Liaison Statement

To	3GPP RAN4, 3GPP RAN5, GCF SG, GCF PAG, GSMA TSGAP, CCSA
CC	
Source	CTIA Certification OTA Working Group
Subject	LS on CTIA Certification OTA Performance Test Plan Version 5.0 Publication
Date	16 February 2023

Introduction

CTIA Certification has released the Test Plan for Wireless Device Over-the-Air Performance Version 5.0 in December 2022.

Discussion

One year ago, the restructured OTA Test Plan Version 4.0 was released to support the expansion of the CTIA Certification OTA test scope to accommodate new airlink technologies, new operating bands, new test methodologies, new device types, new phantoms, etc.

CTIA Certification is pleased to announce that the next major revision of the Test Plan for Wireless Device Over-the-Air Performance Version 5.0 which include the following documents was released in December 2022 (available to download at https://ctiacertification.org/test-plans/):

Test Plan for Wireless Device Over-the-Air Performance	
Document Number	Document Name
CTIA 01.01	Test Scope, Requirements, and Applicability
CTIA 01.02	Operator Priority List (to be published prior to enforcement)
CTIA 01.03	Normative Reporting Tables
CTIA 01.04	Informative Reporting Tables
CTIA 01.20	Test Methodology, SISO, Anechoic Chamber
CTIA 01.21	Test Methodology, SISO, Reverberation Chamber
CTIA 01.22	Test Methodology, SISO, Millimeter Wave
CTIA 01.40	Test Methodology, MIMO, Static Channel Model, Multi-Probe Anechoic Chamber
CTIA 01.41	Test Methodology, MIMO, Static Channel Model, Radiated Two Stage
CTIA 01.50	Wireless Technology, 3GPP Radio Access Technologies
CTIA 01.51	Wireless Technology, Location Based Technologies
CTIA 01.52	Wireless Technology, Non-3GPP Radio Access Technologies
CTIA 01.70	Measurement Uncertainty
CTIA 01.71	Device Setup and Positioning Guidelines
CTIA 01.72	Near-Field Phantoms
CTIA 01.73	Supporting Procedures
CTIA 01.90	Informative Reference Material

Some of the new features and test requirements introduced in Version 5.0 are as follows:

- Test reduction of LTE when NR SA is supported
- Extended testing in reverberation chambers to include Category M1 and Category NB1 devices
- GNSS testing
    - Standalone GPS L5 (informative)
    - Updated EN-DC A-GNSS testing to add GPS L5 and GALILEO E1
    - NR SA A-GNSS (including GPS L1 and L5 and GALILEO E1)
    - Test Time Reduction for A-GNSS OTA with LTE and NR
- Support of ankle-worn devices on the new ankle phantom (informative)
- Fast TIS category of measurements targeting IoT devices
- Option for Receive Signal Strength (RSS) pattern measurements for single receiver devices for test time reduction
- Addition of bands:n12, n14, n26, n30, n48, n77
- Updated TRP and C-TIS test parameters for NR FR1 to maintain comparable results with LTE and to allow for better antenna performance evaluation across the operating band
    - RF Channel BW
        - FDD: 10 MHz, SCS=15kHz
        - TDD: 20 MHz, SCS=30kHz
    - TRP
        - Utilize 12 RB UL allocation (RBstart=6, 20, 34) for FDD
        - Utilize 9 RB UL allocation (RBstart=4, 21, 38) for TDD
        - Allows for common UL Tx BW with LTE while maintaining MPR=0dB and low and high allocations closer to band edges
    - C-TIS (equivalent to TRS in 3GPP)
        - Utilize full downlink allocation
        - Allows for comparable C-TIS results with LTE

The mandatory date for each test methodology has not been finalized/defined yet as the development of the System Validation Documents (SVDs) and Laboratory Authorization Documents (LADs) is still in progress.

Actions

None

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Next Meeting Dates

OTA Working Group:

- CTIA OTA WG Face-to-Face Meeting #3/#4 (2023): 28 March and 31 March, Coppell, TX, USA