

## Abstract

User wants to get ease on mobility and efficiency for their device. The impact is development of the new connection method that more practical and better in security. Bluetooth –uses 2.45 GHz ISM (Industrial, Scientific, Medical) frequency- is one of solutions.

With J2ME (Java 2 Micro Edition), we can develop a new application which use Bluetooth connection on mobile device such us hand phone and PDA (Personal Data Assistant). The device based on Java can integrated with Bluetooth environment using JABWT (Java API for Bluetooth Wireless Technology).

The application which developed in this research is Bluetooth remote control as a telematic or robotic application. The user's input from GUI on mobile phone will be converted into AT-command and transmitted over Bluetooth connection to the remote device and finally, it'll converted again to be mechanic output.

The performance of this application will be measure depend on wireless indoor propagation factors, such as distances, obstacles and interferences. The result is application runs well because it's need proportional of memory usage and power consumption. And Frequency Hopping Spread Spectrum gives it the capability to overcome indoor propagation factors.

**Key word: Bluetooth, J2ME, JABWT, GUI, AT-command, Power Consumption, Memory Usage, Spread Spectrum**