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Evaluation Of Zonation System Implementation For Passengers And Vehicles In Marisa Flighting Port, Pohuwato District, Gorontalo Province, 2020

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ABSTRACT

Marisa Ferry Terminal is a port that serves the Marisa - Dolong - Supply - Ampana route. The existence of the Marisa Ferry Port has a very important role in supporting economic activity and equitable development in Pohuwato Regency. However, at this time many people and unauthorizedvehicles can easily enter the port area, causing the port to become less regulated, such as traders who sell their merchandise at port area, delivery / pick-up enters the port dock area. This is due to the absence of a zoning system in accordance with the Regulation of the Minister of Transportation Number: 29 of 2016 concerning the Sterilization of Ferry Ports. So that in the activity of getting on and off of passengers and loading and unloading vehicles, there are several obstacles, among others, the irregularity of the traffic flow pattern, the absence of zoning in the port which causes unauthorized people to enter restricted areas. This research aims to; 1) To Know Sterilization Passengers and Vehicles at the Ferry Port. 2) To analyze the existing conditions of passenger and vehicle sterilization at the Marisa Ferry Terminal, Pohuwato Regency, Gorontalo Province in 2020. 3) And to evaluate the sterilization of passengers and vehicles and any supporting facilities needed. The research methodology used is direct observation in the field (field research) with measurement studies and literature (literature). Then to analyze this based on the Decree of the Director General of Land Transportation Number SK, 242 / HK.104 / DRJD / 2010 concerning Technical Guidelines for Ferry Traffic Management and PM Number 29 of 2016 regarding ferry port sterilization. The analysis used is the zone system analysis, analysis of vehicle and passenger traffic patterns and the equipment needed to support the zone system. As for the results of this study are 1) That the sterilization of passengers and vehicles is a zone arrangement system at the crossing port from the accumulation of passengers and vehicles. 2) Whereas the existing conditions of the Marisa Ferry Port, pohuwato district, Gorontalo province are not in accordance with the Minister of Transportation Regulation Number 29 of 2016 concerning the Sterilization of Ferry Ports. 3) And that the evaluation in this research states that there are no supporting facilities such as weigh bridges and portals at the Marisa Ferry Terminal which results in an accumulation of the number of passengers and vehicles while operating.

Keywords: Evaluation; Sterilization; Passengers and Vehicles; The Marisa crossing.

1. Introduction

Transportation is one of the facilities for an area to develop and develop and transportation can increase the accessibility or the relationship of an area because accessibility is often associated with the region. To build a village, the existence of transportation infrastructure

and facilities cannot be separated in a development program. The continuity of an efficient production process, investment and technological developments as well as the creation of markets and value are always supported by a good transportation system. Transportation isa very important and strategic factor to be developed, including serving the transportation of goods and people from one area to another and supporting the development of other sector activities to increase national development in Indonesia. [4]

Crossing transportation has a very important role in the transportation sector, which functions as a moving bridge that connects the road network and / or railroad network thatis cut off due to the presence of water to transport passengers, vehicles and goods. Ferry transportation can increase the economic potential of an area [5].

In the Dutch colonial era, Gorontalo Province was known as the "Gorontalo Peninsula" (Gorontalo Peninsula), which is located in the northern part Sulawesi Island, precisely at 0 ° 19 ' 00 "- 1 ° 57 ' 00" North Latitude) and 121 ° 23 ' 00 "- 125 ° 14 ' 00" East Longitude) with a height of 05-25 meters above the surface the sea. The location of Gorontalo Province is very strategic because it is flanked by two waters, namely Gorontalo Bay or better known by the name Tomini Bay to the South and Sulawesi Sea to the north. Gorontalo is a new province that was formed on February 16, 2001. The ferry transportation in this province is located in Paguat District, which is one of 13 sub-districts in Pohuwato Regency. One of the transportation nodes to support this is the port. The Marisa Ferry Port is a pioneering port managed by the Gorontalo Province Area XXI Land Transportation Management Center and supervised by the Directorate General of Land Transportation which serves the Marisa - Dolong - Supply - Ampana crossing route with a route length of 110 miles and a distance of12 hours. The ships operating on this route are KMP. Cengkih Afo ship which is a ship owned by PT. ASDP Indonesia Ferry (Persero). [6]

In the current condition, the Marisa Ferry Port is not functioning optimally. This is due to the fact that the zoning system has not been implemented in accordance with applicable regulations, causing parking vehicles around the jetty area, there is no distribution of parking space which results in delivery / pick-up vehicles and vehicles that will cross parking in any place, incomplete land facilities in the form of weigh bridges and a portal to measure the weight and height of vehicles that want to cross, as well as incomplete facilities in the terminal building such as the waiting room where there are only a few chairs, unavailability of medical rooms, nursing mothers' rooms and the condition of the prayer room which is locked resulting in people more likely to wait around the parking area . In addition, the passenger and vehicle counters that are combined into one result in the driver of the crossingvehicle having to get off the vehicle and head to the counter at the terminal to buy a ticket. Irregular and directed traffic management like this will affect conditions that hinder operational activities at the Marisa Ferry Port.

