Legal reconstruction of shipping flow maintenance by port business entities (BUP) in the future

Muhammad Israyadi (a)* Dhiana Puspitawati (b) Setyo Widagdo (c) Herman Suryokumoro (d)

(a) Doctoral Students of Law Science of Brawijaya University, Malang, Indonesia
(b) Promotor of Law Science of Brawijaya University, Malang, Indonesia
(c) Promotor I of Law Science of Brawijaya University, Malang, Indonesia
(d) Promotor II of Law Science of Brawijaya University, Malang, Indonesia

ARTICLE INFO

Article history:
Received 07 July 2022
Received in rev. form 22 August 2022
Accepted 29 August 2022

Keywords:
BUP, Port Business, Legal
Reconstruction, Shipping Flow Maintenance

JEL Classification:
H10, H19

ABSTRACT

The port is a gateway to enter a region or country and as a liaison infrastructure between regions, between islands, and even between countries. One of the important factors in the port is the shipping lane. The shipping lane is used for the trajectory of ships that will enter the port pool. The Port Business Entity has the obligation to carry out maintenance of shipping lanes and port pools in the form of dredging, so that ship traffic flows and port pools can be maintained properly. However, there are obstacles in carrying out dredging, namely regulations related to the obligation of business actors to have at least one dredger unit to obtain a dredging and reclamation business permit. In addition, regarding funding from the State Revenue and Expenditure Budget (APBN), in particular the dredging of shipping lanes and port pools, the central government no longer allocates dredging funds. By using normative legal research, it is known that legal reconstruction in shipping lanes and port pools by port business entities (BUP) will be carried out in the future to realize the discourse on the transformation of port business entities. In addition, it is necessary to improve Law Number 17 of 2008 concerning Shipping, it is necessary to improve port regulations.

© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

Introduction

Indonesia is a state that puts forward the concept of a welfare state in accordance with the Preamble to the 1945 Constitution. The concept of a welfare state is the embodiment of interventionist thinkers where state intervention on the community will help their economic development and welfare. (Anderson, 2002). To realize the welfare of the community, development is carried out which is a mandate from the objectives of the State of Indonesia as stated in the preamble of the 1945 Constitution of the Republic of Indonesia, paragraph IV (four), viz. promoting general welfare.

National development is an effort to improve all aspects of the life of the community, nation and state which is also a process of developing the entire system of state administration to realize national goals. National development can also be interpreted as a series of development efforts to carry out the task of realizing national goals. One form of development including the construction of ports. From the social aspect, the port becomes a public facility for the community to carry out interactions, including economic activities (Annas, 2017).

The current regulation of the maintenance of shipping lanes and port pools at commercial ports, with the government’s policy regarding funding from the State Revenue Budget (APBN), especially dredging of shipping lanes and port pools, at commercial ports carried out by the Port Business Entity, the central government no longer allocates dredging funds. The APBN itself is the annual financial plan of the Indonesian government approved by the House of Representatives. The amount of costs suspended by the central

* Corresponding author.

© 2022 by the authors. Hosting by SSBFNET. Peer review under responsibility of Center for Strategic Studies in Business and Finance. https://doi.org/10.20525/ijrbs.v11i6.1918
government is related to dredging, both new dredging and maintenance dredging, while the profit obtained by the government is not comparable, thus making the central government no longer able to finance dredging, both new dredging and maintenance dredging.

Based on the facts above, it is progressively possible for Port Business Entities, such as PT. Pelindo and also private legal entities to take part in dredging the channel, so that the lanes of ship traffic can be well maintained. However, there are obstacles to carrying out dredging, viz regulations related to the obligation of business actors to have at least one dredger unit to obtain a dredging and reclamation business permit. The obligation is set to ensure work certainty, namely the ownership of the ship will ensure that the dredging and reclamation proceeds according to schedule.

