

The logo for Optus, consisting of the word "OPTUS" in a bold, teal, sans-serif font.

Submission in response to the
Australian Communications and
Media Authority Consultation

**Review of the
Telecommunications
(Emergency Call Service)
Determination 2009 –
Second-round consultation
paper**

25 July 2019

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Section 1. INTRODUCTION

- 1.1 Optus appreciates the opportunity to provide input to the second round of consultation on the Australian Communications and Media Authority (ACMA) review of the *Telecommunications (Emergency Call Services) Determination 2009* (the ECS Determination).
- 1.2 Priority access to the emergency call service is critical for the Australian public, and all providers play an important role in ensuring this access for end users.
- 1.3 Optus is supportive of the overarching aims of the revised ECS Determination, including:
 - (a) ensuring high levels of access, integrity and availability for the emergency call service; and
 - (b) ensuring calls to the emergency call service are successfully managed,and notes the positive work the ACMA has undertaken to streamline the structure and some of the requirements in the instrument.
- 1.4 In Optus' view, there is further important work to be done on the draft ECS Determination to promote the workability of the requirements and to ensure that the obligations work coherently together to achieve the intended aims.
- 1.5 Optus' comments focus primarily on the sections of the Determination that apply to carriers and carriage service providers (CSPs), not those applicable to the Emergency Call Person (ECP).
- 1.6 Of particular interest to Optus is that the obligations in the ECS Determination adequately reflect settled and industry-agreed policy positions with respect to:
 - (a) The difference between the objects of the Determination and the means or processes to achieve objectives;
 - (b) Network integrity and availability obligations and exceptions;
 - (c) The respective roles and responsibilities – and areas of influence – of the various players in the ecosystem that support emergency calling capability;
 - (d) What steps are to be taken in response to network outages which significantly affect the availability of emergency calling on a carrier or CSP's network;
 - (e) The justification, roles, responsibility and funding for so-called 'welfare checks'; and
 - (f) What is practical and feasible in terms of specific obligations for carriers and CSPs to act to further limit non-genuine calls to the emergency call service.
- 1.7 Communications Alliance (CA) and the Australian Mobile Telecommunications Association (AMTA) have also made a joint submission to this consultation. Optus is a member of both of these industry associations and supports their submission.

Section 2. REVIEW OF THE ECS DETERMINATION

- 2.1 There are some key areas of feedback which will help improve the workability of the ECS Determination and achieve its stated aims.

Purpose and objects of the ECS Determination

- 2.2 Section 5(2) of the Determination outlines the intended objectives which the Determination seeks to achieve.
- 2.3 Sub-sections 5(2)(a) and 5(2)(b) are important objectives; ensuring high levels of access, integrity and service continuity of the emergency call service, and that calls to emergency services are able to be successfully managed.
- 2.4 Sub-section 5(2)(c), as currently drafted, articulates requirements or activities which might contribute to meeting higher order objects, rather than describing unique objects in their own right. These statements should be demoted from being objects or deleted and treated as activities which support the other, 'proper' objects.
- 2.5 That said, if it is the ACMA's intention to retain a similar format to describing the items in section 5(2)(c), the drafting should be adjusted to reflect the specific roles and influence of the various parties because it currently conflates the roles of carriers, CSPs and the emergency call person, as the items listed in 5(2)(c)(i) – (iii) cannot all be performed by each of these entities.
- 2.6 Sections 20 and 47 of the Determination attempt to impose an obligation on CSPs for emergency calls to be handled in a way which would give the appearance of a single national emergency call system.
- 2.7 It appears to Optus that this is a statement more suited as an overarching objective of the ECS Determination, rather than a detailed obligation and it may therefore be better positioned as one of the objects of the Determination in section 5. It is noted that the Telecommunications (Consumer Protection and Service Standards) Act cites this as an overall objective of the legislative provisions regarding emergency calling. It is not appropriate to simply import this high level objective and transform it into a specific obligation in a lower order instrument.
- 2.8 Elevating this concept (relating to the 'appearance' of the emergency calling service) to a statement of objective rather than an obligation, would also assist with the workability of the regulation. While it is acknowledged that section 20 has been carried over from the 2009 version of the ECS Determination, it is unclear in practice what CSPs are expected to do to meet this specific obligation, or how the ACMA could investigate compliance and seek to enforce an obligation structured in this manner. This concern is magnified by the fact that CSPs are only responsible for carrying calls to the relevant termination point and cannot influence how emergency calls are handled after that.

