



RESEARCH ARTICLE

Analysis of the Implementation of the ISM Code on Shipping Safety at PT. Pelni

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ABSTRACT

This study aims to find out the 3 (three) elements in the ISM Code, namely the company's responsibilities and authorities, personnel and resources on board the ship and the operation of the ship applied in PT. Pelni. The data collection methods used are literature studies, observations and interviews. The data collected was analyzed with qualitative descriptive analysis techniques. The results of the research based on the results of the data analysis conducted show that the implementation of the ISM Code in the element of corporate responsibility has been carried out with responsive management, which is a combination of cross-rectorate and cross-division. The personnel and resource elements on the ship have been implemented according to what is in the ship management system, as well as the operation of the ship that has been implemented based on the planned maintenance system. The company's responsibility and authority in implementing the ISM Code as an effort to prevent ship accidents have been implemented in accordance with the DPA mandate in the implementation of safety management. Personnel and resources on board have implemented a shipping safety management system policy in accordance with the ISM Code, but there are still obstacles in the operation of the ship, namely crew qualifications, there are non-conformities with existing standards during recruitment and there is still intervention by company management.

INTRODUCTION

The Republic of Indonesia is an archipelagic country because part of its territory consists of oceans. Indonesia, which is surrounded by islands to connect between its regions, needs sea transportation and is one of the economic movements that should not be ignored (Andriani, 2018). At sea To carry out economic movements, the main means used are fleets in the form of sea transportation that functions to transport types of cargo or passengers. The existence of ships is a very important mode of sea transportation (Yoseph & Danny, 2017). Therefore, the government must make a regulation so that shipping safety can be realized. Law Number 17 of 2008 concerning shipping is a basic provision regarding national shipping. One of the contents of the articles of Law No. 17 of 2008 concerning shipping is shipping safety (Lasse, 2014).

Furthermore, the government issued the Regulation of the Minister of Transportation Number 45 of 2012 concerning Ship Safety Management. Safety and security, both nationally and internationally, need to be increased to support the potential in the shipping sector. Shipping safety is determined by several factors, for example, the sophistication of the ship and equipped with modern equipment, but not only that, this also depends on various factors, including human resources, namely the crew in implementing the ISM Code and support from the management of shipping companies (Azhar, 2013).

The ISM Code (International Safety Management Code) is interpreted as an international safety

management provision for the safety and security of ship operations and pollution prevention stipulated by the International Maritime Organization (IMO) which has been amended. Based on IMO Analysis, it is known that $\pm 80\%$ of ship accidents are caused by human error, and from all these human errors, it is also known that around 80% of them are caused by poor management of shipping companies (International Maritime Organization, 2024). The state of seaworthiness also has a strong influence from the management system of shipping companies or ship operators. Data from the KNKT and investigation stated that the accident occurred more due to human error. The following is the data on marine accidents that we obtained from the KNKT portal for the last six (6) years.

Table 1. Marine accidents according to KNKT

No	Year of occurrence	Number of Accidents	Water area
1.	Year 2021	3 cases	Indonesia
2.	Year 2020	2 cases	Indonesia
3.	Year 2019	17 cases	Indonesia
4.	Year 2018	30 cases	Indonesia
5.	Year 2017	25 cases	Indonesia
6.	Year 2016	16 cases	Indonesia

Data source, KNKT 2024

An example of the case of a ship accident of PT. Pelni, namely the Fast Ferry (KFC) Jet Liner crashed into a building in the Kendari port area which occurred on February 24, 2017. The Jetliner Fast Ferry (KFC) is operated by PT Pelni to serve the community on the Kendari-Raha-Wanci-Bau Bau (PP) shipping route. This ship made in Norway with a capacity of 500 passengers carries 181 passengers to Raha, Kendari. In the accident, the Jetliner passengers in the evacuation process were assisted by KN 370, a ship belonging to the local Marine and Coast Guard Unit (KPLP). Another example is an accident in the waters of Sedanau Island, Bunguran District, which was experienced by KM Bukit Raya. As a result of hitting the coral, KM Bukit Raya experienced a leak in the left side of the hull due to the impact of the coral. The ship was carrying 248 passengers and all passengers were successfully evacuated safely (Bangun & Hariyono, 2019).

