

UNIVERSITI TEKNOLOGI MARA

**Marine Cadastral Geodatabase for Berjaya Langkawi
Resort, Kedah.**

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of the requirement for the degree of
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AUTHOR'S DECLARATION

I hereby declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA (UiTM). It is genuine and the results is of my own unless otherwise acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree dissertation or any qualification.

I, hereby, assert that I have been equipped with the Universiti Teknologi MARA Academic Rules and Regulations regulating the execution of my studies and research.

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ABSTRACT

In the late 1990s, when awareness of the significance of marine natural assets led to enhance competition for its management, the idea of marine cadastre and the need to create a marine regulatory scheme and a cadastre that underlying offshore rights, restriction, and responsibilities match its onshore counterpart became evident. In Malaysia, however, there is a lack of awareness of marine cadastral and coordination of marine tenure registration process that does not provide sufficient evidence to support the system, so the concept of marine cadastral cannot be supplied to multi-stakeholders in the marine industry. The study aims to establish a marine cadastre geodatabase in Berjaya Langkawi Resort, identify and evaluate the capabilities of the relevant spatial data in the marine environment to support marine cadastre geodatabase according to Malaysia's perspective by using the ArcGIS implementation. This study proposed a legal review on entries and resampling the geospatial data using selected parameters such as satellite imagery, bathymetry data survey as topography in the marine environment, and the coordinates of the surveyed lot to determine the shoreline by using the nautical charts as a reference. The pre-comp plan expected result in the existing survey data computation consists of various categories which are fisheries, tourism and recreation, and in the other industries must be within the legal framework. By enhancing the marine cadastre geodatabase, the nature of the marine spaces are manageable in a systematic way to support the land and ocean policies framework legally.

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