Overview Of The Implementation Of The Zoning System At The Port Of Ro-Ro Kuala Tungkal Jambi Province

Sri Kartini¹, Doharman Lumban Tungkup², Desti Yuvita Sari³ & Zeta Amani⁴

¹Politeknik Transportasi Sungai Danau dan Penyeberangan Palembang
*email: sri_kartini@dephub.go.id

Abstract

Zoning is the division or division of an area into several parts, according to the functions and management objectives. Therefore, it is necessary to implement a zoning system in accordance with applicable laws and regulations in order to carry out good transportation activities. But the fact is that the Kuala Tungkal port itself has not implemented a zoning system so that the division of the zone layout at the Ro-ro port is still not good. The method used to analyze the existing problems is the analysis of the zoning system according to the laws and regulations with existing conditions. Based on Ministerial Regulation Number 91 of 2021, a port that meets the standard consists of 5 zones. Zone A, Zone B, Zone C, Zone D and Zone E. However, currently Ro-ro Port only has 3 Zones and there are no weighbridges that are included in Zone B. Based on this analysis, it can be concluded that the Kuala Tungkal Ro-ro Port has not implemented a zoning system in accordance with statutory standards. Therefore, it is necessary to plan for additional zoning by utilizing the empty area around the port as a Development Plan Area for Zone B1 (weighbridge) Zone D and Zone E so that the Ro-ro Port becomes a more organized, orderly and orderly port in accordance with Ministerial Regulation No. 91 of 2021 concerning zoning in the port area used to serve transportation.

Keywords: Application, System, Zoning, Port

1. Introduction

Kuala Tungkal Ro-ro port is located in West Tanjung Jabung regency of Jambi province. In a port the role of ferry transport services has been significantly felt by the people in the archipelago and is still in demand by the people in Indonesia and will continue to grow along with population growth and the flow of private vehicles owned by the community. In accordance with Minister of Transportation regulation number 91 of 2021 concerning. In 2017 the Kuala Tungkal Ro-ro port was inaugurated with only one track and in 2019 there was an addition of the track to a commercial track, the addition of the track at the Ro-ro port was not balanced with the security aspects of the yet planned zoning system.

¹Lecturer of Inland Waterways Journal Transport Polytechnic Of Palembang, email : sri_kartini@dephub.go.id
²Lecturer of Inland Waterways Journal Transport Polytechnic Of Palembang, email : doharman_lumban@dephub.go.id
³Alumni of Inland Waterways Journal Transport Polytechnic Of Palembang, email :
Zoning in the port area is used to serve ferry transport, and each ferry port is required to further implement the division of territorial zones, layouts, and traffic arrangements at the ferry port, both passengers and vehicles, so that operational activities at the port can be more orderly, regular and smooth.

Currently Kuala Tungkal Ro-ro ferry port has not implemented a zoning system and regulation of traffic flow patterns that should be in its daily activities, so that in the implementation of observations in the field there are several problems related to the application of the zoning system such as the absence of a weigh bridge to calculate vehicle tonnage, the absence of a portal to view the dimensions of vehicles, and insufficient parking space. So the need for compliance with the zone system adapted to PM Number 91 of 2021 regarding zoning in the port area used to serve crossing transportation and the decree of the Director General of Land Transportation number : SK.242 / HK.104/DRJD / 2010 on pedestrian traffic management.

The smooth movement of cargo in a port shows the successful performance of a port in managing and processing port operations to be better in providing services to the community. Based on the above background, the authors analyze further in the study with the research title “OVERVIEW OF THE IMPLEMENTATION OF THE ZONING SYSTEM AT THE PORT OF RO-RO KUALA TUNGKAL JAMBI PROVINCE”

2. Research Methodology

The research will be conducted in the form of a review and analysis of the conditions of application of the zoning system at the Kuala Tungkal ferry port. In addition, an assessment of the flow patterns of vehicles at the port. In the implementation of this study using qualitative research methods where this study is descriptive and tend to use analysis. The process and meaning are more emphasized in the research and the theoretical basis is used as a guide so that the research focus is in accordance with the facts in the field.

1. Primary Data
Is data that can be directly from the source or based on direct observation in the field. The Data were obtained from observation / observation, measurement results, and the results of interviews with both the passengers and the relevant officers at the location of street vendors. The primary data obtained during the observation are :
   a) Daily Productivity Data
   b) Vehicle Flow Pattern
   c) Port Inventory

2. Secondary Data
Secondary Data is data obtained based on observations of other parties and in the form of reports in writing, basically its nature is to support the credibility of the primary supporting data or background information for field observations.
   a) Dinas Perhubungan Kabupaten Tanjung Jabung Barat
   b) BPTD Wilayah V Provinsi Jambi

3. Results and Discussion

Analysis of Zoning Problem Solving in Ro-Ro Port
The zoning conditions at the port are not in accordance with Ministerial Regulation Number 91 of 2021 concerning zoning in the port area used to serve crossing transportation because there are several zones that are not yet owned by Ro-ro ports such as weigh bridges, tollgates, Zone D (commercial areas) and Zone E. Both of the zones that do not yet exist, zones that have been divided have also not been able to maximize the condition of the Ro-ro Port such as a narrow waiting room so that when passengers experience an increase in many passengers who rest in the Gangway area and office areas, then the parking area is ready to fit the limited so that many vehicles, especially trucks that park their vehicles along the road to the Port. This can certainly interfere with other vehicles that will enter the port and interfere with the activities of the police and the Navy whose offices are located right in front of the parked truck vehicles.

