

**UNIVERSITI TEKNOLOGI MARA**

**DETERMINATION OF MARITIME  
BOUNDARY IN KELANTAN AND  
TERENGGANU BY USING BASE  
POINT IN ARCGIS**

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Thesis submitted in fulfillment  
of the requirements for the degree of  
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## AUTHOR'S DECLARATION

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

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## ABSTRACT

Maritime boundaries is very important for a states or country to decide where their right on the ocean but the lack of negotiation to deciding where the maritime boundary between two states or country be the big issues nowadays especially for areas of territorial waters with particular interest to countries claiming rights to the waters such as those on the Southern China Sea demands. In the context of this study it is more about the royalty claims than the underlying states under the Federal Government of Malaysia. Petroleum oil and gas royalty claims for Kelantan and Terengganu waters require strong legal evidence, especially when it involves maritime boundaries. According to Article 3 and 4 in UNCLOS, the countries may claim their 12 nautical miles of territorial sea from base line (low water line) but this act was not effective to the State in Federal Government of Malaysia because the Government of Malaysia is purpose the new act that call as Territorial Sea Act (TSA) 2012 that in section 3(3) mention the State Government only can claim from baseline (low water line) to three nautical miles only. This is very important to Kelantan and Terengganu to get the actual fact about their own boundary between their coast lines adjacent. Thus, the aim of this study is to establish the maritime boundary between the Kelantan and Terengganu in Malaysia. In determining the maritime boundary, the position of the base points for each state should be determined in advance. The position of the base points was determined in this study using two methods. The first method used the outermost seaward base points. This method is used by International Court of Justice (ICJ) in resolving the maritime boundary conflict between coastal countries in dispute. The second method is the scaled distance or equidistance of the base point are set to 100 meters, 200 meters and 300 meters in ensuring the best maritime boundary between the States. Next is the three nautical miles area between State of Terengganu and Federal Government of Malaysia. The purposed of the area in Redang Island already done JUPEM on 1998 but this research will enhance the area and make a comparison which one that more beneficially to the state of Terengganu. Method that has been used for this issue is buffer ring method in ArcGIS software, from that the differences between area of JUPEM and this research will figure out. At the end of the hat, this research will answer the maritime boundary issue between Kelantan and Terengganu and also will figure out the three nautical area between State of Terengganu and Federal Government of Malaysia at Redang Island.

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