

IMPACT OF ANCHORING MANAGEMENT POLICY RIAU ISLAND PROVINCE IN INDONESIA

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ABSTRACT

The existence of waters in the Riau Island Province at the crossing of international shipping relations brings Indonesia various opportunities for developing valuable environmental and marine services. This research aims to make efforts and alternatives to the optimization strategy of anchorage activities in the Riau Island Province to manage the potential for environmental and marine services to increase local revenue in the border region. The research method used descriptive qualitative by using secondary data derived from documents, journals, books, websites and other supporting data that focused on analyzing the anchorage development strategy in the waters of the Riau Island Province. The data analysis technique used a data source triangulation approach. The findings show that the impact which occurs in the development of anchorage has three options for optimizing strategies during the COVID-19 pandemic; firstly, maximizing ship guiding and towing services in the Malacca Strait and Singapore Strait, secondly, ship guiding and towing services at TUKS and TERSUS must be given the authority to the Regional Owned Enterprises (BUMD), namely P.T. Pelabuhan Kepri; and thirdly, the importance of controlling environmental impacts on anchorage activities in the Riau Island Province. Afterwards, the researcher also provides an alternative to implementing the Penta-helix concept as a form of monitoring anchors in the waters of the Riau Island Province.

Keywords

Impact; Anchoring; Management; Policy

INTRODUCTION

Sea transportation is essential in spurring increased growth and equitable regional development. In this context, the anchor service is essential because it is one of the primary international sea transportation services with a high investment value and demand from shipping operators. In addition, the utilization of marine waters in the Riau Island is beneficial to local revenue (Irvan, 2018). This is because Riau Island has a vast ocean and must be managed by the potential of natural resources by applicable rules and regulations. Therefore, anchoring activities in the waters of the Riau Islands Province have a solid legal basis, referring to the Regulation of the Minister of Transportation Number: PM 51 of 2015 concerning the Operation of Sea Ports in Article 101 that certain areas in the waters outside the Port can function as anchorage locations and can be managed by Port Business Entity. Furthermore, the decree of the Minister of Transportation of the Republic of Indonesia Number: 16/iuPELABUHAN/PMDN/2017, dated November 3, 2017, concerning the granting of business permits to P.T. Pelabuhan Kepri as a Port Business Entity.

Thus, refer to the Provincial Zoning Plan for Coastal Zone and Small Islands (PZPCZSI) and the Site of Location Review and Field Verification, as well as the Technical Meeting of the Anchor Area in the waters of Riau Strait and Tanjung Berakit, which were held on July 13 2020. However, the PZPCZSI only can function as one part of the marine spatial planning document as mandated by Law Number 32 of 2014 concerning Marine Affairs (Yurista & Wicaksono, 2017). Therefore, although the condition of the Anchor in the Riau Island

has been announced in the Notice to Mariners (N.T.M.) or the Indonesian Seafarers' News (ISN) and listed in the Indonesian Marine Map, the anchoring activity will be carried out (technically) that is the tariff of the type of non-tax state revenue applicable to the Ministry of Transportation.

This is intended to be formulated after the proposed revision of Government Regulation No. 15/2016 is determined and the Riau Island Marketing Team immediately brings customers. The B.U.P. will carry out the contracts to the guide, tugboats, and oil booms with salvage equipment with case-by-case contracts related to AMDAL documents completed on July 31, 2020. The responsible party for organizing the anchorage is P.T. Pelabuhan Kepri, where the Riau Island Provincial Government determined a Governor's Decree regarding the management of anchors in the waters of Riau Island Province. The areas included in the anchoring activity can be seen in the following table:

Table 1. Areas affected by Anchor

City/Region	Waters
Batam	Riau Strait Kabil Waters Area
Batam	Galang Rempang Island Waters Area
Batam	Nipah Island Waters Area
Karimun	Karimun Waters Area
Bintan	Tanjung Berakit Waters Area

Source: PT. Pelabuhan Kepri, 2021

Thus, technology and marketing operations to manage anchorage activities require involvement in optimization. The research aims to provide a Penta - helix approach model. The Penta - helix concept has been widely discussed and used as a framework in many studies related to innovation or organizational innovation (Halibas et al., 2017); (Sudiana et al., 2020). Riau Island Province Government must provide full service in public services. However, in the limitations during the current pandemic with limited movement and number of human resources, the Riau Island government must be able to collaborate with other parties. One of the solutions is the Penta - helix model, which is a collaboration of 5 (Five Elements) elements of stakeholder subjects: Academician, Business, Community, Government, and Media, commonly abbreviated as ABCGM.