Based on the above, there is a blurring of norms, there is an unclear arrangement that should be carried out by the government (port authority) which is its duties and responsibilities but under certain conditions it can be carried out by port business entities. On the one hand, the central government does not have the budget to carry out maintenance dredging of shipping lanes and port pools. But on the other hand, the Port Business Entity also does not have the ability to meet the requirements of the dredging business as stipulated by the Regulation of the Minister of Transportation Number PM 125 of 2018, while PT. Pelindo as a BUMN can take refuge in the provisions of Article 83 paragraph (1) letter b of Law Number 17 of 2008 concerning Shipping, i.e. providing and maintaining wave barriers, harbor pools, shipping lanes, and road networks. The void of norms is a situation where a case or event occurs in society but a rule or regulation does not yet exist or does not exist. For this reason, it is necessary to carry out legal reconstruction, namely efforts to reorient and reevaluate as well as rearrange legal values and norms with socio-political, socio-philosophical and socio-cultural dimensions according to law.

Based on the description above, the purpose of this study is to find a legal reconstruction of the shipping lanes and port pools maintenance by port business entities (BUP) in the future.

This research is basically normative legal research. Normative legal research according to (Hadjon, 1997) is research that provides an understanding of the normative problems experienced by dogmatic legal science in its activities of describing legal norms, formulating legal norms (forming legislation), and enforcing legal norms (practice of law judicial). (Diantha, 2016). The source of data used in this study is primary legal material obtained when conducting Library Research. (Hartono, 1994)

**Literature review**

**Theoretical and Conceptual Background**

**Legal Reconstruction**

The word of "reconstruction" is taken from a foreign word (English), namely from the word "re" which means "about" or "repeat", and the word "construction" which means making / building / interpretation / arrangement / form / construction. (Sadely, 1995). In the Black Law Dictionary (Gamer, 1999), reconstruction is the act or process of rebuilding, recreating, or reorganizing something, reconstruction here is defined as the process of rebuilding or re-creating or reorganizing something. The definition of reconstruction in the Kamus Besar Indonesia is: 1. Restoration as before; 2. Rearranging (depicting) (Moeliono, 1990). B.N. Marbun in the Political Dictionary defines reconstruction as the return of something to its original place, the compilation or redrawing of existing materials and rearranged as they were or the original incident (Marbun, 1996).

Reconstruction in this study is legal reconstruction as a process to rebuild or rearrange ideas, ideas or concepts about law in ensuring legal certainty and business/investment certainty. Law as a means of social engineering is not only understood as a tool to "force" the will of the government to the people. However, now the concept has been expanded to mean that the law is a means of reforming society and the bureaucracy. Therefore, the legislation of a country describes the existence of regulation, control and supervision carried out by the state to its citizens in general (Rahardjo, 1981). If reconstruction is associated with concepts or ideas or thoughts about law, it means that legal reconstruction is interpreted as a process to rebuild or rearrange ideas, thought or concepts about law.

Dredging is a form of excavation that is carried out underwater or partially underwater, in shallow waters or marine waters. Dredging can be carried out to recover commercially valuable materials, minerals or high value deposits such as sand and gravel used by the construction industry. Other benefits of dredging are increasing the security and safety of shipping lanes, increasing the feasibility of sea transportation, increasing the stability of the movement of goods, increasing connectivity between ports, increasing port infrastructure development, increasing the dimensions of ships that can enter ports, increasing port performance stability, increasing the number of ships that can enter ports, port, lowering the rate of sedimentation in the access channel, reducing ship turnover, increasing port performance efficiency, lowering port costs, and increasing port operator income. (Josep, 2019).

