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Analysis of Supervision for The Implementation of International Safety Management Code on The hipping Company

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Abstract

This research aims to find out and analyze the implementation of the 3 codes in the International Safety Management Code (ISM Code) such as: Maintenance of the ship and equipment; Company verification, review and evaluation; Certification and periodical verification; whether implement been done according to the standards and regulations that exist in the Shipping Company. This research was conducted at a Shipping Company (SC) and an Organization Recognized by the Government of Indonesia (RO) as supervisor of the National Shipping Company, on July 2018. Qualitative approach with in-depth interviews, observations, documents review, and focus groups discussions (FGD), where the author determine in advance the independent aspects such as: qualification of supervisors; availability of supervisors; supervision policies and procedures; method of supervision; surveillance equipment; and budget. In SC with 5 informants as technical superintendent, marine superintendent, auditor and designated person ashore (DPA), while in RO there were 4 informants who were all auditors. The results show that in SC: auditor who concurrently act as marine superintendent do not yet receive training on the ISM Code and certainly do not have the capacity as supervisors; auditors and DPA are still less than the number of vessels managed; in RO: auditors are still less than the number of vessels that must be supervised; budgets, especially incentives that are no longer put into effect, need to be reviewed, because the reduction in take home pay for auditors will certainly affect their performance.

Keywords: International safety management, maintenance, supervision, certification, verification

Introduction

Shipping safety is one of the keys to the success of marine transportation management. Shipping that does not safe certainly has a bad impact on the transportation business.

Data on ship's accident investigations in 2010-2016 (KNKT, 2016) released the incidence of ship accidents in Indonesia as many as 54 events. Where providing data in the form of types of accidents, casualties and recommendations.

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The types of accidents that occurred were dominated by burning or exploding ships, which were 19 times or about 35%. Whereas the highest fatality occurred in 2011, namely 86 dead or missing victims and 346 were injured. While the type of accident with small number due to crashing as many as 3 accidents during the last five years.

From still not safe the ships, both human and property, and the still occurrence of environmental pollution are closely related to what is intended and the purpose of the ISM Code for shipping companies and their vessels. This is related to human life, accidents, and environmental pollution (Akyuz, 2017).

Management is a form of work, so that in doing its work a Manager must carry out certain activities that are in accordance with the four main functions of management (George R. Terry, 1997). The four main functions of management are viz: (1) Planning, is to determine the goals to be achieved in the future and what must be done in order to achieve these goals; (2) Organizing, is grouping and determining various critical activities and giving power to carry out these activities; (3) Actuating, is the implementation of plans that have been previously determined or in accordance with the plan; (4) Controlling, is measuring the implementation with objectives, determining the causes of irregularities and taking corrective actions where necessary.

Planning on human resource activities contained in the engineering company is an activity of estimating or describing the state of the workforce to suit the needs of the company effectively and efficiently, so that the goals set by the company can be realized (Eric Alamzah Limawandoyo, Augustinus Simanjutak, 2013). Human resource, culture or work attitude and organizational structure are the problem factors in shipping companies related to ISM Code implementation (M. Firdaus Suwestian, Saladin Ghalib, Setio Utomo, 2015).

Supervision can be defined as the process of determining, what must be achieved is the standard, what is being done is the implementation, assessing the implementation and if necessary make improvements, so that the implementation is in accordance with the plan that is in line with the standards (George R. Terry,

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1997). The form of supervision will work well if the supervision processes are carried out, and the form of the supervision process is: (1) setting the standard criteria and indicators (benchmarks); (2) hold an assessment (supervision); (3) corrective actions.

Maintenance of the ship and equipment (ISM Code-10, 2014: 16) is one of the efforts to fulfill the requirements determined by the Code. The company should establish procedures to ensure that the rules are maintained in conformity with the provisions of the relevant rules and regulations, and with any additional requirements that may be established by the company.

