



Royal Commission
into National Natural
Disaster Arrangements

Draft Propositions
Counsel Assisting

31 August 2020

The Royal Commission into National Natural Disaster Arrangements was established on 20 February 2020 in response to the extreme bushfire season of 2019-20 which resulted in devastating loss of life, property and wildlife, and environmental destruction across the nation.

The Letters Patent for the Royal Commission set out the terms of reference and formally appoint Air Chief Marshal Mark Binskin AC (Retd), the Honourable Dr Annabelle Bennett AC SC and Professor Andrew Macintosh as Royal Commissioners.

This paper was published on 4 September 2020.

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ISBN: 978-1-921091-35-3 (online)

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Introduction

This document sets out a series of **draft** propositions which have been developed by Counsel Assisting with the assistance of staff of the Office of the Royal Commission.

The draft propositions do **not** necessarily represent the views of the Royal Commissioners.

This document responds to the terms of reference set out in the Letters Patent issued on 20 February 2020. Its preparation has been informed by the many opportunities for improvement to Australia's national natural disaster arrangements identified by submissions, responses to compulsory notices and issues papers, and evidence received by the Royal Commission since commencing hearings on 25 May 2020.

This includes suggestions by the Australian, state and territory governments and their agencies, as well as relevant findings and recommendations made by concurrent inquiries.

The draft propositions relate to most, but not all, of the issues that have been, and will continue to be, explored and which may inform this Royal Commission's findings and recommendations. The draft propositions are **not submissions**. Nor are they **final** propositions.

Parties with leave to appear are invited to respond to the draft propositions of relevance to their interests. In their response, parties must identify whether the draft proposition is '*supported*', '*supported in principle*', or '*not supported*'. They will also have an opportunity to provide a short explanation, where necessary.

Members of the public wishing to comment on the draft propositions should complete the online form at <https://naturaldisaster.royalcommission.gov.au>.

Responses to the draft propositions must be lodged within the period directed by the Royal Commission.

It is anticipated that some of the draft propositions will be tested in **Hearing Block 4**, in the week commencing **21 September 2020**.

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Part A: Natural disaster risk: roles and responsibilities

- A1. Natural disaster risk is growing across Australia due to intensifying natural hazards under a changing global climate and increasing exposure and vulnerability of individuals and communities.
- A2. Natural disaster risk reduction and resilience is a shared responsibility between individuals, private enterprise, not-for-profit organisations and all levels of government.

Support for local government

- A3. State governments should ensure oversight and have an understanding of the capacity and capability of local governments to which they have delegated responsibilities to prepare for, respond to, and recover from natural disasters. This should include consideration of:
 - A3.1. the natural disaster risk profile (incidence of exposure and vulnerability) of the local government area;
 - A3.2. demographics of the local government area (including seasonal variability of populations);
 - A3.3. the available resources and capacity of the local government; and
 - A3.4. the need for disaster management training, as part of a process of continuous improvement.
- A4. State governments should review existing arrangements for the sharing of resources with and between local governments during natural disasters, and whether those arrangements provide sufficient surge capacity.
- A5. The Australian government should provide state, territory and local governments with more comprehensive information and guidance about Commonwealth resources and assistance. This should include:
 - A5.1. the effects that can be achieved by deployment of the Australian Defence Force (**ADF**) to support and complement a state or territory's response to, and recovery from, natural disasters;
 - A5.2. arrangements for access, including for ADF assistance; and
 - A5.3. information and tools available from Australian government agencies, for example, the Bureau of Meteorology (**BOM**) and Geoscience Australia.

Part B: National coordination and accountability arrangements

Need for nationally coordinated approach to natural disaster risk

- B1. Mitigating and adapting to the impact of natural disasters requires a sustained nationally coordinated approach to natural disaster risk, according to the principle of 'subsidiarity'.¹
- B2. State and territory governments should share, with each other, and the Australian government, assessments of:
 - B2.1. natural disaster risk in that state or territory; and
 - B2.2. resources available for deployment in the event of a natural disaster;so that a national strategic assessment of risk and resources can be compiled.

Need for revision of national disaster plans

NATCATDISPLAN

- B3. The National Catastrophic Disaster Plan (**NATCATDISPLAN**) should be reviewed and updated as a matter of urgency, so as to clarify its operation in the event of a catastrophic natural disaster.

COMDISPLAN

- B4. The Australian Government Disaster Response Plan (**COMDISPLAN**) should be reviewed and updated as a matter of urgency, so as to clarify its operation in the event of a natural disaster and to ensure that there is consistency between its terms and current practice.
- B5. Changes should be made to enable the planned request for Commonwealth resources, in particular ADF, to support an emergency operation, at a level less than the current threshold. These should include:
 - B5.1. the threshold for requesting assistance in clause 1.4.6 should be adjusted, such that a jurisdiction need not '*have exhausted* all government, community and commercial options' before making a request; and

¹ That is, that decisions should always be taken at the lowest possible level or closest to where they will have their effect, for example, in a local area rather than for a whole country.

- B5.2. clause 2.4.2 should continue to allow for the pre-positioning of Commonwealth resources in advance of an anticipated request.

Need for national coordination of strategic decision making

- B6. A systemic, whole-of-nation approach to national natural disasters necessitates coordination of strategic decision-making across the Australian, state, territory, and local governments.
- B7. The national coordination of strategic decision-making for national natural disasters requires national situational awareness and national forums for decision-making.
- B8. Those making strategic decisions about the allocation and prioritisation of public resources to the preparation for, response to, resilience to, and recovery from national natural disasters ought to be accountable for those decisions.

Role for National Cabinet in national natural disasters

- B9. National Cabinet, or similar peak intergovernmental body, should be adopted as an effective model of collaboration between the Australian, state and territory governments in providing national level coordination and decision making in preparing for, responding to, resilience to, and recovery from, national natural disasters.
- B10. National Cabinet, or similar peak intergovernmental body, should receive and consider advice drawn from experts on relevant subjects, including:
- B10.1. national natural disaster risk, including the projected outcomes of a changing global climate on weather patterns, increasing severity of events and the increasing likelihoods of concurrent events occurring within a state or territory as well as nationally and internationally;
 - B10.2. the level of preparedness and capacity of relevant government and non-government sectors, for example, local governments, infrastructure owners and operators, private land managers, private sector operators (including supply chain managers), charities and other non-government organisations; and
 - B10.3. progress on, and opportunities for, natural disaster risk reduction and resilience measures.
- B11. National Cabinet, or similar peak intergovernmental body, should be convened in anticipation of, and during, a national natural disaster, to ensure effective national level coordination and decision-making for response, relief and recovery arrangements.