ABGCGM unites coordinates and is committed to developing potential. As a form of optimization of an object to be developed for both the present and the future (Duić, 2020). The exciting thing about this research is that the researcher conducted a deep study to design a model for optimizing anchorage activities by involving stakeholders as a form of transparency in future management (Amrial et al., 2017). Cooperation or collaboration in the Penta - helix concept has the characteristics of an agreed shared goal, trust, and a strong relationship. The definition of an anchored ship is a condition where the ship floats without exercising to move against the water and flow the wind by the Anchor owned by the ship in the bow (Liu & Sycara, 1995) Ship anchoring is carried out in certain areas at each Port or outside the port area, considering the sea level and surro

unding conditions (Sasa & Incecik, 2012). Anchoring is carried out to wait for the time to enter the Port, waiting for the completion of the file to enter or exit a port, to avoid the accumulation of ships in the Port, and the ship may also be undergoing repairs on the surface of the water (Eustice et al., 2007).

Optimization is a process of implementing programs that have been planned to achieve the goals/targets of optimally improving performance (Ruszczynski, 2011). Then, the definition of optimization is the process of finding the best solution, not consistently the highest profit that can be achieved (Forst & Hoffmann, 2010); (Pierre, 1986) The optimization goal is to maximize profit, or not always the least cost that can be reduced if the goal is to minimize costs (Rao, 2019). Although research about optimization in the context of anchoring is rarely studied, several studies are explaining the service of foreign ship arrival documents anchoring activities in sea waters to be checked on the completeness of the documents. A foreign ship is anchoring in a predetermined area, and if the results of the inspection of all crew members are declared complete, the ship may enter a port that has to fulfil the ISPS Code standard (Eriyana & Oktaviana, 2020). Afterwards, execute anchoring activities outside the Port to avoid increasing port costs to optimize the maintenance of suitable deep cargo pumps to facilitate loading and unloading activities (Suryadi et al., 2019). Focus on writing as a form of optimization of Riau Island anchorage activities with the concept of a Penta - helix approach by involving interest actors to impact local revenue in the marine sector.

METHODS

The research method is a literature review or study (Pautasso, 2013); (Zed, 2008) The literature study is meant to contain information from the mass media relevant to research problems using secondary data in the form of written texts about the ongoing phenomenon. Data collection techniques in secondary data come from documents, journals, books, websites and other supporting data that focus on case study analysis (Galvan & Galvan, 2017). Furthermore, data analysis uses triangulation techniques. Triangulation is one approach taken by researchers to explore and perform qualitative data processing techniques (Denzin, 2017)

The focus of triangulation is only on the triangulation of data sources to explore the truth of certain information by using various data sources such as documents, archives, and interviews through mass media, with more than one subject which is considered to have different points of view on the phenomenon study in the order it can be depth analyzed (Creswell & Poth, 2016). Thus, the triangulation of data sources will focus on optimizing the strategy for developing anchors in the Riau Island Province, where these activities or the level of efficiency as the role of stakeholders is needed as representation. Representation is ideal using the Penta-helix approach as the desired optimization is by existing procedures and regulations.

RESULTS

A. Development of Anchoring Activities Services in Riau Island Waters

Managing Anchor will be an entry point for investors to know more about Indonesia and its sincerity in providing services. The anchor service principle is a temporary berth facility before the ship enters the Port (Manafi, 2021). Various services have been implemented during this waiting time, summarising the primary services at the Port later. As a result of the still more expensive anchoring service tariff compared to neighbouring countries (tariffs in Indonesia IDR 142 million, while in Singapore IDR 60 million), the efforts to review costs, simplify and restructure costs have been carried out and approved in coordination meetings. The financing aspects that will be restructured in value are port services fees for ships and goods and navigation services, including signing services, shipping telecommunication services, and infrastructure facilities use services.

