

Emergency Call Service Determination: Proposed amendments to improve the operation of the emergency call service

Introduction

The National Emergency Management Agency (NEMA) would like to thank the ACMA for the opportunity to comment on consultation papers relating to:

- *Emergency Call Service Determination: Proposed amendments to improve the operation of the emergency call service*

The Australian Government created the National Emergency Management Agency (NEMA) on 1 September 2022 as a single, enduring, end-to-end agency to better respond to emergencies, help communities recover, and prepare Australia for future disasters. NEMA's broad role spans an all-hazards and the full emergency management continuum, from prevention to reconstruction.

Our purpose is to enable more secure, stronger and resilient communities before, during and after emergencies. Our vision is that in working through meaningful partnerships, we will build Australia's capacity for disaster resilience and support our communities when they need it most.

NEMA four Strategic Objectives are:

1. Leading and coordinating national action and assistance across the emergency management continuum.
2. Building scalable, coordinated emergency management capability for nationally significant, cross-jurisdictional and international crises.
3. Building evidence, intelligence and insights to empower communities, leaders and stakeholders to make effective decisions.
4. Contributing to saving lives, reducing harm, and maintaining public trust to mitigate the consequences of disasters and build back better through investment in people, capabilities and communities.

NEMA's responsibilities in the preparedness, response, relief and early recovery phases of the crisis management continuum are outlined in the Australian Government Crisis Management Framework (AGCMF). Under the AGCMF:

- NEMA is the Australian Government Coordinating Agency for crises caused by natural hazards and space weather.
- NEMA assists the Department of Foreign Affairs and Trade (DFAT) with coordinating the domestic components of international crises.
- NEMA is the custodian of Australian Government crisis capabilities that support some or all elements of crisis coordination, including the National Coordination Mechanism (NCM) and the Australian Government National Situation Room (NSR).
- NEMA is the Australian Government Coordinating Agency for extreme to catastrophic (Tier 4) all-hazards crises, as well as novel crises not identified in the AGCMF.

NEMA, on behalf of National Emergency Management Ministers, develops national action plans to implement the National Disaster Risk Reduction Framework and guides national, whole-of-society efforts to proactively reduce disaster risk to minimise the loss and suffering caused by disasters.

The Australian Government National Situation Room (NSR), a 24/7 watchfloor, is responsible for providing whole of-government all-hazards monitoring and reporting to maintain situational awareness for stakeholders and to support decision making before, during and after crises. Impact analysis and consequence assessment is also conducted by Intelligence teams within the NSR.

In the event of a significant crisis, the NSR establishes an Australian Government Crisis Coordination Team (CCT). This is to support coordination of Australian Government actions, in line with the strategic intent set by the National Coordination Mechanism. It may bring together representatives from relevant Australian Government agencies, as well as other key stakeholders and employs the Crisis Appreciation and Strategic Planning methodology to support strategic planning activities and decision support products.

Disasters are anticipated to become more complex, unpredictable, and difficult to manage. NEMA's focus is to provide support for disasters on a national scale with far-reaching consequences. Strong, trusted and reliable communication networks, underpinned by Public Safety Communications services such as triple zero, the national messaging system and mobile broadband connectivity, will be an increasingly critical capability for emergency management operations. NEMA sees these ACMA consultations as supporting closer partnerships between governments, public safety agencies and industry to ensure a safer Australia as we collectively respond to emergencies.

Response to Consultation Paper Questions

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

Definitions

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.

NEMA considers the definitions of 'emergency call camp on functionality' and 'wilt' of particular importance.

(Delete comment later - FYI 'emergency call camp on functionality' explains a multi-carrier roaming capability but for triple zero only)

NEMA supports the definition of 'emergency call camp on functionality'. This definition will help ensure that affected mobile phone end-users who are Public Safety Agency (PSA) personnel have access to the emergency call service for operational purposes in the event of a network outage of their carrier's mobile network. This would be a complementary (and fail-safe) mechanism to their existing radio communications equipment. The definition adequately enacts Minister's Direction at 6(1)(a)(ii), (iii) and (iv).

