

Communications Alliance Device End-To-End Service Testing (DETEST) Group

Terms of Reference

The *Communications Alliance Device End-To-End Service Testing* DETEST Group has been established to develop industry technical guidance to facilitate the end-to-end testing and technical operational arrangements for the National Messaging System and the Emergency Call Service.



1. Emergency Call Service

Recent changes in the telecommunications environment including proposed changes to the *Telecommunications (Emergency Call Service) Determination 2019* are introducing obligations for Carriers and Carriage Service Providers (C/CSPs) to take measures to test the ability of mobile phones to access the emergency call service via both the home and 'camp on' networks.

Role and responsibilities

The role of the DETEST Group, in relation to the ECS, is to develop industry guidance for the following:

- a general device testing framework, including interactions/coordination between equipment suppliers and mobile network operators.
- to identify what aspects are to be included in the end-to-end (E2E) testing, noting that the ECP to ESO component of the service is outside the C/CSP's visibility and outside the purview of DETEST.
- to work with equipment suppliers to identify what aspects of the devices are to be specified for connecting to the ECS for voice calls to support the E2E testing of these services.
- to consider and provide solutions for specific obligations that arise from Bean review with regards to the ECS Determination, including:
 - device testing and common approach to permitted devices, including the future development of a proposed ACMA database.
 - the approach to blocking of non-permitted/non-compliant devices.
 - the E2E device and network testing of Triple Zero capability, including camp on (limited service state).
 - life cycle aspects of devices, including updates to the device OS software (being via carrier, manufacturer, or user-enabled).
- take into consideration the MNP test plans and QoS specifications, developed under the Network Reference Panel, as inputs for creating test plans.
- take into consideration devices that are being used on private networks.
- facilitate consistency across the various network implementations and devices.
- to consider Federal and State based regulatory frameworks.

2. National Messaging System (NMS)

The establishment of the NMS has come into place as a result of the findings of the *2020 Royal Commission into National Natural Disaster Arrangements*. It found that emergency warning systems are critical for governments to deliver warnings, and with the introduction of Emergency Cell Broadcast (ECB) technology, this will allow emergency services across Australia to send targeted warning messages to compatible devices in near real time.

With the introduction of the NMS, Carriers and Carriage Service Providers (C/CSPs) are taking measures to test that mobile phones are capable of receiving messages sent via the National Messaging System.

Role and responsibilities

The role of the DETEST Group, in relation to the ECB, is to develop and provide industry guidance for the following:

- to identify what aspects are to be included in the E2E testing. This includes those involved in the provision of the NMS, including the mobile network operators and equipment suppliers.
- the E2E device and network testing of the Emergency Cell Broadcast (ECB) requirements for ECB-capable devices.
- to work with equipment suppliers to identify what aspects of the devices are to be specified for receiving ECB messages, to support the end-to-end testing of these services.
- to consider Federal and State based regulatory frameworks.
- to liaise with DITRDCA and NEMA in the development, implementation, and execution of the operational processes for the NMS. These may include NMS message length and the implementation of multiple languages.

3. General

Representation and participation

- interested members from the *WC107 PMTS and Satellite Service Customer Equipment Standards Working Committee*.
- interested members from the *Communications Resilience Administration Industry Group (CRAIG)*.
- other interested *Communications Alliance* members.
- DITRDCA and NEMA to be invited to attend meetings as needed.

Meeting frequency

- initially ad hoc, taking into consideration international time zones for overseas members.

Reference documents

- *Telecommunications (Emergency Call Service) Determination 2019*
- *Telecommunications (Emergency Call Service) Amendment Determination 2024 (No. 1)*
- *Australian Government Response to the Bean Review Final Report - Review into the Optus outage of 8 November 2023 (April 2024)*
- any relevant material relevant to the testing of devices to support NMS

Deliverables

- an overarching guideline to provide a framework for the testing arrangements for ECS and NMS, identifying relevant regulatory instruments, Communications Alliance publications and other materials.
- individual guidelines/specifications to support the overarching guideline, including test approaches and a schedule priority order of activities.
- a relational map showing the various parties of interest and network components of the test regime.

Liaisons

- DITRDCA and NEMA on the implementation of Emergency Cell Broadcast (ECB) supporting the National Messaging System (NMS).
- Communications Alliance Network Reference Panel (NRP) on the development of a National Messaging System CBE / CBC interface specification.
- Communications Alliance WC107 on the revision of the AS/CA S042.1 *Requirements for connection to an air interface of a Telecommunications Network— Part 1: General Customer Equipment Standard*.