Company verification, review and evaluation (ISM Code-12, 2014: 17) are obligations that must be fulfilled, such as: (1) The company should carry out internal safety audits on board and ashore at intervals not exceeding twelve months to verify whether safety and pollution-prevention activities comply with the safety management system. In exceptional circumstances, this interval may be exceeded by no more than three months; (2) The company should periodically evaluate the effectiveness of the safety management system in accordance with procedures established by the company; (3) The audits and possible corrective actions should be carried out in accordance with documented procedures; (4) Personnel carrying out audits should be independent of the areas being audited unless this is impracticable due to the size and the nature of the company; (5) The results of the audits and reviews should be brought to the attention of all personnel having responsibility in the area involved; (6) The management personnel responsible for the area involved should take timely corrective action on deficiencies found.

Certification and periodical verification (ISM Code-13, 2014: 18) is the result of audits conducted starting from the initial audit and periodical verification where the implementation of the ISM Code has been carried out and in accordance with what is required by the Code.

Based on the theories and codes above, then: (1) the dependent aspect is determined, namely; supervision of the application of maintenance of the ship and equipment; (2) independent aspects, namely; includes internal supervision

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(company verification, review and evaluation) conducted by SC, and external supervision (certification and periodical verification) conducted by RO.

These independent aspects include: (1) qualifications of supervisors; (2) availability of supervisory resources; (3) supervision policies and procedures; (4) supervision methods; (5) surveillance equipment; (6) supervision budget.

Method

This research is a qualitative research, that is research that intends to understand the phenomenon of what is experienced by the subject of research holistically, and by way of description in the form of words and language, in a special natural context and by utilizing various scientific methods (Moleong, 2007). This type of research approach is descriptive, which is research that seeks to describe current problem solving based on data.

In this research it is expected to provide answers about the supervision of SC and RO in the application of the ISM Code. This research was carried out based on information from several informants related to supervision by SC and RO, through in-depth interviews, observation and review of documents that will be compared with the provisions imposed on the responsible, executing and supervisory.

Data collection was carried out in several ways, namely: (1) In-depth interview techniques, which were carried out using data collection instruments in the form of in-depth interview guidelines. Where is done to several supervisors related to the implementation of ISM Code, both those in SC and RO; (2) Observation, which is carried out on equipment that supports monitoring activities on the application of ISM Code - Regulation 10, both in SC and RO; (3) Document review, carried out by researchers on regulations, policies, guidelines or standards used in monitoring the implementation of ISM Code - Regulation 10, both those in SC and RO; (4) FGD, which was carried out after an in-depth interview and of course there was a discussion with several experts in SC and RO.

Data processing includes: (1) Checking the validity of the data; (2) Reviewing all available data from observations and in-depth interviews; (3)

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Classify data; and (4) Presenting data in the description.

Discussion and Result

Description of SC; since the beginning of its journey in Indonesian and International waters has been in the shipping business which includes Container Shipping; Bulk Carrier and Tanker, Offshore Support and Ship Management. The area of operations of the company includes including inter-islands in Indonesia, Southeast Asia, South Asia and the Far East. Until now, the shipping business line remains the largest contributor to the company's revenue. SC operates a quality management system, which includes operations both on board and in the office. This system is fully developed with the use of internal resources from concept to application. The vessel's full internal audit program has been operating since management received the International Standard Organisation (ISO), 9002 in accordance with the International Maritime Organisation (IMO) / ISM Code in 1997, with audits conducted every year using the audit body of Nippon Kaiji Kyokai Class. The results of this study were obtained from interviews, observation, document review and FGD.

Description of RO; is the 4th classification body in Asia after Japan, China and Korea, and is the only national classification body tasked with classifying Indonesian-flagged merchant ships. RO activity is a classification of ships based on hull construction, machinery and electric of ship with the aim of providing a technical assessment of the feasibility of the vessel to sail. In addition, RO is also trusted by the Government to carry out statutory surveys and certifications on behalf of the Government of the Republic of Indonesia, including Load Line, SOLAS, MARPOL Conventions, ISM and ISPS Codes. The ISM Code in its activities in RO is organized by the Statutory Division. Whereas activities such as auditing, periodical certification and verification are carried out by branch offices throughout Indonesia which in this case are carried out by their ISM auditors.