Committees and coordination mechanisms supporting National Cabinet

- B12. Intergovernmental and governmental committees with functions related to national natural disaster arrangements should be structured so that elected and non-elected senior officials drive, and are accountable for, policy projects related to natural disasters that are of national significance, to ensure they are completed in a timely manner.
- B13. The National Crisis Committee (**NCC**) should meet regularly to support the work of the National Cabinet in anticipation of, and during, a national natural disaster, to ensure effective national situational awareness and national coordination of implementation of decision-making for response, relief and recovery arrangements.
- B14. The functions of policy and strategic decision-making for resource sharing and prioritisation in anticipation of, and during, a national natural disaster, when exercised by the Commissioners and Chief Officers Strategic Committee (**CCOSC**) should be subject to the organisational governance principles and public accountability requirements that apply to government agencies. The functions of CCOSC concerning national natural disasters:
- B14.1. should not be exercised as a sub-committee of the Australasian Fire and Emergency Services Authorities Council (**AFAC**) Board;
 - B14.2. should be exercised as a sub-committee of the Australia-New Zealand Emergency Management Committee (**ANZEMC**), or equivalent, with respect to policy functions; and
 - B14.3. should be exercised as a sub-committee of the NCC, with respect to strategic resource sharing and prioritisation decision-making.

National resource sharing and prioritisation

- B15. The sharing of personnel, equipment and aerial assets between states and territories should be sufficiently supported, efficient, and should have a level of accountability and assurance.
- B16. The Australian, state and territory governments should agree to principles for resource sharing and prioritisation of movement of resources between jurisdictions during national natural disasters.
- B17. There should be a mechanism for elevating prioritisation decisions to the level appropriate to the natural disaster, including to National Cabinet, or similar peak intergovernmental body, or First Ministers as required, to facilitate the prioritisation of resources shared between jurisdictions in anticipation of, and during a natural disaster.

B18. The functions exercised by the National Aerial Firefighting Centre (**NAFC**) and the National Resource Sharing Centre (**NRSC**) (including the National Deployment Registry proposed by AFAC), should be transitioned to an appropriately funded and supported government entity. The functions of the entity should include:

- B18.1. collating and maintaining a national register of personnel, equipment and aerial assets;
- B18.2. facilitating and supporting the sharing, and interstate and international deployment, of state and territory fire and emergency services resources, including personnel, equipment and aerial assets;
- B18.3. facilitating and supporting the sharing and deployment of international fire and emergency services resources in Australia; and
- B18.4. tracking personnel, equipment and aerial asset deployments at interstate and international levels.

National accountability and reporting mechanisms

B19. Each state and territory government should establish a central accountability mechanism or process to promote continuous improvement and best practice in natural disaster arrangements. The functions of the accountability mechanism should include:²

- B19.1. tracking and reporting on the extent to which that state or territory government has implemented recommendations, accepted by that government, of previous inquiries into climate adaptation, natural hazard resilience, natural disasters and disaster risk reduction;
- B19.2. sharing best practice in relation to climate adaptation and natural hazard resilience, natural disasters and disaster risk reduction;
- B19.3. regularly reviewing and assessing the effectiveness of disaster management by that state or territory, including any disaster management plan and its implementation;
- B19.4. regularly reviewing and assessing the effectiveness of disaster management by district and local groups, including district and local disaster management plans;
- B19.5. reviewing and assessing cooperation between entities responsible for disaster management in that state or territory, including whether the disaster management systems and procedures employed by those entities are compatible and consistent;

² B19.3-B19.12 have been adapted from s 16C of the *Disaster Management Act 2003* (Qld).

- B19.6. recommending or making disaster management standards;
 - B19.7. regularly reviewing and assessing disaster management standards;
 - B19.8. reviewing, assessing and reporting on performance by entities responsible for disaster management in the state or territory against the disaster management standards;
 - B19.9. working with entities performing emergency services, departments and the community to identify and improve disaster management capabilities, including volunteer capabilities;
 - B19.10. monitoring compliance by departments with their disaster management responsibilities;
 - B19.11. identifying opportunities for cooperative partnerships to improve disaster management outcomes; and
 - B19.12. reporting (at least annually) and advising about issues relating to these functions.
- B20. The Australian government should establish an accountability mechanism or process to promote continuous improvement and best practice in natural disaster arrangements. The functions of the accountability mechanism or process should include to track, review, evaluate and report (at least annually) on:
- B20.1. the extent to which the Australian government has implemented recommendations, accepted by the Australian government, of previous inquiries into natural disasters, climate adaptation, natural hazard resilience, and natural disaster risk reduction;
 - B20.2. the extent to which the Australian, state and territory governments have implemented national frameworks, strategies, action plans, partnership agreements and other such arrangements directed to climate adaptation, natural hazard resilience, and natural disaster risk reduction;
 - B20.3. the effectiveness of the national committees and co-ordination mechanisms for natural disasters, including NAFC and NRSC;
 - B20.4. the effectiveness of Australian government natural disaster related information systems;
 - B20.5. the effectiveness of the Australian government non-financial assistance processes for natural disasters, for example, COMDISPLAN and emergency Defence Assistance to the Civil Community (**DACC**);
 - B20.6. the effectiveness of the Australian government financial assistance processes for natural disasters, for example, the Disaster Recovery

Funding Arrangements (**DRFA**), the Disaster Recovery Allowance (**DRA**) and Australian Government Disaster Recovery Payment (**AGDRP**); and

- B20.7. the extent to which states and territories have promoted continuous improvement and best practice in national natural disaster arrangements.

Stress testing national natural disaster arrangements

B21. The Australian, state and territory governments should conduct joint and national scenario planning and exercises (both desk-top and in-field) to assess national capacity, inform capability development and coordination in response to and recovery from natural disasters, including worst case catastrophic events, consequences and vulnerabilities. Those efforts should:

- B21.1. be used to evaluate plans, develop and assess competence, identify resource needs, gaps and any residual risk, and build relationships;
- B21.2. utilise scenarios that assess response to, and recovery from, coincident and consecutive natural disasters, including severe weather event scenarios developed with the assistance of climate modelling;
- B21.3. utilise scenarios incorporating:
 - (a) infrastructure and supply-chain vulnerabilities;
 - (b) current capacity and possible future capability;
 - (c) cross border coordination;
 - (d) interstate and international assistance;
 - (e) resource sharing and prioritisation;
- B21.4. where relevant, include non-government actors, such as critical infrastructure owners and operators; and
- B21.5. assist development of decision support tools.

B22. Lessons learnt from joint and national scenario planning and exercises should be used to proactively:

- B22.1. identify and mitigate risks;
- B22.2. evaluate plans and identify improvements;
- B22.3. promote efficient and effective logistic processes for the rapid deployment of physical and human resources;

- B22.4. improve interoperability and align jurisdictional procedures and protocols; and
 - B22.5. establish a process for escalation and management of any residual risk to facilitate comprehensive planning.
- B23. Joint and national scenario planning and exercises should be linked to continuous improvement programs that inform:
- B23.1. response planning;
 - B23.2. capability acquisition;
 - B23.3. future training requirements;
 - B23.4. doctrine, policy and procedure development;
 - B23.5. cultural and relationship development programs; and
 - B23.6. residual risk identification, treatment and appreciation.

