. International commercial terms, which concern the obligations, risks and costs that are the responsibility of the seller and buyer.
- d. Customs control on export, import and licensing processes
- e. Law and taxes.
- f. Culture, global political economic situation, climate/weather
- g. Communication system
- h. Promise the service that customers require.
- i. Delivery barriers up to customer points
- j. Terms of payment for goods
- k. Knowledge of products

## **Risk Management in Land Freight Transportation**

Risk management in land transportation of goods is the process of managing risks in the process of sending goods by land. The aim is to avoid losses or accidents during the delivery process. Some risks that may occur during the process of sending goods include: damage to goods, loss of goods, delays in delivery, and accidents. Identifying risks, assessing and controlling risks and monitoring, are efforts to eliminate or mitigate risks.

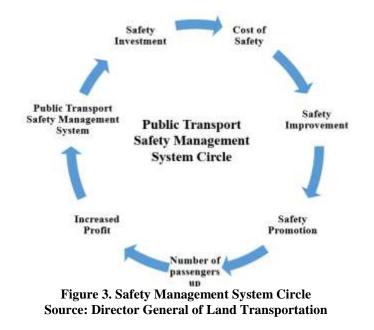
According to the explanation from the KNKT – National Transportation Safety Committee and at the Focus Group Discussion of land transportation safety experts in March 2022, the following are the factors that cause accidents:

- a. Human factors and driver performance: >>Driver fatigue factor, >>Drivers who do not have holidays and working hours according to regulations, >>Transport companies do not carry out driver health and fit performance tests >>Lack of driver competence >>Lack of discipline
- b. Facilities or vehicles: design, pre-inspection, operation and maintenance factors are important points regarding the causes of accidents. Inappropriate use and control of vehicles, the vehicle's roadworthiness is ignored, pre-inspection is not carried out, term maintenance is not carried out and the load of goods exceeds the carrying capacity.
- c. Infrastructure: road structure, signs, rescue lanes, insufficient number of rest areas

Overlapping government policies and regulations and unclear institutions or units responsible as leaders related to accident handling, safety monitoring, infrastructure improvements and handling ODOL (Over dimension over loading) vehicles affect the risk mitigation process.

Since 2018, the government has published a Safety Management System (SMK), which is expected to be an effort to implement risk management in goods and people transportation. This vocational school applies about preparing appropriate vehicle designs, building maintenance systems, pre-inspection systems and effective supervision systems.

Preparing a Vocational School for transportation companies can start from self-evaluation, answering questions honestly, recognizing the current position, creating a program that suits your abilities, evaluating program progress and carrying out continuous improvements. Then the 10 SMK elements can be prepared in a document which becomes the transportation company's standard operating procedures for risk management.



#### Licensing Requirements and Business Obligations for Land Transport Companies

Business actors in Indonesia are required to have an NIB, namely a Business Identification Number, as the identity of business actors issued by the OSS Institution. To obtain an NIB, business actors must attach a deed of company establishment containing a description of the aims and objectives of the company's articles of association, in accordance with the Standard Classification of Indonesian Business Fields (KBLI).

The Central Statistics Agency (BPS) has prepared the Standard Classification of Indonesian Business Fields (KBLI) as a guide for determining the type of business activity. KBLI is a classification of economic activities that produce output in the form of goods or services, based on business field groups, for uniformity of concepts and definitions. The latest regulation regarding KBLI is BPS Regulation number 2 of 2020.

For transportation and warehousing or logistics businesses, the 2020 KBLI is included in group H which includes the provision of passenger or goods transportation, where this group has 5 derivative KBLI as follows: Land transportation and transportation by pipeline (49), Water transportation (50), Air transportation (51), Warehousing and transportation supporting activities (52) and Postal and courier activities (53).

For land goods transportation businesses, there are 4 KBLI numbers, each of which has different company establishment requirements. The following KBLI can be used as a basis for land transportation businesses for goods: KBLI 2020 – 49431: Motorized Transportation for General Goods, KBLI 2020 – 49432: Motorized Transportation for Special Goods, KBLI 2020 – 52291: Transportation Management Services (JPT) and KBLI 2020 – 52295: Multimodal Transportation.