Dredging is useful for maintaining the depth of shipping lanes and harbor pools, this is done so that ports can be navigable, and helps in coastal protection, land reclamation and coastal rebuilding, by collecting bottom sediment and transporting it to other places. (Nasution, 2019). Dredging is carried out by calculating by considering the type of ship that enters the cargo port pool. The ship draft owned by each incoming ship determines the depth of the pond to be dredged for dredging volume planning and port pond maintenance. (Enzeline, 2015).
Article 3 of the Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 125 of 2018 concerning Dredging and Reclamation states that the dredging of shipping lanes and port pools is carried out through dredging work which also provides other interests such as port development; construction of a wave barrier; mining; and/or other buildings such as the construction of terminals, terminals for self-interest, or special terminals that require dredging work activities that may result in disruption of the Shipping Line.

**Maintenance of Shipping Lanes and Port Pools**

Article 1 (paragraph 23) of Government Regulation Number 31 of 2021 concerning the Implementation of the Shipping Sector states that the port pool is the waters in front of the pier which is used for the purposes of berthing operations and ship maneuvering.

The law of the sea is generally also defined as the law of shipping which mainly focuses on regulating the implementation of the Law of the Sea into 2 (two) namely civil law of the sea and public law of the sea (Soekardono, 2012). The definition of shipping based on Article 1 point (1) of Law Number 17 of 2008 concerning Shipping is a unified system consisting of transportation in waters, ports, safety and security, as well as protection of the maritime environment. So, it is not surprising if the law principally contains provisions regarding various aspects of shipping, namely navigation, ports, shipping, transportation, ship accidents, search and rescue (search and secure), prevention and pollution by ships, in addition to contains provisions regarding development, human resources, investigations and criminal provisions. (Umar, 2001) While in the Law of the Republic of Indonesia Number 17 of 2008, what is meant by shipping is a unified system consisting of transportation in waters, ports, safety and security and protection of the maritime environment.

Purpose of the shipping operation as regulated in the provisions of Law Number 17 of 2008 concerning Shipping are:

i. Streamlining the flow of people and/or goods through waters by prioritizing and protecting transportation in waters in the context of facilitating national economic activities.

ii. Fostering a nautical soul.

iii. State sovereignty.

iv. Creating competitiveness by developing the national water transportation industry.

v. Support, mobilize, and encourage the achievement of national development goals.

vi. Strengthening the unity and integrity of the nation in the context of realizing the insight of the archipelago.

vii. Improving national resilience.

Based on Article 5 of Government Regulation Number 2 of 1969, the types of shipping can be divided into three major groups, i.e. "domestic shipping", "foreign shipping" and "special shipping" which can be detailed, namely domestic shipping and foreign shipping and Special Shipping (Purwosutijpto, 1993). Meanwhile, Suwarno (2009) sees shipping from its activities consisting of 2 (two) types, namely commercial shipping and non-commercial service (Suwarno, 2009).

The sediment in the portpool that is formed is too high, this can cause the ship to sink. To avoid this, dredging is needed to a certain depth so that the ship can dock safely. By paying attention to security and providing adequate services for port users, the main factor affecting the occurrence of sedimentation processes is tidal currents. Therefore, it is necessary to study and analyze the distribution pattern of sedimentary material transport at the dredging plan location. (Witantono, 2015).

Based on the results of the International Association of Ports and Harbors (IAPH) conference in June 1983 in Vancouver, Canada, it was recommended that in general all ports must carry out shipping lane maintenance activities continuously (constantly) along the shipping lane to accommodate incoming ships/ out of the port and maintain the security and safety of shipping. (Rosdynur, 2012). The maintenance of shipping lanes is also contained in the Shipping Law Number 17 of 2008, the Government has the obligation to: 1). define shipping lanes; 2). establish a route system; 3). to determine traffic procedures; and 4). determine the berth area of the ship in accordance with its interests.

**Ports**

According to Suyono (2007) a port is a place consisting of land and surrounding waters with certain boundaries as a place for government activities and economic activities used as a place for ships to dock, embark and board passengers and/or loading and unloading of goods equipped with safety facilities. Shipping and port support activities as well as a place for intra and inter-modal transportation (Suyono, 2007).

