

PO Box 372
Blackwood SA 5051
Tel 0417 852 110
Email:
arthur.marsh@internode.on.net
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Submission to: Proposal to make new Air Interface Standard 2022 - consultation 25/2022

Question 1

Is it necessary and appropriate to mandate an industry standard for customer equipment with 5G technology?

Given that customers are currently being offered mobile telephone handsets and other devices claiming "5G" and similarly telecommunications service providers are offering "5G" services, there should be a mandated standard for customer equipment to be compatible with the 5G network services offered in Australia and overseas, particularly for "future-proofing" customers' purchases to be compatible with Voice over New Radio (VoNR), even if the Australian telecommunications service providers do not yet offer such services.

Question 2

If a mandatory industry standard is required, is the proposed Air Interface Standard 2022, which will mandate Communications Alliance's new S042.5 (2022) technical standard for 5G CE appropriate?

Is Communication Alliance's new S042.5 (2022) technical standard the appropriate technology-specific industry standard for 5G customer equipment in Australia?

AS/CA S042.5:2022 does not provide any detail or reference about Voice over New Radio although it mentions the term. For a standard to truthfully claim that it is consistent with "ensuring access to an Emergency Call Service (ECS)", reference needs to be made to the standards that 5G devices designed for voice telephony need to support in order to make emergency calls over 5G. AS/CA S042:2022 fails in this respect and is therefore not an appropriate technology-specific industry standard for customer equipment that is claimed to support voice telephony.

Question 3

Do you have comments on the proposal to reduce the default 2-year ACMA transition period to a one-year default transition period in the proposed Air Interface Standard 2022?

In an ideal world, it would be possible to buy equipment knowing that it met a standard that would be in place for the lifetime of the equipment.

A new standard that references the standards needed to be met in order for 5G equipment designed for voice telephony to be capable of making emergency calls over 5G should be urgently completed and well-publicised, with a one year transition period being appropriate.

Question 4

Do you have any other feedback on the proposal to make the new Air Interface Standard 2022 or the consequential changes to the Telecommunications Labelling Notice?

S042.4 is still in draft for 2022 (or later) release and makes no reference to how voice calls are made over 4G.

As in the case for Question 2, given that voice capability over 4G is not defined or referenced by S042.4, S042.4 fails to be consistent with "ensuring access to an Emergency Call Service (ECS)" over 4G.

I had previously received an email reply from the "Infrastructure & Equipment Safeguards Section, Licensing & Infrastructure Safeguards Branch, Communications Infrastructure Division, Australian Communications and Media Authority" on 22nd April 2022 which claimed:

"All Australian mobile telecommunications networks have been offering VoLTE (Voice over LTE) on their 4G/LTE networks since 2015."

There has however been no reference in S042.4 to Voice over LTE, even though it would be required for making emergency calls over 4G.

(If one looks for a definition of the term "VoLTE" there doesn't appear to be any standard defining the term. The nearest I could find was "GSM Association Non-confidential Official Document IR.92 - IMS Profile for Voice and SMS Version 17.0 18 July 2022 <https://www.gsma.com/newsroom/wp-content/uploads//IR.92-v17.0-1.pdf> " which uses the term "voice over IMS over LTE".)

The email also claimed:

"This issue will sort itself out as the 3G networks are closed down and only 4G /5G (LTE/NR) (and therefore VoLTE for voice services) is used for the provision of all mobile telecommunications services."

Without defined standards for voice over 4G (VoLTE) and 5G (VoNR) in S042.4 and S042.5, mobile voice telephony products can be sold which are not capable of making emergency calls where 3G is not available.

I have not read the IMS Emergency Session specification, 3GPP TS 23.167, which can be found on the ETSI website at:
https://www.etsi.org/deliver/etsi_ts/123100_123199/123167/15.04.00_60/ts_123167v150400p.pdf

I would assume that it would be referenced by a standard that covers 4G and 5G customer equipment that is capable of "ensuring access to an Emergency Call Service (ECS)".

Customers have not been given assurance that 4G capable mobile telephone handsets that are currently sold in Australia will support VoLTE for all telecommunications service providers in Australia (both carriers and MVNO's), and have not been given assurance that 5G capable mobile telephone handsets will support VoNR as telecommunications service providers roll out such services.

I would like to soon be have the capability to buy mobile handsets in Australia that meet standards for VoLTE and VoNR that work across all telecommunications service providers who claim to offer such services, for regular voice calls and not just emergency voice calls.

I assume that a standard for customer equipment capable of VoLTE would also make reference to how such equipment suppliers get the carrier-specific settings so that VoLTE would actually work (ie from GSM Association network settings database with settings also being available from the carriers directly).

[END]