ABSTRACT

DESKTOP-BASED MAPPING SYSTEM OF ELECTRICAL SUBSTATION IN PLN UPJ CILEUNGSI

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PLN UPJ Cileungsi is one of electricity network office providers that handle of a wide area operation of Cileungsi, Bogor. The problems are the data of electrical substation that processed by PLN UPJ Cileungsi are not in visual form so it could not give enough information because it can't show the layout the electrical substations and the wiring between one substation to another. Therefore, it built an application to map the electrical substation in PLN UPJ Cileungsi. This is a desktop-based application because it is the internal need of PLN and may not be published.

This mapping system give visual information about position of electrical substation be located at PLN UPJ Cileungsi, not only give information of the substation position but also other information such as substitution's name, the large power of substation, customers which served by substation. This application can also describe position of substation with the wiring that connecting one substation with another one and has facility to for processing data of substation position. It used structured analysis modeling method to analyze the software. Modeling tools that used are flowmap, E-R diagram and DFD (Data Flow Diagram). This application was built usin tools which is Borland Delphi 7 as application builder and also Mapinfo professional 9.0, ArcView 3.3 and TatukGIS to process the map.

After tested using Black Box for Alpha and interview to users for Beta test, the result is this application can put a point with just turning on edit mode at the map, has a fairly good view, understandable, map that mad in this application can provide information as well, and also report print and data search facilities is quite enough to help users solving the problem.

Key words: Mapping Electrical Substation, Mapping System, Mapping