From the above incident, human factors, organizations and management that have not fully supported the operational needs of safe ships cause ship accidents and prevent marine pollution. Based on the above, the International Maritime Organization (IMO) issued a provision, namely the International Safety Management Code (ISM Code) as a provision to standardize Safe Management for Operation of Ships and Pollution Prevention contained in SOLAS 1974 (Safety of Life at Sea) Chapter IX, namely Management for the Safe Operation of Ships. The International Safety Management Code in relation to safety and pollution prevention and for the implementation of the Safety Management System (SMS) establishes an international standard for the safe management and operation of ships by setting rules for shipping companies. To prevent ship accidents, it is necessary to provide for safe ship operation so that it does not harm the company concerned and the transportation users themselves (Rahman et al., 2017).

PT. Pelni is one of the national shipping companies that has been certified by the ISM Code and has many fleets in operating ships, in the implementation of shipping safety management system policies both on ships and in the office still have problems in their journeys. In ship operation, the implementation of the shipping safety management system policy for seafarers as marine employees of shipping companies is the most important asset. Not only on ships, but also in the office, company employees are required to have knowledge and awareness in implementing shipping safety management system policies as one of the requirements of the International Safety Management / ISM Code standards. At PT. Pelni The implementation of the ISM Code is expected to be able to awaken and maintain a safety culture in shipping safety. Therefore, the implementation of the ISM Code needs to be known to what extent, especially in the safety and security management of ship operations at PT. Pelni.

This research aims to understand the responsibility and authority of companies in implementing the

ISM Code as an effort to prevent accidents on ships. In addition, this study also evaluates the extent to which personnel and resources on board have implemented shipping safety management system policies according to ISM Code standards. This study also identifies various obstacles faced in the implementation of the ISM Code, especially related to ship operations, to provide a more comprehensive picture of the effectiveness of the implementation of the safety management system.

METHODOLOGY

The design of this study is prepared systematically to ensure the smooth and achievement of research objectives. The steps include the collection of initial data from literature and documents as the basis of the methodology, followed by the collection of field data analyzed using relevant methodologies. The discussion was carried out by comparing the results of the analysis with literature studies to support conclusions and recommendations. The conceptual framework is prepared as a guideline for the implementation of research, including factors that affect the research objectives.

The type of research in this research is Descriptive research, where this type of research is to describe, explain and validate the data or findings from the research. This research method can be in the form of describing a variable and has a causal relationship (Ramdhan, 2021; Sujono, 2024).

This research was conducted in Jakarta, especially at the PELNI headquarters and ships operated by PELNI. The research lasted for 8 months, starting from data collection to report preparation. The research proposal is submitted in April 2024, data collection is carried out in August 2024, the results seminar is planned for November 2024, with the target of completing the revision also in the same month.

The population of this study includes policymakers and crew members at PT PELNI. The sample was taken randomly using a random sampling technique, consisting of policy makers in the DPA section, operational managers, and the crew of the Egon.

This study analyzes the bound variables, namely the implementation of the ISM Code, and three independent variables: company responsibility, ship personnel resources, and ship operations. The implementation of the ISM Code includes strategies for objective outcomes on board. Corporate responsibility highlights the role of leadership in the implementation of the ISM Code. The ship's personnel resources ensure the right personnel with adequate training according to their duties. The operation of the vessel emphasizes procedures, plans, and work instructions for the safety of personnel, ships, and environmental protection.

This study uses three data collection methods: literature study to obtain a theoretical basis related to the application of the ISM Code, observation through direct observation of the research object, and in-depth interviews with related parties to obtain field data on the implementation of the ISM Code.

The form of data analysis technique used in solving the problem in this study is using a qualitative description analysis method based on the secondary and primary data obtained.

RESULTS

Data collection was carried out at the PT Pelni Jakarta office and ships docked in Makassar in June 2024. PT Pelni, the national sea transportation company since 1952, has implemented the ISM Code since 1998 for passenger ships and 2002 for cargo ships. The ISM Code serves as a regulation for the supervision and evaluation of ship safety systems. The DPA (Designated Persons Ashore) division is responsible for safety management, while the PT Pelni office manages DOC (Document of Compliance) certificates. Ships owned and assigned by PT Pelni that operate have implemented the ISM Code according to standards.

