**3GPP TSG-CT WG1 Meeting #141eC1-232216**

**Online 17– 21 April 2023**

**Source: Qualcomm Incorporated**

**Title: General section for A2X communication, BRID, DDAA**

**Spec: 3GPP TS 24.577**

**Agenda item: 18.2.21**

**Document for: Agreement**

**1. Introduction**

TS 24.577 specifies protocol aspects for A2X communication, BRID, DAA, and Direct C2 communication according to the stage-2 requirements specified in TS 23.256.

**2. Reason for Change**

TS 23.256 specifies to use A2X communication for

- BRID

- Direct DAA

- Direct C2 communication

It is proposed to introduce general section for A2X communication, BRID, and DDAA, respectively.

**3. Proposal**

It is proposed to agree the following changes to 3GPP TS 24.577

**\*\*\*\*\*\*\*****\*\*\*\*\*\*\***

\* \* \* First Change \* \* \* \*

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[xx] ASTM F3411.19: "Standard Specification for Remote ID and Tracking".

[yy] ASD-STAN prEN 4709-002:2022-03: "Aerospace series - Unmanned Aircraft Systems - Part 002: Direct Remote Identification".

\* \* \* 2nd Changes \* \* \* \*

\* \* \* 3rd Changes \* \* \* \*

# 7 Broadcast remote ID (BRID) over PC5

## 7.1 General

Editor’s Note: This clause will provide description of the procedures at the UE, and between UEs, for BRID over PC5.

This clause describes the procedures at the UE, and between UEs, for broadcast remote ID (BRID) using A2X communication over PC5 as specified in clause 6.1. The broadcast mode A2X communication is used for BRID.

BRID over PC5 is supported for both UAV UEs that register to the MNO network(s) and UAVs that operate out of coverage.

The content of the messages for BRID is defined according to regional regulations for BRID (e.g. message set of ASTM F3411 19 [xx] or ASD-STAN prEN 4709-002 P1 [yy]) and optionally according to regional mean of compliance documents.

\* \* \* 4th Changes \* \* \* \*

# 8 Direct detect and avoid (DDAA) over PC5

## 8.1 General

Editor’s Note: This clause will provide description of the procedures at the UE, and between UEs, for DAA over PC5.

This clause describes the procedures at the UE, and between UEs, for direct detect and avoid (DDAA) using A2X communication over PC5 as specified in clause 6.1. Both the unicast mode A2X communication over NR-PC5 and the broadcast mode A2X communication is supported for DDAA.

The content of the messages for DDAA are defined according to the regional regulations for DAA and is out of scope of 3GPP.

Editor’s Note: It is FFS to figure out CT1 impact for ground-based DAA\* \* \* End of Changes \* \* \* \*