On the Online Single System (OSS) website, each KBLI states Business Licensing Requirements (BLR), Business Licensing Obligations (BLO) and type of business: micro, small, medium and large. The four KBLIs have different licensing requirements and business obligations, because the scope of work is different. However, the four KBLIs mentioned above can own and/or run general or special goods land transportation operations.

Apart from the licensing requirements and business obligations listed in the OSS, business actors are also regulated by Minister of Transportation Regulation number 12 of 2021 concerning Standards for Business Activities and Products in the Implementation of Risk-Based Business Licensing in the Transportation Sector. Then this Minister of Transportation regulation was amended by. Minister of Transportation Regulation number 13 of 2023 concerning amendments to PM number 12 of 2021.

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The regulation states in detail the standards for business activities according to each KBLI, namely: Scope of business, Business classification, General business requirements, Specific business requirements, Facilities, HR & organizational structure HR, Minimum service standards, Product / process / service requirements, Business management system / Safety management system, and Conformity assessment and supervision.

For the transportation of container goods which include special non-dangerous goods, the operating permit, in accordance with KBLI 49432 and stated in Minister of Transportation Regulation number 60 of 2019, in chapter III part one, starting from article 41, can be summarized as follows:

- a. Public Transport Companies that organize special Goods Transport are required to have a permit for special Goods Transport.
- b. The permission in question is granted by the Minister.
- c. In its implementation, the permit for the transportation of goods is signed by the Director General on behalf of the Minister.
- d. The granting of a permit to operate the special Goods Transportation in question is subject to a licensing fee in accordance with the provisions of the statutory regulations
- e. The transportation operation permit as intended is in the form of a contract document and/or electronic card consisting of letter of decision on permission to organize special transportation of goods, a statement of ability to fulfill the obligation to provide special goods transportation in accordance with the permit granted; and monitoring card attached to each Goods Car.
- f. A decision letter for a permit to operate special goods transportation and a statement of capability to fulfill the obligation to serve special goods transportation in accordance with the permit is given to the head of the Public Transport Company and is valid for 5 (five) years.
- g. The Supervision Card is valid for 1 (one) year and must be renewed every year from the time it is issued.
- h. Public Transport Companies that already have permits to organize special Goods Transport as intended must fulfill the following requirements: implement the provisions in the operating permit granted, comply with the provisions of Minimum Service Standards for Transport of Goods, implement a Safety Management System, registering drivers in an application-based driver performance logbook (e-logbook), employ drivers who already have a general driving license according to their class and have certification of Dangerous Goods handling personnel.

# Safety Management System

# Legal basis and definition

The regulations that form the legal basis regarding land transportation of goods are:

- a. Law No. 1 of 1970 concerning Occupational Safety and Health
- Article 87 states that every company is obliged to implement an Occupational Safety and Health Management System that is integrated with company management
- b. Law No. 22 of 2009 concerning Road Traffic and Transportation Article 204 states that Public Transport Companies are obliged to create, implement and perfect a safety management system guided by the national general plan for Road Traffic and Transport Safety
- c. PP No. 74 of 2014 concerning Road Transport Article 94 states that Public Transport Companies are obliged to create, implement and perfect a Safety Management System guided by the national general plan for road traffic and transport safety.
- d. PP No. 37 of 2017 concerning Traffic Safety and Road Transportation Article 27 states that Public Transport Companies are obliged to create, implement and perfect a Public Transport Company Safety Management System based on the RUNK LLAJ.
- e. Minister of Transportation Regulation Number 85 of 2018 concerning Public Transport Company Safety Management Systems
- f. Minister of Transportation Regulation No. 60 of 2019 concerning the Implementation of Goods Transport by Motorized Vehicles on Roads
   Article 45 states that Public Transport Companies that already have a permit to Organize Special Goods
- Transport must fulfill the requirements by implementing a Safety Management System
  Regulation of the Director General of Land Transportation Number: KP.1990/AJ.503/DRJD 2019 dated 22
  April 2019 concerning Procedures for Assessment of Public Transport Company Safety Management Systems
- h. Regulation of the Director General of Land Transportation Number: KP.1913 of 2021 dated 08 June 2021 concerning Competency of Public Transport Company Safety Management System Assessors

