Evaluation of Vehicles Transport Procedures on Board of KMP Lohoraung and KMP. Tarusi at Likupang - Biaro and Likupang – Melonguane Tracking, North Celebes Province

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Abstract

The Ferry Port of Likupang is one of the ferry port located in North Sulawesi province, has a very strategic position and has a huge economic potential to support the local economy. In the security and safety of the transportation system highly favored as a form of good service delivery. Safety was shown not only to the service users, but also to the ship operator. As well as setting up and handling of cargo vehicles on board. The better regulation and vehicle handling on board the better the level of security and safety of vehicles in ship.

Settings and cargo handling vehicles on the ship is good for the service user / owner of the vehicle, as well as for the security and safety of vehicles on board and are not harmful to the operator of the vessel that can be done by means of an approach based on the arrangement of the vehicle by placing a distance between the vehicle safe and mounting strap vehicle (Lashing) contained in the Ministry Of Transportation Regulation Number 115 of 2016 on procedures for the transport of vehicles on the vessel and Ministry Of Transportation Regulation Number 30 of 2016 on concerning the binding obligation on Ferry Transport.

Keywords: Ports; Ships; Loading; User Service; Ship Operator.

1. Introduction

Transport has important and strategic role to support the development in order to achieve national development goals so it was felt necessary to have characteristics that are able to reach all corners of the land and integrating other transport modes as well as services safe, secure, fast, smooth, orderly, organized, comfortable and efficient. This will lead to the diversity of activities posed to inform and influence people’s mobility will be a variety of business purposes, work, school, and other social activities.

A bridge crossing transport movement for a separate transport network by the waters and the absence of adequate land to pass. The existence of ferry transport plays an important role to support economic growth and development in the two regions separated by water. Therefore, the
implementation must be balanced with good services. Good services include adequate facilities and infrastructure, as well as a good port operations.

Crossing the harbor in North Sulawesi remains a priority for connecting a separate area by the waters. The Ferry Port Of Likupang is one port in the province of North Sulawesi serving three Trackings, namely Tracking-Biaro Likupang-Tagulandang-Makalehi-Siau, Tracking-Pananaru Likupang-Melonguane, Tracking-Melonguane Likupang-Marampit-Miangas. Crossing transport used is Ro-Ro vessel named KMP. Tarusi, KMP. Lohoraung and KMP. Watunapato government property.

Currently on existing ships in The Ferry Port of Likupang vehicle transporting arrangement, the determination of the vehicle's position on the ship are still overlapping and incompatible with proper regulation so that the charge was still haphazard arrangement and disrupt the activities of loading and unloading ships. At the Ferry Port Of Likupang also the unavailability of a special officer for lashing the vehicle so as to perform the loading of the vessel - the vessel Ro-Ro is very harmful to the safety in because vehicles - vehicles that enter the vessel in position with a very close distance and without securing strap (lashing) matching the rules so it is harmful both for the vehicle operator or operators of ships which are on board.

2. Research Method
This research method using primary data and secondary data, while the methods used are as follows:

a. Methods of Observation
The method is performed by direct observation of actual conditions on the ground that the activities of loading vehicles on board, setting vehicles on board, procedures for binding of a vehicle on board, fell immediately to conduct surveillance, watch and observe the binding of a vehicle on board.

b. Methods Interviews
The method used to obtain information related to the binding of a vehicle on board as well as procedures for loading vehicles on ferries to the ship's officer.

c. Method Literature
Library method is to obtain secondary data obtained from the literature or books - books in the library of Inland Water and Ferries Transportation Polytechnic of Palembang and books - more books related to the research.

d. Institutional Methods
Institutional method is the collection of data by way of a visit to the agency - the agency or office - the office to obtain secondary data. The author uses this method to collect data from the agency or office that is associated with this study are as follows:

1) BPTD Region XXII North Sulawesi
2) The Ferry Port Of Likupang service unit
3) Transportation agency of North Minahasa regency
4) The Central Statistics Institution of North Sulawesi Province

This data was obtained through the annual report or monthly report that is then assessed and processed and analyzed as supporting material in the discussion of the issues.
3. Results and Discussion

In conducting research to resolve this author using a reference by the Minister of Transportation Regulation Number 115 of 2016 on Procedures for Transportation Vehicles on Ships and Regulation of the Minister of Transportation Regulation Number 30 of 2016 on Binding Obligations On Boat Transport Vehicles crossing as a reference in solving the problem as follows:

a. Procedures for Transportation Vehicles

1) Vehicle Weighing Equipment

Based on survey results obtained in the field that any vehicle to be transported to the vessel does not include information on the type and weight of cargo due to the lack of vehicles weighing device. System is planned that each port used to transport vehicles by ship should prepare scales for vehicles in the port area for weighing vehicles before being transported aboard ship.