NEMA also supports the definition of 'wilt', but suggests further consideration be given to the current and future technological capabilities of what services can be 'wilted'. In particular, if it is technologically possible, it would be good to distinguish between wilting the voice service connection and wilting data transmission. This would allow for wilting voice services while retaining

mobile data connectivity and vice-versa, thereby subsequently retaining users (such as PSA's) ability to make calls through a working voice or data service. Additionally, PSA personnel would still be able to send critical operational data (including videos and other situational information relevant to an emergency) through the broadband network.

Wilting will also allow PSA operational decision makers to consider, including with carriers, deploying backup technology (such as cell-on-wheel (CoW) tower or Vehicle as a Node (VaaN) satellite assets) to areas affected by an outage (i.e. before and during an outage) to ensure continued communications for PSAs and (should bandwidth allow) the community. This would be particularly important where only one network carrier is available and that outage leads to complete loss of access to emergency services numbers.

It is important to note in any 'wilting' scenarios that the planned National Messaging System will rely on the same network emergency signal as Triple Zero and will need to be factored into any future provisions.

Definitions 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.

NEMA supports the intent of ensuring that regional and remote areas are identified separately, as their requirements and situations are different to major population centres, including that these communities are often disproportionately impacted by natural disasters and major incidents.

NEMA recommends that further refinement of the definition should be considered, as more remote areas are sparsely populated and more difficult to access quickly in the event of an emergency. Furthermore, the severity of impact is not always related to the number of services impacted. Under the current proposed definition, these areas may not be captured under the subsequent notification requirements. The number of services affected and duration of the expected outage should be lowered to account for this. Continuing to draw on the ABS Remoteness Structure, this could be addressed through dividing the proposed definition to 'significant inner and outer regional outage' and 'significant remote and very remote outage'. The latter definition should have a lower standard for notification (such 250 services and 3 hours) to ensure users are adequately notified, continue to have access through other networks, PSAs can react accordingly and, in the event of there being no other networks available, PSAs, carriers and local authorities can plan to deploy back-up network technology or make other arrangements.

Please note, this position has also been reflected in ACMA's consultation on *Proposed amendments to the Telecommunications (Customer Communications for Outages) Industry Standard 2024*.

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 impact of meeting the requirements under the proposed amendments in relation to significant local outages.

While this question relates to the impost on industry to implement new requirements, NEMA notes that the policy, regulatory and operational objectives are to prioritise protecting lives, property and the environment.

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.

Out of NEMA's scope.

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.

Out of NEMA's scope.

Wilt mobile stations

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

If wilting a mobile station facilitates triple zero calls on another network, then this is an appropriate step.

NEMA proposes an additional requirement for a network carrier to work with relevant authorities, such as NEMA and emergency management agencies, to determine the need and location to deploy temporary network augmentation assets (e.g. CoWs and VaNs). This is to ensure ongoing network coverage under particular circumstances. These circumstances could include

- Natural disasters (to ensure ongoing communications capabilities, including as a back-up)
- Major Incidents impacting on communications or access to communications infrastructure
- Planned/unplanned outages where no other network is available (i.e. especially in rural and remote areas).

See also answer for question 1 in relation to seeking technical solutions to wilting voice services but retaining mobile broadband data connectivity (if not now, then in the future).

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).

As at questions 1 and 6. Additionally, where data services are considered critical for PSA operational purposes, these could be retained, while supplementary temporary augmented communications assets (e.g. CoWs and VaaNs) are made available to support voice services.

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)?

As per question 7, additional requirements may include carriers working with the relevant authorities to deploy temporary augmented coverage assets under particular circumstances.

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?

No.

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.

NEMA supports the inclusion of this section, including as it meets the requirements of the Ministerial Direction at section 6(1)(b). These requirements must apply to all defined outages (including NEMA's proposed additional definitions), especially as regional, remote and very remote areas are subject to additional vulnerabilities – even more so during emergencies and natural disasters. PSA responses to emergencies in these situations require additional operational considerations (i.e. from a logistical and resourcing perspective), making it critical that accurate information on network status (transparency) is provided quickly and to a high level of detail so that emergency response operations, where required, can be appropriately planned and actioned. Under the Australian Government Crisis Management Framework (AGCMF), NEMA has a defined role in supporting and coordinating national responses to disaster events. This includes providing national situational awareness to Australian Government and state and territory agencies through emails, SMS notifications, and dashboards, issued via the NSR with support from the CCT. Currently the NSR reports to stakeholders, including the Ministers Office, when there are major 000 outages which may have an impact on a community's ability to respond to crises events. The inclusion of this section will assist decision making for NEMA stakeholders, as well as the CCT who may be required to coordinate response on behalf of the Australian Government.