Based on Minister of Transportation Regulation Number 85 of 2018 and Minister of Transportation Regulation No. 60 of 2019, the following are several definitions related to the Safety Management System and Implementation of Goods Transport on the Road:

- 1. The Public Transport Company Safety Management System is part of company management in the form of safety governance carried out by the Public Transport Company in a comprehensive and coordinated manner in order to realize safety and manage the risk of accidents.
- 2. Traffic and Road Transport Safety is a condition where everyone is protected from the risk of accidents during traffic caused by humans, vehicles, roads and/or the environment.
- 3. The Public Transport Company in question is a legal entity that provides transportation services for people and/or goods using Public Motorized Vehicles.
- 4. Goods Transportation is the movement of goods from one place to another using vehicles in road traffic
- 5. Public Motorized Vehicle is any Motorized Vehicle that is used to transport goods and/or people for a fee.
- 6. General goods transportation is general transportation of goods which are not dangerous and do not require special facilities.
- 7. The general goods referred to consist of general cargo, metal cargo, wood cargo, cargo loaded onto a pallet/packed, vehicles with side curtain covers and flat glass.
- 8. Public goods transportation has the following criteria such as using goods cars, trailers and/or attached trains, operated on roads according to the class of road traveled and logistics distribution centers and/or loading and unloading places are available.
- 9. Special Goods Transportation consists of dangerous goods and non-dangerous goods which require special facilities.
- 10. The dangerous goods referred to are explosive items, compressed gas, liquefied gas, or dissolved gas at a certain pressure or temperature, flammable liquids, flammable solid, oxidant producing materials, poisons and infectious substances, goods that are radioactive, goods that are corrosive; and other dangerous goods, determined by the minister who handles government affairs in the environmental sector.
- 11. The non-dangerous goods in question include Bulk Goods, Container, Plant, Live animals, Heavy equipment and transportation of motorized vehicles.
- 12. Transportation of Dangerous Goods in question has the following criteria:
  - use the Goods Car according to its intended purpose;
  - the road infrastructure traversed meets the road class requirements;
  - availability of loading and unloading facilities;
  - the highest vehicle speed limit in accordance with statutory provisions;
  - park the vehicle in the designated place; And
  - operates according to a predetermined trajectory.
- 13. Goods transportation for non-dangerous goods in the form of containers in.
  - use the Goods Car in accordance with its specifications and designation;
  - the road infrastructure traversed meets the road class requirements;
  - availability of loading and unloading equipment facilities in places that do not disturb the security, safety, smoothness and orderliness of traffic and the surrounding community;
  - the highest vehicle speed limit in accordance with statutory provisions;
  - park the vehicle in a designated place and separate from parking vehicles transporting people; And
  - have special markings for Container vehicles transporting Dangerous Goods.
- 14. Transport of non-dangerous goods in the form of containers must meet the following requirements:
  - a. use loading and unloading facilities that meet the requirements;
  - b. carry out loading and unloading in a place that does not disturb the security, safety, smoothness and orderliness of traffic and the surrounding community;
  - c. placing goods in container spaces that are properly arranged so that the load is distributed proportionally on the axles of the goods car;
  - d. placing the container on the cargo car carrying it using a turn key; And
  - e. carrying out loading and unloading in containers following the requirements of the commodities being transported

