

## **Adaptive network selection mechanism for telecardiology system in developing countries**

### **Abstract**

Inadequate telecommunication infrastructure is one of the main reason of drawback on telecardiology implementation in developing countries. A new network selection algorithm is proposed to overcome this problem by providing adaptive heterogeneous networks. The proposed algorithm finds the most suitable wireless network according to user's health condition and service requirements. This algorithm adaptively adjusts the user bandwidth requirement by deactivating the lowest priority service level. The priority deactivation will provide sufficient bandwidth to support the higher priority service level when the best network has limited capacity. Simulation results show that the proposed algorithm improves the quality of services, cost effective and adaptive to the best networks. It outperforms conventional bandwidth based handover algorithm for telecardiology application. © 2016 IEEE.