Communication of preparedness for natural disasters

- B24. At least annually, each state and territory government should provide a public statement, based on relevant expert advice, containing an evaluation of the likely natural disaster risk for individuals and communities in their jurisdiction, and the effectiveness of the preparation and planning for the upcoming season.

Part C: Declaration of national emergency

Power of the Australian government to declare a national emergency

- C1. The Australian government has the power to make a 'Declaration of a State of National Emergency' (**Declaration**) in relation to a national natural disaster (**emergency**).
- C2. The Australian government should develop arrangements to support the making of a Declaration. Those arrangements need not be legislated.

Purpose and scope of a declaration of national emergency

- C3. To heighten awareness, galvanise preparation, and support and amplify related messages, a Declaration should signal to the Australian community that the impact, or likely impact, of a natural disaster is, or will be, significant, or could be catastrophic.
- C4. A Declaration should recognise the primary responsibility of state and territory governments in responding to natural disasters within their jurisdictions.
- C5. A Declaration should prompt consideration of the activation of exemptions in respect of national emergencies, for example: in the *Privacy Act 1988* (Cth); the *Environment Protection and Biodiversity Conservation Act 1999* (Cth); the making of statutory instruments, for example under section 89A(3) of the *National Health Act 1953* (Cth); and other legislation as appropriate.
- C6. A Declaration should signal to Australian government agencies that specific measures to mobilise resources should be initiated, or be ready to be initiated, at short notice, for example, that activation or forward deployment of Commonwealth resources will occur to provide support in anticipation of a natural disaster.
- C7. A Declaration should be in place for only a limited period of time.
- C8. A Declaration may apply to the whole, or part, of the nation.

Circumstances for making of declaration of national emergency

- C9. A Declaration should only be made in circumstances where a natural disaster is, or is likely to have, a significant national, or catastrophic, impact, including because of cascading, concurrent, or compounding natural disasters.
- C10. A natural disaster has, or is likely to have, a significant national, or catastrophic, impact when, in the view of the decision-maker, it:
 - C10.1. impacts, or threatens to impact, two or more states and/or territories and across jurisdictional borders; or

- C10.2. has the potential to overwhelm or exhaust a state and/or territory's assets and resources; or
 - C10.3. because of its scale or complexity, warrants a nationally coordinated response; or
 - C10.4. will impact, or threaten to impact, Commonwealth interests; or
 - C10.5. has rendered, or threatens to render, a state or territory government incapable of functioning; or
 - C10.6. requires the Australian government to supplement state or territory capacities, efforts, and capabilities to save lives and to protect property and public health and safety; or
 - C10.7. results, or may result in, a breakdown in the national flow of essential goods, services or resources; or
 - C10.8. because of cascading, concurrent, or compounding natural hazard events, may result in one or more of the above circumstances.
- C11. Any Declaration should be made by the Prime Minister, at his or her discretion, and does not require prior agreement between the Australian, and one or more state or territory, government. However, the decision-making process might be assisted by consultation, such as with National Cabinet or First Ministers.

Australian government assistance or resources activation

- C12. Australian government assistance or resources or Australian government supported assistance or resources that could be coordinated and mobilised by the making of a Declaration might include:
- C12.1. *Australian Defence Force*: for example, the ADF can be pre-deployed in anticipation of a state/territory government request for assistance under the DACC arrangements. The Reserves can be called out in accordance with the provisions of the *Defence Act 1903* (Cth) to assist in responding to the natural disaster;
 - C12.2. *Medical support*: for example, AUSMAT can be pre-deployed in anticipation of a state/territory government request. Emergency protocols can be introduced to expedite the deployment of general practitioners and allied health workers to disaster-affected communities. The 'continuing dispensing' arrangements can be expanded to allow pharmacists to dispense a one-off standard quantity of an eligible PBS medicine without a prescription;
 - C12.3. *International assistance*: for example, the Department of Foreign Affairs and Trade can activate relevant international crisis arrangements, including deploying liaison officers and other support to the

Department of Home Affairs' Emergency Management Australia (**EMA**) for international assistance, delivery of consular services, and crisis communications;

- C12.4. *Science and meteorological agencies*: for example, the functions of key Australian government agencies (such as BOM, Geoscience Australia, CSIRO, Australia's Nuclear Science and Technology Organisation, and the Australian Space Agency) can be mobilised and coordinated to further facilitate the prioritisation of support to response and recovery efforts for the duration of the Declaration;
- C12.5. *Financial assistance*: for example, financial assistance, under the DRA and the AGDRP, can be planned and expedited. Further, the Australian government can actively provide assistance under, and advice in relation to, funding arrangements operated jointly with the states and territories, for example, the DRFA.
- C12.6. *Recovery*: for example, the activities of the national standing recovery body can be scaled up. If there is no national standing recovery body, either a time-limited Australian government recovery coordinator or an Australian government recovery taskforce can be appointed to focus on leading the Australian government's recovery efforts until an agency can be stood up.

Australian Defence Force assistance

C13. The DACC arrangements with respect to emergency DACC:

- C13.1. should be reviewed and updated as a matter of urgency to clarify the operation of emergency DACC in the event of a natural disaster (noting such arrangements do not require legislation);
- C13.2. should be refined to enable a planned request for ADF assistance, to support response and recovery to a natural disaster, at a level less than the current threshold, including removing the requirement that a jurisdiction have exhausted all its resources before making a request, to reflect current practice.

C14. The legislative arrangements enabling the 'call-out' of reservists should be examined to ensure that such call-outs are more streamlined, and flexible in order to meet ADF operational requirements, including in natural disasters.

C15. The Australian government should consider whether Defence (including ADF) and Defence personnel and staff (including ADF personnel) engaged in activities conducted under or pursuant to emergency DACC have the same or similar privileges and immunities as states and territories, and their personnel do, when engaged in activities in response to, and recovery from, natural disasters.

Part D: National natural disaster information systems

National disaster risk information

- D1. All governments should prioritise the implementation of harmonised data governance, national data standards and sharing common technologies to enable collaboration in the production, analysis, access, and exchange of information, data and knowledge about climate and disaster risks.
- D2. The Australian, state and territory governments should support the implementation of the National Disaster Risk Information Services Capability (**NDRISC**) and aligned adaptation initiatives to provide opportunities to build national and thematic platforms to support coproduction of information, linked expertise, decision science support and action.

National climate projections

- D3. The Australian, state and territory governments should develop updated, downscaled, nationally consistent, climate projections (**National Climate Projections**):
 - D3.1. to assess future natural disaster risk; and
 - D3.2. develop integrated climate and disaster risk scenarios.

These projections and scenarios should be underpinned by an agreed common core set of climate trajectories and timelines.
- D4. This work should be led by national science institutions, such as the CSIRO and/or the Bureau of Meteorology, in collaboration, where appropriate, with research institutions, the private sector and entrepreneurs.