It is essential that NEMA be provided with near-real time data on outages in a format that can be shared with Commonwealth and state and territory governments and agencies. The NSR operates National Joint Common Operating Picture (NJCOP) which provides a near-real-time situational awareness by displaying all active nationally significant disasters and crisis events, supporting analysis and improving the timeliness of decision making. The data on outages should be in a format compatible with displaying on the NJCOP.

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?

While NEMA cannot comment on behalf of emergency service agencies, the proposed information at a minimum would be useful for NEMA to provide situational awareness and decision making support to stakeholders during crises.

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

NEMA suggest that carriers and carrier service providers (CSPs) are required to deliver spatially enabled communications via Application Programming Interface (API) protocols. This approach will support the consumption of outage information into emergency management spatially enabled situational awareness capabilities to facilitate consequence analysis (i.e. eftpos outages impacting fuel purchases and therefore evacuation activities). This facility could also support private sector awareness and planning.

NEMA recommends that these requirements be reviewed after 3 years.

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.

Yes, it is essential the information on telecommunications outages is shared nationally in agreed formats. Jurisdictions have standing arrangements to share personnel and resources during emergencies, coordinated through the National Resource Sharing Centre (NRSC), and visibility of impacts in other jurisdictions are critical to maintaining situational awareness. This national picture is also extremely useful for border communities who require an accurate picture of outage in close

proximity. The NJCOP is a mechanism where the national picture of outages can be displayed for Australian government, and state and territory stakeholders.

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

NEMA supports the principle that network information should be provided to those most affected by the network outage and who would subsequently be able to act on the information. NEMA should be provided all network outage-related information in its role as the national coordinator for emergency management responses. NEMA would use the information provided to support decision making before, during and after crises and in general emergency management. Having such information at hand would also assist in mitigating or minimising potential emergencies. This could include deciding how PSAs communicate with each other if a voice and data network is down or compromised in a particular area, and what support would be required to address communications challenges. It would allow NEMA to work with carriers and PSAs to manage communication issues in near-real time and increase operational efficiency and effectiveness in supporting local communities, including to take off additional strain on the triple zero network.

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.

NEMA considers that this timeframe is appropriate.

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.

In line with question 14, NEMA should be kept informed and updated about disruptions (under Part 3, section 6.3, of the disruption protocol).

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.

NEMA supports the timeframe proposed as it gives ample opportunity for ACMA to pass on the relevant information to agencies like NEMA, or PSAs affected in the outage area, to factor this into subsequent operational planning in preparing for and mitigating emergencies.

Proposed amendments to the Telecommunications (Customer Communications for Outages) Industry Standard 2024

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Response to Consultation Paper Questions

1. Definition of significant local outage

Question 1: Is the proposed definition of significant local outage workable? If not, please provide suggested wording for an alternative definition giving reasons.

NEMA supports the intent of ensuring that regional and remote areas are identified separately as their requirements and situations are different to major population centres, including that these communities are often disproportionately impacted by natural disasters and major incidents.

NEMA recommends that further refinement of the definition should be considered as more remote areas are sparsely populated and more difficult to quickly access in the event of an emergency. Furthermore, the severity of impact is not always related to the number of services impacted. Under the current proposed definition, these areas may not be captured under the subsequent notification requirements. The number of services affected and duration of the expected outage should be lowered to account for this. Continuing to draw on the ABS Remoteness Structure, this could be addressed through dividing the proposed definition to 'significant inner and outer regional outage' and 'significant remote and very remote outage'. The latter definition should have a lower standard for notification (such 250 services and 3 hours) to ensure users are adequately notified, continue to have access through other networks, PSAs can react accordingly and, in the event of there being no other networks available, PSAs, carriers and local authorities can plan to deploy back-up network technology or make other arrangements.

