

**MERCU BUANA UNIVERSITY
POSTGRADUATE PROGRAM
MAGISTER OF INDUSTRIAL ENGINEERING**

TESIS

Name : Ari Arba'i
Title :

**“ANALYSIS OF IMPROVEMENT VESSELS MAINTENANCE
MANAGEMENT BASE ON INTERNATIONAL SAFETY
MANAGEMENT CODE APPLICATION”**

ABSTRACT

Development and advancement of maritime transportation system in Indonesia need of vessel have on good condition and safety used for instrument transportation between islands and inter-lands in Indonesian region or ocean going. Those expediences should contribute to the all of growth, even distribution and development in each region and islands in Indonesia. The expedient vessels should need to have phase of maintenance planning suitable with the used prior code. But then oftentimes phase of maintenance not proportional with what is expected of the code. Then it need for considerable study to the maintenance management processes for the vessels to optimizing expedient of the vessels.

A lot of maintenance management systems are used to identify phase of maintenance and management on industrials even manufacturing industries or services industries, but then on shipping industry there is requirement for their vessels maintenance management that is International Safety Management Code (ISM Code). Then analysis would be held are analysis for maintenance vessels management base on international safety management code application. Analysis of those application and implementation of this maintenance management system expected to useful for guidance of maintenance management application processes and those aspect that influence to the achievement implementation of vessels maintenance management. With the result could be used for guidance in each shipping industry in that development one even in just running or company establishes for implementation maintenance management as well as requirement of international safety management code.

As for target of this research is to obtain: measure phase of implementation maintenance management system base on ISM Code in shipping company, identify non-conformities I implementation maintenance management system base on ISM Code, then could be held for correction or improvement to close the target maintenance and working optimizing, identify relevance of phase of implementation and management to successful of implementation and

successful of company foregoing and to find the influence factors for application process of maintenance management system in shipping company.

Research method used descriptive quantitative approach, which try to depict influence implementation international safety management system to maintenance management system. Research conducted at shipping company residence in Jakarta with the hypothesis phase of implementation safety management in very difference phase.

Result of research that implementation of maintenance management system base on international safety management code in shipping company influences on phase of top management commitment for implementation processes, planning, responsibility and measurement and monitoring. Both of shipping company human resources base and infrastructure have in sufficiency. Improvement on implementation process should be in top management commitment.

