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POWER CONTROL ALGORITHMS IN SOFT AERIAL NETWORK

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ABSTRACT

Soft aerial network is an alternative ways of network that can be applied in the next generation of communications world. The aim of this dissertation is to compare the soft aerial network with the terrestrial cellular system. Several advantages in the soft aerial network may overcome the drawbacks in the terrestrial cellular system. The comparison is made by the number of baseband radios needed in both soft aerial network and terrestrial cellular system. The main reason of choosing the network is the cost issues in both networks. In wireless cellular communications, power control is a very important to measure the capacity of network. Effective power control will give an impact to the capacity of the network. The basic idea to implement this is by reducing the co-channel interference in order to increase its capacity. There are many types of power control algorithms in cellular network. This project will focus on close loop algorithm and open loop algorithm. The performances of these algorithms are measured by their speed of convergence. All these algorithms may be implemented to the soft aerial network. The soft aerial network is defined as soft infrastructure because the contiguous cells on the earth's surface created by a phase of array antenna are easily moved as and when required.