National natural hazard risk assessment, projections and maps

- D5. The Australian, state and territory governments should develop and maintain nationally consistent:
 - D5.1. assessments of the frequency, intensity and spatial distribution of all natural hazards at a national scale, and appropriate regional and local scales to assess *current natural hazard events risk*, using agreed methods and datasets (**National Natural Hazards Event Risk Assessments**);
 - D5.2. projections of the frequency, intensity and spatial distribution of all natural hazards at a national scale, and appropriate regional and local scales to project *likely future natural hazard events risk*, using an agreed common core set of climate trajectories and timelines drawing on the National Climate Projections (**National Natural Hazard Events Risk Projections**); and

- D5.3. national natural hazard risk maps and other data platforms that allow for the current and likely future frequency, intensity and spatial distribution of natural hazards to be spatially represented (**National Natural Hazards Maps**).

D6.

- D6.1. This work should be led by national science institutions, such as the CSIRO, Geoscience Australia and/or the Bureau of Meteorology, in collaboration, where appropriate, with research institutions, the private sector and entrepreneurs.
- D6.2. The National Natural Hazard Events Risk Assessments; National Natural Hazard Events Risk Projections and the National Natural Hazards Map should be communicated on public-facing platforms.

National exposure information and map

- D7. The Australian, state and territory governments should identify all existing data collected and maintained by them in respect of the elements that may be at risk of a natural hazard event now and in the future (**Exposure Information**), including:

- D7.1. individuals;
- D7.2. dwellings or households and communities;
- D7.3. buildings and structures;
- D7.4. public facilities and infrastructure assets;
- D7.5. agricultural commodities;
- D7.6. environmental assets; and
- D7.7. business activity;

where those data can appropriately and usefully inform decision-makers (including individuals, businesses and governments) of this element of natural disaster risk.

- D8. The Australian, state and territory governments should, as a matter of urgency, work together to:

- D8.1. harmonise, at a national level, the Exposure Information (**National Exposure Information**); and
- D8.2. identify key gaps in National Exposure Information.

- D9. The Australian, state and territory governments should work together to:

- D9.1. develop and implement a national data standard for Exposure Information for natural hazards, including bushfire, flood, cyclone, heat waves, storms;
 - D9.2. address the key gaps in National Exposure Information; and
 - D9.3. maintain the National Exposure Information.
- D10. The Australian, state and territory governments should work together to develop and maintain national exposure data platforms and/or maps using the National Exposure Information showing the elements that may be exposed to natural hazard risk now and in the future (**National Exposure Maps**).
- D11. This work should be led by national science institutions, such as the CSIRO and/or Geoscience Australia in collaboration, where appropriate, with research institutions, the private sector and entrepreneurs.
- D12. The National Exposure Information and the National Exposure Maps should be communicated on public-facing platforms.

National natural disaster risk maps and portal

- D13. The Australian, state and territory governments should bring together and maintain:
- D13.1. the National Climate Projections;
 - D13.2. the National Natural Hazard Events Risk Assessments;
 - D13.3. the National Natural Hazard Events Risk Projections;
 - D13.4. the National Natural Hazards Maps;
 - D13.5. the National Exposure Information; and
 - D13.6. the National Exposure Maps;
- in a single tool that can be used to identify the current and future exposure of a particular locality or region to a natural hazard event (**National Natural Disaster Risk Maps**).
- D14. This work should be led by national science institutions, such as the CSIRO, Geoscience Australia and/or BOM in collaboration, where appropriate, with research institutions, the private sector and entrepreneurs.
- D15. The National Natural Disaster Risk Maps should be communicated on public-facing platforms.
- D16. The National Natural Disaster Risk Maps, National Natural Hazard Projections, the National Natural Hazard Maps, the National Exposure Information, the National

Exposure Maps and the underlying data sets should be made available to public in a centralised portal (**National Natural Disaster Risk Portal**).

National vulnerability information and national resilience indices

D17. As contemplated in the 2018 report of the National Resilience Taskforce, *'Profiling Australia's Vulnerability: The interconnected causes and cascading effects of systemic disaster risk'*, the Australian, state and territory governments should develop tools, methods and guidance to:

D17.1. identify; and

D17.2. assess;

the vulnerability of individuals and communities to a natural hazard event (**National Vulnerability Information**).

D18. This work should be led by national science institutions, such as the CSIRO in collaboration, where appropriate, with research institutions, the private sector and entrepreneurs.

D19. The National Vulnerability Information should be communicated on public-facing platforms.

D20. The Australian, state and territory governments should develop and maintain national indices to assess the capacity of a community or region to adapt and cope with natural disaster risk (**National Resilience Indices**).

D21. The National Resilience Indices should be communicated on public-facing platforms.

D22. The National Vulnerability Information and National Resilience Indices should be incorporated into the National Natural Disaster Risk Portal.

National fuel load database

D23. The Australian, state and territory governments should work together to establish a national fuel load database (**National Fuel Load Database**) to support decision making on natural hazard reduction activities. To facilitate the establishment of the National Fuel Load Database, the Australian, state and territory governments should:

D23.1. agree a national standard for collecting, tracking and reporting fuel load data, based on existing national fuel classification systems;

D23.2. agree a national standard for assessing, monitoring and reporting fuel load management activities; and

D23.3. develop and utilise remote sensing and other technologies (for example, LiDAR) to improve the capture of fuel load data.

- D24. This work should be led by national science institutions, such as the CSIRO in collaboration, where appropriate, with research institutions, the private sector and entrepreneurs.
- D25. The Australian, state and territory governments should work together to improve knowledge and understanding of the efficacy and efficiency of fuel load reductions activities by investing in public education programs and resources.

National bushfire database

- D26. The Australian, state and territory governments should work together to establish a national bushfire database (**National Bushfire Database**). The National Bushfire Database would enable:
- D26.1. monitoring of trends in bush fire activity and impacts, including timing, cause and extent, and severity across all land tenures and vegetation types;
 - D26.2. tracking trends and identifying patterns in associated weather and climate signals that contribute to severe or extreme bush fires; and
 - D26.3. evaluation of the cost and effectiveness of risk mitigation efforts, including hazard reduction, and fire suppression activities.

Part E: National knowledge investment and research

- E1. Investment in research to improve knowledge and understanding of natural hazards and natural disaster risk is required to drive the future development of expertise, tools and systems to deal with national natural disasters.

National knowledge gaps

- E2. The Australian, state and territory governments should prioritise investment in national research that addresses national knowledge gaps, acknowledging that the emergency management sector is not the only stakeholder in natural hazard resilience and disaster risk reduction.

Climate and weather modelling and intelligence

- E3. The Australian, state and territory governments should prioritise investment to:
- E3.1. ensure an ongoing capability in national climate and weather modelling; and
 - E3.2. improve national climate and weather intelligence relating to natural hazards and natural disaster risk.

National research centre for natural hazard resilience and disaster risk reduction

- E4. The research centre for natural hazard resilience and disaster risk reduction announced by the Australian government on 23 July 2020 should:
- E4.1. reinforce Australia as a major world centre of bush fire research, and technology development and commercialisation;
 - E4.2. target delivery of national research priorities that address national knowledge gaps and national research needs in respect of all natural hazards and natural disaster risk; and
 - E4.3. facilitate research that brings together universities, government agencies and delivery partners.