Network obligations

- 2.9 Optus considers that it is important from a policy, practice and compliance perspective that the ECS Determination includes:
- (a) Strong and clear obligations for carriers and CSPs to carry calls and ensure their networks maintain strong levels of integrity and capability to support emergency calling in the full range of normal operating conditions; and

- (b) Reasonable exceptions to reflect the fact that network availability cannot be guaranteed to the 100% level.
- 2.10 Optus believes that the current drafting of the ECS Determination does include drafting to address (a) above, but does not sufficiently take into account limiting network availability scenarios by adequately articulating the exceptions which are intended to address (b) above.
- 2.11 The exceptions listed under sub-section 12(2), for example, seem to be mainly focused on issues that may occur at customer premises or in customer equipment, rather than in carrier networks (such as network failures due to unplanned outages or mass service disruptions).
- 2.12 Optus understands that this may not have been the ACMA's intent, and that the list of exceptions is illustrative, however we recommend that the list be updated to include some network examples for clarity and cross-reference Appendix F of the C536:2011 Emergency Service Requirements Code.
- 2.13 Section 14 of the Determination imposes a requirement on CSPs to give an end-user access to the ECS whether or not a number is currently issued to the end-user in relation to a service. The drafting of this clause is too broad, as it could be interpreted to imply that a CSP's responsibility extends beyond the supply to its own customers of an emergency telephone service, to include data service customers, customers of another CSP and SIM-Less calls. Given the inclusion in the Determination of a trial to minimise SIM-less calls (in Part 4 of the Determination), Optus recommends that this clause be updated to restrict it to the CSP's customers of an emergency telephone service and also reflect that there may be authorised exceptions to this obligation.
- 2.14 The drafting of section 21 assumes that CSPs exercise control over all aspects of delivering calls to the ECP. In practice, and as described at 2.17 below, CSPs can be responsible for routing calls through their network to a point of interconnect with Telstra (as the ECP's CSP). From that point on, the routing of the call to the ECP is within the control of another party, not the originating CSP. The obligation described at the current section 21 should reflect this reality. At best, CSPs can be accountable for routing calls within their own network, and then having arrangements in place with the ECP's CSP which have the objective of delivering those calls to the ECP. They cannot 'ensure' what happens within that transit carrier's network.
- 2.15 Division 2.3, Subdivision A of the Determination contains requirements to pass on information to the call-taker about the telephone number associated with the service from which an emergency call is made.
- 2.16 The way this is currently drafted does not take into account that carriers and CSPs do not communicate directly with the call-taker.
- 2.17 The wording in these clauses, and especially section 23, needs to be updated to reflect that carriers and CSPs can only ensure that the public number information is correctly included in call-related information which is being routed to the ECP's CSP (i.e. Telstra) at the relevant termination point. What happens to the information between the call being handed over at the relevant termination point and it being received by the call-taker is beyond the control of all CSPs except for the ECP's CSP (i.e. Telstra) that provides that link.

Clarity of roles and responsibilities

- 2.18 With multiple parties involved in the end-to-end handling of emergency calls it is important that obligations imposed by the ECS Determination accurately reflect the different roles of each party and the matters that are within their control.