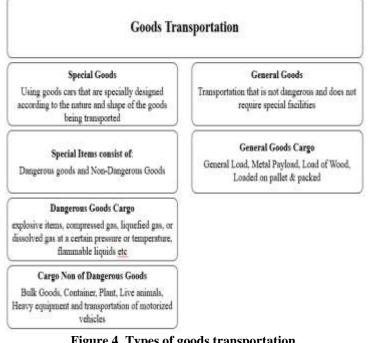


Figure 4. Types of goods transportation. Source: Director General of land transportation, 2021

## Guidelines for Preparing a Public Transport Company Safety Management System

The following are points regarding the preparation of a safety management system:

- 1. Public Transport Companies are required to create, implement and perfect a Public Transport Company Safety Management System guided by the RUNK LLAJ.
- 2. The Public Transport Company Safety Management System as referred to is created no later than 3 (three) months after the permit to operate public transport is granted.
- 3. The Public Transport Company Safety Management System that has been created is reported to the public transport operating permit provider in accordance with its authority.
- 4. The Public Transport Company Safety Management System includes ten elements, namely:
  - Commitment and policy
    - Organizing
    - Hazard and risk management
    - Motor vehicle maintenance and repair facilities
    - Documentation and data
    - Increased competency and training
    - Emergency response
    - Internal accident reporting
    - Monitoring and evaluation
    - Performance measurement

Details regarding the elements mentioned above can be found in Appendix I to Regulation of the Minister of Transportation No. 85 of 2018.

 The Public Transport Company Safety Management System as referred to is prepared in the form of a Public Transport Company Safety Management System Document, with the format listed in Appendix II to Minister of Transportation Regulation No. 85 of 2018.

In the licensing requirements and business obligations listed in the OSS, and in the Minister of Transportation Regulation number 12 of 2021 concerning business activity standards, KBLI 52291 and 52295 do not clearly state the obligation to prepare Safety Management System documents.

#### Supervision of the Implementation of Public Transport Company Safety Management Systems

Supervision of the implementation of the Public Transport Company Safety Management System is carried out in stages: observation and monitoring, inspection and auditing.

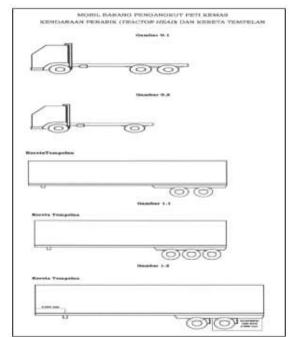


Figure 5. Tractor Head and Chassis for Container Transporter. Source: PM Transportation no 60/2019

Supervision is carried out by officers formed by the Director General, Head of Agency, Governor and Regent/Mayor in accordance with their authority. The results of the supervision are submitted to the Director General, Head of Agency, Governor and Regent/Mayor in accordance with their authority in the form of:

- a. The results of observations and monitoring are in the form of reports on developments in situations and conditions.
- b. The results of the inspection are in the form of a report on the condition and performance of the object being inspected
- c. Monitoring through audits is a special and systematic examination of the level of compliance of Public Transport

Companies with the implementation of the Safety Management System. This supervision is carried out by an auditor appointed by the official who issued the permit. The results of the audit are the basis for imposing administrative sanctions on public transportation companies and following up with corrective action and/or law enforcement. The corrective action referred to is in the form of improving performance on audit and inspection objects and changes to Public Transport Company Safety Management System policies and/or regulations.

Meanwhile, law enforcement as intended takes the form of imposing administrative sanctions in accordance with the provisions of statutory regulations.

Regarding administrative sanctions, they are applied as follows:

- 1) Public Transport Companies that do not create, implement and compile a Safety Management System as intended are subject to administrative sanctions.
- 2) The administrative sanctions referred to are in the form of:
- 3) written warning;
  - license suspension; and/or
  - License revocation.
  - The administrative sanctions as intended are given by the Director General, Head of Agency, Governor, or Regent/Mayor in accordance with their authority.
- 4) Administrative sanctions in the form of written warnings as intended are imposed a maximum of 2 (two) times with a period of 30 (thirty) days each.
- 5) In the event that the permit holder still does not carry out his obligations after the expiration of the period, his supervision card will be frozen.
- 6) 60 (sixty) days after the permit holder continues to fail to carry out his obligations after the expiration of the period, he will be subject to revocation of the permit in the form of revocation of the supervision card.