2) Circumstances Vehicle

Based on the results of a survey conducted they found a vehicle that is positioned crosswise. This is one of the violations committed by the operator of the ship, so it was clear that the party of the vessel operators do not pay attention to the level of safety of service users. The planned system Regulation of the Minister of Transportation Regulation Number 115 of 2016, article 17, paragraph 1 vehicle must be placed lengthwise (longitudinal) direction of the bow or stern of the ship and the ship should not cross. Therefore, if the operator of the ship still make mistakes, it can be sanctioned.

3) The distance between the vehicle and the vessel wall

According to The Ministry of Transportation Regulation Number 115 of 2016 Article 20 and the Minister of Transportation Regulation Number 30 of 2016 Article 5 that the distance between the vehicle and the wall as follows:

1. The distance between one side of the vehicle at least 60 cm
2. The distance between the front and rear of each vehicle 30 cm
3. For vehicles beside the side adjacent to the wall of the vessel, within 60 cm calculated from lining the inner wall or outer side of the joist

Based on the results of the field survey still a lot of preparation vehicles on the boat were very close. The planned system is by adjust the distance between the vehicle and to the vessel wall in accordance with existing regulations.Shipping clerk must perform measurements of length and width, then the officer loading inside the vessel had to use a stick or ruler media with a length of 30 cm and 60 cm to provide a distance between the vehicle in accordance with The Ministry of Transportation Regulation Number 115 of 2016, chapter 20.

b. Techniques and Procedures Binding Vehicle On Boat

1) Mechanical Lashing

Existing condition that was found in terms of the safety of the loading process is far from safe, because they are found not all do the lashing vehicles. The vehicles in the lashing only vehicle that allows for lashing or are located near the point of binding, the binding was also not appropriate regulatory standards. The planned system that is based on the rules that have been made by the
government according to The Ministry of Transportation Regulation Number 115 of 2016 About Procedures for Transportation Vehicles in Upper Boat in article 19, paragraph 1 Every vehicle shall be binding during the cruise. The government also issued a rule in which the binding of a vehicle must meet existing provisions, such as Article 18 in The Ministry of Transportation Regulation Number 115 of 2016 explained that the overall weight of the vehicle between 3.5 tons to 20 tons should use a binder at least two means of fastening, for a vehicle that has an overall weight of 20 tons to 30 tons must use at least 3 fastener tools and vehicles that weigh 30 tons to 40 tons using four tools binder. But in field conditions, lashing used is not viewed in terms of the overall weight of the vehicle.

2) Line required lashing

Existing condition that is found in a field that is not all vehicles that do the binding (lashing) either on the sequences of the bow, middle and aft. The vehicles in the lashing only on the vehicle adjacent to the point of binding, binding did not meet standards. Under the planned system rules shall be binding on the sequences of the bow, the middle and stern contained in The Ministry of Transportation Regulation Number 115 of 2016 About Procedures for Transportation Vehicles in Upper Boat.

To maintain the balance of the ship, the government issued a regulation where required to do the lashing on the vehicle which is located in the row direction, middle and aft. While the vehicle is not done lashing, then the clamp on the wheels of the vehicle. But the conditions on the ground have not been applying the rule, based on the observation of this happened because of constraints on the executive officer of his lashing that does not exist.

3) The Kind of Tool Bond (Lashing)

Fastener tools (lashing gear) payload is all well permanently attached tool or a tool - a tool that can be moved - moved, used to bind and support units - a unit charge. To maintain security and safety in shipping the government issued a mandatory rule which does lashing or binding. Based on the observations of the writer, ship operators only provide the tools fastener types of rope and clamp on the wheels of the vehicle to clamp it was only in the form of a booster made of wooden beams. The planned system that is based on the rules set forth the requirements of the type of equipment that can be used in the form of a chain or other device made of steel or other material that has the strength and character of the same flexibility, power fastener tool should not be less than 120 KN.

4) Availability Officers To Tie Vehicles

According to Ministry Of Transportation Regulation Number 30 of 2016, article 6, paragraph 2 that the number of officers to bind a vehicle adapted to the schedule of ships. According Utomo and Susilowati (2017) in his article that in order to carry out the lashing of the vehicle can reach 3-5 minutes done by one person. Based on the survey, that the unloading services at The Ferry Port Of Likupang with a duration of 1 hour, starting at 15:00 pm until 16:00 pm to ship KMP. Lohoraung and 16:00 pm until 17:00 pm for KMP. Tarusi.