From the analysis of the problems obtained, an overview of the conditions was made where in the following figure it describes several zones that have not been owned, so that the Ro-ro port can apply zoning in accordance with Ministerial Regulation Number 91 of 2021 concerning zoning in the port area used to serve crossing Transportation.

1. Zone A

   a) Zone A3: passenger ticket inspection

   ![Figure 1. Passenger Ticket Inspection Area](image)

   Currently at the port there is no A3 zone or passenger ticket check point, Zone A3 itself serves as a road and passenger ticket check point that will enter the ship to prevent passengers without tickets who pass into zone A3 so that passengers can be more orderly.

2. Zone B

   a) Weigh Bridge
Currently the Port of Ro-ro does not have a weighbridge, weighbridge itself has a function to calculate the load of a vehicle to comply with the standards, figure 4.42 is an overview of the plan for the weighbridge.

b) Toll Gate / Vehicle counter

Here is an overview of the plan for the tollgate at the Port of Ro-ro which serves for the placement of weighbridges and tollgates or counters for vehicle tickets.

3. Zone C
   a) Gangway/Causeway
Designated passenger lane at the port where the gangway leads out of the port. Currently, the gangway line does not have a fence/barrier so that when passengers get off or leave, many walk outside the gangway line. This can certainly disrupt the flow pattern of vehicles, with the planned barrier / fence, it is expected that passengers can be more orderly walking in a special passenger lane (gangway).

4. Zone D
   a) Commercial District (Mall)

Commercial area (Mall) is an area that reflects a form of trade activity in a city that includes retail trade activities and local scale service business that has a great influence on the region.

5. Zone E
Buffer Zone (vehicle stacking Area outside the port) is parking for vehicles that already have a ticket but it is not time to enter the crossing port with the planning for Zone E, it is expected that there will be no more stacking of vehicles ready to load with vehicles that do not yet have a scheduled departure.
Because there are still some zones that do not have ro-ro ports such as Zone B1 (weighbridge and Tollgate) Zone D (commercial area/Mall) and Zone E. From the layout in the picture there is vacant land in the port area which will be used as a planned area for the construction of Ro-ro port which can be used as a place for Zone B1 (weighbridge and Tollgate) Zone D (commercial area) and Zone E. So that from this development plan, the application of the zoning system at the Ro-ro port can be in accordance with Ministerial Regulation Number 91 of 2022.
Figure 8. Regional Development Plan zone B1 (weighbridge and Tollgate) Zone D (commercial area) and Zone E

Figure 10. Layout Plan of zoning division in Kuala Tungkal Ro-ro Port
b. Application Of Vehicle Flow Patterns

1) The following is a plan of vehicle flow patterns in Kuala Tungkal Ro-ro Port:
   a) plan for the flow pattern of vehicles boarding the ship at the Kuala Tungkal Ro-ro crossing Port:
      (1) motorcycles and cars enter through the tollgate to buy tickets
      (2) the truck or freight passes through the weighbridge then buys a ticket at the vehicle tollgate (which has the cargo weigh the weight of the cargo and the vehicle in Zone B1)
      (3) vehicles that already have tickets to the field queue ready to load (Zone B2)
      (4) vehicles that do not have scheduled departures but already have tickets are directed to Zone E to park their vehicles in the Buffer zone
      (5) vehicles in Zone B2 will be directed by the officer to the area ready to enter the ship through the trestle and then enter the ship through the ramp door (Zone B3)

4. Closing
   a. Conclusions

   Based on the analysis of existing problems in the Port of Kuala Tungkal Ro-ro crossing, there are several conclusions, including:

   1) The lack of zoning system in Kuala Tungkal Ro-ro port, this can be seen from some incomplete facilities such as weigh bridges, tollgates and inadequate ready-to-load parking lots. In addition, the service at the port has not been running well because service users feel confused with the existing zone system at the Kuala Tungkal Ro-ro crossing Port. Steps that can be taken to implement the ideal zoning system, namely the need for proposals for the use of vacant land as a Development Area Plan for zones that are not yet owned, so that Kuala Tungkal Ro-ro port can be an organized port in terms of zoning and flow patterns.
2) The existing zoning conditions and traffic flow patterns at Kuala Tungkal Ro-ro Port are not in accordance with the decree of the Director General of Land Transportation number: SK.242 / HK.104/DRJD/2010. There is still often a buildup of vehicles.

3) There is no signboard zone at the port of crossing Ro-ro resulted in the absence of restrictions in the port area for service users it can be seen from the presence of people who are not interested in entering the port area and restricted areas for the public, so that the port becomes less organized. Therefore, the installation of zone signs in the Ro-ro Port area needs to be applied as a zone divider and instructions for passengers.

b. Suggestion

After the study has been carried out, and based on the survey results at the Kuala Tungkal Ro-ro ferry port, the authors provide some suggestions, namely:

1) The need for the implementation of the regional zoning system at the Kuala Tungkal Ro-ro crossing port in accordance with Ministerial Regulation Number 91 of 2021
2) The need for regulation of passenger and vehicle traffic patterns that are adjusted to the regulation of the Director General of Land Transportation number SK.242 of 2010 on the Technical Guidelines for Traffic Management crossings, so as not to occur crossing between passengers
3) Create an ideal design/overview of zoning in the port area that is used to serve crossing transportation so that the port can operate in an orderly manner
4) The need for the laying of signs that should be to facilitate and serve service users in understanding the conditions at the Kuala Tungkal Ro-ro ferry port

5. References

[3] Ministerial Regulation No. 91 of 2021 on zoning in Kawasan ports used to serve Transportation
[4] Decree of the Minister of Transportation number KM 52 year 2004 on the implementation of ferry ports Article (1)