

NSMA 2023 6 GHz Panel Discussion



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Federal Communications Commission

FCC 20-51

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
Unlicensed Use of the 6 GHz Band) ET Docket No. 18-295
)
Expanding Flexible Use in Mid-Band Spectrum) GN Docket No. 17-183
Between 3.7 and 24 GHz)

FCC introduced new Part 15.407 rules for unlicensed use of the 6 GHz Band.

- 1) Low Power Indoor use
- 2) Automatic Frequency Coordination (AFC) controlled Standard Power use

Also called for a 6 GHz Multi-Stakeholder Group to “address issues specific to technical and operational issues associated with the AFC system”

REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: April 23, 2020

Released: April 24, 2020

Table 3: Expanded Unlicensed Use of the 6 Gigahertz Band

Device Class	Operating Bands	Maximum EIRP	Maximum EIRP Power Spectral Density
Standard-Power Access Point (AFC Controlled)	U-NII-5 (5.925-6.425 GHz)	36 dBm	23 dBm/MHz
Client Connected to Standard-Power Access Point	U-NII-7 (6.525-6.875 GHz)	30 dBm	17 dBm/MHz
Low-Power Access Point (indoor only)	U-NII-5 (5.925-6.425 GHz) U-NII-6 (6.425-6.525 GHz) U-NII-7 (6.525-6.875 GHz)	30 dBm	5 dBm/MHz
Client Connected to Low-Power Access Point	U-NII-8 (6.875-7.125 GHz)	24 dBm	-1 dBm/MHz

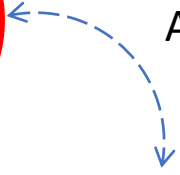
Client devices connected to an LPI AP are not required to be indoors

FCC R&O called for formation of a multi-stakeholder group

6 GHz Multi-Stakeholder Group



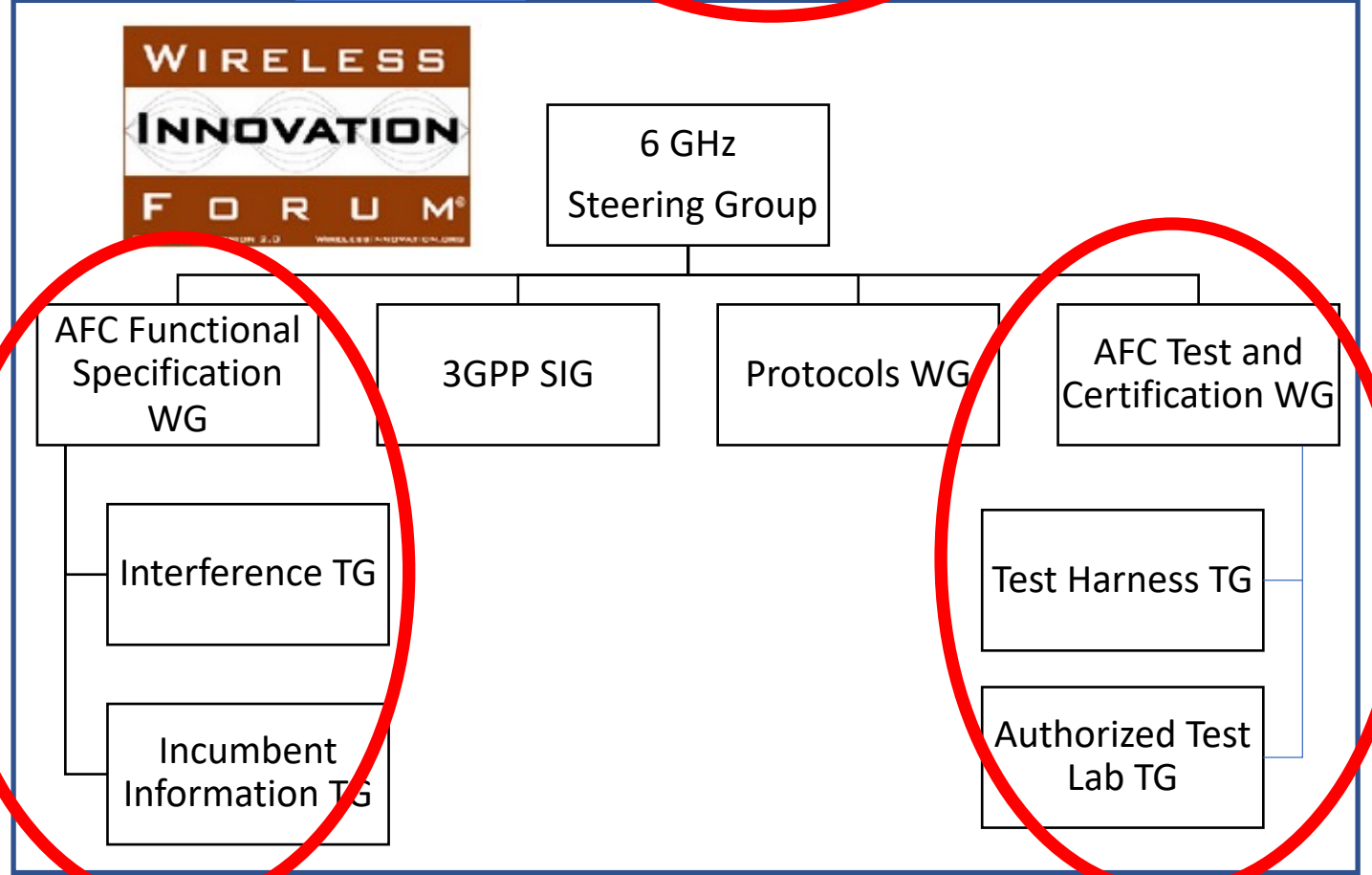
Liaison Agreement



Work Stream 1:
Harmful Interference

Work Stream 2:
Incumbent Information

Work Stream 3:
AFC Development



Wireless Innovation Forum has published:

- 1) TS-1014 6 GHz Functional Requirements v1.3.0
- 2) TS-3005 AFC System – SPD Interface Technical Specification v1.1.1
- 3) TS-3007 AFC System to SPD Interface Technical Specification v1.1.0
- 4) TS-5008 6 GHz Supplementary Data Repositories v.1.2.0

Available at:

<https://6ghz.wirelessinnovation.org/baseline-standards>

Wi-Fi Alliance has published:

- 1) AFC Device (DUT) Compliance Test Plan v1.3.3.pdf
- 2) AFC Device (DUT) Compliance Test Vectors v1.0.1.xlsx
- 3) AFC System (SUT) Compliance Test Plan v1.4.2.pdf
- 4) AFC System (SUT) Compliance Test Vectors v1.1.2.xlsx
- 5) AFC System to AFC Device Interface Specification v1.5.pdf

Available at:

[https://www.wi-fi.org/downloads-registered-guest/AFC Specifications and Test Plans 05082023.zip/38132](https://www.wi-fi.org/downloads-registered-guest/AFC%20Specifications%20and%20Test%20Plans%2005082023.zip/38132)

Designated Test Vectors

- 1) SRS – Successful Registration and Spectrum Availability (1)
- 2) URS – Unsuccessful Registration and Spectrum Availability (7)
- 3) FSP – Fixed Services Protection (100)
- 4) IBP – International Border Protection (8)
- 5) SIP – Special Incumbent Protection (16)

WinnForum and Wi-Fi Alliance have been working to define the expected results to these test vectors.

These expected results to be released to the FCC and public soon.