Table 2. The number of ship fleets operated by PT. Pelni in 2024

No	Fleet of Ships	Owned by PT. Pelni	Assignment by the Ministry of Transportation	Sum
1	Passenger ships	26	70	96
2	Cargo ships	8	1	9
3	Cattle Ship		1	1
	Sum	35	72	106

Data source: PT. Pelni, 2024

Based on the data in table 1. provide an explanation related to the ownership of PT Pelni ships and ships assigned by the Ministry of Transportation. A total of 106 ships operated by the ship consist of 96 passenger ships, 8 cargo ships and 1 livestock ship. With the number of ships as many as 106, qualified resources are needed, both those in the office to manage them and resources at sea (crew) who operate the ship (Law of the Republic of Indonesia No. 17 of 2008 concerning Shipping, 2008).

In the implementation of the ship accident prevention management system in order to ensure the safety and security of the ship, not only the supervision of the management on board the ship and the management of the company that supervises every task of the personnel on board but also focuses on the recruitment of the captain to the crew who are placed in the ship's organizational structure. The following is attached data on the number of crew members manning the ship operated by PT. Pelni is either owned or assigned by the Ministry of Transportation.

Table 2. The number of crew members manning the PT. Pelni

No	Fleet of Ships	Owned by PT. Pelni	Assignment by the Ministry of Transportation	Sum
1	Passenger ships	1558	2040	3598
2	Cargo ships	108	18	126
3	Cattle Ship	18	-	18
	Sum	1684	2058	3742

Data source: Pt. Pelni, 2024

In table 2. the number of crew members manning the ship operated by PT. Pelni with a total of 3742 crew members consists of 1684 organic people (crew members who have been appointed as permanent employees of Pelni), and 2058 non-organic people.

If we look at the number of personnel manning Pelni ships in terms of quantity, the number is very proportional to cargo ships and livestock ships. For example, on a cargo ship for 1 cargo ship manned by 18 people, the number has met the organizational structure on board. Likewise with passenger ships if we look at the existing table that on average 1 (one) passenger ship with type 2000 is manned by around 85 people, type 1000 is manned by around 55 people and type 500 is manned by around 45 people. A different thing happens at the level of supervision by the land/office where with the number of ships as many as 106 fleets and the number of crew members as many as 3742 people are only handled by 5 people in the DPA section. We consider that human resources who handle the management safety system are still minimal, so a system is needed to help facilitate the handling of the safety system using applications.

DISCUSSION

In the shipping route of PT Pelni ships, which are part of the sea transportation facilities as a link between islands, it is required to have sufficient and capable human resources in ensuring shipping safety and requires a high commitment from the management level to implement the elements contained in the ISM Code. The safety management system aims to provide practical work procedures in operating the ship safely and a safe working environment.

In preventing risks to ships, personnel and the environment, human resources are required to improve

the skills of personnel on land and on board in the field of shipping safety management continuously, including readiness to face emergency situations related to safety and environmental protection. The safety management system must ensure compliance with the required provisions and rules, and the codes, guidelines and standards recommended by international maritime organizations, governments, classification bodies, and applicable maritime industry organizations are also considered. The following elements are indicators in this study, related to shipping safety management:

The responsibility and authority of the company in implementing the ISM Code as an effort to prevent accidents on ships.

The responsibility and authority of the company, which in this case is PT. Pelni as an operator certainly cannot be separated from what is the supervision of the responsibility and authority of the crew for shipping safety in preventing ship accidents. Based on Article 40 of Law No. 17 of 2008 concerning Shipping, it is stated that transportation companies in waters are responsible for the safety and security of passengers and/or goods they transport. And the value of the responsibility is mentioned in Article 2 which reads that the water transport company is responsible for the cargo of the ship in accordance with the type and quantity stated in the cargo document and/or the agreement or contract of carriage that has been agreed. Liability as referred to in article 40 of the Shipping Law may arise as well as the operation of a ship in the form of: (a) death or injury of the passenger, (b) destruction, loss or damage of goods transported, (c) delay in the transportation of passengers and/or goods transported, (d) losses of third parties. In the level of regulations under Article 77 paragraph 1 of Government Regulation (PP) Number 20 of 2010 concerning Transportation in Waters, it states that water transportation companies are obliged to transport passengers and/or goods, especially postal transportation agreed in the transportation agreement.

