



6G RESEARCH DIRECTIONS

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NOTE WELL

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- [BCP 9](#) (Internet Standards Process)
- [BCP 25](#) (Working Group processes)
- [BCP 25](#) (Anti-Harassment Procedures)
- [BCP 54](#) (Code of Conduct)
- [BCP 78](#) (Copyright)
- [BCP 79](#) (Patents, Participation)
- <https://www.ietf.org/privacy-policy/> (Privacy Policy)

MOTIVATION

- IEEE 802.11 6G related developments followed by Agenda slide for 117
- IEEE 802.11 6G related developments Based on slides from Dorothy Stanley, 802.11 Chair
- Subscribe to 6gip@ietf.org

WI-FI 6, 6E & 7


- Wi-Fi 6 adds a new frequency, 6GHz
- Standard supports up to 9.6Gbps
- What is Wi-Fi 6E?
- only Wi-Fi 6E devices and applications can operate in the 6-GHz band
- What is Wi-Fi 7?
- Wi-Fi 7 adds one new 320 MHz channel and no new frequency
- Standard targets throughput minimum of 30Gbps, expect 40Gbps+
- IEEE 802.11ax, i.e. Wi-Fi 6 meets the MAC/PHY requirements
- for 5G IMT-2020 Indoor Hotspot and Dense urban test environments
- defined by ITU-R

WI-FI 7 OR 802.11BE

- What is Wi-Fi 7?
- Wi-Fi 7 adds one new 320 MHz channel and no new frequency
- Standard targets throughput minimum of 30Gbps, expect 40Gbps+
- Use cases include: Industrial IoT, AR/VR, 4K/8K Video, Cloud Computing, Video Conferencing
- Throughput and Spectral Efficiency
- Low Latency
- Enhancements for 6GHz support
- Doubles the data rate from 802.11ax previous maximum (160 MHz)
- 320 MHz bandwidth channels are only applicable in 6 GHz band: two adjacent 160 MHz channels

AGENDA

- Two presentations:
- IP Address Mobility: Presentation on LISP by Dino Farinacci 30 minutes
- ATIS NextG Alliance: Presentation by Amitava Ghosh (amitava.ghosh@nokia.com) 30 minutes



Q&A