According to Bambang Triatmodjo (2010) a port is an area of water that is protected against waves, which is equipped with marine terminal facilities including a dock where ships can be moored for loading and unloading of goods, cranes for loading and unloading goods, marine warehouses (transit) and a place for loading and unloading goods. Storage places where ships unload their cargo, and warehouses where goods can be stored for a longer time while waiting for delivery to the destination or shipment.

Based on Law Number 17 of 2008 concerning Shipping, port is defined as a place consisting of land and/or waters with certain boundaries as a place for government activities and business activities that are used as a place for ships to dock, embark and board passengers and/or loading and unloading of goods, in the form of terminals and ship berths equipped with safety facilities and shipping security and port support activities as well as a place for intra and intermodal transportation.
Additionally, in Article 1 of the Regulation of the Minister of Transportation of the Republic of Indonesia Number PM 57 of 2020 it is stated that ports are a place consisting of land and/or waters with certain boundaries as a place for government activities and business activities that are used as a place for ships to dock, embark and board passengers, and/or loading and unloading of goods, in the form of terminals and ship berths equipped with safety facilities. And shipping security and port support activities as well as a place for intra and intermodal transportation.

According to Puspitawati, a port is a place where most of the economic activities that use waterways are a vital sector in Indonesia's social and economic life, considering that geographically Indonesia is an archipelagic country. Indonesia is the only archipelagic country that has determined the archipelagic sea lanes. The Indonesian archipelagic sea lanes consist of 3 (three) archipelagic sea lanes (ALKI-I, ALKI-II, and ALKI-III) which stretch from north to south and vice versa. (Puspitawati, 2019).

Economically, the port functions as one of the drivers of the economy because it becomes a facility for the distribution of production products. Therefore, the port sector is a very strategic place for the movement of goods and services, transportation facilities, and even further matters relating to the modern business of exporting and importing goods.

According to Triadmodjo (1999) transit ships require a port pool to accommodate ships in berth time while in port, so that ships can carry out loading and unloading without being disturbed by waves. (Triadmodjo, 1999) The roles and functions of ports according to Edy Hidayat (2009) are: a). The commercial gateway of a region or country, b). Land and sea transition point, c). Place of transition from sea transportation mode to land transportation mode and d). Storage and distribution of goods. (Hidayat, 2009) As one of the transportation infrastructures, ports have a strategic role to support the transportation system because they are the point of connection between regions/countries (Indrayanto, 2005). In addition, the port is a place for intra and intermodal transportation (Oblak, 2013). Socially, ports are public facilities where interactions between users (communities) take place, including interactions that occur due to economic activity (Berköz, 2005). According to Muldiyanto, the port's basic facilities consist of protection facilities and mooring facilities (Muldiyanto, 2010).

Institutions at ports after the enactment of Law Number 17 of 2008 concerning Shipping and Government Regulation Number 69 of 2011 concerning Ports consist of: 1). The Port Authority is a regulator at the central level under the control of the Minister of Transportation. 2). Harbourmaster (syahbandar), i.e. to carry out the function of shipping safety and security 3). Port Business Entity

**Port Business Entity**

Article 1 paragraph (12) of the Regulation of the Minister of Transportation Number PM 50 of 2021 concerning the Operation of Sea Ports states that a Port Business Entity is a business entity whose business activities are specifically in the field of terminal and other port facilities. Port Business Entity is a business entity whose business activities are specifically in the field of terminal and other port facilities.

**Legal Basis for Port Business Entities (BUP):**

i. Law Number 17 of 2008 concerning Shipping (Article 93 to Article 95).

ii. Government Regulation Number 61 of 2009 concerning Ports (Article 71 to Article 73) as amended by Government Regulation Number 64 of 2015.

iii. Ministerial Regulation 57 of 2020 concerning the Second Amendment to the Regulation of the Minister of Transportation Number 51 of 2015 concerning the Operation of Seaports.

