EVALUATION OF TRAFFIC MANAGEMENT AT PORT CROSSING GILIMANUK

Siti Nurlaili Triwahyuni¹, Elfita Agustini², Ni Komang Budiantini³

Abstract
Traffic management at the port is very important to create order, regularity, and smooth or comfortable activities in the harbor transport through the implementation of a zoning system and traffic management in accordance with applicable regulations. However, the implementation of zoning is still not optimal because there are still hawkers around the port and the occurrence of crossings between vehicles which makes service users uncomfortable and the flow pattern at the port is not smooth so that it can cause congestion. The method in this research is descriptive qualitative with several approaches in obtaining data as reference and comparison material to describe the state of the object under study in accordance with the situation and conditions when the research was conducted. Based on the analysis results obtained, the zoning system has not been implemented in accordance with the Regulation of the Minister of Transportation Number 29 of 2016 concerning Fertilization of Ferry Ports and there are still crossings between vehicles that will enter and leave the ship. From the results of the analysis, it is necessary to rearrange traffic management and apply the zoning system in accordance with applicable regulations.

Keywords: flow pattern, zoning, management.

1. Introduction
Crossing transportation is a link for areas that cannot be passed by land because they are cut off by water. Until now, the movement of people and goods from one island to another can be accessed using a ferry. There are several things that must be considered in transportation, namely order, order and smoothness so as to create safe and comfortable transportation. The management of crossing traffic at the port aims to create order, order and smoothness as well as the convenience of activities at the ferry transport port through a zoning system and traffic management in accordance with the Regulation of the Minister of Transportation Number 29 of 2016 concerning Fertilization of Ferry Ports and the Decree of the Director General Number 242 of 2010 Regarding the Technical Guidelines for Crossing Traffic Management, it can be carried out through activities that include the implementation, planning, supervision and control of crossing traffic at ports and routes.

¹ Lecturer of Politeknik Transportasi Sungai, Danau & Penyeberangan Palembang, E-Mail: elly.thecullens@gmail.com
² Lecturer of Politeknik Transportasi Sungai, Danau & Penyeberangan Palembang, E-Mail: elfitaagustini@gmail.com
³ Alumni of Inland Water And Ferries Transport Polytechnic of Palembang E-Mail: budiantini01@gmail.com
However, the Gilimanuk Ferry Port has not implemented zoning and its implementation has not been optimal because there are still hawkers who sell in zone C or around the gangway and pass by in the trestle area and the parking lot is ready to load this is not in accordance with the current regulations, namely Regulation of the Minister of Transportation Number 29 of 2016 concerning Fertilization of Ferry Ports. In the ready-to-load parking area there is a traffic flow that is not smooth, the traffic flow pattern at the Gilimanuk Ferry Port is still a meeting between vehicles which at the time of loading and unloading ships there is still contact between vehicles in the ready-to-load parking lot which results in the accumulation of vehicles or congestion in the parking lot. This has an impact on the loading time becomes longer and loading time becomes faster which can be detrimental to the costs, energy and time of service users.

The situation at the Gilimanuk Ferry Port is not sterile and there are still crossings between vehicles that make service users uncomfortable and smooth. This is due to the incompatibility of the ideal conditions as stated in the Regulation of the Minister of Transportation Number 29 of 2016 concerning Fertilization of Ferry Ports and the Decree of the Director General of Land Transportation Number 242 of 2010 concerning Technical Guidelines for Crossing Traffic Management.

The objectives to be achieved in this study are to determine the suitability between the efforts to regulate passenger and vehicle traffic management at the Gilimanuk Ferry Port in accordance with applicable regulations and to plan for regulating the flow of vehicle and people traffic to improve the smoothness and comfort of service users at the Port. Gilimanuk crossing.

2. Research Methods

This research is a qualitative research. The implementation of the research includes: 1) the observation stage, 2) the identification stage, 3) the literature study stage with the data that has been obtained and then recapitulating the data, 4) analyzing the data and solving problems, 5) the final stage of the research. The data to be collected in this study include daily productivity data at the port, vehicle and passenger traffic flow patterns and documentation of conditions at the port. The method used to collect data is survey and observation method. Qualitative descriptive analysis is research that describes, describes or describes the state of the object under study as it is, according to the situation and conditions when the research was conducted (Sugiyono, 2017). The analysis carried out is an analysis of the flow pattern arrangement that is planned to minimize crossings that occur by redesigning the flow of vehicle traffic to the Plengsengan pier and analyzing the application of ferry port sterilization in accordance with applicable regulations.

