ISSN: 3116-3475
International Journal
of Education, Research, and Innovation Perspectives
Volume 2 Issue 7 (July 2026)

The Utilization of the Unified Safety Management System (SMS) for the Safe Operation of Vessels Under the Management of Misuga Kaiun Co., Ltd.

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Date Submitted:
July 19, 2026

Date Accepted:
July 20, 2026

Date Published:
July 21, 2026

DOI:
10.5281/zenodo.21474788

ABSTRACT

Safety onboard ship can depend on the quality and extent of the ship's Safety Management System (SMS) as it details all the important processes, procedures, and instructions to be followed in order to ensure the safe operation of ships anywhere all times. This research was conducted to study the Section 02 of the Shipboard Procedure Manual of the Unified Safety Management System (SMS) of Misuga Kaiun Co., Ltd. highlighting the duties and responsibilities of the seafarers onboard and to further validate whether or not the utilization of the Unified SMS has a positive or negative effect on the safe operation of the vessel. The researcher used an individual one-to-one live interview via common social media conference platforms with the aid of an interview tool. This revealed the experiences, reactions, and coping up strategies of the 15 pre-selected seafarers from the three groups of participants in respect to their level of responsibilities onboard ship. The data gathered were carefully studied and interpreted to come up with a well-formulated analysis which were utilized to draw a conclusion and provide set of recommendations for the realization of the effects of the utilization of the Unified SMS of Misuga Kaiun Co., Ltd.

Keywords: *shipboard experience, shipboard reactions, shipboard coping up strategies, SMS Utilization, Unified Safety Management System, Level of Responsibilities*

INTRODUCTION

Misuga Kaiun Co., Ltd., a Japanese ship management company established in 1994, has grown from managing woodchip carriers to becoming one of the world's leading ship management companies, with a fleet of more than 150 vessels (BIMCO, 2017). The company is committed to ensuring the safe and efficient operation of its vessels while complying with international maritime regulations, flag state requirements, charter party provisions, and shipowners' expectations.

To address challenges associated with the global shortage of seafarers and the transfer of personnel among affiliated companies, Misuga Kaiun Co., Ltd. adopted the Unified Safety Management System (SMS) on January 3, 2017. The Unified SMS was designed to standardize shipboard operations and procedures across all managed vessels, enabling seafarers to transition between vessels and affiliated companies with minimal adjustment. Through its Training Division, the company conducted extensive familiarization programs to prepare officers and ratings for the implementation of the new system.

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A significant feature of the Unified SMS is Section 02 of the Shipboard Procedure Manual, which outlines the duties and responsibilities of all crewmembers. While the system aimed to improve operational consistency and safety, changes in job assignments and responsibilities generated varying reactions among seafarers. Some readily accepted the new procedures, while others experienced difficulties adapting to the changes. Previous research (Kiunisala, 2018) found that resistance primarily stemmed from modifications in traditional duties and responsibilities, resulting in implementation challenges during the transition period.

Despite these challenges, the company continued implementing the Unified SMS throughout its fleet. Positive and negative feedback from seafarers highlighted the need to further examine its effectiveness, particularly its impact on safety culture and vessel operations. Existing studies have largely focused on the level of implementation rather than its actual effects on shipboard personnel and operational safety. Consequently, there remains a need for a deeper understanding of how the Unified SMS influences seafarers' experiences and contributes to the safe operation of vessels.

Therefore, this qualitative study seeks to examine the utilization of the Unified SMS, particularly Section 02 of the Shipboard Procedure Manual, by exploring the experiences, reactions, and coping strategies of seafarers. The findings are expected to contribute to the existing body of knowledge on maritime safety management and provide insights into how the Unified SMS enhances safety culture and supports the safe operation of ships.

METHODS

Research Design

This study employed a qualitative research design to gain an in-depth understanding of participants' experiences, perceptions, and perspectives regarding the phenomenon under investigation. Qualitative research focuses on interpreting non-numerical data to uncover underlying meanings, patterns, and insights that cannot be captured through quantitative methods. Data were collected through one-to-one interviews, allowing participants to openly share their experiences and viewpoints. This approach provided rich, detailed information that helped the researcher develop a comprehensive understanding of the research problem within its real-life context.

Research Locale

This study was conducted among seafarers onboard vessels operating under a company that has implemented a Unified Safety Management System (SMS). The research locale encompassed the work environment where the Unified SMS is actively practiced and applied in daily shipboard operations. The participants were selected from the three levels of responsibility onboard, namely Management Level, Operational Level, and Support Level, to obtain diverse perspectives regarding the implementation of the Unified SMS.

Data gathering was carried out through interviews and discussions conducted either onboard the vessels or through online communication platforms, depending on the availability and schedule of the participants. The shipboard environment served as an appropriate setting for the study because it allowed the researcher to explore the participants' actual experiences, perceptions, and challenges related to the implementation of the Unified SMS within their organizational and operational context.

The selected locale was deemed suitable for the study as it provided direct access to participants who possess relevant knowledge and firsthand experience with the Unified SMS, thereby enabling the collection of rich and meaningful qualitative data.