In Article 72 it is stated that the determination of a Port Business Entity appointed to carry out port exploitation activities at a port whose status changes from a port that has not been commercially operated to a port that is commercially operated is carried out through the granting of a concession from the port authority. The Port Business Entity acts as an operator operating terminals and other port facilities.

Port management and exploitation includes parts that must be concessioned or only for unmanaged or non-existing facilities that need concessions and how is the authority that PT. Pelabuhan Indonesia I (Persero) has over the assets it owns (existing), the status of port services concession rights that have been managed, business cooperation with third parties and fees that have been carried out by PT Pelabuhan Indonesia I (Persero) related to the existence of rules regarding concessions.

**Shipping**

Article 1 (1) of Law Number 17, 2008 defines shipping as “A unified system consisting of transportation in the waters, shipping, safety and security, and protection of the marine environment.” Likewise, in Article 1 of the Government Regulation of the Republic of Indonesia Number 31 of 2021 concerning the Implementation of the Shipping Sector, it is stated that shipping is a unified system consisting of transportation in waters, ports, safety and security, as well as protection of the maritime environment. Bjune meant that maritime law as “The set of legal rules, concepts and process that relate to navigation and process by water. Traditionally, the focus of the law is the ship, and the legal incident that arise from its operations, which are plentiful.” (White, 2006)

In other words, maritime refers to shipping (navigation), trade (sea-borne trade), port affairs and all kinds of activities related to
Results of Research and Discussion

Law as the basis for the development of other fields means the actualization of the law function as a tool of social engineering/development (law as a tool of social engineering), an instrument for problem solving (dispute resolution) and an instrument for regulating community behavior (social control). The rule of law also means optimizing its role in development, ensuring that the national development agenda runs in an orderly manner, with predictable consequences from the steps taken (predictability), which are based on legal certainty, benefit and justice. (Soetomo, 2008)

Law as a means of social engineering is not only understood as a tool to “force” the will of the government to the people. However, now the concept has been expanded to mean that the law is a means of reforming society and the bureaucracy. Consequently, according to Moempoeni Martojo, the legislation of a country describes the existence of regulation, control and supervision carried out by the state to its citizens in general (Rahardjo, 2000). Law as social engineering must be systematic, starting from problem identification to solving it, namely:

i. Get to know the problems faced as well as possible, including carefully identifying the people who want to be the target of the cultivation.

ii. Understand the values that exist in society. This is important in that social engineering is intended to be applied to a society with multiple sectors of life, such as: traditional, modern and planning. At this stage, the values for the selected sector are determined.

iii. Make hypotheses and choose which ones are the most feasible to implement.

iv. Follow the application course of the law and measure its effects.

Legal Reconstruction is one step to perfect the existing legal rules by responding to changes in society. Besides that, it is also a way to develop legal material or positive law through logical reasoning, so that the desired results can be achieved. That is, reconstruction is rearranging and synchronizing some existing legal rules. In carrying out the legal construction, Scholten pays attention to three conditions, namely (Rahardjo, 2000):

i. Reconstruction must be able to cover all relevant fields of positive law.

ii. There should be no logical contradiction in it. For example, there is a teaching stating that the owner can be the holder of the mortgage on his own property. This teaching is a construction that is wrong because the mortgage itself is a right owned by one person over the property of another.

iii. Reconstruction should meet the requirements of beauty. That is, it is not something that is made up, it should provide a clear and simple picture.

The reconstructed legal regulations are expected to be better and guarantee legal certainty and benefit the community. The Port Authority Agency is expected to become an independent institution in overseeing and supervising all regulations relating to ports and sea transportation in Indonesia. The highest authority in the Port Authority is not provided with regulations at the level of the Law. Consequently, strengthening the role and function of the institution as a regulator seems neglected. The Port Authority as a regulator at the port is still less authoritative than the Port Business Entity (BUP) as the operator at the port.