National research priorities related to natural disaster risk

- E5. National research priorities related to natural disaster risk should:
- E5.1. support a National Disaster Risk Information Services Capability;
 - E5.2. support a National Natural Disaster Risk Portal;
 - E5.3. support National Vulnerability Information;

- E5.4. support National Resilience Indices;
 - E5.5. support a National Fuel Load Database;
 - E5.6. support a National Bushfire Database;
 - E5.7. consider chronic and long-term health effects of natural disasters, especially vulnerable communities;
 - E5.8. consider short and long term health impacts of bushfire smoke on Australian communities;
 - E5.9. support efficacy and efficiency of hazard reduction activities; and
 - E5.10. support fire simulation and predictive capabilities.
- E6. The Australian, state and territory governments should establish formal pathways and structures for interaction between government, government bodies, research institutions, the private sector and entrepreneurs, to facilitate the development of collaborative, impact-driven research expertise, tools and systems to deal with natural disasters.

Air quality research and public health messaging

- E7. The Australian, state and territory governments should work together to develop close to real-time, nationally consistent public messaging on air quality, including consistent categorisation and public health advice, and advice targeted to vulnerable groups. Relevant considerations for enhanced public messaging include:
- E7.1. the data on which the information is based should be identified and calculated consistently, for example, by use of the same averaging periods, air quality information (AQI) calculations and pollutants;
 - E7.2. nationally consistent and regularly reviewed pollutant standards within the *National Environmental Protection (Ambient Air Quality) Measure* should be developed to better support public alert and warning systems;
 - E7.3. improved and multi modal air quality alert and health associated health advice systems should be progressed, including the use of national apps (for example, an enhanced AirRater app), websites and traditional messaging communication modes;
 - E7.4. research-based national guidelines on the provision of information to the public on appropriate activities to minimise harm should be developed, including on the use of personal protective equipment (PPE) in particular P2 masks, clean air shelters and other protective measures; and

- E7.5. a research-based national, strategic education program should be developed to assist the community to make informed decisions and preventative actions in response to exposure to poor air quality.
- E8. The Australian, state and territory governments should invest in the further research, development, and use of smoke forecasting systems, building on work already undertaken in relation to the Air Quality Forecasting (AQfx) system.

Fire simulation and predictive capabilities

- E9. The Australian, state and territory governments should further develop national capacity in fire simulation and predictive capabilities, including the capability to read and interpret these products through training.
- E10. This work should be led by a national science institution, such as the CSIRO in collaboration, where appropriate, with research institutions, the private sector and entrepreneurs.
- E11. The Australian, state and territory governments should work together to fund the ongoing development and national implementation of Spark. The support could include employing technologies such as machine learning to enable near-real-time prediction as well as incorporating national mapping of fuel load, condition, state and distribution.
- E12. The Australian, state and territory governments should work together to establish a spatial technology acceleration program to improve capability to detect ignitions and monitor accurately all fire edge intensity and progression automatically across the nation in near real time.

Part F: National mitigation and preparedness arrangements

Future proofing

- F1. Each of the Australian, state and territory and local governments should determine their preferred level of preparedness to reduce and mitigate future natural disaster risks. Considerations include:
- F1.1. predicted outcomes of the changing global climate on weather patterns;
 - F1.2. increasing intensity of severe weather events; and
 - F1.3. increasing likelihood of concurrent events occurring within each state and territory, as well as nationally and internationally.

Community education

- F2. All governments and fire and emergency service agencies should ensure existing programs (including in schools) to educate the community about preparing for natural disasters are ongoing and targeted. These programs should include, among other things, information that:
- F2.1. reinforces responsibilities individuals have (especially in high-risk environments) and how they can best make informed decisions when preparing for, and responding to, natural disasters;
 - F2.2. reminds individuals and communities of the importance of preparing and being properly equipped to defend their homes;
 - F2.3. encourages individuals and communities to develop a natural disaster survival plan (including knowing the location of safer places and appropriate evacuation routes);
 - F2.4. ensures individuals and communities understand that crucial services, such as power, and telephone networks, might be limited or simply not be available during natural disasters;
 - F2.5. encourages individuals and communities to ensure they have adequate emergency supplies (such as batteries, a radio and water), in light of that information; and
 - F2.6. ensures individuals and communities understand emergency warnings and know where to find information during natural disasters.

Emergency planning

- F3. Emergency planning arrangements, at a national, state and territory, and local, level should receive appropriate input from non-government actors with relevant expertise and roles in response and recovery, such as:
- F3.1. critical infrastructure owners and operators;
 - F3.2. private land managers;
 - F3.3. charities and other non-governmental organisations;
 - F3.4. those with expertise in wildlife, or stock, welfare;
 - F3.5. private sector operators (including supply chain managers); and
 - F3.6. primary health care providers.

Primary health care providers

- F4. There should be a greater inclusion of primary health care providers in disaster planning committees, disaster plans and response, at local, state/territory and national levels. Arrangements to facilitate greater inclusion of primary health care providers should have regard to:
- F4.1. primary care providers and Primary Health Networks (**PHNs**) representation at municipal, regional and state planning committees and in incident and regional level Health Incident Management Teams (at the discretion of the local commanders and Regional Health Coordinators);
 - F4.2. participation in emergency management exercises and training;
 - F4.3. the inclusion of arrangements with local primary care providers in local/municipal emergency management plans;
 - F4.4. the presence of pharmacists, as relevant and necessary, in emergency relief settings, including relief and recovery settings or information hubs;
 - F4.5. registration of volunteer primary health care personnel prior to deployment to support participation;
 - F4.6. emergency management training of primary health care personnel to ensure they understand the emergency management command and control structure, such as through the Major Incident Medical Management & Support (**MIMMS**) standard or The Australian Medical Assistance Teams (**AUSMAT**) training; and
 - F4.7. supporting the inclusion of primary health care providers by providing necessary resourcing and training to primary care providers to facilitate their role during a disaster.

Isolated and high-risk communities and evacuation planning

- F5. Those responsible at all levels of government for evacuation planning and related resources should review and update their evacuation plans, to have regard to the mobility of the Australian population, particularly during summer months, and to account for:
- F5.1. the adequacy of evacuation routes;
 - F5.2. the existence and standard of any evacuation centres and safer places in the community (including regularity of maintenance and existence of communications facilities and alternate power sources);
 - F5.3. coordination between states and territories in cross border areas and cross-border access to evacuation centres;
 - F5.4. education and signage about evacuations and evacuation routes, including education of seasonal populations;
 - F5.5. the potential for critical infrastructure failure (particularly communications and power);
 - F5.6. availability of essential supplies, including food and water;
 - F5.7. the potential inability to evacuate;
 - F5.8. communications 'black spots';
 - F5.9. consequence management and compounding events such as the loss of essential services or health impacts; and
 - F5.10. liaison with local government and the community in developing and reviewing these plans.
- F6. Terminology for the different sheltering options – including evacuation centres, Neighbourhood Safer Places, places of last resort and natural disaster shelters – should be made nationally consistent.
- F7. All governments should provide further national community education on the function and limitations of different sheltering options – including evacuation centres, Neighbourhood Safer Places, places of last resort and natural disaster shelters.