As one of the anchorage areas, the Provincial Government of the Riau Island is appreciated for its efforts in applying for the Anchor's concession in the waters of the Riau Island. The initiative of the Riau Island Province Government is the basis for cooperation between the Indonesian Ministry of Transportation and the Coordinating Ministry of Maritime Affairs and Investment of the Republic of Indonesia, not only rearranging the waters for anchor harbours but also rearranging the regulations and provisions that have been applied but still had an obstacle in increasing the competitiveness of the Riau Island towards neighbouring countries in providing anchor harbour services. The types of services provided during the implementation of the anchoring service are contained in the revised Government Regulation No. 15 of 2016 concerning types and tariffs for Non-Tax State Revenue (PNBP) applicable to the Ministry of Transportation.

Deregulation is a step to simplify government rules or policies with a specific purpose. In this case, deregulation of the unit cost of anchor services is needed to increase the competitiveness of anchor services in the Riau Island Province compared to neighbouring countries. The approach to deregulation is carried out by simplifying the types of services offered, tariff adjustments, and the addition of articles. However, considering the big goals achieved, two options were narrowed down the scenario of anchor deregulation in the Riau Island Province. The first option is a proposal to prepare a new Government Regulation Plan regarding Non-Tax State Revenue (PNBP) value relief which will become the implementing rule of Law No. 9 of 2018. This process will take time as a new regulation at the level of a Government Regulation. Then the second option is a more moderate proposal and faster to be realized, considering only through this change is the inclusion of several new Articles taking into certain conditions that shipping operators can be given tariff reductions.

1. Maximizing Ship Guiding and Towing Services in the Straits of Malacca and Singapore Straits

The Malacca Strait and Singapore Strait, busy and congested international shipping lanes, have many passing ships (Wahyulianto et al., 2019) It is still high in the service of guiding and towing ships

in the Malacca and Singapore Straits. The inability to control ship scouting by Indonesian scouts, especially in the Riau Island region, has resulted in ships passing through the strait that is still vulnerable to ship accidents. It is necessary to increase the capacity of pilotage institutions by optimizing ship piloting. Because the Malacca and Singapore Straits are crossed over by 25 per cent of world trade commodities and are supported by a substantial hinterland. In case the service for anchoring activities is good, then it has great potential to grow and develop rapidly in public services for anchoring activities.

Furthermore, the innovation in digital port services was developed by the Riau Island Province government by involving Pelindo 1 in the form of the i-Marine and Port Operation Command Center (Pelindo, 2021). In real-time, the i-Marine system can help service users make mooring plans, online meeting services, ship position information, online guiding and towing services, ship air, pilot assignment dispatching, and tugboats. The POCC system is a control centre that coordinates ship and terminal services and monitors ship queues. The i-Marine and POCC systems significantly contribute to supporting the port business, such as maximizing the accuracy of mooring planning, improving operational performance, ensuring the achievement of one-day billing, and accuracy in coordination and decision-making.

Afterwards, strengthening information on ship activity schedules, loading and unloading, and other port operational activities in real-time. Based on the explanation above, there is necessary for high participation to create digitalization-based service innovations and carry out technical control that refers to Standard Operating Procedures (S.O.P). Thus, supervision in service innovation in guiding and towing services in the waters of the Malacca and Singapore Strait must have human resources quality in supervising anchorage activities in the waters of the Riau Island Province so that the optimization of anchoring has a good impact on the readiness of stakeholders in boosting the economy marine sector.

2. Ship Guiding and Towing Services at TUKS and TERSUS if delegating to P.T. Pelabuhan Kepri

The level of port service reliability is primarily determined by the performance of the port management operator at the predetermined anchor harbour's location. Then, guidance serves to guide ships that will leave or enter the ports or waters required to guide. Regulations related to this are regulated through the Minister of Transportation Regulation No. 51 of 2015 concerning the Operation of Seaports (Manafi, 2021). The operation involves many parties as the preparation for implementation is carried out as well as possible (Sasono, 2021). Likewise, at the time of the implementation, it is controlled by coordination between related parties for the pilotage services can dash safely and smoothly. The implementation of pilotage is the authority of the Government which can be delegated to Port Business Entities (P.B.E.) or Private Interest Terminal (P.I.T.), which is in collaboration with P.T. Pelabuhan Kepri and Special Terminal (TERSUS) have to fulfil the requirements and obtain a permit from the Minister (PM. No. 57 of 2015 Chapter VI concerning the procedures for delegating the implementation of ship guiding and towing).

