

aerial vehicles (UAVs), which will be utilised in wireless communications to provide high data rates in place of traditional base stations (BS), will be supported by 6G.

I.HEALTHCARE

The poor data rate and time delay in other wireless communication technologies led to the absence of electronic healthcare. With the use of XR, robotics, automation, and artificial intelligence, 6G will enable secure connection, high performance, ultra-low latency, high data rate, and high reliability, allowing for the full implementation of remote surgeries, as shown in Fig. 4. Additionally, the THz band's tiny wavelength facilitates communication and the development of nanosensors, opening the door to the creation of novel nanoscale technologies that can function inside the human body.

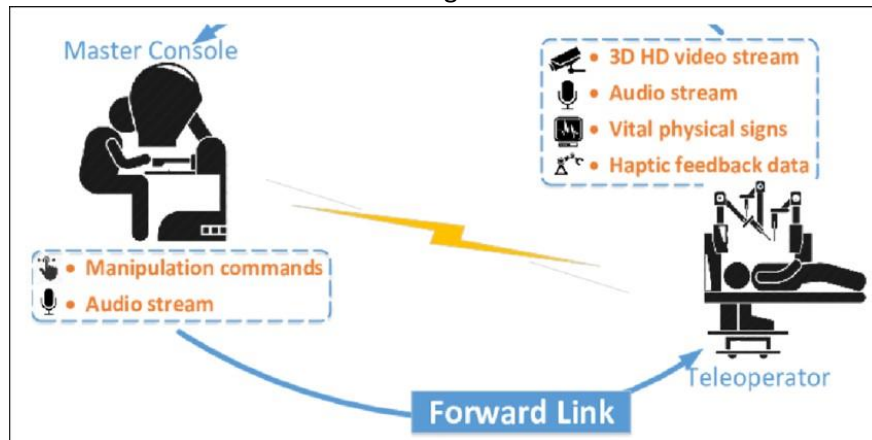


FIG.4 A loop explaining the communication between the master console and the tele-operator

SENSORY DATA IN 6G

The advancement of science and technology in recent years, along with the widespread adoption of the Internet of Things (IoT) and the emergence of 5G and 6G networks, has resulted in the progress of various computer technologies. This has facilitated improved connectivity among the billions of mobile smart sensor devices, such as smartphones, pads, and smart bracelets, which are omnipresent and possess enhanced processing and storage capabilities. Consequently, the concept of participant sensing has emerged, allowing individuals to utilize these devices and their integrated sensors, such as the gyroscope, accelerometer, and microphone, to gather and share sensing data. Through this, individuals can actively contribute to the monitoring of data in cities.

The potential of the 5G network lies in its ability to remotely transmit sensor data from different mobile devices equipped with diverse wireless interfaces [11]. Looking ahead, the 6G network is poised to create a globally interconnected society. By seamlessly merging terrestrial wireless and satellite communications, the integration of 5G and 6G networks will provide users with enhanced connectivity. Data reporting can be done more conveniently by selecting either cellular networks or Wi-Fi networks [83]. The heterogeneity of the options allows for flexibility in choosing the most suitable network. In a network, users typically encounter varying transmission expenses and levels of network accessibility. To be more precise, the cost associated with widespread availability The importance of the Tous cellular network cannot be underestimated, particularly for MCS applications that involve the transfer of