Sampling Technique

This study utilized purposive sampling, a non-probability sampling technique commonly used in qualitative research to select participants who can provide rich and relevant information related to the phenomenon under investigation. Participants were chosen based on specific inclusion criteria, particularly

ISSN: 3116-3475
International Journal
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Volume 2 Issue 7 (July 2026)

their experience with the implementation of the Unified Safety Management System (SMS). The study involved 15 seafarers, with five participants representing each level of responsibility: Management Level, Operational Level, and Support Level. The relatively small and homogeneous sample size was deemed appropriate for generating in-depth insights and achieving a comprehensive understanding of participants' experiences and perspectives regarding the Unified SMS.

Table 1. *Profile of Participants*

Participant Code	Level of Responsibility	Eligibility
P1-P5	Management Level	Experienced the implementation of the Unified safety management system
P6-P10	Operational Level	
P11-P15	Support Level	

Note: Participant identities were anonymized using codes (P1-P15) to ensure confidentiality and protect participant's privacy.

RESULTS AND DISCUSSION

Experiences of Seafarers in the Utilization of the Unified SMS

The experiences of seafarers in the implementation of the Unified Safety Management System (SMS) differed according to their levels of responsibility onboard. The Management Level experienced pressure due to their responsibility in introducing and implementing the system among the crew. The Operational Level encountered challenges in adapting to changes in their duties and responsibilities, resulting in initial confusion and concern. Meanwhile, the Support Level experienced minimal disruption as their tasks continued to be assigned by their superiors. Despite these challenges, all groups were able to adapt to the system and contribute to its implementation.

Reactions of Seafarers to the Utilization of the Unified SMS

The participants generally expressed positive reactions toward the implementation of the Unified SMS. Although the transition brought challenges, continuous familiarization programs, training initiatives, and close coordination between shipboard personnel and company management facilitated acceptance of the new system. The support provided by the Management Level and the Training Division enabled the Operational and Support Levels to gradually adjust to their new responsibilities while maintaining the safe operation of the vessel.

Coping Strategies of Seafarers in the Implementation of the Unified SMS

The participants employed various coping strategies to adapt to the Unified SMS. Continuous familiarization and training were identified as the most effective means of adaptation. The Management Level maintained regular communication with shore-based management and actively participated in the implementation process. The Operational Level successfully adapted by accepting the changes and participating in ongoing training activities. The Support Level demonstrated cooperation and support toward their superiors. Furthermore, all participants recognized the importance of strictly complying with the provisions of the Unified SMS and viewed it as an essential guide to maintaining safety onboard.

CONCLUSION

Based on the findings of the study, the implementation of the Unified Safety Management System (SMS) of Misuga Kaiun Co., Ltd. has generally contributed positively to the safe operation of the vessel. While the transition to the Unified SMS presented varying challenges across the Management, Operational, and Support Levels, the participants demonstrated adaptability and commitment to its successful implementation. Continuous familiarization, training, effective communication, and strong support from both shipboard and shore-based management were identified as key factors in facilitating acceptance of the

ISSN: 3116-3475
International Journal
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system. Moreover, the participants recognized the Unified SMS as an essential framework that promotes safety, standardization, accountability, and operational efficiency onboard. Therefore, the study concludes that the Unified SMS has strengthened safety culture among seafarers and has become an effective tool in supporting the safe and efficient operation of vessels under Misuga Kaiun Co., Ltd. management.

References

Bhattacharya, S. (2012). The effectiveness of the ISM Code: A qualitative enquiry. *Marine Policy*, *36*(2), 528–535. https://doi.org/10.1016/j.marpol.2011.09.004

BIMCO. (2017). *Ship management report 2017*. Baltic and International Maritime Council.

Ceyhun, G. C. (2014). The impact of shipping accidents on marine environment: A study of Turkish seas. *European Scientific Journal*, *10*(23), 10–23. https://doi.org/10.19044/esj.2014.v10n23p10

Dokker, K. (2016). *Ship knowledge: A modern encyclopedia* (9th ed.). Dokmar Maritime Publishers.

Health and Safety Executive. (n.d.). *Human factors: Managing human failures*. https://www.hse.gov.uk/humanfactors/topics/humanfail.htm

International Chamber of Shipping. (n.d.). *Shipping and world trade*. https://www.ics-shipping.org/shipping-facts/shipping-and-world-trade

International Maritime Organization. (n.d.). *Maritime safety*. https://www.imo.org/en/OurWork/Safety/Pages/Default.aspx

Kiunisala, M. A. L. (2018). *Assessment of the Unified Safety Management System (SMS) of Misuga Kaiun Co., Ltd.* [Unpublished manuscript].

Raunek. (2019, November 12). *Safety management system for ships: ISM Code explained*. Bright Hub Engineering. https://www.brighthubengineering.com/seafaring/32839-marine-safety-management-what-is-ism-code/

Sanguri, M. (2019, April 20). *ISM Code: A burden for seafarers?* Marine Insight. https://www.marineinsight.com/marine-safety/ism-code-a-burden-for-seafarers/