The decree of the Director-General of Sea Transportation No. UM.002/38/DJPL-2011 concerning standards for port operational service performance of the Directorate General of Sea Transportation consists of waiting time, approach time, sufficient time, work productivity, receiving/delivery of containers, level of use of the wharf (B.O.R.), level of warehouse use (S.O.R.), level of use of the stacking field (Y.O.R.) and the readiness for equipment operation. The key performance indicators in port management are measurements of various aspects of port operations. The key performance indicators for pilotage services are based on local and international standards (ISO). The world's major ports use the standards of zero accidents and zero waiting time for pilot service as a measure of the success of their service, while in Indonesia, in assessing the performance of pilotage services, still use approaching a time (AT), waiting for time (W.T.) and zero accident (Lasse, 2012); (Yudithia & Mahadiansar, 2019) .

The performance of the scout or the movement of the scout and the movement of the tugboat is primarily determined by the demand of the berth. Currently, the waters of the Riau Islands in the anchor activity in the demand of the ships that leaned on have an increase in ship capacity/upsized vessels, thus affecting the intensity/frequency of the movement of pilots and tugboats, which in turn out affects the waiting time and approaching time. This is important to note because it can affect the smoothness and speed of services provided in anchoring activities in the waters of Riau Island. To ensure that the

operational management of anchors runs well, in an auction, there is no winner for one reason or another, and the Government can carry out concessions through the assignment mechanism.

The existence of opportunities, challenges, and problems in the development trend of port management makes the selected Port Authority required to continue to improve the performance and functions in providing services that are appropriate to the expectations of stakeholders, the businesspeople in port service users and the Community. Therefore, the Port Authority manages the Regional Government and will determine the anchoring service by establishing a Regional Owned Enterprise. However, the Regional Government did not have sufficient financing capacity to carry out the operation of Anchor. Therefore, then the appointment of Anchoring Service Management Operators will be carried out by the Port Business Entity (P.B.E.) based on the concession line; the determination will be determined through the Auction Mechanism.

The alternative management of KSP BMN/BMD is carried out to reduce the burden on the state budget in financing port operations and maintenance. The two alternative forms of the assignment are the Government's efforts to accelerate the development, preparation, and operation of anchor services in the regions. Through these two alternatives, the Government no longer must incur operational costs, maintenance, and infrastructure improvements but can receive fixed Non-Tax State Revenue (PNBP) through contributions and profit-sharing. The assignment scheme will still benefit all parties because it uses a profit-sharing scheme between the Harbormaster and the Port Authority (KSOP) with the Port Business Entity (P.B.E.), namely P.T. Pelabuhan Kepri will be assigned later. With these various existing schemes, it is hoped that there will no longer be any obstacles in determining the Port Manager and can immediately develop competitive anchor services for the regional development through the creation of a maritime economy can be accelerated.

Port management mechanisms are the authority of the Regional Government, with the approval of the Minister of Transportation. In this case, the Regional Government may propose a Utilization Cooperation (K.S.P.) scheme to manage the Port as a regional asset. The submission of K.S.P. by the Regional Government through the prospective Port Business Entity (P.B.E.) to the Ministry of Transportation must be planned carefully because the Port is a very high-value investment at a particular time. Because the Port is an investment with value depending on the potential and development opportunities. Therefore, the investment value can change and be very different depending on the point of view of the assessment of certain parties.

The difference in point of view often becomes an obstacle in establishing a port management cooperation agreement. In this case, the Central Government, as the building part, will always judge based on the potential value that can be received by the Port, while investors want to invest at the lowest possible cost. Therefore, assessing the K.S.P. meeting point is often challenging to realize. Thus, the success of a K.S.P. agreement must be determined from the point of view of regional development, community welfare and improvement of the investment climate for all parties.

3. The Importance of Controlling Environmental Impacts in Anchoring Activities in the Riau Island Province.

One of the most accessible impacts that can be seen because of unpreparedness in managing port services is the impact on the aquatic environment, which is increasingly polluted by oil, residue, and garbage from anchored ships (Manafi, 2021). Unfortunately, this continues to happen to one of them because shipping operators have not complied with regulations for handling oil spills and ship waste, though this has been regulated in the Regulation of the Minister of Transportation No. 58 of 2013 concerning the prevention of pollution in waters and ports. In addition, the Riau Island Province Government has established a Regional Regulation in the context of Combating Oil Spills at Sea to support the control of pollution due to sea transportation.

