RESPONSE TO THE INDEPENDENT REVIEW OF THE BUSHFIRE AND NATURAL HAZARDS CRC

The Board and management of the Bushfire and Natural Hazards CRC welcome the findings and recommendations of the independent review lead by Prof Mary O’Kane. The CRC is particularly pleased with the following top-level findings of the review:

- The major end-user partners have found the CRC’s work an important factor in building their appreciation of the value of research, particularly strategically focussed research.
- Research is generally of very good quality on important topics with admirable emphasis on utilisation, and a recognition of the need to understand impact. Examples of excellent research include the research on warnings and fire behaviour.
- Research processes are good, with appropriate attention to ethics approval and research management, though a sound data management strategy is lacking.

These are the core activities of the centre and the findings recognise that the CRC is operating in a sound and effective manner.

The review panel had access to a large amount of materials and were able to, and did, ask for any material it wanted. The panel was also provided with access to a wide range of CRC partners in addition to sourcing its own contacts to speak to.

It should be noted that this was a review of the operations of the CRC and did not stray into examining the operations of any of our partners, who clearly are engaging strongly with the CRC to ensure delivery.

As requested in the original terms of reference, the review panel found areas where there are opportunities for improvements. The Board and Management accepts all these recommendations as a basis to improve.

The panel recommendations are divided into two sections. The first relates to the operations of the current CRC. The second relates to opportunities for future focus on funding and transition.

THE RECOMMENDATIONS RELATING TO THE CURRENT CRC

**Recommendation 1** – Strengthen education pathways: That the CRC ensure its students are maximally job ready and sector-informed, through structured mentoring, placements and network-building

**Response**: ACCEPT: CRC management is now considering what changes can be made to the way in which the education program is delivered to ensure students get the maximum exposure to the end-users, in order to maximise their ability to find employment in the sector.
**Recommendation 2** – Model diversity: The CRC must model exemplary diversity and cultural values in the way it operates and is managed. In particular, it is important that the Board and management aim for gender balance within the next 12 months.

**Response:** ACCEPT: It is accepted that the current gender diversity on the Board is not at the target 50:50 level we have set for ourselves. The board is currently considering a renewal process and the gender balance will be considered as part of this. It is our Members who nominate and elect people to serve as Directors and the Board will ensure it gives guidance at the next nomination opportunity.

The Executive Management Team has a 60:40 male : female split including the CEO. In the next layer down there is also a 50:50 split (managers).

In all the CRC events, including the research day at the AFAC conference, the CRC has sought to balance the male to female ratio in presenters and last year’s research day was close to 50:50. However, sometimes last-minute changes affect planned activities and balance. The CRC also seeks to balance age, ethnicity and seniority across its events.

The CRC will continue to model diversity in all its forms, in its events and activities.

**Recommendation 3** – Manage data: That there be a CRC policy on how data is curated and managed. To operationalise this, it might profitably partner with another organisation.

**Response:** ACCEPT: The CRC Board and management believes this is an important recommendation, particularly as we transition into a future institute. The CRC Management have already started to discuss this with various parties. An internal policy will be developed.

Also, at the August 2018 meeting of the Board it resolved to go further and commit to developing a scoping study to examine the role and processes for the sector to ensure that data is effectively managed to ensure it can be used to inform future policies and practice. The CRC will work with its partners to scope this piece of work.

**THE RECOMMENDATIONS RELATING TO THE FUTURE FOCUS**

**Recommendation 4** – Map the landscape:

As part of its focus on future structures, that the CRC answers the following questions:

a. What are the big research questions with national significance (top six, say)?

b. Who is doing and has done what and where?

c. What research questions are not being addressed at all, anywhere in the world?

d. Who are potential end-user players who don’t seem to be active, for example, insurance and banks?

e. Who are active and potential end-user partners?

f. Who are actual and potential research providers and education and training providers?
g. What disciplines are needed that aren’t currently included? Economics? Health?
h. What training and education options should there be, including systematic and widespread community outreach programs, short courses for professionals, schools education?

Response: ACCEPT: The CRC management will use these questions to guide the development of a future research agenda for the institute. Some elements have already been addressed to some extent. The CRC will also commit funds to better understand and map the relationships within the sector and beyond in order to address 4b.

Recommendation 5 – Explore the options:
That the CRC examine all options for the future, including one or more combinations of the following:
   a. Continue the CRC (probably only possible with a change of government)
   b. Replace CRC Program funding through the Department of Home Affairs or another Commonwealth department (Defence CRC model)
   c. Take better advantage of synergies from a unified arrangement between the CRC and AIDR
   d. Have all the jurisdictions call for a review to advise the COAG on the issues and how to address them
   e. Become a research and knowledge broker organisation
   f. Become a self-funded research institute, without CRC program funding but with funding from partners and/or contract research
   g. Build a strong capacity for high quality contract research, knowledge application and management consulting that responds to urgent sector needs
   h. Being a prime provider of education in the sector.

Response: ACCEPT: These are informing the discussions in the transition plan and in the development of possible options for the future.

Recommendation 6 – Understand the impact on society: That the CRC engage a top economics research group from one or more of its research providers (maybe funded as a special project from the Strategic Fund) to:

- Build a strong understanding of the ongoing impact of the CRC, factoring in the tangible and intangible benefits of its research and education programs
- Build capability for end-users to make policy and treasury arguments for new policy proposals

Response: ACCEPT: The CRC management agrees that this would be a valuable piece of work and has committed to undertake an economic evaluation of the work of the Bushfire and Natural Hazards CRC, and extend it to the Bushfire CRC.
FINDINGS

The Review also made a number of findings

**Finding 1** - The major end-user partners have found the CRC's work an important factor in building their appreciation of the value of research, particularly strategically focussed research.

**Response**: This is important to note and to ensure that this is maintained.

**Finding 2** - Research is generally of very good quality on important topics with admirable emphasis on utilisation, and a recognition of the need to understand impact. Examples of excellent research include the research on warnings and fire behaviour.

**Response**: This is important to note and to maintain, and to address the weakness in data management strategy.

**Finding 3** - Research processes are good, with appropriate attention to ethics approval and research management, though a sound data management strategy is lacking.

**Response**: This is important to note and to maintain, and to address the weakness in data management strategy.

**Finding 4** - The CRC did not articulate to the review what is unique about its core capability and offerings; how its current research program is linked to its vision and mission; where the major research challenges still lie; and what the research landscape looks like overall, including other competing and complementary research groups and centres here and overseas. Understanding this is vital to the strategic narrative required to position the CRC for its next phase.

**Response**: The CRC accepts that this was not adequately demonstrated to the review. However, the CRC is undertaking a review will help in the articulation, including the mapping of the operating environment, a study into impact and a reframing of the messages on what makes the CRC unique.

**Finding 5** - The PhD students associated with the CRC strongly valued their experience in the CRC projects and being exposed to critical end-user issues.

**Response**: This is important to note and to maintain.

**Finding 6** - Overall the governance and management processes of the CRC are sound, and the work of the Research Utilisation Committee is particularly valued. However, there is still work to do to model and value a genuinely diverse and inclusive management and governance culture.

**Response**: This is similar to Recommendation 2. The CRC will consider adding a diversity element to its values statement.