

## Abstract

In this thesis we investigated the introduction of a mandatory fatigue risk management system as part of the already existing safety management system for ships. In the first part we described what fatigue is by means of a literature study. In the first chapter, we briefly discussed the biological concepts and processes concerning sleep and fatigue. In the second and third chapter we looked at the causes and consequences of fatigue. In the fourth chapter, we formulated the problem - the relationship between fatigue and safety on board - by making connections between the opinions of different authors. In the fifth chapter, we criticized the current measures against fatigue at various levels and we indicated in which areas they are deficient. In the sixth chapter, we explored fatigue risk management systems through a literature review and by making connections between the opinions of different authors, while adding our own criticism. We concluded that the introduction of a fatigue risk management system as part of the existing safety management system for ships could provide a desirable solution to the problem of fatigue and we therefore recommend that the IMO make these systems mandatory for all ships in the next revision of the ISM Code.