



Telecommunications (Mobile Equipment Air Interface) Technical Standard 2022

Telecommunications Act 1997

The AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY makes the following technical standard under subsection 376(1) of the *Telecommunications Act 1997*.

Dated: 8 December 2022

Chris Jose
[signed]
Member

Linda Caruso
[signed]
~~Member~~/General Manager

Australian Communications and Media Authority

Part 1 – Preliminary

1 Name

- (1) This technical standard is the *Telecommunications (Mobile Equipment Air Interface) Technical Standard 2022*.
- (2) This technical standard may also be cited as the *Mobile Equipment Standard 2022*.

2 Commencement

This technical standard commences at the start of 22 December 2022.

3 Authority

This technical standard is made under subsection 376(1) of the *Telecommunications Act 1997*.

4 Repeal of the *Telecommunications (Mobile Equipment Air Interface) Technical Standard 2018*

The *Telecommunications (Mobile Equipment Air Interface) Technical Standard 2018* (F2018L01727) is repealed.

5 Background

- (1) This technical standard applies to particular customer equipment, as provided by section 13.

Note: A thing that is customer equipment to which this technical standard applies is referred to as an *item*.
- (2) This technical standard consists only of such requirements as are necessary or convenient for the following:
 - (a) protecting the integrity of a telecommunications network or a facility;
 - (b) protecting the health or safety of persons who:
 - (i) operate; or
 - (ii) work on; or
 - (iii) use services supplied by means of; or
 - (iv) are otherwise reasonably likely to be affected by the operation of;a telecommunications network or a facility;
 - (c) ensuring that customer equipment can be used to give access to an emergency call service;
 - (d) ensuring, for the purposes of the supply of a standard telephone service, the interoperability of customer equipment with a telecommunications network to which the equipment is, or is proposed to be, connected.

Part 2 – Interpretation

6 Definitions

In this technical standard:

3G/4G technology means any of the following technologies:

- (a) UTRA FDD;
- (b) E-UTRA FDD;
- (c) E-UTRA TDD;
- (d) OFDMA TDD WMAN.

Note: “UTRA FDD” stands for Universal Terrestrial Radio Access Frequency Division Duplexing.

“E-UTRA FDD” stands for Evolved Universal Terrestrial Radio Access Frequency Division Duplexing.

“E-UTRA TDD” stands for Evolved Universal Terrestrial Radio Access Time Division Duplexing.

“OFDMA TDD WMAN” stands for Orthogonal Frequency Division Multiple Access Time Division Duplexing Wireless Metropolitan Area Network.

5G technology means either of the following technologies:

- (a) 5G New Radio;
- (b) 5G New Radio and E-UTRA (LTE).

Note: “E-UTRA (LTE)” stands for Evolved Universal Terrestrial Radio Access (Long Term Evolution).

Act means the *Telecommunications Act 1997*.

addressable device means a device that enables a carriage service provider to identify the device when used for two-way communications on a public mobile telecommunications service or a satellite service supplied by the carriage service provider.

amending instrument, in relation to an applicable industry standard, means an instrument prepared by Communications Alliance Ltd that amends that standard.

applicable industry standard, in relation to an item, has the meaning given by section 8.

AS/CA S042.1:2022 means the Australian Standard AS/CA S042.1:2022 – *Requirements for connection to an air interface of a Telecommunications Network – Part 1: General* first published by Communications Alliance Ltd on 8 March 2022.

AS/CA S042.4:2022 means the Australian Standard AS/CA S042.4:2022 – *Requirements for connection to an air interface of a Telecommunications Network – Part 4: IMT-2000 and IMT-Advanced Customer Equipment* first published by Communications Alliance Ltd on 5 December 2022.

AS/CA S042.5:2022 means the Australian Standard AS/CA S042.5:2022 (incorporating Amendment No.1/2022) – *Requirements for connection to an air interface of a Telecommunications Network – Part 5: IMT-2020 Customer Equipment* first published by Communications Alliance Ltd on 8 March 2022 and reissued incorporating Amendment No. 1/2022 on 4 May 2022.

date a modified item is made has the meaning given by section 11.