#### Minimum Service System

Minimum Service Standards for Goods Transport are the requirements for carrying out Goods Transport by Motorized Vehicles on the road regarding the type and quality of service that is entitled to be obtained. In accordance with PM Transportation number 60/2019, for organizing goods transportation by motorized vehicles, which is related to special goods, including containerized goods transportation, the minimum service system is according to figures 2.7a and 2.7b below. This regulation is related to KBLI 49431 and 49432. Meanwhile, for KBLI 52291 and 52295, because the scope of business activities is wider, the minimum service standards required are different. And this is stated in the Minister of Transportation Regulation number 12 of 2021 concerning standards for business activities and products.

| TYPE                 | DESCRIPTION   | FUNCTION                                   | INDICATOR                                | MEASUREMENT  |
|----------------------|---|--|--|--|
| Driver<br>Condition  | The driver's physical<br>and mental condition is<br>healthy           | Proof that the driver is<br>in good health | Healthy                                  | Health Certificate<br>from Doctor for 6<br>months      |
| Driver<br>Competency | Drivers have knowledge<br>of routes, services,<br>emergency response  | Drivers understand<br>traffic etiquette    | Training<br>Participation<br>Certificate | Minimum 1 time in<br>5 years                           |
| Recess               | Drivers are required to<br>rest 15 minutes after a 2-<br>hour journey | Keep the driver fit and<br>healthy         | The driver is in excellent condition     | Notes on the<br>implementation of<br>driver rest hours |
| Flashlight           | Lighting Aids   | As a lighting tool<br>during emergencies   | Availability                             | At least 2 units                                       |
| Medical<br>facility  | First Aid Kit for<br>Accidents  | Used in handling<br>emergency conditions   | Availability                             | At least 1 unit<br>(plaster, antiseptic)               |
| Bill of lading       | Proof of Transportation<br>and Delivery of Goods                      | Guarantee smooth<br>delivery               | Availability                             | Must be Available<br>on every Truck                    |
| GPS                  | As technology to<br>determine the position<br>and route of delivery   | Safety                                     | Availability                             | Must be Available<br>on every Truck                    |
| Truck Age            | The maximum age limit<br>for a vehicle to operate                     | Prioritize safety, service<br>and security | Maximum Age                              | 20 years   |

Figure 6. A Part of Minimum Service System for Organizing Motorized Vehicle Goods Transport on the road. Source: PM Transportation no 60/2019

The service standards for KBLI 52295, namely multimodal transportation, are according to the following figure:

| Service | Issuing multimodal transportation documents   |  |  |
|---------|---|--|--|
|         | Transport goods according to the agreement stated in the multimodal transportation document |  |  |
|         | Maintain safety and security in the implementation of multimodal activities                 |  |  |
|         | Take action according to legislation regarding special goods and dangerous goods            |  |  |
|         | Resolving claims submitted by service users   |  |  |
|         | Insure its responsibilities in accordance with statutory provisions                         |  |  |

Figure 7. Multimodal transportation business services. Source: PM Transportation no 12/2021

## III. CONCLUSION

Referring to Indonesia Central Statistics Agency data in the first quarter of 2024, it is noted that the transportation sector still has a large contribution and growth to Indonesia's gross domestic product. So government programs in the form of providing infrastructure and monitoring regulations in this sector have become important issues.

Land transportation via roads plays the biggest role so that the implementation of regulations in the field of safety and service standards is a very pressing factor to be carried out correctly and consistently.

The still quite high number of accidents and incidents in transporting goods via highway is an indication that there is still a need to increase the role and contribution of all stakeholders in implementing the safety management system.

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There are still high complaints regarding the service standards provided by logistics service providers, especially container transportation, which is proof that regulations still need to be improved to adapt to changes and operator discipline in implementing existing regulations and rules.