Description of research respondents, in-depth interviews, observations, document reviews and FGDs were conducted in SC for several Technical

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Superintendents, Marine Superintendents, Auditors, DPAs, and Quality & Safety Managers who were experts in ISM Code; and at RO to several Auditors and Senior Managers of Maritime Management System who are experts in ISM Code.

The implementation of research both in SC and RO began with in-depth interviews, document review, followed by observation, and closed with FGD.

The results of the research both in SC and RO where the assessment on each dependent aspect of research is "the results of the measurement", with the level: (1) more than (fulfilling/available/good); (2) fulfilling/ available/good; (3) sufficiently (fulfilling/available/good); (4) less than (fulfilling/available/good).

Qualifications of supervisors in SC such as technical superintendents, auditors & DPA companies are at the level "fulfilling", both in terms of education, training, and experience in accordance with the placement of positions in the engineering and quality & safety departments. Supervision carried out especially the maintenance of ships & equipment; Company verification, review and evaluation are in accordance with the qualifications they have. However, for marine superintendents who concurrently act as new auditors at the level " sufficiently fulfilling", because training related to supervision as an ISM auditor has never been followed.

Availability of supervisory resources in SC such as technical superintendent is at the level "more than available" both in terms of the number of ships, the type of ship and the type of machinery or other equipment compared to the number of personnel in this technical department. However, for the auditor and/or DPA, the company is only at the level "sufficiently available", because in reality the number of personnel managing the vessel is still less than the number of vessels and the area of operation.

Supervision policies and procedures in SC that are used by technical superintendents, marine superintendents, auditors & DPA are at the level "available", both from various types of ships and the type of machinery or other equipment. Likewise, guidelines from various brands of products, machinery and other equipment are available according to the safety management system (SMS)

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of company.

Supervision methods in SC that are used by the technical superintendent, marine superintendent, auditor & DPA of the company are at the level "good", as the above procedure comes from the SMS of company. Likewise the use of applications and software that has been recognized both nationally and internationally.

Surveillance equipment in SC that is used by the technical superintendent, marine superintendent, auditor & DPA of the company is at the level "available", such as the above supervision method, of course, equipment that can be online is needed such as laptops and cellphones. Where a laptop, a cellphone that functions as a camera that is usually used for work whose nature must be written, drawn or equipped with photographs in making reports, notes and recommendations which of course can be via email, chat or printer.

Supervision budget in SC used by technical superintendent, marine superintendent, auditor & DPA during the current year budget is at the level "available".

Qualifications of supervisors in RO of the auditors are at the level "fulfilling", both in terms of education, training, and experience in accordance with the placement of his position in the branch office that handles survey & audit. Supervision carried out specifically: Maintenance of ships & equipment; company verification, review & evaluation; and certification and periodical verification is in accordance with the qualifications they have.

Availability of supervisory resources in the RO of the auditor is at the level "sufficiently available" both in terms of the number of ships, the type of vessel and the work area compared to the number of individuals in this branch office. This level is sufficiently available with the understanding that there are still shipping companies and vessels that are still waiting for the audit to be carried out with the reason that the auditor who is in accordance with his qualification is still conducting an audit in another company / ship. Continuous training to improve the

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level of auditor position to lead auditor has not been running properly.

Supervision policies and procedures in RO used by the Auditors and Senior Managers of the Maritime Management System are at the level "available", both from various types of vessels as regulated by the ISM Code. Likewise the guidelines from the latest IMO and International Association Classification Society (IACS PR10-R1-09, 2012) have also been completed in these procedures.

