

**A STUDY ON THE NAVIGATIONAL SAFETY OF INLAND
WATER TRANSPORT SYSTEM (IWTS) IN MALAYSIA:
LANGAT RIVER**

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**FACULTY OF MARITIME STUDIES AND MARINE SCIENCE
UNIVERSITY OF MALAYSIA, TERENGGANU**

2012

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A study on the navigational safety of Inland Water Transport
System (IWTS) in Malaysia : Langat River / Teng Soon Wai.

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2012

**A STUDY ON THE NAVIGATIONAL OF INLAND WATER TRANSPORT
SYSTEM (IWTS) IN MALAYSIA: LANGAT RIVER**

By

TENG SOON WAI

**Research Report submitted as partial fulfilment of
the requirement for the degree of
Bachelor of Science (Nautical Science and Maritime Transportation)**

**Department of Nautical Science and Maritime Transportation
Faculty of Maritime Studies and Marine Science
University Of Malaysia, Terengganu**

2012



DECLARATION AND VERIFICATION REPORT

FINAL YEAR RESEARCH PROJECT

It is hereby declared and verified that this research report entitled:
 A Study on the Navigational Safety of Inland Water Transport System (IWTS) in
 Malaysia: Langat River, by Teng Soon Wai, Student ID: UK 16619 has been examined
 and all errors identified have been corrected. This report is submitted to the
 Department of Nautical Science and Maritime Transportation as partial fulfilment
 towards obtaining the Degree of Bachelor of Science (Nautical Science and
 Maritime Transportation), Faculty of Maritime Studies and Marine Science,
 University of Malaysia, Terengganu (UMT).

Verified by:

Principal Supervisor

Name : Captain Asri Chin
 Official stamp :

Capt. Asri B. Chin
 Director - Marine Services
 ANQ Sdn Bhd

26 MAY 2012

Date :

Co-Supervisor

Name : Captain Noor Apandi Osnin
 Official stamp :

CAPT NOOR APANDI BIN OSNIN
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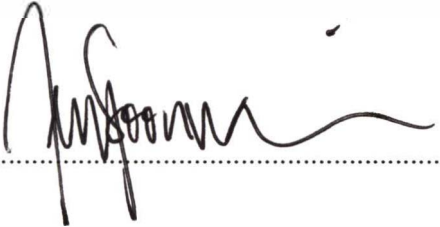
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DECLARATION

I hereby declare that the work in this Final Year Research Project is my own except for the quotations and summaries which have been duly acknowledged. I also declare that this Final Year Research Project has not been previously or currently submitted for any other degree in University of Malaysia, Terengganu or other institutions.

Signature : 
Name : **Teng Soon Wai**
Student ID : **UK 16619**
Date : **26 MAY 2012**

A Study on the Navigational Safety of Inland Water Transport System (IWTS) in Malaysia: Langat River

ABSTRACT

Inland water transportation project is considered today as one of the mitigation option available for humanity to curb carbon footage. Navigational safety in inland water transportation represents a major concern to inland water transportation; its existence is very infrequent but has grave consequence that makes its avoidance a very imperative factor. The nature of the inefficiency or inadequacy of navigational safety can be worrisome as they can lead to loss of life, damage to environment, disruption of operation, injuries, instantaneous and point form release of harmful substance to water, air and soil and long time ecological impact. However, the developments of complex system like inland water transportation and navigational safety project also need to meet economic sustainability for decision requirement related to marine accidents and incidents avoidance. This makes analysing and quantifying occurrence scenarios, consequence of accident very imperative for reliable and sustainable design for exercise of technocrat stewardship of safety and safeguard of environment. This paper discusses the risk control option required for operational, societal and technological change decision for sustainable inland water transportation system. The paper presents the result of investigation of navigational safety in the Langat River waterways development.