



ACMA engagement – Proposed amendments to the Telecommunications (Emergency Call Service) Determination

Telstra Group Limited Consultation Response

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Introduction and Executive Summary

Telstra welcomes the opportunity to make this submission to The Australian Communication and Media Authority's (ACMA's) consultation on the Proposed amendments to the operation of the Telecommunications (Emergency Call Service) Determination (the ECS Determination) (Consultation paper). Our submission responds directly to the questions posed in the Consultation paper, along with proposals for additional changes to the ECS Determination.

Telstra is broadly supportive of the changes that the ACMA is proposing to make to the ECS Determination. However, there are sections where we continue to have concerns.

In summary, the key points in our submission are as follows:

- As explained in our submission in response to the consultation on further changes to the Telecommunications (Customer Communications for Outages) Industry Standard (the CCO Standard), we consider the definition of 'significant local outage' to be unworkable as it is currently drafted.
 - Telstra strongly supports exclusion of Major Cities, for the reason the ACMA cites in the CCO Consultation paper – availability of alternative telecommunications networks. Extending this same logic, we propose the exclusion of both Inner Regional Australia and Outer Regional Australia areas from the ECS Determination. Using the ACMA's logic for the exclusion of Major Cities, fixed networks will have good mobile coverage and vice versa in both Inner Regional Australia and Outer Regional Australia. Further, overlapping coverage from multiple mobile base stations in regional towns means localised outages (one base station) are unlikely to disrupt overall mobile coverage in that town. We propose the removal of both Inner Regional Australia and Outer Regional Australia areas from the CCO Standard to reduce the notification and reporting burden on carriers and carriage Service providers (CSPs).
 - If the ACMA decides that Inner Regional Australia and Outer Regional Australia are to be included, the threshold for the number of services affected within a defined period is too low and will cause unreasonable burden on carriers and CSPs, potentially lead to confusion, drive a high level of queries, and result in 'notification fatigue', without any substantiated incremental benefits.
 - Please refer to our submission on the CCO Standard for information about our views on how the definition should be adjusted (as applicable to the ECS Determination) and the associated reasoning.
- The scope of the definitions for both 'major outages' and 'significant local outages' needs to be amended so it is restricted to emergency call services, in accordance with the ACMA's powers.
- We acknowledge and support the new provisions addressing non-genuine emergency registrations. For completeness, we propose the inclusion of a new definition for registration and updated definition for genuine emergency registration. We have also proposed amending the term medical alert device to personal alert device.
- The requirement to wilt base stations should be updated to clarify that there must be a total loss of connectivity to the core network (or to one or more of the core networks in the case of a multi-operator core network) for the requirement to be activated, to avoid complex exemption scenarios. The definition of wilt should also be updated to provide for scenarios where a base station may support more one carrier network, e.g. a base station used in a MOCN arrangement.



- In the future, we see the Triple Zero Custodian playing a central role in coordinating responses to ECS outages including the associated disruption protocol, notification and reporting arrangements. Our submission flags the ACMA's proposed amendments to the ECS Determination where the Triple Zero Custodian is likely to be involved in future. These amendments (along with other existing ECS Determination provisions relevant to the custodian role) will need to be reviewed and updated before the Triple Zero Custodian is established.
- We propose amendments to the device blocking and notification arrangements in sections 65 and 69 so CSPs and carriers have more flexibility in how they treat devices that only require a software or firmware upgrade to be able to make emergency calls. Rather than having to block these devices (and forcing the users to unnecessarily acquire new devices), it would be more appropriate for CSPs and carriers to warn the end users about the risk and ask them to complete the necessary software or firmware upgrade.
- In principle, we support the information sharing obligations in section 78. We do, however, believe the ECS Determination should refer to the CCO Standard rather than duplicate the obligations. We are also of the view that it is not appropriate for carriers to decide which specific emergency service organisations (ESOs) to provide information to. Instead, the obligation should require notifications to be sent to all ESOs within a State or Territory that is impacted by an outage.
- Given the criticality of investigative reports into outage causes, we propose extending the reporting periods defined in section 79, for both the initial written report and subsequent reports, ensuring there is adequate time to undertake potentially highly complex investigations. We also propose using business days rather than calendar days to avoid ambiguity and ensure the requirement takes account of holiday periods.
- We consider the timeframe for providing management plans in section 80 is reasonable. However, we believe the scope of the changes that these apply to should be narrowed to clarify that these plans are only required for significant changes to the underlying network technology or architecture that fundamentally modify how emergency calls are carried across the network.