In accordance with the Regulation of the Minister of Transportation Number 29 of 2016 concerning the Sterilization of Ferry Ports, that every ferry port is required to pay more attention to the division of zone zones, layout, and traffic regulation at the Ferry Port, both passengers and vehicles as well as the Decree of the Director General of Land Transportation. Number: SK.242 / HK.104 / DRJD / 2010 Regarding Ferry Traffic Management, each ferry port is required to pay more attention to traffic regulation at the crossing port, both passengers and vehicles so that operational activities at the Port can be more orderly, orderly and smoothly. The smooth movement of cargo at a port shows the success of a port's performance in regulating and processing port operations to be better in providing services to the community [7].

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2. Research Methods The

methods used in this research are:

a. Primary

Data Primary data is data obtained directly from the source or based on direct observations in the field. The method used in primary data collection is divided into two, namely [8]:

1) Observation Method

In this method the surveyor observes the condition of the object by using his five senses because in this method the surveyor reviews, monitors and directly observes conditions in the field. This method is very simple but requires precision to observe objects carefully within a certain period of time and to take direct documentation regarding port conditions.

2) Method of Calculation

Here the surveyor counts / counts the number of objects in a certain period of time using tools (such as counters, etc.) or with the help of a straight line (to show the number 5). The data obtained are in the form of accurate quantitative data.

a) Daily Productivity Survey

Calculating port productivity per day, this survey was conducted for 15 days.

b) Measurement of Port Area Measuring the

area of the port area and its facilities using measuring tools.

b. Secondary

Data Secondary data is data that is not collected by researchers themselves. Secondary data is obtained from various agencies related to the object of research which is then processed and recapitulated so that it becomes one standard data. The methods used to collect secondary data include [9]:

1) Literature method

namely by studying theory and literature and lecture modules in the Palembang River, Lake and Crossing Polytechnic library as well as the legal bases related to the problemsto be studied as a theoretical basis in analyzing and solving problems.

2) Institutional Methods

Done by collecting data from agencies associated with this research. This secondary data was obtained from several related agencies, such as:

1) Land Transportation Management Center for Region XXI, Gorontalo Province.
2) PT.ASDP Indonesia Ferry (Persero) Luwuk Branch.
3) Gorontalo Province Central Bureau of Statistics

3. Results and Discussion

a. Current Conditions

at the Marisa Ferry Port have not implemented a proper zoning system so that there are still many unauthorized people entering the forbidden port area, such as traders selling

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their wares in places that are not allowed, delivery / pick-up entering the port dock area as well as passengers not waiting in a space that has been provided such as a waiting room, this causes the port to become irregular and can interfere with operational activities at the port. The following is a description of the current conditions at the Marisa Ferry Terminal:

Figure 1 conditions Existing at the Marisa Ferry Terminal

Description:

a. Passengers do not wait in the space that has been provided such as waiting room
b. Passengers and Vehicles waiting at the Trestle near the pier
c. Irregular parking
d. Deliverers / pickers are free to enter the jetty area

b. Determination of the Zone System

From looking at the current conditions at the Marisa Ferry Terminal. So a zoning system is needed to curb vehicles and passengers in order to support the safety and comfort of activities at the port. In accordance with the Minister of Transportation Regulation Number 29 of 2016 concerning the Sterilization of Ferry Ports in the zoning system planning must pay attention to:

The following is the layout of the zoning system plan based on PM No. 29 of 2016 concerning thesterilization of ferry ports