Supply chain continuity and transport routes

- F8. Australian, state and territory governments should review supply chain risks at each level of government, and consider alternatives and options to ensure supply of essential goods in times of natural disaster need. The review should consider and determine whether Australian, state and territory governments should

develop domestic stockpiles and/or community caches of identified essential goods.

- F9. State, territory and local governments should manage transport routes (including roads, rail and waterways) by reference to their:
 - F9.1. utility (supply route, evacuation route, emergency service access);
 - F9.2. priority (main thoroughfare, alternative route); and
 - F9.3. risk level.
- F10. Transport routes supporting national supply chains should be identified, and prioritised by state and territory governments (and where appropriate, local governments) with appropriate resilience measures to ensure that private sector freight organisations and other relevant users can maintain essential supplies for communities in anticipation of, during, and after, natural disasters.
- F11. Opening and closure information of transport routes used for national supply chains should be provided to freight organisations and other relevant users, and where possible predicted or notified in real time, so as to minimise disruption to supply chains to communities in anticipation of, during, and after natural disasters.
- F12. Relevant state and territory governments, working with local governments and fire and emergency service agencies, should ensure that there are appropriate arrangements for roadside vegetation management. These arrangements should take into account priority access and egress routes; road priority, utility, and strategic value; cost; and residual risk to national natural disasters.

Critical infrastructure and essential services

- F13. All governments should facilitate the identification and assessment of key risks that essential services outages have on communities in a severe or catastrophic disaster, so governments and dependent public infrastructure owners and operators are aware of, and can mitigate, the risks.
- F14. The Australian government should lead the development of improved information flows between essential infrastructure owners and operators and governments so that relevant stakeholders can identify and engage quickly in a natural disaster, including, where necessary, notifying affected or impacted communities about residual risks.
- F15. In determining risk mitigations and preparedness for natural disasters, telecommunications network owners and operators should develop strategies that take into account the community impacts of telecommunications outages. These strategies should be reviewable by the Australian Communications and Media Authority, upon request by the Australian government minister with responsibility for communications.

- F16. In determining risk mitigations and preparedness for natural disasters, electricity infrastructure owners and operators should develop strategies that take into account the community impact of electricity network outages. These strategies should be reviewable by relevant regulators, upon request by ministers with responsibility for electricity networks.
- F17. In order to minimise communication outages and extend basic communication coverage during natural disasters, all governments, either directly or together, work with relevant telecommunications and electricity regulatory, policy and market bodies, to:
- F17.1. ensure there are sufficient redundancy options available (e.g. backup diesel generators, deployed temporary telecommunications facilities, etc.) to supply power to essential telecommunication infrastructure or alternative telecommunications infrastructure;
 - F17.2. ensure there is appropriate auditing of distributors' preparedness for risks arising from network assets being affected by, or igniting a, bush fire;
 - F17.3. investigate the feasibility of cross-carrier roaming arrangements between carriers and the public for basic text, voice and data during the period of emergency in areas directly affected by a natural disaster;
 - F17.4. enable emergency services agencies to require carriers to provide regular information on the status of outages and areas affected by a natural disaster.

Public and private land management

- F18. Australian, state and territory governments should review their legislation and processes relating to vegetation management, bushfire mitigation and hazard reduction to:
- F18.1. ensure there is clarity about the scope for landholders and land managers to undertake bushfire hazard reduction activities; and
 - F18.2. minimise the time taken to undertake relevant assessments and obtain relevant approvals.
- F19. State and territory governments should educate the community about individual and community roles and responsibilities in managing native vegetation to improve hazard reduction on both public and private land.
- F20. State and territory governments should clearly articulate and make available to the public their fuel load management strategies, as well as publicly report on the implementation and outcomes of those strategies.

Indigenous land and fire management practices

- F21. Indigenous fire practice is one component of a broader practice of Indigenous land management, not simply another technique of hazard reduction.
- F22. Indigenous land and fire management is supported and practised differently across the varied landscapes of Australia.
- F23. Indigenous groups and communities have different objectives and levels of knowledge, experience, resources and opportunities to undertake Indigenous land and fire management.
- F24. All governments should work with Traditional Owners to explore the relationship between Indigenous land and fire management and natural disaster resilience, and its integration into a whole-of-community approach to natural disaster resilience.
- F25. All government land managers should explore opportunities to integrate indigenous land and fire management practices in planning and execution of public land management activities.

Land use planning and building

Land use planning

- F26. Present and future natural disaster risk should be a mandatory consideration when making decisions about where to locate communities, buildings and services and what conditions to impose or standards to require for new buildings or developments.
- F27. The Australian, state and territory governments should develop regional and local tools and scenarios, from nationally consistent natural hazard risk projections and nationally consistent climate projections, to inform state, territory and local government decision making as to:
 - F27.1. where to locate communities, buildings and services; and
 - F27.2. what conditions to impose, or standards to require, for new buildings or developments.

National targets for reducing 'legacy risk'

- F28. Australian, state and territory governments should work together to agree a national approach to addressing 'legacy risk'.
- F29. Australian, state and territory governments should work together to agree a national approach to communicating risk information to households and purchasers. The measures for communicating and educating individuals and communities about 'legacy risk' should include:

- F29.1. making information available to land owners as to the natural hazard risk to land and/or buildings, for example through a National Natural Disaster Risk Portal;
- F29.2. in consultation with the insurance industry, develop guidance for businesses and households about retrofitting and other mitigation actions (such as land clearing of vegetation within a certain area of building);
- F29.3. identifying and encouraging actions that can be taken by businesses and households to address 'legacy risk', including developing and adopting national standards for those actions. For example, *AS 5414:2014: Bushfire water spray systems* – this standard sets out the requirements for building a bushfire sprinkler system and the *Performance Standard: The Design and Construction of Private Bushfire Shelters*;
- F29.4. agreeing a nationally consistent mechanism by which the exposure and vulnerability of land and/or buildings to a natural hazard event (in the present and future) is clearly disclosed to a potential purchaser at the time of sale.

National building standards

- F30. Australian, state and territory governments should assess the extent to which *AS 3959:2018 Construction of buildings in bushfire-prone areas* is effective in increasing the likelihood that a building will survive a bushfire.
- F31. The National Construction Code should be amended to specifically include, as an objective of the code, making buildings more resilient to natural hazards.