Please refer to our accompanying document, **Draft ECS Determination Amendment instrument_Feb 2025 Telstra Markup**, marked-up with our proposed changes, as outlined in our submission.



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1. Telstra responses to the ACMA's issues for comment

1. Requirements under paragraph 6(1)(a) of the direction

Question 1: Are the proposed definitions, particularly the definitions for the terms, 'customer access network', 'core network', 'emergency call camp on functionality' 'emergency registration', 'mobile base station' and 'wilt' appropriate? If not, please provide an alternative definition and give reasons for doing so.

We are in broad agreement with the definitions of these terms, save as set out below:

- The definition of *wilt* needs to be updated to address MOCN (Multiple Operator Core Network) or other similar scenarios where the same physical base station may be used by more than one carrier network. We suggest it be updated to the following:
 - *wilt* in relation to a mobile base station, means to prevent mobile devices from having any connectivity to the mobile carrier's network via that base station
- *Emergency registration* – we are broadly in agreement with this definition, but given the definition of non-genuine emergency registration, we propose the inclusion of a new definition for registration and updated definition for *genuine emergency registration* (rather than simply *emergency registration*) as set out below, which we have incorporated into the Draft Instrument:
 - *emergency registration* means the process by which a mobile device requests attachment to the emergency call signalling channel of a public mobile telecommunications network; and
 - *genuine emergency registration* means an emergency registration that is for the purpose of making an emergency call to the emergency service number 000 or 112.
- Additionally, Telstra proposes the definition of *medical alert device* be amended to *personal alert device*. There are wearable devices available that would meet the definition but might not be considered 'medical', such as personal safety alarms. Amending the term is in line with the intent of the definition and ensures current and future devices of this nature are captured.

Definition of 'significant local outage'

Question 2: Is the definition of significant local outage proposed at section 6 workable? If not, please provide an alternative definition and explain your reasons for doing so.

We do not consider that the current definition of 'significant local outage' is workable for the following reasons.

1. Impact to a distinct location should be in 'remote Australia' only, i.e. Remote Australia and Very Remote Australia, as per the ABS Remoteness Structure definitions; reference to 'regional Australia' should be removed, i.e. Inner Regional Australia and Outer Regional Australia, as per the ABS Remoteness Structure definitions. Regional centres are often served by multiple base stations. In the event of the loss of a single base station, neighbouring base stations will automatically expand their coverage (because devices will connect to a base station further away), making it difficult to determine which customers may be unable to make an emergency call. However, in remote locations, where there may be only one base station, it is more straightforward to determine which customers are affected.
2. Telstra is concerned that the threshold number of affected services in the proposed 'significant local outage' definition is unworkable. The significant burden on resources and costs, not only to carriers and CSPs, but also ESOs, is not only disproportionate to any attendant public benefit, but also has



the potential to cause confusion, drive a high level of queries, and result in 'notification fatigue'. We strongly recommend the threshold for the number of services affected by a SLO is increased to 10,000 services.

In relation to items 1 and 2 above, we refer the ACMA to our submission on the CCO Standard for further detail on our position on the definition of 'significant local outage', in particular, our response to Question 1.

3. The scope of the definition of *significant local outage* should also be amended so that it's restricted to emergency call services. We propose that amendments be made to the introductory text of the definition, as well as subsections (a) and (b) of the definition. We set out our reasons for this in Section 2 of our submission. We also note that corresponding amendments should be made to the definition of *major outage*.
4. The reference to 'telecommunications network' in the definition of *significant local outage* should be replaced with a controlled network or controlled facility, for consistency, to align with the terminology throughout the ECS Determination.

Question 3: Please provide data on the nature and volume of outages in telecommunications networks that would be captured by the proposed definition of significant local outage. Explain the impost of meeting the requirements under the proposed amendments in relation to significant local outages.

We estimate that the proposed definition of *significant local outage* will generate approximately [CIC Begins] [REDACTED] [CIC Ends] to a minimum of 1,000 customers for each notification. This would equate to sending [CIC Begins] [REDACTED] [CIC Ends] notifications per year.

We are concerned that this high volume of notifications is potentially detrimental to the best interests of end-users, other CSPs, the ECP and other stakeholders who may struggle to distinguish notifications regarding serious outage events from others. We are also concerned about the burden to industry, as to accommodate this high volume, automated solutions would need to be implemented, placing a high financial burden on CSPs who may only supply subset of services (e.g., mobile but not fixed) or who operate in a subset of states/territories around Australia. If the scale of notifications were lower, these CSPs may elect to avoid the capital cost of an automated solution.

We refer the ACMA to our submission on the CCO Standard for further detail on feasibility and costs.