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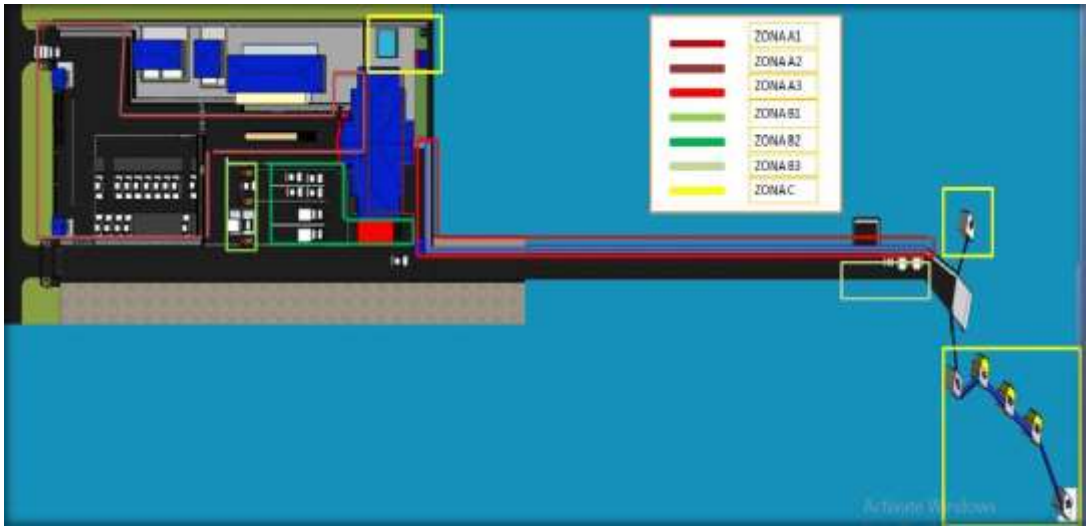

Figure 2 Layout of Marisa Ferry Port Area Zoning System Plan

Description:

1) Passenger zone (Zone A)

Zone A1: It is a public zone that functions for the placement of port gates, parking lots for delivery / pick-up vehicles, passenger ticketcounters.

Zone A2: Namely a limited public zone that functions as a passenger waiting room for prospective passengers who will cross (already have tickets) and service users (deliverymen) who do not cross but have port maintenance service fees.

Zone A3: Namely a restricted zone that functions for the gangway and as aplace to check passenger tickets.

2) Vehicle Zone (Zone B)

Zone B1: Namely the general zone that serves as the port gate.

Zone B2: Namely a limited public zone which functions as a parking lot for vehicles queuing to cross that already have a ticket before entering the ship.

Zone B3: It is a restricted zone which functions as a parking lot for vehicles readyto load / get on board.

3) Security Zone (Zone C)

Zone C: which functions for the security and safety of important facilities, which are prohibited from entering except for officers, among others:

a) Water reservoir
b) Electrical Substation / Genset
c) Bolder's Place

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Table 1 Comparison of zoning systems at the Marisa Ferry Terminal

No	Current	conditions Planned conditions
1	There is no application of a zone system and layout arrangement at this port so that the division of areas for each service user at the port, both passengers and vehicles, can be divided properly.	Proposal to implement a zoning system at the port is in accordance with the Minister of Transportation Regulation Number 29 2016 concerning the Sterilization of Ferry Ports so that access between passengers and vehicles can be implemented so as to create a safe, orderly and regular ferry port

Table 2 Comparison of current and planned condition facilities

No	Current	conditions Planned conditions
1	The absence of weight and height measurement tools for vehicles so that vehicles with excess loads can still get on board	Proposed construction and placement of weigh stations and portals so that the weight and height of vehicles can be limited so as to reduce the risk of accidents due to overloading
2	The mixing of ready-to-load parking areas and parking areas for delivery and pick-up vehicles	Proposed separation of ready-to-load parking areas and parking for shuttle vehicles to reduce the risk of vehicle accumulation
3	Mixing of passenger and vehicle	counters Separation of passenger and vehicle counters in order to improve services at ports

The application of the zoning system and layout arrangement in the Marisa Ferry Port area is very important to be implemented immediately because it concerns security, safety, comfort, order and order of service users at the port.

Figure 3 Planned Passenger Traffic Flow PatternsDescription of the drawing up and down of passengers:

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1. Get on the ship
   a. All passengers and deliverers or pick-ups enter through the main gate of the port and drop off passengers at the delivery / pick-up vehicle parking lot, then go to the passenger ticket booth located in the passenger terminal building, while the delivery vehicle can park their vehicle in the delivery and pick-up parking area (zone A1).
   b. Passengers (have tickets) are waiting in the waiting room (zone A2).
   c. Passengers who will board the ship, first exit the waiting room and head to the gangway, where ticket checks will be carried out, and ticket checking only once (zone A3)
   d. Passengers enter the ship through the ramp door by following the ship operator's instructions (zone C).

