

**DEVELOPMENT OF NDCDB IN E-CADASTRAL
ENVIRONMENT: CASE STUDY NDCDB IN AREA OF
UNIVERSITI TEKNOLOGI MARA (UITM), PERLIS.**

NORSYAHDIRA BINTI AHMAD

2013561523



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AUTHOR'S DECLARATION

I declare that the work in this thesis/dissertation 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.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Undergraduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student : Norsyahdira Binti Ahmad
Student I.D. No. : 2013561523
Programme : Bachelor of Surveying Science and Geomatics
(Honours.)– AP220
Faculty : Architecture, Planning & Surveying
Thesis/Dissertation Title : Development of NDCDB in e-Cadastral Environment
Case Study NDCDB in Area of Universiti Teknologi
Mara (UITM), Perlis.

Signature of Student : 
Date : July 2017

ABSTRACT

e-Cadastral was implementation under 9th Malaysia plan (2006) which can increase productivity in surveying technologies. With that, the aim of this study to provides the National Digital Cadastral Database (NDCDB) in the area of Universiti Teknologi MARA (UITM), Perlis using the e-Cadastral system. The modern of e-Cadastral survey technologies software can produce collection and directly automatically processing survey data during fieldwork. One of the technologies of the e-Cadastral survey is pre-computation (pre-comp) software. The pre-comp software to produce the pre-computation plan using the coordinate GDM2000 and also automatic generate SKL ASCII file. The second of technologies highly advance software in the e-Cadastral survey is e-Title Survey Module (e-TSM) software. e-TSM software can view data capture of survey data, and the survey data will electronic record and calculated which can adopt in the field to finish (F2F) concept under the e-Cadastral environment. Indirectly, the advances in this e-TSM software also can automatically generate 16 ASCII file at the same time. So that, the advantages of this method technology to surveyor are can save time, save cost and also reduce the workforce in survey work. Other than that, the capabilities of survey instrument also crucial in the implementation of e-Cadastral such as Total Station ES instrument. This device used in the e-Cadastral survey to replaces the obsolete land survey instruments. Usually, the e-Cadastral survey cannot be separated with the accuracy and precision. That why JUPEM upgrade their method from standard measurement cadastral works process Bowditch to digital method measurement e-Cadastral work using Least Square Adjustment. The result data survey must be under tolerance and lowest bound according to "Pekeliling KPUP Bil.6 Tahun 2009" (PKPUP 2009) to take the measurement quality of e-Cadastral survey work. In conclusion, the implementation e-Cadastral in survey depends on the capabilities of instruments and software will get the real time results data survey and the work will complete on time and efficient.

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