

agreements, with different stakeholders, including telecommunications companies, government agencies, satellite operators, and industry organizations, vying for access to available spectrum bands. The competition for spectrum can lead to delays and challenges in securing sufficient spectrum resources for 6G deployment. 6G technology may utilize higher frequency bands, including millimeter-wave (mmWave) and terahertz (THz) frequencies, to achieve ultra-high data rates and spectral efficiency. However, these frequency bands have unique propagation characteristics, such as higher path loss and susceptibility to atmospheric absorption, which may limit their practical deployment and coverage. Spectrum allocation is governed by regulatory frameworks and policies established by national and international regulatory authorities. Regulatory constraints, such as licensing requirements, interference mitigation measures, and spectrum sharing arrangements, can impact the availability and accessibility of spectrum for 6G deployment, particularly in densely populated areas or regions with competing interests.

Overall, addressing these challenges will require innovation and strategic planning to realize the full potential of 6G technology while ensuring its responsible and sustainable deployment.

CONCLUSION

As long as technological advancements are being progressing, the need for innovative and practical approaches to further improve the network system would arise. The upcoming 6G technology is bound to make future technological advancements possible. The new era of 6G network will pave the way for certain new technologies such as quantum cryptography, brain chips and automated systems to be included in day to day life of humankind.

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