Based on observations field for the lashing of vehicles on ferry ports Likupang performed by driving this happens because of the unavailability of the ship above the officers to undertake vehicle lashing. The planned system that is by providing two officers who stand by at The Ferry Port Of Likupang of binding vehicles in KMP. Lohoraung and KMP. Tarusi.
c. Comparison Between Existing Systems With Planned Systems

1) The existing system

Disadvantages:

a) As a result of the adjacent vehicle distance service users is difficult to get out of the vehicle or passing through the car deck to get on board.

b) Lack of comfort for users of services in the absence of a good vehicle settings.

c) Non-performance of the binding of a vehicle (lashing) on board could endanger the safety of shipping.

d) Losses due to the use of the type of fastener tools (lashing) ropes are less effective in terms of strength in which the binder is minimal burden can jeopardize the safety of the ship, passengers and vehicles.

e) The absence of a special officer fastening vehicles result in no party can be held responsible in case something undesirable.

f) As a result of the unavailability of facilities Weigh it is not known with certainty the total weight of the vehicle which transported

2) The planned system

Advantages:

a) The vessel will have inter-vehicle distance control system onboard were safe and comfortable and more secure shipping safety.

b) By implement binding of a vehicle (lashing) as well as the procedure for loading an appropriate vehicle based on The Ministry of Transportation Regulation Number PM 115 of 2016 About Procedures for Transportation Vehicle Above Boat and Regulation of the Minister of Transportation No. 30 of 2016 Obligations Binding Vehicle Above Ships crossing at the time of shipping the the cruise will provide comfort for service users.

c) With the special officer fastening vehicle based on Regulation of the Minister of Transportation No. 30 Year 2016 Binding Obligations on board that if something happens no one is responsible.

d) By providing the weighbridge the total weight of the vehicle to be transported can be known so much easier to be able to determine the stability of the ship.

4. CLOSING

a. Conclusion

Based on the analysis of the problem that has been done on this Mandatory Working Paper, the authors draw the following conclusion:

1) The procedure for transporting vehicles on the boat at The Ferry Port Of Likupang not in accordance with the procedure for transporting vehicles that have been set by The Ministry of Transportation Regulation Number 115 of 2016 as:

a) Likupang Ferry Port is not provide scales for vehicles

b) They found a vehicle that is positioned crosswise
c) Straps used to bind the vehicle is still in the form of a rope
d) The binding system of the vehicle does not match the vehicle's weight
e) At KMP. Tarusi and KMP. Lohoraung not all vehicles made binding
f) The spacing between adjacent vehicles

2) Research shows that the binding of the vehicle on the vessel at The Ferry Port Of Likupang related deficiencies in its implementation are not according to standards, as well as lashing equipment used is also not fit the standard

3) The unavailability of a special officer for lashing in accordance with The Ministry Of Transportation Number 30 of 2016 on Binding Obligations Ships Vehicles crossing over.

**b. Suggestion**

1) Need to improve performance in KMP. Lohoraung and KMP. Tarusi based procedures for transporting the vehicle on board and binding obligations on ferry transport vehicles set out in the regulation on the boat associated with the weighing, ordinances binding and fastener tools vehicle.

2) Require intensive supervision and checking of the authorized officer in the activities of vehicle loading on the vessel to determine if the vehicle has been loaded on the ship in accordance with applicable regulations

3) Based on the calculation that The Ferry Port Of Likupang for KMP. Lohoraung and KMP. Tarusi must provide 2 special officer assigned to conduct the rope binding the vehicle, because of the presence of the officer who provided the implementation will be faster loading of the vehicle and no one is responsible if anything happens while sailing like accidents due to bad weather. If the operator of the ship did not have enough officers then ship operators should be recruit new officers and give a briefing to the ropes binding the vehicle.

**5. References**

4) Act No. 17 of 2008 on shipping.
5) The Government Regulation Number 51 of 2002 on Shipping.
6) Regulation of the Minister of Transportation Regulation Number 26 of 2016 on Operation Of Transport Ferry.
7) Regulation of the Minister of Transportation Regulation Number 30 of 2016 on Obligation To Ship Transport Vehicles Bonding Ferry.
8) Regulation of the Minister of Transportation Regulation Number 115 of 2016 on Procedures For Transport On Board.