In paragraph 3 it is stated that before carrying out transportation as mentioned in paragraph 1, the shipping company must ensure: (a) the ship's transportation facilities have met the seaworthiness requirements, (b) the ship's transportation facilities have been filled with sufficient fuel and fresh water and equipped with logistics supplies, (c) the passenger compartment, cargo room, cooling room, and other storage places on the ship are adequate and safe for passengers and/or goods to be loaded, and (d) the manner in which the loading, handling, storage, stacking, and unloading of goods and/or loading or unloading are carried out carefully and carefully. Of course, what is the task of the company is part of the International Safety management Code ISM Code, to supervise the running of all managerial operations of shipping in avoiding ship accidents that have met international standards in the managerial process of avoiding human error for the safety and security of shipping.

Another responsibility is mentioned in Article 180 of the Government Regulation on Transportation in Waters, namely that the water transportation company is responsible for the safety and security of passengers and/or goods it transports. Shipping companies in waters are responsible for the cargo of ships in accordance with the type and quantity stated in the cargo documents and/or agreements or contracts of carriage that have been agreed.

Regarding the company's responsibilities and authorities, it cannot be separated from the structure on board the ship which must be implemented managerially in order to run the International Safety Management Code, although it is also inseparable from other international rules that affect the implementation of the duties and authorities of the crew as an integrated part for the running of security and safety on board the ship such as both on board and before being on board the ship such as the implementation of the Standards of Training, Certification and Watchkeeping for Seafarers (STCW). In terms of structure on board although not all ship structures are the same on every ship because it depends on the type, there is an organization structure on board that is at least owned on every ship which of course also has the responsibility and authority to represent the company to apply the ISM Code.

The application of the ISM Code for companies is used to improve work systems, to implement internationally recognized safety management systems, to be ready to face market competition, to increase customer confidence in cargo safety, and to satisfy customers.

Ship personnel play a crucial role in the implementation of the Shipping Safety System. PT Pelni has





established Responsive Management, a cross-directorate and divisional team to oversee the implementation of the ISM Code. Each incident is reported through a dedicated communication group, with the main focus on the safety of cargo, ships, and passengers. Incident handling procedures have been set up to minimize life-threatening accidents, ships, and the environment. PT Pelni routinely evaluates the implementation of the ISM Code to ensure that the main goals are achieved, namely ensuring ship safety, protecting the environment, and preventing ship damage.

Implementation of shipping safety management system policies by ship personnel and resources.

Transportation safety is manifested in the smooth implementation of transportation in accordance with operating procedures and technical feasibility requirements for facilities and infrastructure and their supports. The human factor in the form of personnel on board the ship is the main cause of accidents in addition to other factors of ship resources. This happens because of a poor management system, both the management system on board and the company's management. To reduce accidents and marine pollution caused by human factors, a safety management system that synergizes between companies and ships is needed. Therefore, the implementation of the ISM Code must be carried out optimally to achieve shipping safety and ship operation. The ISM Code is an international standard for safety management systems that aims to ensure that companies provide services that meet the set requirements, namely that ships can operate safely and prevent environmental pollution. The implementation of the safety management system on board has been carried out in accordance with the procedures contained in the safety management system manual. The skipper has responsibility for its implementation and continuously reports to the head office.

Based on the results of observations on the Egon ship in Makassar, the ship's safety management system is implemented in accordance with safety manuals and SOPs with the skipper as the main person in charge. The skipper provides clear motivation and instructions to the crew, ensures experienced and competent seafarers, and reports shortcomings to the Designated Persons Ashore (DPA). In addition, the skipper routinely conducts emergency exercises to ensure crew readiness, supervises the work of Mualim I and the Head of the Engine Room, and handles discipline issues and training to adapt to technological changes. This implementation aims to ensure ship safety and operational efficiency.

Table 3. Safety Drill checklist implemented

No	Types of activities	Implementation		Information
		yes	No	
1	Conducting safety-related briefings	√		
2	Lifeboat lowering exercise	√		
3	Firefighting drills	√		
4	Fire retardant clothing training	√		

Data source: KM. Egon, 2024

Some of the indicators that the researcher poured into the results of interviews with the crew of the ship, the researcher concluded that the implementation of the ISM Code on the ship management system, there is still a record of improvement related to point (c), where the captain is given the authority to ensure that the ship is manned by competent people/seafarers. However, in the recruitment process, especially at the officer level (Mualim 1,2,3) there are still placements on ships that do not involve the input, advice and opinions of the Captain.