- 2.19 Currently, there appear to be requirements imposed on different parties within that chain which are not within their control.
- 2.20 Optus therefore recommends that the draft ECS Determination be reviewed to ensure that the structure of the obligations it seeks to impose are based on a clear delineation between the roles and responsibilities of carriers, CSPs, the CSP that carries calls between the relevant termination point and the ECP, and the ECP itself.

Disruptions to the emergency call service

- 2.21 There is a clear and appropriate intent in the ECS Determination for cooperation between the different parties involved in handling emergency calls to ensure that such calls are prioritised and handled effectively.
- 2.22 This is especially important in the event of an outage whereby emergency calls do not reach the ECP (whether the failure is at the ECP end or in the carrier/CSP network).
- 2.23 However, it is Optus' view that some of the additional obligations imposed in the draft ECS Determination in an attempt to address this issue are not structured appropriately.
- 2.24 Work continues to be undertaken by industry and Government on the Triple Zero Disruption Protocol, and Optus' view is that some of the requirements which the Determination seeks to impose are premature and may in fact better be dealt with via industry arrangements rather than in the Determination.
- 2.25 As an example, section 27 of the Determination requires carriers and CSPs to immediately notify when "some or all emergency calls" cannot be carried. However, there is no threshold provided for this requirement. This means that, for example, an individual fault at a customer's premise may need to be notified. Similarly, it would mean that all planned and unplanned outages would need to be notified. This is clearly neither practical nor workable.
- 2.26 Optus does not support a notification requirement, however if it is deemed necessary for such a requirement to be in the ECS Determination, it will need to be suitably constrained and, for example, be restricted to unplanned mass service disruptions or a similar threshold, to avoid major impact to both carriers / CSPs and the ECP, who would otherwise be inundated with notifications from other industry participants about minor events. Additional clarity would also be required on the requirement to notify "immediately".

Welfare calls

- 2.27 Section 29 of the Determination sets out requirements for CSPs to conduct so-called "welfare checks" if there has been a service disruption in their network which has impacted their ability to carry emergency calls to the relevant termination point.
- 2.28 From Optus' perspective, the policy position underlying this draft obligation has not been satisfactorily explored and settled. The various outcomes for customers resulting from this obligation do not appear to have been fully balanced against the cost and complexity for CSPs, including how this type of obligation can practically be carried out in wholesale service scenarios.
- 2.29 The complex and at times elongated wholesale supply chain will make this type of welfare check obligation impractical for a range of CSPs.
- 2.30 Even if it were practical in all supply scenarios, Optus' view is that this welfare check obligation does not sit appropriately with CSPs. If it is to be undertaken, the welfare check requirement should rest with the ECP.

- 2.31 The practical reality is that these welfare check calls may be analogous to emergency calls. CSP call centre staff are not trained to handle emergency call situations such as those received by the ECP, nor are they trained to handle the potential adverse or traumatic outcomes that may result from such calls.
- 2.32 In addition, there is little a CSP call centre operator could do if they called a customer back only to find that they still need emergency service assistance, other than direct them to call Triple Zero.
- 2.33 The ECP, however, is funded by the Government specifically to provide such specialised assistance to end users in an emergency situation. It is Optus' view, therefore, that it would be much more practical and effective to use these existing, specially-trained, Government-funded resources to make welfare calls if policy settings dictate these are required.
- 2.34 In addition, similar to the views in paragraph 2.26 above, Optus believes that the requirement to interrogate CSP / carrier records to determine end users who may have unsuccessfully attempted to call Triple Zero and to provide this information to the ECP to make welfare calls should only apply in relation to network outages of a certain specified type or magnitude, and not (for example) to individual customer faults.
- 2.35 We recommend this obligation be tied to the unplanned mass service disruption definition proposed above.

