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DOCUMENTATION PROCEDURES FOR NEW SHIP CONSTRUCTIONS IN THE SHIPBUILDING INDUSTRY FOR SHIPPING ELIGIBILITY CERTIFICATION REQUIREMENTS AT PT. INTERNUSA BAHTERA BATAM

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Abstract— In the shipping industry, documents and certifications are essential to ensure every ship meets safety and regulatory standards. For the shipbuilding industry, these documents are critical prerequisites for obtaining ship eligibility certifications. This study aims to analyze the procedures for fulfilling documentation requirements for new ship constructions in the context of shipping eligibility certification. This research employs a descriptive qualitative method, utilizing triangulated data collection through literature reviews, observations, and documentation. The study focuses on new ship constructions managed by PT Internusa Bahtera in Batam. The results reveal major challenges in the documentation process, including delays caused by incomplete submissions, lack of coordination among stakeholders, and technical issues in online systems. To address these challenges, the study recommends improving agent training, streamlining internal workflows, and enhancing technological systems to ensure efficiency and compliance with maritime standards. The procedural stages for new ships include tendering, contract formation, shipyard preparation, blueprint approval, keel laying, ship launching, ship measurement, and registration leading to certificate issuance. This research contributes to the shipping industry by providing insights and practical recommendations to improve the certification process, thereby supporting safer and more sustainable maritime operations.

Keywords— *shipping industry; certification; shipbuilding*

I. INTRODUCTION

Indonesia, as the largest archipelago in the world [1], heavily relies on maritime transportation for its economic activities [2]. The shipping industry, particularly shipbuilding, plays a vital role in supporting the country's trade and logistics needs [3]. With the implementation of cabotage principles and the Masterplan for Acceleration and Expansion of Indonesia's Economic Development (MP3EI) [4], the shipbuilding industry has grown significantly. However, meeting safety and regulatory standards remains a critical challenge for ensuring seaworthiness and environmental sustainability [5,6,7,8].

The research aims is to describe the documentation and certification requirements for new ship constructions at PT Internusa Bahtera Batam. The focus research contain of two key aspect are the first what documents and certifications are required for new ship construction and secondly how are these documents fulfilled in compliance with shipping eligibility certification requirements.

In the world of shipping, documents and certifications are known to be required for every ship to carry out a voyage [9]. When a ship carries out voyage activities, transporting and unloading goods or passengers in a port area, there will certainly be a document and certification check by the agency company appointed by the ship owner to serve the ship when loading and unloading at the port [10,11].

According to the Regulation of the Minister of Transportation of the Republic of Indonesia No. 45 of 2012 concerning Ship Safety Management given and the requirements of the International Safety Management Code (International Standard for Safety Management in Ship Operations) [12], all companies that own ships or operate their ships must establish a safety management system in the form of a ship certificate. These certificates aim to ensure the operational feasibility of the ship safely and the legality of the ship that will sail and work on a project. In the company there is a process of checking the expiration date of documents and ship certificates owned by the company. Each ship has documents and certificates, both permanent and temporary [13].

II. METHOD

This study uses a descriptive qualitative approach to understand the procedures for fulfilling ship documentation. Data were collected through the following literature review which an analyzing existing publications and maritime regulations; observation which an examining real-time documentation processes at PT Internusa Bahtera; and documentation analysis which following the reviewing forms, certificates, and company records related to ship certification.

III. RESULTS AND DISCUSSION

A. Documentation Requirements

The study identifies the following key documents required for new ship constructions:

1. Ship Measurement Certificate: Defines the dimensions and tonnage of the vessel.
2. Safety of Life at Sea (SOLAS) Certificate: Ensures compliance with safety standards.
3. Pollution Prevention Certificate: Verifies the ship's environmental compliance.
4. Load Line Certificate: Specifies the safe load limits of the ship.
5. Radio Safety Certificate: Confirms the adequacy of onboard communication systems.

These certifications are integral to ensuring that ships meet operational and safety requirements mandated by national and international authorities.

B. Procedural Stages for New Ships

1. Tendering: Selection of shipbuilders through competitive bidding.
2. Contract Formation: Legal agreement between the shipowner and shipbuilder.
3. Shipyard Preparation: Initial groundwork and allocation of resources.
4. Blueprint Approval: Official verification of ship designs by relevant authorities.

5. Keel Laying: The formal commencement of ship construction.
6. Ship Launching: Transition of the ship from the construction site to water.
7. Ship Measurement: Verification of ship dimensions and tonnage.
8. Registration and Certification: Issuance of essential certifications to authorize operations.

C. Procedural Challenges

1. Incomplete Documentation: Frequent omissions in submissions, such as missing owner identification or incomplete contracts, delay certification processes.
2. Stakeholder Coordination Issues: Poor communication between departments and external stakeholders, such as regulatory authorities and shipowners, hampers process efficiency.
3. Technological Limitations: The online documentation system (SPKE) frequently experiences technical glitches, leading to delays in document processing.

D. Solutions and Recommendations

To address the identified challenges, the study proposes the following:

1. Agent Training Programs: Comprehensive training on documentation and regulatory requirements to reduce errors.
2. Workflow Optimization: Streamlining internal processes by integrating inter-departmental coordination protocols.
3. Technological Enhancements: Upgrading the SPKE system to improve usability and minimize downtime.

These solutions aim to enhance efficiency and reliability, reducing delays and ensuring adherence to stringent maritime standards.

IV. CONCLUSIONS

This research highlights the pivotal role of documentation and certification in the shipbuilding industry. Effective documentation not only ensures compliance with maritime regulations but also supports safer and more sustainable operations. By addressing the challenges identified, PT Internusa Bahtera Batam can significantly improve its processes, bolstering Indonesia's position in the global maritime industry.

Future research could explore the integration of advanced technologies, such as blockchain, for enhancing transparency and security in documentation processes.

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