Then the results of the interview with DPA, the researcher concluded that the SOP (standard operating procedure) for recruitment of ship crew members still has inconsistencies in determining positions, for example for mualim I, II and III levels as well as for the Engineer I, II and III levels, in the recruitment sub-division does not provide notes of important points related to the success of the position.

The DPA did not get approval for the placement of these people, constrained by the demands or internal interventions of the company's management and ship operations so that there were still obstacles faced in ship operations.

The occurrence of the ship accident experienced by PT. Pelni clearly caused huge losses both in terms of material and declining public confidence in the sea transportation mode for ships operated by Pt. Pelni. It can be seen that the pattern of career paths is different from then and now where ship officers who work on passenger ships are no longer required to go through an orientation period to introduce and solidify their experience on new cargo ships to passenger ships. This also proves that experience will make these young officers have a strong mentality as well as sailor skills in sailing ships. Another thing is also several officers who work on ships owned by PT. Pelni are energy with non-organic status who if they make a mistake do not think about the consequences received for disciplinary action. With non-organic status, they can leave the company without thinking about the career they have built. It will be different from the crew of a ship with organic status will think about the career they have built.

Based on the interviews, it was found that the standard standards for recruiting ship personnel have not been implemented consistently, with policies changing according to the needs of the company and the type of ship. According to Mr. Simon Lebo (2024), even though prospective personnel have participated in education and training (DIKLAT), their understanding of ship operations and safety is often lacking. Socialization related to the ISM Code and more intensive training are sought to improve the competence of personnel. This recruitment faces a dilemma, because even though some prospective personnel do not meet the qualification standards, the company's needs and the development of shipping management still require the absorption of labor (Provisions of the Minister of Transportation No. PM 45 of 2012 concerning Shipping Safety Management, 2013).

In the recruitment for crew members at the Officer level, in the event that Starting from Mualim II (two) to operational positions, the level is carried out at the Sub-division level and the DPA division is not involved. Thus it can be said that there is control that does not work when it comes to recruitment. Only at the Captain Level go through strict recruitment by going through several stages or career paths. A skipper on the Pelni ship is a crew member who is considered capable of not only leading the ship but he is a representative of the company who has full responsibility in ensuring the safety of the ship and its passengers. That is the importance that the ship must be manned by a competent person.

The facts also show that in the implementation of the ISM Code which is implemented in socialization by the company for the sake of a comprehensive understanding of the ISM Code to all personnel on board or company personnel in terms of management under the ship, several things that have been actualized related to all standards that must be carried out in the operation of the ship. In fact, the most important thing is also in understanding the ISM code as it is necessary to understand all national and international regulations in the form of conventions, especially in the Safety of Life at Sea (SOLAS) 1974, STCW which is the standard in the recruitment of ship personnel, and what is regulated in MARPOL which has been ratified as a positive law of Indonesia.

Obstacles faced in the implementation of the ISM Code related to ship operation

The implementation of shipping regulations, including in the implementation of the ISM Code, can certainly refer to the principles in law enforcement or regulations which in the implementation can be reviewed from the law enforcement theory by Lawrence M. Friedman who stated that in the

implementation of positive law and international law in the form of international conventions, in this case, what is regulated in SOLAS 1974 which refers to the International Safety Management Code for the safety and security of shipping, especially in Ship operation can be reviewed with three aspects, namely: legal structure, legal substance, and legal culture. In the implementation of the ISM Code related to ship operation, it is complete in accordance with the provisions of the law in terms of regulating the implementation of ship operation to meet the standards that have been set. Various laws have been ratified by our country as a legal substance and in terms of legal structure, there are already law enforcers from parts of the ministry who provide supervision over the implementation of the ISM code in companies. However, the fact that the ISM code has not been maximized in its implementation is due to several obstacles and obstacles, as follows:

1. Socialization of the ISM Code has not been maximized

What is a guideline in maintaining shipping safety and security, especially in ship operation, is very guided by the ISM Code which has become an international standard to avoid ship accidents. In the ISM code, good management has been regulated in doing various procedural things to maximize and streamline the duties and responsibilities of personnel on board the ship or company in issuing policies that can support the running of a good shipping system. However, it is very unfortunate that the socialization of the ISM code, both by the government and by the company itself, has not been maximized in socializing what is regulated in the ISM code and instructions and guidelines in preventing ship accidents. Although various shipping regulations have actually ratified procedural standards in shipping, few understand if it is part of the ISM code for the safety and security of shipping.