Welfare checks

Question 4: Is the proposed definition of significant local outage likely to lead to more missed emergency calls requiring welfare checks and referrals to police services? If so, why? Please explain your answer.

Telstra conducts welfare checks on all missed emergency calls, regardless of the cause. Therefore, the proposed definition itself is not likely to impact welfare check volumes for Telstra.

Question 5: Is the possibility of a greater impost on police services to follow up on failed welfare checks sufficiently balanced by the benefit of checking on the welfare of a person who has made an emergency call that failed during a major or significant local outage? Please explain your response.

We consider that this a question best answered by police services. We are of the view that any welfare check, where the emergency call person (ECP) or CSP is unable to reach the customer after three attempts, must be referred to police to determine the well-being of the caller.

Wilt mobile base stations



Question 6: Is the wilting requirement appropriate to meet the requirements of the direction?

We consider the wilting requirement is appropriate to meet the requirements of the direction. However, we believe that the obligation on a carrier to wilt a mobile base station should only apply in the case of total loss of connectivity to the carrier's core network, as per our proposed drafting in section 73(1) of the Draft Instrument.

This change is necessary to avoid a carrier being obliged to wilt a mobile base station in a situation where there is only a partial loss of connectivity and this may not provide an optimal outcome for customers, as explained in our answer to Question 7 below.

Question 7: Are there circumstances where there should be an exemption from wilting a mobile base station? For example, where voice services may not be working but data services are working, and it may be possible for an end-user to use the data services on their phone to seek assistance (but not by using the Triple Zero Emergency Call Service).

On the basis that the obligation is to wilt when there is a total loss of connectivity to the core network (as per our proposed drafting in section 73(1) of the Draft Instrument), we consider there are no reasons for an exemption to apply.

However, if the wilting obligation was to also include partial loss of connectivity, a very complex matrix of exemption scenarios would be required, including consideration for when there is no alternate network available in the geographical area. In this case, some calling capability is better than no calling capability once a base station is wilted. Additionally, certain product sets only utilise specific connectivity requirements and, therefore, are only dependent on partial connectivity.

If there is a partial loss of connectivity, call attempts that fail will receive an error code response associated with the failure scenario. The work in response to Bean Recommendation #3 regarding end-to-end testing still needs to validate network and device behaviour in these scenarios, including the expected device behaviour to reselect to another network if available.

Question 8: Are there specific conditions that should apply to the requirement to wilt mobile base stations during outages (other than the loss of connectivity between the mobile base station and the core network)?

We refer to our response to Question 7 relating to exemption considerations. The obligation to wilt should be limited to the total loss of connectivity to the carrier's core network. In other cases, carriers should retain discretion whether to wilt after considering what approach would be in the best interests of end-users for that specific situation.

Exception to requirements

Question 9: Are there any additional relevant examples of matters that are beyond the control of the provider that may materially and adversely affect the provider's technical ability to meet the proposed new requirements?

We propose the following be included as an example of matters beyond the control of the provider in the note for subsection 19(3).

- Where a mobile phone does not conform to the applicable standards in Australia when attempting to make an emergency call.

Additionally, we propose the following be included in the note for subsection 12(2) as a matter beyond a providers control.



- Where an unknown software defect within a network element is dormant until a very particular and specific set of circumstances occur to trigger it, with impact occurring despite reasonable efforts in the network design and commissioning to prevent impact.

2. Requirements under paragraph 6(1)(b) of the direction

Question 10: Proposed section 78 is intended to apply when either a significant local, or major outage that affects the carriage of calls to the emergency call person for 000 and 112 occurs. Is this appropriate or should it apply only to major outages affecting the carriage of emergency calls? Please explain your answer.

The information sharing obligations in section 78 are acceptable. However, we recommend the ECS Determination refer to the CCO Standard rather than duplicating the obligations in the ECS Determination.

It is our view that in future the Triple Zero Custodian will be best placed to coordinate the gathering and sharing of information and therefore the current provisions should only be regarded as an interim arrangement.

Question 11: Is the information specified in proposed paragraphs 78(3)(a) to (f) sufficient real-time information about a network outage to provide useful assistance for emergency service organisations in the relevant area impacted by the network outage and the emergency call persons for 000 and 112 and 106?

Telstra considers that the information listed in Division 5.2, that must be provided if available during an outage, is reasonable for the purpose of ensuring primary stakeholders are sufficiently informed in a timely manner.

Question 12: Is there additional information about a network outage that should be specified as real-time network information? Please explain your answer.