Water pollution in the anchorage area, especially from foreign ships, will be very worrying considering that international-flagged ships have the potential to carry hazardous and toxic waste (B3), which is harmful to the preservation of aquatic ecosystems in the waters of the Riau Island Province (Sumardi, 1995). B3 is waste generated from a production process, both industrial and other business activities. Where people live, there is usually found or produced waste, water waste, or other activities that are not managed properly will have an impact on the creatures and the surrounding environment

because of their excellent nature and concentration, directly or indirectly can damage the environment and the health of living things around it (Ukas & Arman, 2019).

Small things like ballast water disposal are very likely to carry pollutant loads and invasive marine species that can interfere with the existence of endemic biota. Therefore, the efforts to control water pollution in the territorial waters of the Riau Island Province that every port control holder must prepare are realized through the provision of reception facilities. A reception Facility (R.F.) is a facility for reducing, storing, collecting, transporting, utilizing, processing and landfilling waste at the Port originating from ship operations or port support activities.

According to the mandate of Government Regulation No. 21 of 2010 concerning Protection of the Maritime Environment and Regulation of the Minister of Transportation No. 58 of 2013 concerning Control of Pollution in Waters and Ports, especially the Regulation of the Minister of Transportation of the Republic of Indonesia of 2014 concerning Prevention of Maritime Environmental Pollution, it has been stated that every Port must have a storage facility (whether fixed, floating, or moving) capable of receiving marine pollutant waste/garbage originating from ships and adequate for the intended storage purpose. As a form of port service, the Reception Facility can also be a new source of income for local governments, whose value is quite significant.

B. Development of Retribution Potential for Anchoring Activities

The anchorage management must provide benefits in the form of revenue sharing for the region. This is stated in the Riau Island

Province Government 550/2021 concerning the Implementation Plan for Levy Retribute. In this case, the Riau Island Province has the authority in the 12 nautical miles, a manifestation of Article 18A of the 1945 Constitution. Thus, the Non-Tax State Revenue (PNBP) of the Ministry of Transportation applicable in certain areas in the waters designated as ports in the Riau Island Province has been revised with the Minister of Finance Regulation No. 165/P.M.K.02/2020, The P.M.K. reduces the value of Non-Tax State Revenue (PNBP) of the Ministry of Transportation by an average of 50% from the previous levy to get a competitive price and provide space for regional revenues.

The Riau Island Province Government has followed this up by issuing Riau Island Governor Regulation No. 64 of 2020 concerning the Guidelines for the Implementation of Port Service Retribution applicable in certain areas in waters designated as ports in the Riau Island Province. The regulation regulates the number of local government levies for ship docking/parking services in waters 12 nautical miles from the coastline designated as anchorage areas; hence that it becomes a contribution to the regional income of the Riau Island Province for financing development and government services which are the responsibility of the Government of Riau Island Province. The additional Original Local Government Revenue (P.A.D.) from 3 anchorage areas determined by the Central Government, 12 miles from the shoreline in the Nipah Island waters zone, the Tanjungbalai Karimun waters zone, and the Galang Island waters zone (Astuti, 2021)

Currently, the management of the three anchor points is also included in the Regional Regulation (Perda) for the Riau Island Regional Retribution as one of the targets and retribution in the region for 2021. In the future, there will be 17 points in the Riau Island waters. Afterwards, the Riau Island Province Government estimates that it can reap local revenue of around IDR 700 million per day from anchoring services in Galang Waters, or 200 billion in a year, and currently, the P.A.D. of the Riau Island Province reaches 1.2 trillion. (Naim, 2021). Based on this explanation, if later added 200 billion means the P.A.D. will contribute 15 to 20 per cent of the Local Government Budget (APBD) (Sianturi, 2021). Therefore, the anchoring location in the Riau Island can run well, with the support of legal certainty at the regional and central levels and the provision of good services. The docking space in Singapore and Johor is already minimal. Then, the Riau Island Province will take advantage of this situation.