2. The qualifications of prospective personnel on board the ship are completely inadequate.

The development of the Shipping Education system and various shipping agencies that have developed in carrying out Training Education which has been eroded by the development of technology and social media has become a threat to prospective personnel in mastering shipping techniques and things. It can be easily obtained with various theories that will not be the same as practicum directly on the ship, a mindset that is easy based on the story of senior experience without directly experiencing the conditions on a certain ship makes it a weakness when facing a problem that tests not only the competence of the ship's personnel but also tests the mentality of the personnel which in fact many fall because of things like this.

3. The recruitment process for personnel on board is less strict.

In the implementation, giving birth to the next generation of ship personnel from the Captain to the Crew of the Ship, of course, is the main focus of shipping companies because the shipping system develops from time to time by requiring many competent personnel according to their fields. But basically the system of recruiting prospective ship personnel is getting here, period after period it is getting less and less strict which underlies the experience on board is not the only standard so that it can be assigned on board. The recruitment process, which in addition to not focusing on the standards of the ISM code or STCW, is a weakness of personnel who later in critical terms are not able to make the right decisions.

4. The dilemma of absorbing prospective Ship Personnel to avoid unemployment.

The sociological condition in absorbing all prospective personnel is also a heavy part for the ship company for the absorption of prospective personnel into the world of work, with various considerations and also the intention to hone the abilities of prospective personnel to make decisions to absorb most of the candidates to the stage of the section that is given tasks and authority on board even though of course through strict Education and Training (DIKLAT). With many prospective personnel, of course, it is also another focus of the company because it requires greater time and cost in preparing more competent ship personnel candidates.

5. Support from the Government in supervising the implementation of the ISM Code has not been maximized.

Seeing the development and strictness of the ISM Code which provides many regulations on various

things in the stability of ship operations, various formal and material requirements in carrying out a voyage that not all ship companies are able to meet these standards to sail. With the lack of strict supervision of this, even less strict supervision makes various ship companies still carry out voyages outside the standards that have been set, making the habit repeated without findings by the authorized supervisors, so that systematically endangering the ship and the ship company and of course to its passengers and cargo.

6. Building an online-based system

PT Pelni, as a shipping company, continues to improve internal and external services through the implementation of the ISM Code. One of the important innovations is the Planned Maintenance System (PMS) online system which was launched in August 2024. PMS is designed to make it easier for management to oversee ship operations and maintenance, by providing information that is fast, accurate, and easy to understand. The system includes features such as Daily Maintenance, Running Repair, Floating Repairing Docking (FRD), Running Hours, and technical and nautical certificate information. For example, in FRD, the system records the ship's docking schedule for maintenance and repairs. The app also helps monitor safety equipment, such as checking SART equipment. PMS is currently in the stage of familiarization and data input, supporting PT Pelni in making quick decisions in accordance with applicable safety and service quality standards (Siswoyo, 2016).

