

**A METHOD FOR
MARINE CADASTRAL INFORMATION DISSEMINATION**

NOOR ANIM ZANARIAH BINTI YAHAYA

UNIVERSITI TEKNOLOGI MALAYSIA

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MARINE CADASTRAL INFORMATION DISSEMINATION

NOOR ANIM ZANARIAH BINTI YAHAYA

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To my beloved mother and father,
thank you for your prayers, sacrificial love and always believe in me.
I love you.

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ABSTRACT

As one of the maritime nations, development in Malaysia not only takes place on the land but also extends to the marine area. In addition, technology advancement has influenced and changed the surveying industry and global mapping. Through preliminary research regarding marine cadastre, the framework for Marine Cadastre Processing System has been produced with ability to process data from the fieldwork, to compute and to adjust the information regarding marine areas. The purpose of this study is to facilitate the sharing and dissemination of Marine Cadastral information as well as an initiative to develop an online web-based GIS application. In this study, the architecture of the framework for Marine Cadastre Processing System was implemented as a means to process the data from Marine Cadastre demarcation. Moreover, this system has the capability to access the Marine Cadastre data via internet and its efficiency has been given emphasis using ArcGIS Server version 9.3. The development of Marine Cadastre geospatial database has been executed to support the system. Testing carried out using the same workstation as the server indicates that the system is fully functional to process the data and be accessed by the users via internet. The potential to disseminate and share the Marine Cadastral information has been successfully proved and the study can act as one of the initiatives for our country especially in the field of Marine Cadastre.

ABSTRAK

Sebagai salah satu negara maritim, pembangunan di Malaysia bukan sahaja berlaku di kawasan daratan tetapi juga meliputi kawasan marin. Di samping itu, kemajuan teknologi telah mempengaruhi dan mengubah industri ukur dan pemetaan global. Melalui penyelidikan awal mengenai kadaster marin, satu rangka kerja bagi menghasilkan Sistem Pemprosesan Kadaster Marin telah dihasilkan dengan keupayaan untuk memproses data dari kerja lapangan, mengira dan melaraskan maklumat berkaitan kawasan marin. Tujuan kajian ini adalah untuk memudahkan perkongsian dan penyebaran maklumat Kadaster Marin serta sebagai satu inisiatif untuk membangunkan aplikasi GIS dalam talian berasaskan web. Dalam kajian ini, seni bina rangka kerja bagi pembangunan Sistem Pemprosesan Kadaster Marin telah dilaksanakan sebagai satu cara untuk memproses data dari penandaan Kadaster Marin. Selain itu, sistem ini mempunyai keupayaan untuk mengakses data Kadaster Marin melalui internet dan kecekapannya telah diberi tumpuan menggunakan *ArcGIS Server* versi 9.3. Pembangunan pangkalan data geospasial Kadaster Marin telah dilaksanakan bagi menyokong sistem ini. Ujian yang dilakukan menggunakan stesenkerja yang sama sebagai pelayan (*server*), telah menunjukkan bahawa sistem ini berfungsi sepenuhnya untuk memproses data dan diakses oleh para pengguna melalui internet. Potensi untuk menyebarkan dan perkongsian maklumat Kadaster Marin telah berjaya dibuktikan dan kajian ini boleh bertindak sebagai salah satu daripada inisiatif untuk negara kita terutamanya dalam bidang Kadaster Marin.