VII. Healthcare

Prior wireless communication systems lacked electronic healthcare due to low data rates and timing issues. As demonstrated in Fig. 2, 6G will enable the existence of remote surgeries by offering secure connections, ultra-low latency, enormous data speeds, and high dependability via AI. Furthermore, the short wavelength of the THz band facilitates communication and the creation of nano-sensors, allowing the development of autonomous nanosized devices that may work within the human body [4].

4. The primary requirements of 6G networks:

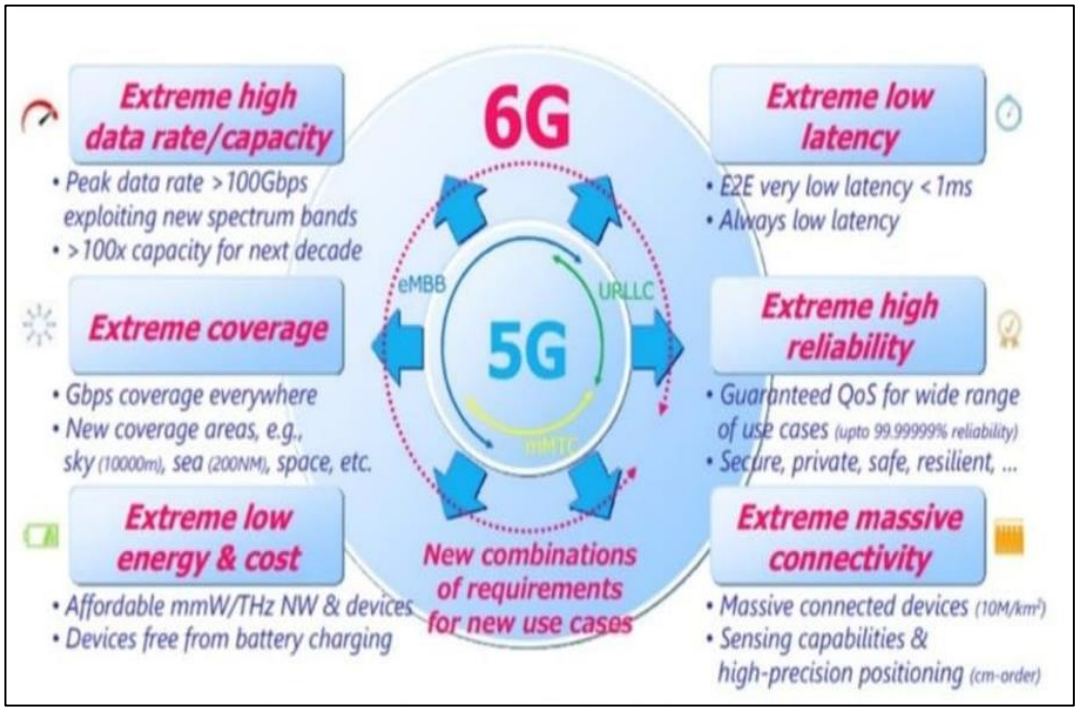

Fig 3: The Requirements of 6G networks

Architecture of 6G System:

The purpose of 6G mobile networks is to offer high-speed wireless connectivity, ubiquitous intelligence, and processing capability in the air, space, and seas. Satellite and underwater communication networks will be combined in order to enable network coverage all around the planet [5,13].

In 6G mobile networks, a super-fast service with data rates up to 1000 Mbps is needed [11,14]. 6G needs include holographic communication, dependability, low latency, and so on [5,15]. The essential conditions for 6G networks are given in Fig. 3 [16]. Using smaller cells and higher frequency bands are potential choices. Larger power consumption and higher operational costs will come from smaller cell sizes, and route loss may be suffered by high frequency bands. As a consequence, we must establish a limit on how far we may