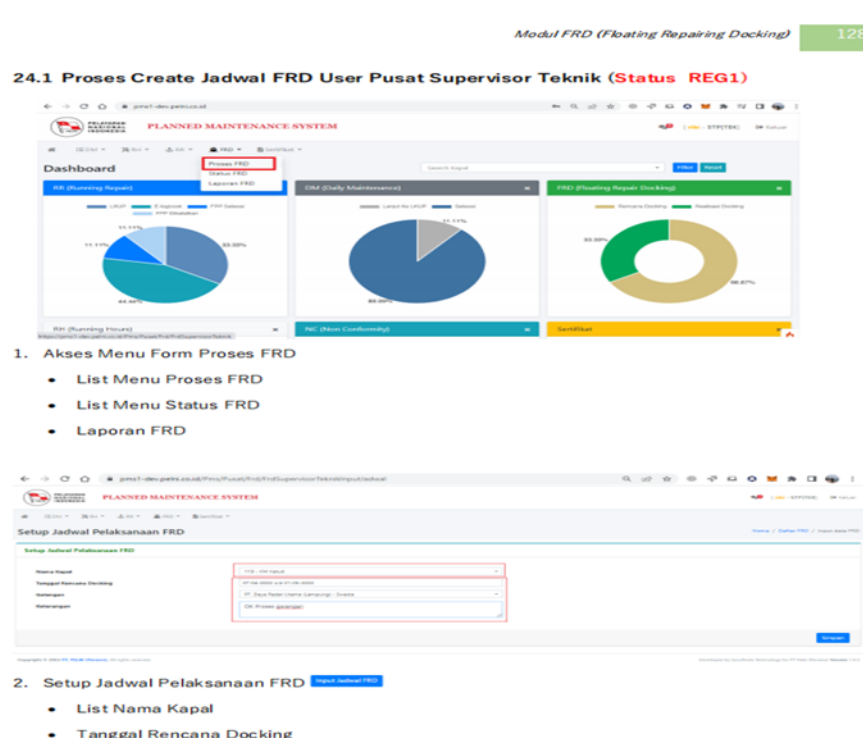


Image One of the display menus on the FRD report

Data source: Pt. Pelni, 2024

CONCLUSION

Based on the research and discussion carried out, it can be concluded that PT Pelni has carried out its responsibilities and authorities in implementing the ISM Code as an effort to prevent accidents on ships. This is reflected in the implementation of safety management in accordance with the main duties and functions of the Designated Person Ashore (DPA). Personnel and resources on board have also implemented shipping safety management system policies in accordance with the provisions of the ISM Code. However, this study found several obstacles, such as the mismatch of crew qualifications in the recruitment system and the intervention of company management in some operational decision-making.

This research provides suggestions for companies to provide continuous socialization to all parties, both

those working in the company and on ships, to ensure a thorough understanding of duties and responsibilities in accordance with the ISM Code in maintaining shipping safety and security. In addition, the company and the skipper are expected to increase supervision of the implementation of the shipping safety management system to minimize potential risks. The identified obstacles, such as recruitment problems and management interventions, should be used as a reference by PT Pelni's management to make more effective improvements in the future.

REFERENCES

- Andriani, A. (2018). *Saya Indonesia, Negara Maritim Jati Diri Negaraku*. CV Jejak (Jejak Publisher).
- Azhar, I. A. (2013). *Pengaruh Pemahaman Keselamatan Awak Kapal terhadap Penerapan International Safety Management Code (ISM-Code) oleh Awak Kapal PT Pelayaran Nasional Indonesia*. Bakrie University.
- Bangun, G. A. A., & Hariyono, W. (2019). Analisis Penerapan Keselamatan dan Kesehatan Kerja (K3) Pada Kapal Penumpang di PT PELNI Semarang. *Seminar Dan Konferensi Nasional IDEC*, 3(2579–6429), 1–6.
- International Maritime Organization. (2024). *The International Safety Management (ISM) Code*. <https://www.imo.org/en/OurWork/HumanElement/Pages/ISMCode.aspx>
- Ketentuan Menteri Perhubungan No. PM 45 Tahun 2012 Tentang Manajemen Keselamatan Pelayaran (2013).
- Lasse, D. A. (2014). *Keselamatan pelayaran di lingkungan teritorial pelabuhan dan pemanduan kapal*. Jakarta: Raja Grafindo Persada.
- Rahman, H., Satria, A., Iskandar, B. H., & Soeboer, D. A. (2017). Penentuan faktor dominan penyebab kecelakaan kapal di Kesyahbandaran Utama Tanjung Priok. *ALBACORE Jurnal Penelitian Perikanan Laut*, 1(3), 277–284.
- Ramdhan, M. (2021). *Metode Penelitian*. Surabaya: Cipta Media Nusantara.
- Siswoyo, B. (2016). Persepsi Masyarakat Terhadap Peralatan Keselamatan Kapal Laut dan Penyebrangan Di Provinsi Maluku. *Warta Penelitian Perhubungan*, 28(2), 146–156.
- Sujono. (2024). *Metode Penelitian administrasi dan manajemen*. Yogyakarta: Deepublish.
- Undang-Undang Republik Indonesia No 17 Tahun 2008 Tentang Pelayaran (2008).
- Yoseph, A. D., & Danny, F. (2017). Analisis Kecelakaan Transportasi Laut di Indonesia Tahun 2003-2013. *Prosiding Seminar Hasil Penelitian Semester Ganjil 2016/2017*, 1, 228–243.