# UNIVERSITI TEKNOLOGI MARA

# THE ESTABLISHMENT OF MARINE CADASTRE INFRASTRUCTURE IN MALAYSIA FROM THE LEGAL AND TECHNICAL PERSPECTIVES

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### **ABSTRACT**

Marine cadastre involves the governing of 3R concepts (right, restrictions and responsibility) in the marine area. Legal and technical issues are the most crucial to drive the implementation of marine cadastre. In Malaysia, the use of the National Land Code 1965 is for land cadastre purposes but it does not cover marine situations. The various marine legal matters that currently exist mainly focus on enforcement and do not emphasize marine spatial issues. The current existing provisions, such as the National Land Code 1965, define the terms used and the concept of cadastre in water body situations. However, they do not specifically discuss marine alienation. Furthermore, the current practice of marine space data acquisition also follows the land standard operations, including types of data used and data presentation. This research is to investigate, establish and propose relevant legal and technical aspects for the establishment of a marine cadastre standard of practice in Malaysia. Various methods have been used in the investigation, particularly through literature reviews on the National Land Code 1965 and other related written acts, rules, regulations and procedures. In addition, personal and group interviews and discussions through a formed focus group involving multi stakeholders such as the Department of Survey Malaysia and the Land and Mine Office were carried out. Sample new data sources using various data acquisition methods such as are bathymetry data, sonar images, topography data and oceanography data were collected at the Berjaya Resort & Spa as the case study area. The data were processed using related softwares such as SPSS, Surfer 8, HydroNav, TGO Trimble, Topcon Tools and Autocad. The results propose the definition of marine cadastre for Malaysia and amendments to the content of the National Land Code 1965 as well as the procedure of practice in marine environment. In addition, the study also proposes types of data to be used for decision making in marine alienation. Generally, the outputs of the research will enhance the practice of marine alienation procedures towards the establishment of a standard national marine cadastre infrastructure platform for Malaysia both from the legal and technical perspectives.

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