5G Mobile Network

Abstract :

This paper focuses on the new technologies coming to the market in the field of mobile network. Currently people are using 1G, 2G, 3G & 4G. So there are 4 generations of wireless network are available. It is said that after every decade, a new wireless network comes in the market. After 4G, now the world is moving towards 5G network.

This paper focuses on the previous versions of wireless network, issues related to them, need of 5G & applications of 5G. This paper also includes the on-going research on 5G & proposed 5G architecture.

The services provided by 5G needs some additional technologies & protocols to be introduces. IEEE 802.21 is used for the uninterrupted handover between the channels (i.e. without data loss). All-IP is needed to have packet switched network i.e. every device will be given an IP address which will govern the traffic over the network of that device. Software defined radio will make the reconfiguration of the devices while use. Cognitive radio will be responsible for the efficient use of the available spectrum.

References:

1) Aleksandar Tudzarov and Toni Janevski, "Functional Architecture for 5G Mobile Networks",1000 Skopje, Macedonia
2) **HUAWEI TECHNOLOGIES CO., LTD.**, "5G: A Technology Vision"
3) Dr. Anwar M. Mousa, "Prospective of Fifth Generation Mobile Communications", University of Palestine,Gaza- Palestine
4) http://www.ict-ras.eu/, "5G radio network architecture"
5) Saddam Hossain, "5G Wireless Communication Systems", The People's University of Bangladesh (PUB) Bangladesh
6) Amit Kumar, Dr. Yunfei Liu, Dr. Jyotsna Sengupta,"Evolution of Mobile Wireless Communication Networks: 1G to 4G", College of Information Science and Technology, Nanjing Forestry University, Nanjing, China, Dept. of Computer Science, Punjabi University, Patiala, Punjab, India
7) http://en.wikipedia.org/wiki/5G
8) http://en.wikipedia.org/wiki/4G
9) Aman Aryaputra,"5G- The Future of Mobile Network", Bhuvaneshwari
10) http://www.theguardian.com/media-network/media-network-blog/2014/aug/26/5g-network-launch-mobile-consumers-connectivity-download