IMT means the set of globally harmonised frequency bands and standards for the operation of third generation (3G), fourth generation (4G) and fifth generation (5G) wireless telecommunication systems and equipment which is termed “IMT” by the International Telecommunication Union.

Note: “IMT” stands for International Mobile Telecommunications. Further information about IMT could, at the time of making this technical standard, be accessed at the International Telecommunication Union’s website at www.itu.int.

IMT item means an item that:

- (a) is designed or intended for use in connection with a public mobile telecommunications service; and
- (b) uses any of the following technologies to which IMT applies:
 - (i) 3G/4G technology;
 - (ii) 5G technology.

included in a class of items has the meaning given by section 10.

item means a thing that is customer equipment to which this technical standard applies, as provided by section 13, and includes a modified item.

manufacturer, in relation to an item, includes (but is not limited to) a person who modifies the item.

modified item means an item that has been modified, by or on behalf of the manufacturer or importer of the item, after the item was manufactured or imported and, for the avoidance of doubt, is the item as modified.

Note: A modified item includes, for example, an item that has been modified from a software update made by or on behalf of the manufacturer or importer of the item, after the item was manufactured or imported.

original item has the meaning given by paragraph 10(1)(b).

original modified item has the meaning given by paragraph 10(2)(b).

publication date, of a document prepared by Communications Alliance Ltd, is the date on which the document is first published by Communications Alliance Ltd.

relevant date, for an item, has the meaning given by section 12.

replacement standard, in relation to an applicable industry standard, means a standard prepared by Communications Alliance Ltd that replaces the applicable industry standard.

Note: This definition does not cover a standard that replaces a replacement standard.

satellite service means a carriage service in a case where customer equipment used in connection with the supply of the service communicates directly with a satellite-based facility.

transition period has the meaning given by section 9.

Note: A number of other expressions used in this technical standard are defined in the Act, including the following:

- (a) carriage service (see section 7);
- (b) carriage service provider (see sections 7 and 87);
- (c) customer equipment (see sections 7 and 21);
- (d) emergency call service (see section 7);
- (e) facility (see section 7 and subsection 374(2));
- (f) import (see section 7);
- (g) manufacturer or importer of customer equipment or customer cabling (see section 406A);
- (h) public mobile telecommunications service (see sections 7 and 32);
- (i) satellite-based facility (see section 7);
- (j) standard telephone service (see section 7);
- (k) telecommunications network (see section 7 and subsection 374(1)).

7 References to other legislative instruments

In this technical standard, unless the contrary intention appears, a reference to any other legislative instrument is a reference to that other legislative instrument as in force from time to time.

Note 1: For references to Commonwealth Acts, see section 10 of the *Acts Interpretation Act 1901*; and see also subsection 13(1) of the *Legislation Act 2003* for the application of the *Acts Interpretation Act 1901* to legislative instruments.

Note 2: All Commonwealth Acts and legislative instruments are registered on the Federal Register of Legislation.

8 Applicable industry standard

In this technical standard, each of the following is an ***applicable industry standard*** in relation to an item:

- (a) in all cases – AS/CA S042.1:2022;
- (b) if the item is an IMT item that uses 3G/4G technology – AS/CA S042.4:2022;
- (c) if the item is an IMT item that uses 5G technology – AS/CA S042.5:2022.

Note 1: If, for example, an item is an IMT item that uses 3G/4G technology and 5G technology, then AS/CA S042.1:2022, AS/CA S042.4:2022 and AS/CA S042.5:2022 are applicable industry standards in relation to the item.

Note 2: The applicable industry standards are incorporated as existing at the times specified in sections 15, 17 and 18 (see sections 377 and 589 of the Act). Copies of the applicable industry standards could, at the time of making this technical standard, be obtained free of charge from Communications Alliance Ltd's website at www.commsalliance.com.au.

9 Transition period

For the purposes of this technical standard, if an applicable industry standard is amended by another instrument or replaced by another standard, there is a ***transition period*** for the amending instrument or replacement standard that starts on its publication date and lasts for:

- (a) unless paragraph (b) applies – 12 months; or
- (b) if the amending instrument or replacement standard specifies a longer period for items to transition to the applicable industry standard as amended or the replacement standard – the period so specified or 24 months, whichever is the lesser period.

