

ISSN: 2249-7137

Vol. 11, Issue 10, October 2021 Impact Factor: SJIF 2021 = 7.492



## ACADEMICIA An International Multidisciplinary Research Journal



(Double Blind Refereed & Peer Reviewed Journal)

## DOI: 10.5958/2249-7137.2021.02112.1 AN OVERVIEW OF 4G WIRELESS TECHNOLOGIES

Dr. Ajay Rana\*; Dr. Aniket Kumar\*\*; Dr. Jasvir Singh Rana\*\*\*

\*Shobhit Institute of Engineering and Technology, (Deemed to be University), Meerut, INDIA Email id: ajay.rana@shobhituniversity.ac.in,

<sup>2, 3</sup>School of Electronics, Electrical & Mechanical Engineering, Faculty of Engineering and Technology, Shobhit Institute of Engineering and Technology, (Deemed to be University), Meerut, INDIA Email id: aniket.kumar@shobhituniversity.ac.in <sup>3</sup>jasvirsingh.rana@shobhituniversity.ac.in

## ABSTRACT

In the last several decades the development of wireless broadband technologies has been a response to rising demand for mobile Internet and wireless multimedia applications such as live TV, live movies, video conferencing, and so on. In the telecommunications industry, mobile communication is critical. WiMAX and LTE have facilitated the convergence of mobile and fixed broadband networks through a common wide area radio access technology and flexible network architecture. Since 2007, the IEEE 802.16 working group has been working on a new revision of the IEEE 802.16 standards as a higher level air interface to satisfy the ITU-R/IMT-advanced requirements for 4G systems and the next generation. 4G mobile technology ensures great mobility by providing high data rates and high capacity IP-based services and applications. The 4G wireless system, its design, security services, advantages, and difficulties are all described in this article.

KEYWORDS: LTE, Mobile Communication, Networks, Wireless Technology, 4G Networks.

ACADEMICIA

Vol. 11, Issue 10, October 2021 Impact Factor: SJIF 2021 = 7.492

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ISSN: 2249-7137

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