To formulate the legal reconstruction of the maintenance of wave barriers, port pools, shipping lanes and road networks, by BUP and the Port Authority by changing the regulations in the shipping law by:

i. To form their own entity that specifically carries out maintenance of harbor channels and ponds.

All ports in Indonesia are still not yet equipped with supporting infrastructure and adequate management structures. For example, in terms of infrastructure, many ports are not equipped with adequate navigation, loading and unloading equipment, and maintenance equipment (such as dredgers). As a result, ships sailing in certain ports have to bear higher risks and operational costs than anchoring in ports that are equipped with adequate equipment.

The practice of port operator authority (OP) does not work this is due to:

i. The OP is not provided with sufficient funds, let alone the funds to carry out the function as a regulator, there is no allocation of operational funds for the OP’s office from the APBN. As a regulator, OP actually has an obligation to maintain the quality of the infrastructure he controls, such as shipping lanes. This infrastructure must be regularly dredged. Dredging must be done every 2 or 4 years depending on the level of sedimentation in the shipping lane. The dredging costs reached more than IDR. 10 billion. In addition, the OP also has to take care of the roads in the port area. However, due to the absence of APBN funds, the maintenance of shipping lanes and port roads was delegated to Pelindo. This condition has been going on for a long time. It is reviewed considering that not all BUPs have the capability and sufficient funding to carry out maintenance of wave barriers, port pools, shipping lanes and road networks.
ii. The absence of qualified staff in the field of port or terminal management and operations, as well as in the field of port business. Civil servants in OP mostly function as administrators. The head of OP, who is expected to be the main driver of the national port business, puts himself more as a bureaucrat behind the desk. Almost all OP heads were chosen from echelon III civil servants of the Ministry of Transportation, so it seemed that the echelon II positions given to them were gifts. Long story short, the OP is just a paper tiger.

With the establishment of its own agency that specifically carries out maintenance of port lanes and ponds so that BUP does not run a port business entity, the port business entity cannot be involved in the construction, operation, and maintenance of shipping lanes leading to a special terminal managed by a business entity so that BUP is more focused on carrying out its duties and role becomes easier to carry out.

i. BUP consolidation forms its own business entity in carrying out the maintenance of Shipping Channels and Port Pools

ii. Involving the ministry of PUPR in the construction and maintenance of shipping lanes, port pools, and maintenance of shipping lanes in seas and rivers and lakes.

The regulation that forms the basis for the law on the maintenance of shipping lanes and port pools at commercial ports by port business entities can support other regulations as a reference that these regulations already existed before. Although the ius constitutenum later needs to be supported by a legal reform to implement changes to any rules related to the legal basis for the maintenance of shipping lanes and port pools at this commercial port, so that according to Mochtar Kusumaatmadja about the function and role of law in national development, then it is known as a Legal Development Theory, is placed on a premise which is the core teaching or principle for future legal rules in a change in the rules themselves in society (Atmasasmita, 2012). Renewal is not showing something completely new, but rather reconstructing it and then applying it to the current reality (Qardhawi, 2014). It is hoped that the law on the maintenance of shipping lanes and port pools at commercial ports in Indonesia can give birth to the principle of social justice: providing a way to provide rights and obligations in basic community institutions and determine the proper distribution of benefits and burdens of social cooperation (Rawl, Keadilan Dasar-dasar Filsafat Politik untuk Mewujudkan Kesejahteraan Sosial dalam Negara), in providing shipping security for every transportation company as well as passengers and goods. This is because in shipping, you must first provide services in its implementation. The modern surveillance systems take advantage of the, Automatic Identification System (AIS), a compulsory tracking system for many types of vessels. Ships that carry AIS transponders on board transmit their position and status in order to alert nearby vessels and ground stations, but this information can well be used to identify events of interest and support decision making (Ioannis Kontopoulos, Iraklis Varlamis & Konstantinos Tserpes 2021), whether or not the ship is allowed to enter the port

