Abstract

Satellites are specifically made for telecommunication purpose. In satellite systems, On-Board communication is a one of the key aspect in which transfer of digital data (high speed high volume data) & TM-TC (Tele command or Telemetry, low volume low speed data) is taking place. Data communication among satellite systems also known as Inter-Satellite Communication Link provides connectivity among two or more satellites and eliminating the need for intermediate ground stations when communicating data. Inter satellite links have been considered for satellite constellation missions involving earth observation and communications. In this paper, the feasibility of IEEE 802.11n standard for Inter-satellite communication and Ranging between two Wi-Fi enable devices has discussed.

References

1. Tanya Vladimirova, Christopher P. Bridges, George Prassinos, Xiaofeng Wu, Kawsu Sidibeh, David J. Barnhart," Characterising Wireless Sensor Motes for Space Applications" In


6. Wenlong Shen, Bo Yin, Xianghui Cao, Lin X. Cai, and Yu Cheng, "Secure Device-to-Device Communications over WiFi Direct" In IEEE Network (Volume: 30, Issue: 5, September-October 2016)


10. https://www.education.psu.edu/natureofgeoinfo/c5_p18

Index Terms

Computer Science
Communications

Keywords

Inter-satellite link, Wi-Fi Direct, IEEE 802.11, Ranging.