Minimisation of calls that are not emergency calls

- 2.36 The intent of Division 2.5 of the Determination is clear, however the detailed requirements in this section are impractical and need to be revised.
- 2.37 Section 30(1)(c) requires CSPs to transfer calls to the announcement for number check where an end user dials additional digits after the emergency service number. However, Optus' networks are set up to automatically transfer the call to the relevant termination point once the three-digit emergency service number has been dialled, in accordance with international ITU-T and 3GPP international standards. It does not wait to determine whether other digits are subsequently dialled.
- 2.38 Further, sub-section 31(3)(a) – (c) requires carriers and CSPs to take steps to monitor all calls to emergency service numbers, identify non-genuine calls and stop high volumes of non-genuine calls.
- 2.39 While it may not be the ACMA's intention, the current drafting of the clause seems to imply that CSPs need to intercept such calls and interrogate the content of all emergency calls to determine if they are legitimate calls to emergency call services. Apart from doing this CSPs have limited or no capability to determine if a call is non-genuine. Clearly, this approach is not feasible and would also be in conflict with the Privacy Act and Telecommunications (Interception and Access) Act requirements.
- 2.40 It is our view that the ECP and ESOs are better placed to determine whether calls are genuine. The ECP should also use the processes specified in Section 6 of C525:2017 Handling of Life Threatening and Unwelcome Communications Industry Code to interact with carriers and CSPs in efforts to minimise non-genuine calls to emergency call services.
- 2.41 Optus recommends that this type of requirement could perhaps be better addressed by industry protocols, such as that contemplated in 31(3)(d). Optus therefore recommends that the drafting in the Determination be simplified to reflect the over-arching objective of promoting actions to support the integrity of the emergency call service and that in practice steps include those intended to reduce non-genuine calls to the ECP, with the

practical details of how to determine whether such a call is likely to be, or actually is, a non-genuine call being addressed via industry protocols to be developed by Communications Alliance.

Alternative call handling of SIM-less calls

- 2.42 It is not clear to Optus why an ancillary matter, such as a trial which proposes to deal with SIM-Less calls to Triple Zero, needs to be included in the Determination, especially in such detail.
- 2.43 It would appear much more efficient to have a more general requirement in the Determination which allows such trials to be undertaken with the ACMA's approval.
- 2.44 The inclusion of such a high level of prescriptive detail about this proposed trial in the ECS Determination removes entirely the ability of industry, the ACMA and the Government to respond to the learnings of the trial, make amendments to the trial criteria and the potential options to be trialled while the trial is underway.
- 2.45 As an example, during the trial, it may be determined that there is an alternative call handling option which may be suitable, but due to the current prescriptive wording in the Determination, it would not be possible to assess this as part of the trial.
- 2.46 We note that under the current 3GPP and AS/CA Technical Standards for Customer Equipment (CE), it is not possible for a Carrier to distinguish genuine SIM-Less call cases from other SIM-equipped call cases where the mobile handset CE only provides an IMEI to the Carrier's mobile network while initiating an emergency call (see Clauses 5.2.2.1 (b) (i) and 5.2.2.1 (b) (ii) of AS/CA S042.1:2018 Technical Standard for details). The consequence is that it is not currently technically feasible for a Carrier to insert the ECP's unique identifier for SIM-Less calls to emergency service numbers during the trial.
- 2.47 The inability to respond during the trial period to the learnings from the trial, and to tailor the approaches for the trial accordingly, seems impractical and a rather perverse outcome.
- 2.48 Optus therefore recommends that the detailed trial parameters be removed from the Determination, with the drafting to retain a high-level rule which provides exemptions from the requirements in the Determination for the purposes of undertaking a trial aimed at achieving the objects of the Determination, with ACMA approval of the trial criteria.
- 2.49 Should such an approach not be possible from a drafting perspective, Optus recommends that an industry workshop be held to better determine the trial parameters and potential call handling options, to ensure workability and that the trial will achieve practical and useful outcomes. The results of this can then be incorporated into the drafting of Part 4.
- 2.50 Optus will be willing to participate in such an industry workshop.