Telstra considers that the information that must be shared under section 78(3), if available to a carrier at the time of sharing, is reasonable for the purpose of ensuring primary stakeholders are sufficiently informed.

Question 13: As drafted, proposed section 78 requires carriers to share real-time information with emergency service organisations located in the relevant area impacted by the network outage. Is this sufficient, or should emergency service organisations nationally be given information about outages? For example, would it be useful for emergency service organisations in New South Wales to be given real-time network information about a significant local outage in south-east Queensland? Does it depend on the relative proximity of the emergency service organisations to the location of the outage? For example, would emergency service organisations in Western Australia want to receive information about outages in Tasmania? Is there value in receiving this information for situational awareness? Please explain your answer.

It is our view that carriers should not be required to send the information to specific ESOs as carriers are not in a position to be able to make this judgment. For this reason, we believe the obligation to share information with ESOs should only apply at a State or Territory level, i.e. either to all ESOs or to a central coordinating ESO organisation within the State or Territory.

We recommend the ACMA conducts further consultation with the ESOs to fully gauge their appetite for receiving this information.

Question 14: Are there additional stakeholders who should receive real-time network information under this section?



No.

3. Requirements under paragraph 6(1)(c) of the direction

Question 15: Is 30 days an appropriate timeframe to prepare a report setting out the information in subsection 79(2)? If not, what would be an appropriate timeframe? Please explain your answer.

We are of the view that the use of 'business days', rather than 'days', avoids ambiguity and ensures the timeframe takes account of holiday periods.

We believe that extending the period to 60 business days is required to help ensure the Outcomes Plan is robust. Determining the causes and necessary remediation in the case of a major unplanned outage may be an involved and complex process, involving many different issues and or players in the ecosystem.

Additionally, we propose that the timeframe for further written updates set out in section 79(4)(b), be amended from 45 days to 3 months. As mentioned above, reports into causes of major unplanned outages may be extremely complex and require extensive, lengthy investigations. These reports are a vital component in building future resilience across the Triple Zero ecosystem and, as such, it is essential these are not rushed in order to meet an arbitrary fixed deadline.

4. Requirements under paragraph 6(1)(d) of the direction

Question 16: Are there specific matters that should be set out in the disruption protocol in the ECS Determination? Please describe in detail those matters, giving reasons for your answer.

As the Consultation paper points out, most of the requirements that might ordinarily be specified in a disruption protocol are already included within the ECS Determination. We note that Triple Zero primary stakeholders, including the ECP, have had the agreed and published Triple Zero Disruption Protocol in place since 2018. Given this document already comprehensively covers stakeholder communication and responsibility, we do not feel it is appropriate for the ECS Determination to duplicate these responsibilities or set out additional requirements. We have reflected our proposed amendments in Part 6 and Schedule 1 of the Draft Instrument accompanying our submission.

Telstra is concerned about the potential for confusion that could be caused by the paraphrasing in the Disruption Protocol of other obligations in the ECS Determination. We believe these concerns can be avoided by simply cross-referring to these obligations in the Disruption Protocol – instead of setting out simplified “lookalike” obligations as currently proposed in the Draft Instrument, which could create compliance confusion.

We also appreciate the challenge posed by the fact that there are limitations on setting out comprehensive arrangements in a regulatory instrument such as the ECS Determination, or schedule to the ECS Determination, as those arrangements cannot be easily amended, and must be publicly available (and static) for the ECS Determination to meet legislative requirements.

We agree with the ACMA that there are likely to be good opportunities to develop a comprehensive disruption protocol that is not limited by the restrictions applicable to the ECS Determination, once the Triple Zero Custodian role is established – given that role is expected to play a central coordination role when a major outage occurs. This is particularly true when it comes to coordination of communications with emergency service organisations. It would be unhelpful to try to “hard code” additional process related details into the ECS Determination in this regard, when things may well change once the Triple Zero Custodian is established. Further, the obligations may not be helpful or indeed may hinder ESO efforts to support end-users if, for example, they result in confused messaging arising from multiple notifications from different carriers and the ECP in the case of wide-scale issues.

5. Requirements under paragraph 6(1)(e) of the direction



Question 17: Is 6 months prior to the proposed change an appropriate amount of time to submit the management plan to the ACMA? If not, please specify a timeframe and provide reasons why.

We consider that 6 months is a reasonable time frame for providing a management plan for a proposed change. However, the scope of section 80 must be amended to clarify that the application of this section is limited to significant changes to the underlying network technology or architecture that fundamentally modify how emergency calls are carried across the network. The examples in the associated Note are helpful but the operative clause needs to be tightened to align with the examples given. Providing management plans for lesser operational or incremental changes would be a significant regulatory burden that would stifle the pace of network investment and provide no obvious benefits.