Conclusion

Legal reconstruction in the maintenance of shipping lanes and port pools by BUP in the future needs to be carried out immediately so that the shipping lanes and port pools can be passed by certain ships at commercial ports. In addition, it is necessary to improve Law Number 17 of 2008 concerning Shipping, and provide opportunities for BUP to carry out maintenance of shipping lanes and port pools at commercial ports. Port Authority is an extension of the central government to supervise and regulate port activities so that they run smoothly, safely, orderly and comfortably. It is also necessary to form a special business entity to carry out maintenance of shipping lanes and port pools at commercial ports, as well as BUP together with other business entities that utilize shipping lanes and port pools to contribute to financing shipping lanes and port pools where the port authority (government) is a mediator.

Acknowledgement

Author Contributions: Conceptualization, Methodology, Data Collection, Formal Analysis, Writing—Original Draft Preparation, Writing—Review And Editing by authors with equal participation. All authors have read and agreed to the published the final version of the manuscript.

Institutional Review Board Statement: Ethical review and approval were waived for this study, due to that the research does not deal with vulnerable groups or sensitive issues.

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

Conflicts of Interest: The authors declare no conflict of interest.

References

Andersen, E. G., Gallie, D., Hemerijck, A., & Myles, J. (2002). Why we need a new welfare state. Oxford University Press Inc.

Annas, M. (2017). Kegiatan Usaha PT. Pelabuhan Indonesia Paxsa Lahirnya Undang-Undang Nomor 17 Tahun 2008 Tentang Pelayaran dalam Perspektif Hakum Persaingan Usaha. Fakultas Hukum Universitas Muhammadiyah Yogyakarta, Fakultas Hukum Universitas Muhammadiyah Yogyakarta

Atmasasmita, R. (2012). Teori Hukum Integratif. Yogyakarta Genta Publishing

Berkoz, L. and Tekba. (2005), The role of ports in the economic development of Turkey. Paper dipresentasikan pada seminar 39th European Congress of the Regional Sciences Association. Dublin

Diantha, I Made P. (2016). Metodologi Penelitian Hukum Normatif dalam Justifikasi Teori Hukum, Jakarta,Prenada Media Group
Echols, John M. and Shadily H., (2000), Kamus Inggris Indonesia (An English Indonesian Dictionary), Jakarta, PT. Gramedia Pustaka Utama

Enzeline, V. E., Widada, S., & Atmodjo, W. (2015). Kondisi Batimetri Dan Sedimen Dasar Perairan Di Kolam Pelabuhan Cargo PT. Pertamina Ru VI Balongan, Jawa Barat. Journal of Oceanography, 4(3), 625-634.

Garner, B.A. (1999). Black's Law Dictionary, ST. Paul Minn: West Group, 1999

Hartono, S. (1994). Penelitian Hukum di Indonesia pada Akhir Abad ke-20, Bandung, Alumni

Hidayat, E. (2009). Perencanaan, Perancangan dan Pembangunan Pelabuhan. Referensi Kepelabuhanan Seri 03 Edisi II, Jakarta

PT. Pelabuhan Indonesia I, II, III, IV

Indonesia (2008). Undang-Undang Nomor 17 Tahun 2008 tentang Pelayaran

Indonesia (2021). Peraturan Pemerintah Nomor 31 Tahun 2021 tentang Penyelenggaraan Bidang Pelayaran

Indrayanto (2005). Peran Pelabuhan dalam Menciptakan Peluang Usaha Parawisata: Kajian Historis Ekonomis, Jurnal, Universitas Diponegoro, Semarang.

Josep, A. A. (2019). Analisis Manfaat dalam Proyek Pengerukan Studi Kasus: Alur Pelayaran Surabaya Timur. Jurnal Penelitian Transportasi Laut.