3. Results and Discussion

The zoning system is not in accordance with the Regulation of the Minister of Transportation Number 29 of 2016 concerning Fertilization of Ferry Ports because there are still many hawkers around the port and signs that are not in accordance with the applicable rules so they do not know the boundaries of the zone. Regulating the zoning system at ports based on the Regulation of the Minister of Transportation Number 29 of 2016 concerning Ferry Port Sterilization, it is mandatory to regulate and control both passengers and vehicles by carrying out ferry port sterilization to expedite and regulate vehicles and passengers in order to create a comfortable and smooth atmosphere.
Zone determination to support comfort and smoothness based on applicable regulations, the zone system can be divided into 3, namely: 1) zone A for people, 2) zone B for vehicles, and 3) zone C for vital facilities. Zone A in question is as follows: 1) zone A1 for the placement of counters and vehicle parking and only for passenger delivery/pick-up, 2) zone A2 for waiting rooms and only for prospective passengers, and 3) zone A3 for inspection of passenger tickets and only intended for people who will cross. Zone B in question is as follows: 1) zone B1 for placing weighbridges and vehicle toll gates in the port area, 2) zone B2 for queuing vehicles that will cross in the port area, and 3) zone B3 for loading areas for vehicles ready to enter ships. Zone C is a vital facility that functions for the security and safety of important facilities, and is prohibited from entering except for port officials. Zone C is a bunker, generator, moveable bridge or gangway operator’s house, water hydrant, substation and bolder area.

The division of the zone system to facilitate services is divided into two zones, namely for vehicles and people zones. In order for the ferry port to be well organized, it is necessary to have area restrictions for vehicles entering the port so that the operational pattern can run optimally and the zoning system arrangement runs smoothly.

The flow pattern for vehicles leaving and entering the port area is still not running smoothly because there are still vehicles crossing between vehicles leaving the moveable bridge 2 dock with vehicles going to the pontoon dock and vehicles leaving the moveable bridge 3 dock and vehicles which will go to the plengsengan pier (LCM).

Irregular traffic flow patterns can lead to conflicts, namely meetings between vehicles when vehicles enter the moveable bridge pier and Plengsengan pier or pontoon dock used for loading and unloading activities, as well as passengers descending through vehicle lanes that can endanger passengers. In order to create comfortable and smooth traffic conditions, it is necessary to regulate vehicle traffic patterns in the port area so that smoothness at the port can be organized.

In the selection of the new system, there is an alternative pattern of vehicle movement, namely by regulating the direction of movement of vehicles entering and leaving the port, as well as establishing a zone system for the convenience and smoothness of service users and operating the Plengsengan dock tollgate which has not been opened every day on Sundays. normal. Signs and officers will be installed to prevent crossing. Reset the traffic flow for the path of vehicles leaving the ship.

Vehicles with a payload of under 35 tons cross by using the movable bridge pier and pontoon dock facilities, while vehicles with a payload of over 35 tons cross by using a ship at the Plengsengan pier and the movement patterns of passengers getting off the ship. Passengers exit the ship through the ramp door through the trestle for vehicles and through the gangway for passengers and exit the port via the planned road.

Passengers who get off the ship enter the special passenger lane (gangway) through the pier to the passenger waiting room (zone A2), after arriving at the passenger waiting room they exit to the parking lot for passengers who are picked up and for passengers who walk to the zebrcross, all passengers are good being picked up and pedestrians leaving the port.

To support the zoning system and traffic flow patterns at ports, it is necessary to have signs, road markings and additional officers in the port area who provide warnings, orders, prohibitions and instructions for service users. So to direct the flow of traffic and road equipment as a barrier or barrier for passenger and vehicle traffic.
After arranging the placement of signs as a supporter of the zone system, then placing a traffic cone or traffic cone made of plastic or rubber measuring 50 to 90 cm, so that it seems lighter and easier to move, especially when the vehicle is going to park or going to the ship. After that, it is also arranged for the placement of road markings in the form of a white line that limits one vehicle to another in the parking area for ready-to-load vehicles.

The existence of signs to provide information and instructions for service users to regulate and direct traffic flow is required by officers at designated locations as regulators and instructions for passenger and vehicle traffic. Placement of officers at the intersection post for vehicles exiting and entering the parking lot ready to load, placing officers in zones B2 and B3.

4. Closing

Based on the results of research and discussion, it can be described the conclusions of the research results which are the answers to the problems posed in this study. The conclusion is that the management of passenger and vehicle traffic at the Gilimanuk ferry port is not in accordance with applicable regulations. The application of sterilization at the Gilimanuk ferry port is still not optimal, the division of zones that cannot be identified, it is necessary to optimize the application of ferry port sterilization in accordance with the Regulation of the Minister of Transportation Number 26 of 2016 concerning Ferry Port Sterilization to increase comfort for both operators and service users and so that the necessary arrangements to improve the smoothness and comfort of service users at the Gilimanuk Ferry Port is to plan to rearrange the traffic flow at the Gilimanuk Ferry Port.