## **ABSTRACT**

Material procurement process has become one most important aspect for every company to run its business. PT PLN Persero as a company also needs material to run its activity. The materials needed by PT PLN Persero on this occasion are like Electrical cables, circuit breaker, electric pole and other materials. To fulfill all material needed above, PT PLN Persero is planning to use E-procurement system which is an application system that integrate procuring process inside. A process that is handled by this system is the auction process.

Auction is conducted by PT PLN Persero with the purpose to acquire material needed with the cheapest price. This price must fulfill the criteria given by PT PLN Persero. The output of the system is an auction winner who will sign contract for material procurement. The winner is the one who able to bid in for the cheapest price over the material offered. This auction itself is held in schedule that has been arranged before by the company.

Input inserted in this application is a user bid for the auction which had been chosen before by the user. The input will result an output which will describe the condition regarding the input, accepted or rejected. After an auction ended, it will pick auction winners.

This application is built using Client-server architecture in which desktop's application act as server and Pocket PC based PDA role as client. The output counted is the speed of the application in responding an input and result an output.

This application is built with Visual Basic .Net, SQL SERVER 2000 database, and using cradle as connectivity between server and client.

Based on the testing, this application deserved to be alternative solution of auction because all bid inserted will be processed right away, and because the mobility PDA offered.

**Keywords**: e-procurement, auction, Real-time system, pocket PC