Supervision methods in RO are in accordance with the above policies & procedures, and at the level "good". Where all this is known as the Status Survey in the Classification Division, is also applied to the Statutory Division with the name Audit Status. In fact, periodically a Status Audit containing Non-Conformity (NC) or Major Non-Conformity (MNC) will be sent to the ship's owner within 3 months before maturity. This system is online between the Statutoria Division, auditors and ship's owner, especially each auditor can monitor each status of certificates and periodical verification, or NC or MNC for the company or ship.

Surveillance equipment in RO used by auditors & Senior Managers Maritime Management System at the level "available", such as the above supervision means of course, equipment that can be online is needed such as laptops and cellphones.

Supervision budget in RO is used by auditors, at the level "sufficiently available". This sufficient level is reasonable because previously the incentives for each audit provided for auditors were revoked in 2017.

Conclusion

Supervision activities in SC regarding the application of ISM Code to “maintenance of ships and equipment; company verification, review and evaluation” have not been carried out optimally.

The factors that make the supervision to be less than optimal are as follows: (1) Qualifications of supervisors where a marine superintendent certainly do not have the ability when do not receive training on the ISM Code, so that the quality of supervision is certainly lacking; (2) Availability of auditors and DPA still needs

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addition, where the number of vessels that are so many, both owned by the SC itself and other shipping companies managed by SC cannot be managed by the small number of auditors and DPAs. Moreover, the ship's operating area is so vast, of course the energy and time by them will be spent on trips to outside the city only. Automatic implementation of supervision both at the office and on ships will not be fulfilled and of course the performance will also decrease.

Supervision activities in RO regarding the application of ISM Code to "certification and periodical verification" have not been carried out optimally.

The factors that make the supervision to be less than optimal are as follows: (1) Availability of supervisory resources, auditors still need to be added, where the number of companies and ships is so large, unable to be served by the limited number of auditors. Moreover, the operational area of each Main Branch Office is so large, of course the energy and time will be spent on trips and staying outside the city; (2) The supervision budget provided for auditors certainly needs to be reviewed. This sufficiency is not only physically with the cost of transportation and lodging alone, of course also the non-physical with a sense of satisfaction and feel good both during the work in the office and outside the office, as well as funds left at home.

References

Akyuz, E. (2017). A marine accident analysing model to evaluate potential operational causes in cargo ships. *Safety Science,* Volume 92, p. 17–25.

Eric Alamzah Limawandoyo, Augustinus Simanjutak. (2013). Pengelolaan Dan Pengembangan Sumber Daya Manusia Pada Pt. Aneka Sejahtera Engineering. *Jurnal Manajemen Bisnis Petra Vol. 1, No. 2.*

George R. Terry. (1997. Principle Of Management, 7th Ed., Homewood Ilinois, *Richard D Irwill Inc.*

IACS PR10-R1-09 (2012). Procedure for the Selection, Training, Qualification and Authorisation of Marine Management Systems Auditors.

IACS PR9-R2-09 (2012). Procedural Requirements for ISM Code Certification.

ISSN: 2622-5778 (online)
Advances in Transportation and Logistics Research
http://proceedings.itltrisakti.ac.id/index.php/atlr

IMO Resolution A.913(22)-01 (2002). Revised Guidelines on Implementation of the ISM Code by Administration.

ISM Code (2014). International Safety Management Code.

ISO 9000 Series (2015). International Standard Organisation.

KNKT. (2016). Data Investigasi Kecelakaan Pelayaran Tahun 2010–2016, *Jakarta: Media Release KNKT.*

M. Firdaus Suwestian, Saladin Ghalib, Setio Utomo. (2015). Implementasi Kebijakan Sistem Manajemen Keselamatan Pelayaran (Studi di PT. Maritim Barito Perkasa, Banjarmasin). *Jurnal Bisnis Dan Pembangunan Vol. 3, No. 1.*

MARPOL - Consolidated Edition (2011). International Convention for the Prevention of Pollution from Ships, 1973.

Moleong J. Lexy. (2007). Metodologi Penelitian Kualitatif. *Rosda.*

SOLAS - Consolidated Edition (2014). International Convention for the Safety of Life at Sea, 1974, as amended.