Insurance

- F32. Each of the Australian, state and territory, and local governments should provide clear guidance to the public, as well as to the insurance industry, in advance of, or in anticipation of, a natural disaster, as to the circumstances in which it will, or will not, assist with debris clean-up, including in particular contaminated debris.
- F33. All governments should consider the findings and recommendations of prior and concurrent inquiries into insurance issues, in particular the Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry, the Australian Competition and Consumer Commission's *Northern Australia Insurance Inquiry* and the Department of Treasury's *Disclosure in General Insurance Review*, with respect to the use and accessibility of insurance as a risk management tool for natural disasters.

Part G: National response arrangements

Emergency information

National standards for warning apps

- G1. The Australian government should facilitate, and state and territory governments support, the development of national standards of information for emergency warnings applications (**apps**), incorporating:
 - G1.1. consistent terminology, symbology, and definitions across hazards;
 - G1.2. extending coverage of jurisdictions' apps to no less than 50km into the neighbouring state/territory jurisdiction;
 - G1.3. information on when the data for the apps were last updated, and/or how often data are updated; and
 - G1.4. information on road closures (including state and local roads), fire front, fire direction, fire prediction, and appropriate sheltering facilities, such as Neighbourhood Safer Places or equivalent.
- G2. The Australian government should lead, with support from states and territories and the private sector, the development of a national, all-hazard app that provides real time information on the location and risks of floods, bushfires, cyclones, storms and other natural hazards.

All-hazard national warning system

- G3. State and territory governments should finalise and implement a new all-hazard national warning system as a matter of priority.
- G4. The new warning system should be accompanied by an extensive, targeted community education program to ensure the public understands the new warnings and what they should do in response to each warning.

New national fire danger rating system

- G5. State and territory governments should finalise and implement the new Australian Fire Danger Ratings System as a matter of priority, notwithstanding the complexity involved in taking into account the latest science and technology to reflect better the effect of forecast environmental and weather conditions on the potential for bushfire.
- G6. The Australian Fire Danger Ratings System should be accompanied by an education campaign to ensure the public understands the new ratings, the potential danger attached to each rating, and what steps they should take in response to each rating.

ABC communication of emergency information

- G7. All state and territory government emergency services agencies should embed Australian Broadcasting Corporation (**ABC**) managers within the public information functional areas of state and territory emergency management centres to assist with the timely delivery of critical emergency information to the public.

Emergency responders

National training and competency standards

- G8. State and territory governments, assisted by the Australian government, should work towards achieving nationally consistent training and competency standards, while recognising a need for jurisdictional context. National standards should meet the needs (including the professionalism required within the sector), and the safety requirements, of fire and emergency service agencies.
- G9. National training program standards should include preparedness and risk mitigation topics, such as hazard reduction measures like prescribed burning.

National accreditation

- G10. A national approach to training and competency standards should be linked to a national accreditation process for fire and emergency services practitioners, whether paid or volunteers.
- G11. National accreditation should be used to establish a national register of qualified fire and emergency service personnel. The register should: facilitate interstate resource sharing; and provide a national picture of personnel capacity and capability (utilising national accreditation information).

Volunteer and fire and emergency services capacity and capability

- G12. State and territory fire and emergency services agencies should consider the incorporation of private firefighters (such as farm firefighting units) into the Australasian Inter Service Incident Management System (**AIIMS**), including by providing relevant training, where those firefighters are not already incorporated.
- G13. State and territory governments should regularly assess the capacity of the fire and emergency service workforce in each state and territory in light of current and future requirements.
- G14. State and territory governments should consider whether employment protections for fire and emergency service volunteers are desirable to ensure that volunteers will not be discriminated against, disadvantaged or dismissed for reasons associated with their volunteer service.

Australian Medical Assistance Teams (AUSMAT)

- G15. AUSMAT capability and procedures should be reviewed by the Australian, state and territory governments or the National Health Emergency Management Subcommittee of the Australian Health Protection Principal Committee, which review should consider:
- G15.1. clear requesting and deployment procedures;
 - G15.2. direction and control of AUSMAT capability;
 - G15.3. insurance, cost recovery and reporting requirements; and
 - G15.4. the capacity and capability of AUSMAT and the National Critical Care and Trauma Response Centre (**NCCTRC**) for future domestic deployments in circumstances of national natural disasters.

Emergency communications and equipment

Interoperable communications

- G16. Australian, state and territory governments should work towards ensuring that emergency communications and equipment are interoperable across jurisdictions.
- G17. The Australian government should investigate the feasibility of telecommunications carriers providing roaming capability between carriers beyond Triple Zero during natural disasters.

Public Safety Mobile Broadband

- G18. The Australian, state and territory governments should prioritise negotiations for comprehensive and cost-effective delivery of Public Safety Mobile Broadband capability.

Incident management systems and information sharing

- G19. Fire and emergency services agencies in adjoining states and territories should integrate mission critical communication systems for improved cross-border interoperability and accountability. These should include:
- G19.1. requirements for state jurisdictions to enhance Computer Aided Dispatch (**CAD**) integration and interoperability outcomes;
 - G19.2. neighbouring states to integrate CAD solutions for improved cross border incident response, situation awareness and officer safety; and
 - G19.3. CAD Integration with utility service providers to improve faster, more accurate response.

- G20. State and territory governments and their fire and emergency service agencies should work to improve information sharing during natural disasters, in particular for natural disasters near, or at, jurisdictional borders. This includes information flow between Incident Management Teams (**IMT**), and from IMTs to emergency operation centres, government, the community and other organisations and persons involved (such as private firefighters), and between emergency operation centres.

National aerial firefighting capability

- G21. The Australian, state and territory governments should ensure (through the most appropriate contracting mechanism) an Australian sovereign aerial firefighting capability of sufficient size and versatility to meet national needs.
- G22. The capability could include line scanning, live feed video imagery, aerial tankers, and support for the provision of critical supplies. The Australian-based capability should be informed by:
- G22.1. consideration of reliance on overseas-based aircraft and the advantages of a modest Australian-based Large Air Tanker (**LAT**) or Very Large Air Tanker (**VLAT**) capability, including its supporting infrastructure;
 - G22.2. continued research and evaluation of the optimum future aerial firefighting capability and tactics;
 - G22.3. best practice procurement strategies; and
 - G22.4. the most effective deployment of aerial assets according to the greatest need between jurisdictions.
- G23. The Australian, state and territory governments should consider contracting arrangements that encourage the Australian-based aerial firefighting industry to develop capability.
- G24. For nationally shared aerial assets, specifically designed governance arrangements, operational arrangements, and protocols for prioritisation should be developed and communications interoperability issues considered.
- G25. Aerial and ground-based firefighting capacity should be supported by a web-based service using real time earth observation capability, including satellite-based and near earth airborne platforms (drones) high definition remote sensing data to provide fire-front monitoring capacity.

Part H: National resilience and recovery arrangements

Recovery and resilience evaluation

- H1. Australian, state and territory governments should regularly re-evaluate the risk profile and measures after natural hazard events to test the effectiveness of adaptation and resilience-building measures and learn from them. This includes conducting timely post-event impact assessments to provide the necessary evidence-base for evaluation and learning.