The Riau Island Provincial Government has also prepared a regional retribution determination letter (SKRD) or a memorandum of regional levy bills in the form of lay-up anchorage services (Herdian, 2021); (Kusnadi, 2021). Based on this explanation, the attention of the Riau Island Province Government to develop the potential for retribution anchorage activities aims to obtain large P.A.D. so that P.A.D. can be maximized; hence it can be used for welfare and development due to the COVID-19 pandemic. However,

it will need supervision from various stakeholders with a Penta - helix approach for the elements of the Development of Retribution Potential for Anchoring Activities in Riau Island can be adequately fulfilled.

C. Implementation of the Penta - helix Concept as a Form of Anchoring Supervision in Kepulauan Riau

Concretely, several sectors in the pen concept - helix supervision model have their respective roles and tasks in synergy. Their respective roles and duties can be seen as follows.

- 1) The Penta - Helix model acts as an organized c. First, academics, through the knowledge power, present knowledge that makes life faster, cheaper, and more valuable. Such as identifying the potential and certifying products and human resource skills that support the increase in the potential of the Anchor. Academics, in this case, are sources of knowledge with the concepts and latest theories relevant to the conditions of anchor development in the waters of the Riau Islands; hence academic studies from economic and legal aspects can be prioritized for the creation of effective anchorage optimization in implementation.
- 2) Second, the private sector in the Penta - Helix model acts as an enabler. The private sector is an entity that carries out business processes to create added value and maintain sustainable growth. The private sector can act as an enabler to provide technology and capital infrastructure. The change to the digital era can help the development of potential at new anchor points in the future to be more effective, efficient, and productive.
- 3) Third, the Community in the Penta - Helix model acts as an accelerator. In this case, the Community is people with the same interest and are relevant to the development of potential and the forms of supervision that will be developed for anchoring activities in the waters of the Riau Islands. Act as an intermediary or become a connector between stakeholders with rights and obligations to assist the Community in the whole process and facilitate the adoption of a better economic process. In addition, the Community has a role as an accelerator. In this case, the Community is people with the same interests and relevant to the Government's programs. Furthermore, the Community also promotes involvement in creating jobs to improve the welfare of the people involved in anchoring activities in the Riau Island Province.
- 4) Fourth, government elements have the political power to formulate a policy through decisions. The Government must act as a regulator and controller with regulations and responsibilities in developing what has been planned. In this case, it involves all activities such as planning, implementation, monitoring, control, promotion, financial allocation, licensing, programs, legislation, development and knowledge, public innovation policy, support for innovation networks and public-private partnerships. The Government also has a role in coordinating stakeholders who contribute to the development of village potential.

Last, the mass media as a press forum and mass communication tool are considered important in realizing public information disclosure. Currently, media is a door to learning to know various events. Media is also considered a mirror of various social events and the world. The media must be able to act as an expander and act as an amplification of the process, output, and impact of the program to expand awareness and accelerate the distribution of information. The media plays a role in supporting publications in the promotion and making brand image anchors to encourage Original Local Government Revenue (P.A.D.) in the Riau Island Province.

CONCLUSION

An ancho is a form of utilization of potential environmental and marine services in the form of port services. So far, the potential for anchors' services has not been managed optimally, thus creating so many dark ports that give a negative impression of shipping services, especially in the border areas of the Riau Island Province. The importance of the Penta - Helix approach aims to focus on the issue and take decisive action in leading joint coordination between all stakeholders for a common goal. In the end, anchor governance efforts have come to light, starting with restructuring the service fee structure to become more competitive.

However, there is a long road to service improvement which will be proven by the presence of international ships in Indonesia, as well as increasing the Competitiveness Ranking, which is still the task ahead.

Hence, coordinating between Ministries/Agencies and Local Governments will still be the hard work that must be prepared, including Standard Operating Procedures (S.O.P.) to support port operations and procedures. Furthermore, regulations related to areas, financing, and administrative authorities between the central and regional governments and the S.O.P. on procedures for inspecting ships in the anchorage area. Furthermore, if necessary, revise the Ministry Regulation on Non-Tax State Revenue (PNBP) at the Ministry of Transportation through P.M.K. by strengthening law enforcement and encouraging the provision of the incentive for Law Enforcement Officials at Sea.

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