Please note, this position has also been reflected in ACMA's consultation on *Emergency Call Service Determination: Proposed amendments to improve the operation of the emergency call service*.

Question 2: Does the definition adequately capture outages that are lesser in scale than major outages, but have a significant impact on local communities in the areas that may have lower levels of access to alternative telecommunications networks?

See above for Question 1.

2. Outages caused by natural disasters

Question 3: Are there concerns about the imposition of requirements on carriers and CSPs in relation to outages caused by natural disasters? If yes, please explain.

NEMA supports the additional requirement on carriers to provide public notification via their website. NEMA would have concerns if the carriers were required to notify the public via SMS on all outages during disasters including natural disasters, given the already congested networks needed for emergency services during a natural disaster.

- NEMA would be concerned if telecommunication messages impacted the ability for the community to receive emergency alert messages sent by states and territories.
- NEMA would be concerned if telecommunication messages diluted the importance of Emergency Alerts sent by state/territories and their police, fire and ambulance services.
- NEMA recommends that the consistency of messaging is important. Our lessons process from Tropical Cyclone Jasper highlighted that more communication is helpful, but only if it is consistent with state and territory advice (including Emergency Alert).
- NEMA recommends the Department of Home Affairs be consulted on the network impacts of the NSR messaging to stakeholders via the NEMA Information Management System if direct to public SMS notifications were to be considered.
- NEMA should be included as a relevant stakeholder as the national coordinator during natural disasters.
- NEMA may consider requesting that carriers and CSPs also be required to notify the National Emergency Management Agency where a major and significant local outage has been caused by a natural disaster.
- NEMA suggests carriers and CSPs are required to deliver spatially enabled communications via Application Programming Interface (API) protocols. This approach will support the consumption of outage information into Emergency Management spatially enabled situational awareness capabilities to facilitate consequence analysis (i.e. eftpos outages impacting fuel purchases and therefore evacuation activities). This facility will also allow private sector awareness and planning.

For additional clarity, the transparency arrangements in the Determination at s78 should equally apply during outages in natural disasters.

Question 4: Can you suggest an alternative way to manage communications with customers and the public during outages caused by natural disasters so that the objectives of the direction are met?

The National Messaging System (NMS) is a telephony-based warning capability being delivered by the Australian Government to support a cohesive national approach to hazard preparedness, emergency response and recovery effort. Utilising cell broadcast technology, the NMS will not be affected by, or contribute to, mobile network congestion which can lead to delays for SMS-based systems. It will be able to deliver alert and warning information to compatible mobile devices reliably and in near real-time, on any scale and will have the capacity to target specific geographic area within 160m accuracy.

The Australian Government's primary use of the NMS will be to send public safety messages during incidents of national significance such as a pandemic or a disaster spanning two or more jurisdictions.

Under the AGCMF, NEMA and Australian Government have a responsibility to ensure that communication to Australian communities during a crisis is consistent, coordinated and helps prevent harm during a crisis. Situational awareness of outages can assist in activating crisis communication coordination, through NEMA or relevant Australian Government Coordinating Agency under the AGCMF. This would support consistent and coordinated information being shared with the public across government, industry and public channels.

3. Feasibility and cost

Question 5: For carriers and carriage service providers, what are the likely costs and benefits of implementation for your organisation? (Please provide specific cost estimates in your response.) Are there alternative ways to achieve the objectives of the direction that would be consistent with its terms and provide for lesser costs and/or greater benefits?

Out of NEMA's scope.

5. Commencement

Question 6: We are seeking views, and the reasons for them, on the earliest practical date for the standard for significant local outages to commence in full, noting that this must be no later than 30 June 2025.

NEMA supports the 30 June 2025 commencement date.

6. Additional/alternative requirements

Question 7: In relation to the draft amendments to the standard:

- Are there any additional matters aligned to the objectives that should be included but have not been?

• Are there any matters that have been included for which alternative arrangements should be considered?
Please provide evidence to support your submission.

No.