Note: See subsection 15(2) in relation to a transition period.

10 Class of items

- (1) In this technical standard:
 - (a) an item (other than a modified item) is ***included in a class of items*** if the item:
 - (i) is identical to each other item of the class (irrespective of when the items were manufactured or imported); and
 - (ii) has the same manufacturer or importer as each other item; and
 - (b) the ***original item***, in relation to the class, is the item of the class that was the first to be manufactured in Australia or imported.
- (2) In this technical standard:
 - (a) a modified item is ***included in a class of items*** if:
 - (i) the modification which resulted in that item is identical to the modification which resulted in each other item of the class (irrespective of when the items were so modified); and
 - (ii) the modified item is, in all other respects, identical to each other item (irrespective of when the items were manufactured or imported); and
 - (iii) the modified item has the same manufacturer or importer as each other item; and
 - (b) the ***original modified item***, in relation to the class, is the item of the class that was the first to be so modified in Australia or imported.

11 Date a modified item is made

In this technical standard, a reference to the ***date a modified item is made*** is a reference to the date of making of the modification which results in that item.

12 Relevant date for an item

In this technical standard, a reference to the *relevant date* for an item is a reference to:

- (a) in the case of an item (other than a modified item) – the date the item is manufactured in Australia or imported; or
- (b) in the case of a modified item – the date the modified item is made in Australia or imported.

Note: An item (other than a modified item), for example, may meet the requirements in subsection 15(1) in relation to an applicable industry standard by complying with:

- (a) except in a case covered by paragraph (b) – the applicable industry standard as existing on the date the item was manufactured in Australia or imported; or
- (b) in a case where the applicable industry standard is replaced by another standard and that date of manufacture or importation is on or after the publication date of the replacement standard – the replacement standard as existing on its publication date.

Part 3 – Application and requirements

13 **Application of this technical standard**

This technical standard applies to a thing that is customer equipment that:

- (a) is designed or intended for use in connection with a public mobile telecommunications service or a satellite service, or both; and
- (b) is an addressable device.

14 **Requirements**

- (1) An item must meet the requirements in subsection 15(1), (2), (3) or (4) in relation to each applicable industry standard in order to comply with this technical standard.
- (2) Subsection (1) does not apply to an item if, under Part 4, the item is taken to comply with this technical standard.

15 **Standard for items**

- (1) An item meets the requirements in this subsection in relation to an applicable industry standard if the item complies with:
 - (a) except in a case covered by paragraph (b) – the applicable industry standard as existing on the relevant date for the item; or
 - (b) in a case where the applicable industry standard is replaced by another standard and the relevant date is on or after the publication date of the replacement standard – the replacement standard as existing on its publication date.
- (2) An item meets the requirements in this subsection in relation to an applicable industry standard if:
 - (a) the applicable industry standard is amended by another instrument or replaced by another standard and the relevant date for the item occurs during the transition period for the amending instrument or replacement standard; and
 - (b) the item complies with:
 - (i) the applicable industry standard as existing immediately before the publication date of the amending instrument or replacement standard; or
 - (ii) the applicable industry standard as amended and existing on the publication date of the amending instrument; or
 - (iii) the replacement standard as existing on its publication date.

Note: To avoid any doubt, if the relevant date for the item occurs during more than one transition period for an amending instrument or a replacement standard that affects the applicable industry standard, the item may meet the requirements of this subsection in relation to any of those transition periods. So if, for example, the relevant date for the item occurs during a transition period for an amending

instrument, and a transition period for a replacement standard, each of which affects the applicable industry standard, the item may comply with:

- (a) the applicable industry standard as existing immediately before the publication date of the amending instrument or replacement standard; or
 - (b) the applicable industry standard as amended and existing on the publication date of the amending instrument; or
 - (c) the replacement standard as existing on its publication date.
- (3) An item meets the requirements in this subsection in relation to an applicable industry standard if:
- (a) the item is included in a class of items; and
 - (b) the original item or original modified item of the class meets the requirements in subsection (1) or (2) in relation to the applicable industry standard.
- (4) An item meets the requirements in this subsection in relation to an applicable industry standard if:
- (a) the item would have been included in a class of items but for the making of a modification which resulted in that item; and
 - (b) the modification is not material; and
 - (c) the original item or original modified item of the class meets the requirements in subsection (1) or (2) in relation to the applicable industry standard.

