20, Maxwell Road, #09-17, Maxwell House, Singapore 069113

IMDA TS CMT and IMDA TS CMT CB comments

Comments 1: For IMDA TS CMT and IMDA TS CB

For EMI Requirements

4.4.1.1 EMI or emission measurements

- (a) Radiated emissions from associated ancillary equipment not incorporated in the CMT shall be measured to Class B requirements defined in §4 and Tables A.4 and A.5 of CISPR 32 [9].
- (b) Conducted emission at the DC power port of the CMT intended for vehicular use, shall be measured to Class B requirements defined in §4 and Table A10 of CISPR 32 [9].
- (c) Conducted emission at the AC mains port shall be measured for CMT with dedicated charger or adapter [4] to Class B requirements defined in §4 and Table A.10 of CISPR 32 [9]. Equipment with DC power port which is powered by a dedicated AC/DC power converter is defined as AC mains powered equipment (§3.1.1 [9]).

Note: If CMT is a module intended to be marketed and sold separately from a host, it shall be assessed with at least one representative host system. Modules may be internal, mounted, plug-in or external (§6.2 of CISPR 32 [9]).

Is it possible to include Class A for industrial environment or telecommunication centers, which is align with ETSI standards? As most of the industrial product are comply to Class A limits in the world. It is quite impossible for them to comply with Class B limit.

26 Final draft ETSI EN 301 489-1 V2.1.1 (2016-11)

Product related conditions for combined testing of radio and ancillary equipment may be contained in the relevant part of ETSI EN 301 489 series [i.13].

This test assesses the level of radiated electromagnetic noise from the enclosure of ancillary equipment.

8.2.2 Test method

The test method shall be in accordance with CENELEC EN 55032 [1].

8.2.3 Limits

The ancillary equipment shall meet the class B limits given in CENELEC EN 55032 [1].

Alternatively, for ancillary equipment intended to be used exclusively in an industrial environment or telecommunication centres, the class A limits given in CENELEC EN 55032 [1] may be used.

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Comment 2: IMDA TS CMT

4.4.2 Equipment safety testing 4

Equipment safety testing or assessment shall be performed to requirements defined in IEC 60950-1, based on the following assumptions:

Concurrent of the possible replacement of standards of IEC 60950-1 to IEC 62368-1. Not sure IMDA would want to add in this standards. As IMDA TS CB already include this standards in the TS.

4.3.2 Equipment safety testing

- 4.3.2.1 Equipment safety testing or assessment shall be performed to requirements defined in IEC 60950-1 [14] or IEC 62368-1 [15], based on the following assumptions:
 - (a) CBS is powered by a dedicated external power supply or AC/DC power converter; and
 - (b) CBS operates with SELV in environments where overvoltage from telecommunication networks may be possible. SELV refers to voltages not exceeding 42.4 V peak or 60 V DC.

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Comment 3: IMDA TS CMT

4.4 Electromagnetic Compatibility (EMC) and Equipment Safety Requirements

4.4.1 EMC assessment

For EMC assessment, the CMT and/or ancillary equipment shall be classified as equipment for vehicular use (i.e. mobile terminal connected with vehicular charger or DC supply); or equipment for portable/mobile use (i.e. powered by its integral battery). This equipment classification is used to determine the applicability of the EMC (emission and immunity) testing requirements based on §5.5 and §7 of ETSI EN 301 489-1 [4]; or §7.5 and §9 of ITU-T K.116 [8]. The ETSI EN 301 489-1 [4] standard shall be used in conjunction with the ETSI EN 301 489-24 [5] standard for CMT that supports the UTRA and E-UTRA RITs.

According to RED Directive.. EN 301 489-52 V1.1.0 (2016-11) will be replacing ETSI EN 301489-24 V1.5.1 (2010-10). As it is going to merge.

So Should IMDA consider EN 301489-52 which already covered all technology?

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Question 1: IMDA TS CMT and TS CB

Table 1: CMT Operating Frequency Bands

ba	in	d

UTRA FDD Band	E-UTRAN Band	Direction of Transmission	Frequency Range
1	1	Transmit	1920 MHz - 1980 MHz
		Receive	2110 MHz - 2170 MHz
III	3	Transmit	1710 MHz - 1785 MHz
		Receive	1805 MHz - 1880 MHz
VII	7	Transmit	2500 MHz - 2570 MHz
		Receive	2620 MHz - 2690 MHz
VIII	8	Transmit	880 MHz - 915 MHz
		Receive	925 MHz - 960 MHz
(7)	38	Transmit and Receive	2570 MHz - 2615 MHz Note 1
-	40	Transmit and Receive	2300 MHz - 2340 MHz Note 2

Note 1: CMT operating in band 38 shall only transmit and receive within the indicated frequency range.

Note 2: CMT operating in band 40 shall only transmit and receive within the indicated frequency range.

Does Band 38 and Band 40 open now? if yes should we comply with band 38 and band 40 standards? For normal LTE Band 38 and band 40 the range should be LTE Band 38: 2572.5 MHz \sim 2617.5 MHz LTE Band 40: 2302.5 MHz \sim 2397.5 MHz . So does we need to disable or reduce the bandwidth of the equipment that support this band?

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