

Chapter 5

Conclusions

4G network is envisioned to provide any time any place connectivity. The work presented here addresses two major areas towards the realization of such complex networks related to Mobility Management and issues related to accounting, charging billing, and provision of unified billing over IPv6 convergent architectures. The proposed mobility management architecture embodies HMU that utilizes the FBA algorithm to provide the mobility support. The FBA algorithm of HMU proposed is capable of achieving a low handoff (horizontal and vertical) latency time of about 1 second observed through the experimental evaluation conducted on a complete Windows platform environment.

The proposed CFA for unified billing provides a unified billing structure for the users along with the independence in obtaining different services from varied network operators. The experimental study discussed proves the possibility of such architecture for unified billing generation in future 4G networks. The framework also describes a transparent financial model benefitting both the network operators and the users. This kind of billing architecture for convergent 4G networks would induce robust technological developments owing to cumulative business growth targeted
towards provision of better services to the users at highly market competitive charges.

The future work could be considered towards further reducing handoff latency periods, provisioning of security for handoff operations. Migration of the proposed billing architecture onto cloud platforms in the future would result in better industry acceptance and better convergence.