Kementerian P. (2018). Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 125 Tahun 2018 tentang Pengerukan dan Reklamasi

Kementerian P. (2020). Peraturan Menteri Perhubungan Republik Indonesia Nomor PM 57 Tahun 2020 tentang Perubahan Kedua Atas Peraturan Menteri Perhubungan Nomor PM 51 Tahun 2015 tentang Penyelenggaraan Pelabuhan Laut.

Kontopoulos, I., Varlamis, I., & Tserpes, K. (2021). A distributed framework for extracting maritime traffic patterns. International Journal of Geographical Information Science, 35(4), 767-792. https://doi.org/10.1080/13658816.2020.1792914

Marbun, B. N. (1996). Kamus Politik, Jakarta, Pustaka Sinar Harapan

Moeliono A. (1990). Kamus Besar Bahasa Indonesia, (Penyunting Penyelia), Jakarta: Departemen Pendidikan dan Kebudayaan – Balai Pustaka

Murdiyanto. (2010). Perencanaan Pelabuhan, Yogyakarta, Beta Offset

Purnomo, A. (2019). Pengerukan Pemeliharaan Alur Pelayaran Pe

Qardhawi, Y. (2014). Pekerjaan Survei Hidrografi dan Perencanaan Alur Pelayaran di Indonesia. Jurnal Kajian Hukum dan Keadilan, 7(3)

Qardhawi, Y. (2014). Problematika Rekonstruksi Ushul Fiqih, Al-Fiqh Al-Islâmiyyah Al-Ashâlahwa At-Tujidid, Tasikmalaya

Rahardjo, S. (1981) Hukum dalam Perspektif Sosial, Bandung, Penerbit Alumni

Rahardjo, S. (2000), Ilmu Hukum, Bandung, PT Cipta Aditya Bhakti

Rawls, J. (2006). Teori Keadilan Dasar-dasar Filosofat Politik intanq Mewujudkan Kesejahteraan Sosial dalam Negara, (A Theory of Justice), Terjemahan Uzair Fauzan dan Heru Prasetyo, Yogyakarta,Pustaka Pelajar

Rosdynur (2012), Pekerjaan Survei Hidrografi dan Perencanaan Alur Pelayaran dalam Usaha Transportasi Hasil Pertambangan Bathara. Bandung, Teknik Geodesi dan Geomatika FITB-ITB

Sockardono, R. (1994). Hukum Dagang Indonesia: Jakarta CV Rajawali

Soetomo (2008). Masalah Sosial dan Upaya Pemecahunnya, Yogyakarta, Pustaka Pelajar

Suwarno (2009). Manajemen PemasaranJasa Perusahaan Pelayaran, BP UNDIP, Semarang, 2009

Suyono (2007) Shipping Pengangkutan Intermodal EksporImporMelalui. Laut, Jakarta, Penerbit PPM

Triatmodjo (1999), Hidraulika II, Yogyakarta, Beta Offset

Triatmodjo, B. (2010). Perencanaan Pelabuhan, Yogyakarta, Beta Offset, 2010

Umar, H. (2001). Hukum Maritim dan Masalah-Masalah Pelayaran di Indonesia: Buku I, akara, Pustaka Sinar Harapan

White, M. (2006), Australian Maritime Law, 2nd Edition, Federation Press. Australia

Witantono and Khomsin (2015). Pemodelan Aliran Sedimen di Kolam Pelabuhan (Studi Kasus: Kolam 1 Pelabuhan Tanjung Priok, Jakarta). Jurusan Teknik Geomatika, Fakultas Teknik SIP dan Perencanaan, Institut Teknologi Sepuluh November. Jurnal GEOID. 01(01).

Publisher’s Note: SSBFNET stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.

© 2022 by the authors. Licensee SSBFNET, Istanbul, Turkey. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).

International Journal of Research in Business and Social Science (2147-4478) by SSBFNET is licensed under a Creative Commons Attribution 4.0 International License.