## IV. RECOMMENDATION

The safety management system and minimum service standards, especially in container transportation, are considered very urgent to be implemented by all stakeholders.

The government as a regulator is required to be able to quickly adapt to changes in the business environment by creating regulations that ensure business activities are able to provide efficiency and effectiveness to customers which in the end will also be able to increase Indonesia's competitiveness through reducing logistics costs. The government's role, which also requires courage, is in enforcing the law against violations that occur in implementing regulations. A transparent and auditable bureaucracy also guarantees legal and business certainty and reduces hidden logistics costs.

Business actors as parties who have the responsibility to guarantee and provide safety and standard service quality to customers of container transportation services are also required to be able to nimbly follow changes in the business environment and applicable regulations. Implementing appropriate strategies, developing and utilizing technology, adapting organizational structures and developing the quality of human resources are important steps that must be taken to ensure safety and service to customers.

The presence of various non-profit institutions in the container transportation industry is also requested to act as mediators for the government and business actors in the creation, implementation and provision of sanctions for ensuring the implementation of regulations governing safety management systems and minimum service standards

## REFERENCES

- [1]. Direktoran Jendral Perhubungan Darat Direktorat Sarana Transportasi Jalan, (2021), "Penerapan sistem manajemen keselamatan perusahaan angkutan umum pada angkutan barang", Jakarta, Hal1-15
- [2]. Grinerud, Katrine., Aarseth, Wenche Kristin., Robertsen, Rolf (2021), Leadership strategies, management decisions and safety culture in road transport organizations, Research in transportation business and management, Elsevier, Hal 1-8

https://oss.go.id/informasi/kbli-berbasis-risiko

- [3]. Kamadjaja, Ivan, (2022), "Standar teknis pengemudi truk dan kondisi existing pelatihan dan setifikasi", Prosiding Sidang Para Pakar Keselamatan Transportasi Darat, Jakarta, Hal1-5
- [4]. Mulyono, Agus Taufik, (2022), "Tuntutan standardisasi komponen dan sub komponen jalan yang berkeselamatan", Prosiding Sidang Para Pakar Keselamatan Transportasi Darat, Jakarta, Hal1-14
- [5]. Peraturan Menteri Perhubungan No 60 Tahun 2019 tentang Penyelenggaraan Angkutan Barang dengan Kendaraan Bermotor di Jalan
- [6]. Peraturan Menteri Perhubungan Nomor 85 Tahun 2018 tentang Sistem Manajemen Keselamatan Perusahaan Angkutan Umum
- [7]. Prasatya, I Made Agus. (2022), "Strategi korlantas POLRI dalam penegakan hukum", Prosiding Sidang Para Pakar Keselamatan Transportasi Darat, Jakarta, Hal1-21
- [8]. Pujawan, I Nyoman. (2010). Supply chain management. Edisi kedua, Guna Widya, Surabaya, Hal 5-9, 192-198
- [9]. Rushton, Alan., Coucher, Phil., Baker, Peter. (2014), The handbook of logistics and distribution management, 5th edition, Kogan page, London, Hal 3-15,367-388
- [10]. Setiyadi, Budi. (2022), "Keselamatan transportasi darat", Prosiding Sidang Para Pakar Keselamatan Transportasi Darat, Jakarta, Hal1-9.
- [11]. Tjahjono, Soerjanto, (2022), "Hasil investigasi kecelakaan lalu lintas di Indonesia", Prosiding Sidang Para Pakar Keselamatan Transportasi Darat, Jakarta, Hal1-15
- [12]. Tonhauser, Michal., Ristvej, Jozef (2021), "Implementation of new technologies to improve safety of road transport", proceedings 14th International scientific conference on sustainable, modern and safe transport, Elsevier, Hal 1-6
- [13]. Wildan, Achmad. (2021), "Sistem manajemen keselamatan angkutan jalan", Prosiding QnA TruckMagz Learning, Jakarta, Hal 1-11

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