2. Get off the ship
   a. All passengers disembark from the ship and enter the special passenger lane (gangway)through the pier to the passenger waiting room (zone A3).
   b. After arriving in the waiting room (zone A2), after arriving at the waiting room, passengers go out to the parking lot for the passengers they picked upand for passengers who walk to the zebracross
   c. All passengers, both picked up and pedestrians, leaving the port (zone A1)

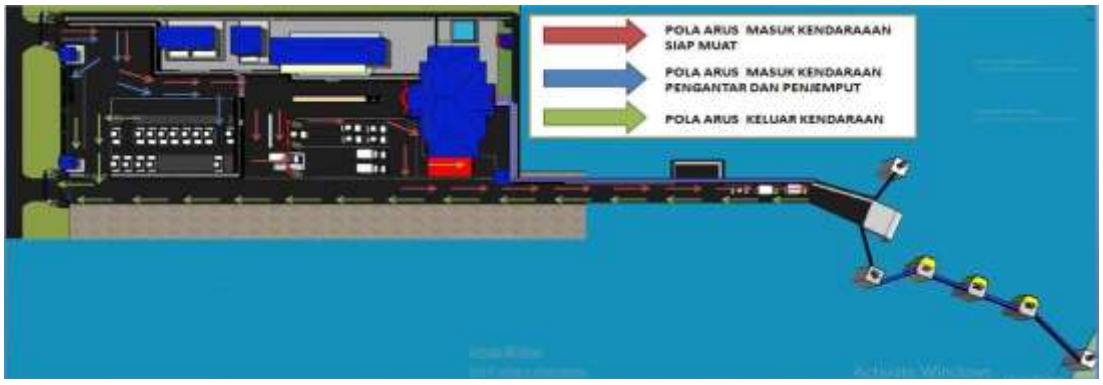

Figure 4 Designated Vehicle Traffic Flow PatternCaption of getting on and off the vehicle:

1. Get on the ship
   a. All types of vehicles enter through the main port of the port to the tollgate vehicle(zone B1)
   b. All vehicles enter the vehicle queue parking lot (ticket checking is carried out) (zone B2).
   c. Vehicles of 4 or more wheels enter the ready-to-load vehicle park in accordance with the instructions of the port operator and ship operator (zoneB3).
   d. Vehicles enter the ship through thedock movible bridge (MB)regularly according to the ship operator's instructions (zone C).

2. Get off the ship
   a. All types of vehicles exit through the roof hatch and jetty (zone C) to zone B3
   b. After arriving at zone B3, the vehicle heads out to zone B1 (zone B2).
   c. All Vehicles exit through the port gate (zone B1)

Based on the results of the analysis that has been obtained, the solutions to the problems that will be recommended are as follows:

1. Separating Passenger and Vehicle Counters. By moving the vehicle counters directly connected to the parking lot ready to load so that it is separated from delivery and pickup vehicles, then optimizing the position of passenger counters in the terminal building by providing passenger gangway facilities and adding officers so that the counter area becomes sterile from service users who only come to dropping off or picking up passengers.
2. Placing weighbridge and portal facilities before the vehicle counter so that control can be exercised over the maximum vehicle weight onboard the ship, in order to reduce the risk of damage to thetype moveable bridge and overload on the ship
3. Checking passenger tickets in front of the exit from the passenger waiting room, so that unauthorized people cannot enter the prohibited zone other than prospective passengers and officers.
4. Rearrange the flow patterns of vehicle and passenger traffic after the separation of vehicle blocks and passenger counters as well as the separation of ready-to-load parking lots and delivery and pick-up parking lots, then placinggangways passenger
5. Addition and placement of supporting equipment for the zone system, such as signs and road equipment that are useful as directions or as a form of prohibition.

4. Conclusion

a. Conclusion

Based on the results of the analysis of the existing problems, the following conclusions can be drawn:

1. Zoning System at a crossing port is a system of zoning arrangement or division of areas at a ferry port from the accumulation of passengers and vehicles so that an orderly division of areas is created.
2. The existing conditions of the Passenger and Vehicle Zoning System at the Marisa Crossing Port, Pohuwato Regency, Gorontalo Province in 2020 are **not in** accordance with the Minister of Transportation Regulation Number 29 of 2016 concerning the Sterilization of Ferry Ports.
3. The Evaluation of the Passenger and Vehicle Zoning System at the Marisa Ferry Terminal, Pohuwato Regency, Gorontalo Province in 2020 states that there is still a lack of supporting facilities such as weigh bridges and portals so that the Zoning System Application at this Port is disrupted.

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b. Suggestions

The suggestions that can be given from the existing problems are:

1. The need to implement the implementation of passenger and vehicle sterilization in accordance with Ministerial Regulation Number 29 of 2016 concerning Ferry Port Sterilization in order to support the smoothness, security and orderliness of the port area.
2. It is necessary to regulate the traffic flow patterns of passengers and vehicles at the Marisa Ferry Port to facilitate the flow of entry and exit from the port.
3. To Evaluate Passenger and Vehicle Sterilization It is necessary to procure port support facilities such as weigh bridges and portals as control of vehicles whose weight and height exceeds the maximum capacity of the ship.

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