Other editorial comments

2.51 Optus also has a number of editorial comments to make, as detailed below.

2.52 *Definition of "default CLI"*

- (a) The current drafting of this definition refers to circumstances where there is no CLI associated with the call, however does not take into account circumstances where the CLI associated with the call has been replaced with another CLI in accordance with industry Specifications and Guidelines.
- (b) To address this, we recommend amending the definition to read:

default CLI means the default calling line identification (CLI) for a call that is provided by the telecommunications network from which the call originated where there is no CLI associated with the call, or where the CLI associated with the call has been replaced with another CLI in accordance with industry Specifications or Guidelines.

2.53 *2.5.2 Section 10 – Requirement for carriers and carriage service providers – access for carriage service provider*

- (a) We acknowledge that this section of the ECS Determination has been carried over from the previous version, however the drafting remains unclear as to the relationships between carriers, CSPs, provider 1 and provider 2, and the requirements this section seeks to impose.
- (b) As an example, there is no obligation for a carrier to provide access to its networks unless it has a contractual relationship with a CSP or the service is a declared service, yet the drafting of this section appear to indicate otherwise.
- (c) We therefore recommend that the drafting of this section be reviewed, with the aim being to streamline and clarify the wording and the desired outcome this section seeks to achieve. This should be consistent with the general requirement in section 8(b), to do everything reasonably necessary to provide such access.

2.54 *Section 11 – Networks*

- (a) Sub-section 11(1) contains a note with a couple of examples listed.
- (b) Those examples are not relevant to IP networks, and therefore – in keeping with the aim of the revised ECS Determination to be technologically neutral – we recommend that those examples be deleted.
- (c) We do not believe that there is a need to replace them with different examples.

2.55 *Section 17 – Requirement if end-user uses emergency service number 106 – standard telephone service*

- (a) Item (c) in Note 1 to this section refers to data transmission over a public mobile telecommunications service.
- (b) There is currently no technology available that provides error-free text data transmission over mobile networks, therefore we recommend that item (c) be deleted.

2.56 *Section 19 – Carriage service provider must ensure an emergency call is carried to relevant termination point and to an emergency service organisation*

- (a) As per our feedback earlier in this submission, the roles and responsibilities of each party in the chain are not accurately reflected in the ECS Determination.
- (b) Both the title of this section and subsection 19(2) would appear to indicate that a CSP has control of the carriage of a call beyond their termination point to the ESOs. This is not the case.
- (c) The CSP supplying the emergency telephone service can only control the carriage of the emergency call up to the relevant termination point. The ECP then ensures the carriage of the emergency call beyond the relevant termination point to the ESOs.

- (d) We therefore recommend deleting the words “and to an emergency service organisation” from the title of this section, and changing the reference to an emergency service organisation in subsection 19(2) with “the emergency call person”.

2.57 *Section 23 – Information provided automatically with emergency call – carriers and carriage service providers*

- (a) As per the feedback provided on the definition of “default CLI” above, Optus recommends that subsection 23(2) be expanded to include a new clause (c) with the following wording:

“or where the CLI associated with the call has been replaced with another CLI in accordance with industry Specifications or Guidelines.”

2.58 *Section 24 – Additional information after emergency calls are transferred – carriage service provider*

- (a) It is not clear from the drafting of this section as to whether the requirement applies to the CSP who has sent the call to the ECP, or to the ECP’s CSP who has routed the emergency call from the ECP to the ESO.
- (b) It would be helpful to clarify this in the drafting.

2.59 *Section 25 – Additional information after emergency calls are transferred – carrier*

- (a) Subsection 25(2) refers to carriers providing information on emergency calls that did not originate on their network but were transferred to emergency service organisations. It is not possible for carriers other than Telstra to meet this obligation.
- (b) Optus suggests that this information may be best provided by the ECP instead, as they receive all the emergency calls, and the wording of the clause be updated accordingly.