2. Telstra proposals for additional changes to the ECS Determination

ACMA's powers under section 147(1) of the Act: Telstra supports the ACMA's proposal to have consistency between the definitions of "major outage" and "significant local outage" used in the CCO Standard and in the ECS Determination. However, the ECS Determination is made under section 147(1) of the Telecommunications (Consumer Protection and Service Standards) Act 1999 (the TCPSS Act). The ACMA's powers under section 147(1) of the TCPSS Act are limited to making a determination imposing requirements in relation to emergency call services. We therefore recommend changes (which we have marked-up in the Draft Instrument) to limit these definitions to outages impacting a network used to carry emergency calls or supply emergency telephone services that result in an end-user being unable to establish and maintain an emergency call (rather than any carriage service as under the CCO Standard).

To ensure the amendments to the ECS Determination remain within the ACMA's powers under section 147(1) of the Act, we also recommend that the definitions of "major outage" and "significant local outage" as used in the ECS Determination refer to an unplanned adverse impact to a network "used to carry emergency calls". This applies the same nexus with emergency calls as used in section 27(1) of the ECS Determination currently.

To make clear the distinction between these terms when used in the ECS Determination as compared with in the CCO Standard, we suggest the ACMA uses differentiated defined terms in the ECS Determination, such as "major ECS outage" and "significant local ECS outage".

We have reflected our proposed amendments in the Draft Instrument accompanying our submission, see in particular, the drafting incorporated into the definitions of *major ESC outage* (as amended) and *significant ECS local outage* (as amended).

3. Changes to the ECS Determination to allow updating of firmware

This section of our submission provides detail on changes we consider should be made to Part 4, *Other requirements for carriers and carriage service providers in relation to emergency calls made on a mobile phone* of the ECS Determination to allow end users to update the firmware in a mobile phone that is unable to access the emergency call service.¹ We note that our contribution in this section is outside the scope of the consultation.

Following our introduction of the blocking requirements in Part 4 of the ECS Determination (implemented on 28 October 2024), we encountered a scenario in which a mobile phone was unable to access the emergency call service, in this case, due to a problem with its firmware. We were already aware that firmware can affect the ability of a mobile phone to access the emergency call service, as we had encountered such devices during the lead up to the 3G shutdown.

If we were to follow the obligations in section 65(2) or section 69 of the ECS Determination (as appropriate), we would be forcing the end-user to obtain a new mobile phone (and to provide details of low-cost options/alternatives, as per sections 65(2)(c) and 69(5)). This seems a disproportionate course of action, given all that is required to remedy the situation is for the end user to update their firmware.

As such, we propose the following changes to sections 65(2)(c), 69(2), 69(4) and 69(5).

¹ Where this solution is possible. Not all mobile phones that are unable to access the emergency call service can be remedied by a firmware upgrade, however, we have discovered through direct experience that in some instances, a firmware upgrade will resolve the issue where a mobile phone is unable to access the emergency call service.



Section 65(2)(c) - Repeal the paragraph, insert:

- (c) provide the end-user with information about:
 - (i) any methods available to the end-user to update the firmware or software or settings in the mobile phone to enable it to access the emergency call service; or
 - (ii) alternative mobile phones that are available, including information about alternative low cost or no cost mobile phones that can access the emergency call service.

Sections 69(2), 69(4) and 69(5) - Repeal the paragraphs, insert:

- (2) The carriage service provider must, within 5 business days:
 - (a) Where it is possible to rectify the inability to access the emergency call service due to a missing firmware or software update or configuration setting in the mobile phone, advise the end-user of the appropriate method(s) to update the software or settings in the mobile phone so that it can access the emergency call service; or
 - (b) notify the end-user that the mobile phone is no longer configured to be able to access the emergency call service and that the carriage service provider will cease supply of carriage services to the mobile phone on a date that is between 28 and 35 days from the date of the notification.
- (4) The carriage service provider must cease supply of carriage services to the mobile phone:
 - (a) no earlier than 28 days after the notification sent under subsection (2)(b); and
 - (b) no later than 35 days after the notification sent under subsection (2)(b).
- (5) In addition to the information included in a notification under subsection (2)(b) and prior to the ceasing of supply of carriage services to the mobile phone, a carriage service provider must also provide information to the end-user about alternative mobile phones that are available, including information about alternative low cost or no cost mobile phones that can access the emergency call service.

We have reflected our proposed amendments in the Draft Instrument accompanying our submission.