Coordination of resilience and recovery efforts

Recovery resource sharing

- H2. There should be a consolidated formal mechanism for sharing all types of recovery resources between states, territories and the Australian government during and following natural disasters. Current recovery sharing arrangements, for example, the *Guidelines for Interjurisdictional Assistance (Community Recovery) 2020* developed by the Social Recovery Reference Group (**SRRG**) of the ANZEMC Community Outcomes and Recovery Sub-committee (**CORS**), are of too limited scope, and do not facilitate the sharing of all relevant recovery resources, such as specialists and technical experts to support the built environment and economic and ecological recovery.

Coordinating volunteers and donations of goods

- H3. State and territory governments should improve arrangements for the coordination of spontaneous volunteers in relief and recovery from natural disasters, for example by adopting the Emergency Volunteering CREW model used in Queensland.
- H4. State and territory governments should develop, and support, efficient and effective arrangements for:
 - H4.1. educating the public about the potential difficulties associated with donated goods, for example, the storage and distribution of donated goods; and
 - H4.2. the coordination of donated goods, for example, by working with organisations such as GIVIT.

Charities and donated funds

- H5. National forums for charities, for example, the Charities Forums held by the National Bushfire Recovery Agency (**NBRA**) in 2020, should plan for, and facilitate, coordination of charities' involvement in recovery support.

- H6. National forums for charities should be held on an ongoing basis with a view to continuously improving coordination of recovery support in respect of all natural disasters.
- H7. The Australian, state and territory governments should work together as a matter of priority to harmonise the regulation of charitable fundraising, including so as to reduce charities' costs of regulatory compliance and maximise distribution of donated funds.

Disaster recovery funding

Eligibility and access

- H8. The Australian, state and territory governments and non-government organisations should review and consider opportunities to streamline financial assistance provided to individuals, communities and small businesses, including via the DRFA. As part of this process, consideration should be given to, the extent appropriate:
 - H8.1. harmonising eligibility criteria and evidentiary requirements to promote equitable access to support across jurisdictions;
 - H8.2. the appropriateness of the level of financial assistance provided; and
 - H8.3. consolidating duplicative assistance measures.

Pre-agreed recovery programs and definitions

- H9. Work by all governments on the development of pre-agreed recovery programs should be prioritised. In particular pre-agreed programs providing social support, such as legal assistance and domestic violence needs, and environmental recovery, should be considered.
- H10. There should be pre-agreed definitions of affected businesses and persons to whom recovery support will be provided.

Consistency of recovery support

- H11. The Australian, state and territory governments should work together to ensure the level of disaster recovery support available is consistent for communities, persons and businesses, across different states, territories and local government areas.
- H12. The Small Disaster Criterion of \$240,000 should be reviewed to avoid communities, persons or businesses in certain areas being denied support available to those similarly affected persons in more populous jurisdictions.

Streamlined application processes

H13. The Australian, state and territory governments should work together to streamline the DRFA application processes at each level so as to create a common Australian experience. In particular:

- H13.1. processes should be fit for their purpose and maintain necessary oversight; and
- H13.2. burdens placed on those involved (and local government in particular) should be manageable.

Resilience projects

H14. The DFRA should be amended to specifically allow for funding of projects in circumstances where:

- H14.1. the project would enhance the resilience of a community in respect of an identified high risk of a natural disaster recurring; and
- H14.2. the project in question is likely to result in an overall reduction in the cost of government funding (taking into account both the up-front cost of the project and the cost of government recovery funding) should the natural disaster affect the community again.

H15. Specifically, consideration should be given to allow for the funding of resilience projects in circumstances which are not 'exceptional'.

H16. As a matter of priority, the Australian, state and territory governments should work together to find ways in which the principle of "building back better" to enhance communities' resilience and risk mitigation can be expressly incorporated into and promoted by the DRFA. Relocation of buildings, infrastructure and/or communities rather than rebuilding may need to be incorporated in high risk areas.

Recovery information collection and dissemination

Personal information collection

H17. The Australian, state and territory governments should work together to develop a system for the collection and dissemination of personal information in the context of a natural disaster, including:

- H17.1. harnessing real time geospatial mapping to assist streamlining claims and determining eligibility criteria based on an applicant's principal place of residence to areas affected by a natural disaster;
- H17.2. enabling appropriate and timely sharing of personal information between all levels of government, agencies, insurers and non-government

organisations for the purposes of providing recovery support, using standardised processes and platforms; and

- H17.3. an opt-in scheme, based on consent given by an affected person at the time they first seek assistance.

Privacy legislation at all levels would likely need to be amended to facilitate this process.

Impact assessments

H18. The Australian, state and territory governments should:

- H18.1. continue to develop a greater capacity to collect and share standardised and comprehensive natural disaster impact data. As part of this, a national data sharing system, as well as the greater incorporation of data collected from non-government organisations, incorporation of local knowledge and improving the capacity of entities responsible for conducting impact assessments, should be developed.
- H18.2. give urgent consideration to the extent to which personal information provided by affected persons can or should be included or connected with impact data to facilitate timely recovery support.

Health including mental health

H19. Australian, state and territory governments should agree a minimum dataset of metrics to measure health impacts, including mental health, to support early planning, inform immediate and future response, and provide an evidence base for recovery planning efforts.

H20. Australian, state and territory governments should give specific recognition to:

- H20.1. the mental health impacts of compounding natural disasters;
- H20.2. the mental health of first responders; and
- H20.3. the mental health of vulnerable groups, such as children.

Wildlife management and species conservation

H21. The Australian, state and territory governments should work together to ensure greater consistency and collaboration in the collection, storage, access and provision of data, information and science in respect of species and distribution.

H22. States and territory governments should ensure that effective wildlife response and recovery capabilities are developed and integrated into emergency planning processes for natural disasters. This could include consideration of specific

coordination capabilities, such as rapid deployment of appropriately trained personnel.

- H23. The Australian, state and territory governments should work together with relevant non-government organisations to establish national standards and training relevant to emergency wildlife response and recovery.
- H24. All governments should invest in long-term ecosystem and land management monitoring, modelling, forecasting, research and evaluation to promote natural disaster resilience and adaptation.

National recovery and resilience agency

- H25. There should be a single, scalable standing national body responsible for natural disaster recovery and resilience at the Australian government level. That body should:
 - H25.1. have an all hazards focus;
 - H25.2. be responsible for Australian government recovery coordination, prioritisation, policy and collation of relevant data;
 - H25.3. embed a 'one stop shop' and 'no wrong door' principle in its programs;
 - H25.4. engage with the private sector and charities to deliver recovery support proactively;
 - H25.5. provide national leadership for broader resilience policy and programs, working closely with state, territory and local governments;
 - H25.6. be responsible for broader Australian government resilience policy and programs;
 - H25.7. maintain a strong connection with Australian government preparation and resilience capabilities and policy making, as articulated in the *National Strategy for Disaster Resilience* and the *National Disaster Risk Reduction Framework*.