Note: A modification is material if it would or could reasonably be expected to affect whether the relevant item would comply with the same version of the standard with which the original item, or the original modified item, of the class has complied to meet the requirements referred to in paragraph (4)(c).

Part 4 – Savings and transitional arrangements

16 Definitions for this Part

In this Part:

AS/CA S042.1:2020 means the Australian Standard AS/CA S042.1:2020 – *Requirements for connection to an air interface of a Telecommunications Network – Part 1: General* first published by Communications Alliance Ltd on 15 October 2020.

AS/CA S042.4:2018 has the same meaning as in the old technical standard.

old technical standard means the *Telecommunications (Mobile Equipment Air Interface) Technical Standard 2018* as in force immediately before the commencement of this technical standard.

Note 1: AS/CA S042.1:2020 and AS/CA S042.4:2018 are incorporated as existing at the times mentioned in sections 17 and 18. Copies of those standards could, at the time of making this technical standard, be obtained free of charge from Communications Alliance Ltd's website at www.commsalliance.com.au.

Note 2: The old technical standard is available on the Federal Register of Legislation.

17 Items for which relevant date occurred before commencement

- (1) An item is taken to comply with this technical standard if:
 - (a) the relevant date for the item occurred before the commencement of this technical standard; and
 - (b) the item complies with the old technical standard.
- (2) An item is taken to comply with this technical standard if:
 - (a) the relevant date for the item occurred before the commencement of this technical standard, but subsection (1) does not apply; and
 - (b) the item complies with:
 - (i) AS/CA S042.1:2020 as existing on the relevant date; or
 - (ii) in a case where the relevant date is on or after 8 March 2022 (being the publication date of AS/CA S042.1:2022) – either:
 - (A) AS/CA S042.1:2020 as existing immediately before 8 March 2022; or
 - (B) AS/CA S042.1:2022 as existing on 8 March 2022; and
 - (c) in a case where the item is an IMT item that uses 3G/4G technology – the item also complies with:
 - (i) AS/CA S042.4:2018 as existing on the relevant date; or

- (ii) in a case where the relevant date for the item is on or after 5 December 2022 (being the publication date of AS/CA S042.4:2022) – either:
 - (A) AS/CA S042.4:2018 as existing immediately before 5 December 2022; or
 - (B) AS/CA S042.4:2022 as existing on 5 December 2022.

Note: If the item is an IMT item that uses 5G technology, the item may, but is not required to, comply with AS/CA S042.5:2022.

18 Items for which relevant date occurs during the 12-month period starting at commencement

An item is taken to comply with this technical standard if:

- (a) the relevant date for the item occurs during the 12-month period starting at the commencement of this technical standard; and
- (b) the item complies with:
 - (i) AS/CA S042.1:2020 as existing immediately before 8 March 2022 (being the publication date of AS/CA S042.1:2022); or
 - (ii) AS/CA S042.1:2022 as existing on 8 March 2022; and
- (c) in a case where the item is an IMT item that uses 3G/4G technology – the item also complies with:
 - (i) AS/CA S042.4:2018 as existing immediately before 5 December 2022 (being the publication date of AS/CA S042.4:2022); or
 - (ii) AS/CA S042.4:2022 as existing on 5 December 2022.

Note: If the item is an IMT item that uses 5G technology, the item may, but is not required to, comply with AS/CA S042.5:2022 during the 12-month period.

19 Items included in a class of items where the original item or original modified item of the class is taken to comply with this technical standard

An item is taken to comply with this technical standard if:

- (a) the item is included in a class of items; and
- (b) the original item or original modified item of the class is taken to comply with this technical standard under section 17 or 18.