Chapter Five

Conclusions and Recommendation

5   Conclusions and Recommendation

5.1   Conclusions

Nowadays users demand high service availability to access the network infrastructure not only under the anywhere, anytime, but also under the always best connected paradigms.

In this thesis the VHO process in heterogeneous networks was discussed.

A program was designed using MATLAB to calculate the parameters of the vertical handover decision making in Heterogeneous Networks. Different scenarios were considered. The results showed that as the user moves away from the RAT, the RSS decreases. The results also showed that as the cell radius increases the RSS of the user decreases and the probability of handover increases. The results showed that as the height of the base station increases the path loss decreases resulting in a low RSS. It was also noticed that as the number of channels for calls class 1 and calls class 2 increases the blocking probability decreases since more channels will be available to accommodate more users. The results also showed that when providing a user with a high QoS, that is using a high value of bbu, for a single call, the number of channels available is less than when using a low value of bbu and providing the user with a low QoS for a single call.

5.2   Recommendation

This thesis discussed theVertical Handover Decision Making in Heterogeneous Networks, for a future work the following recommendations are hereby made:

- In this thesis two parameters were used to evaluate the vertical handoff decision; the Received signal strength and the availability of the bandwidth. Different parameters such as Power consumption, Monetary cost, Security and User preferences can be considered to evaluate the vertical handover decision.

- In this thesis one RAT was considered, it is recommended to use more than one RAT and see its results on the decision making.