


Mr Ian Dundas
Secretary, House Select Committee
On the Recent Australian Bushfires
Parliament House
Canberra 2600



00/106/03

Submission No.401

Dear Mr Dundas

On behalf of Engineers Australia I would like to thank you for giving us the opportunity to make a submission to the Select Committee on the Recent Australian Bushfires.

Bushfire prevention and management are important in protecting urban and rural Australia. The recent problems with bushfires across Australia demonstrate the need for the development of better management processes and new technologies to protect property, infrastructure and the environment.

Engineers Australia has over 70,000 members. Engineers work in areas relating to bushfire prevention and management, including environmental, civil and structural engineering as well as risk management.

Engineers Australia believes that there are some important areas to consider for bushfire prevention and management in urban and rural areas.

These include:

- A code of practice for fire safety design for buildings in high bushfire risk areas.
- Education of residents and business owners in areas of fire risk.
- Research and Development of bushfires and fire prevention processes and technologies.

Code of Practice for Fire Safety Design - Engineers Australia Society for Fire Safety recommends adopting a code of practice for fire safety design in new residential and industrial building development, in accordance with the Building Code of Australia (BCA). This will require fire safety engineers and other practitioners involved in fire safety management to ensure the fire safety provisions in the BCA are enforced effectively for residential and industrial building development.

The aim of the code is to take into account the different interpretations of fire safety provisions of the BCA and make sure that they are met. It provides a checklist for what engineers should look for when certifying building structures including how building plans, structure and documentation stand up to the provisions for fire safety in the BCA.

Engineers Australia believes that the implementation of the code will help avoid confusion over compliance with the fire safety provisions in the BCA.

Education – A number of local councils and fire authorities publish bushfire prevention guides. Many of these guides cover bushfire prevention advice such as tree clearing, fire resistant building design and personal safety. Despite this, it is not clear whether this information is provided for all residents living in areas at risk of bushfires.

Engineers Australia believes that this information needs to be disseminated widely to all residents, particularly new residents, who may be unaware of bushfire risks in their area. There also needs to be regular reviews of bushfire education material to ensure that it takes into account new developments and any changes in local infrastructure, such as the development of new residential areas.

Research and Development – New technologies and processes are being developed for bushfire prevention and management. The CSIRO has established several research projects including developing fire protective suits, improving fire tanker safety and creating new mapping technology for keeping trees clear of powerlines. The University of New South Wales School of Mathematics is also undertaking research projects to collect data and model the development of bushfires.

Apart from this, the Federal government is establishing a Cooperative Research Centre (CRC) for Bushfires. The aim of the new CRC will be to develop a comprehensive understanding of the behaviour of bushfires in different regions. This will involve researching weather patterns, vegetation and land management. The CRC for Bushfires will combine the work of the CSIRO, Emergency Management Australia, the Bureau of Meteorology and State fire authorities.

Engineers Australia supports the new CRC and believes that R&D funding for bushfire prevention should be maintained in the longer term. The research projects already undertaken demonstrate that there is significant potential for innovation in this area.

Engineers Australia believes that Federal, State and local governments should consider these measures to help minimise the risk of damage and destruction of property, infrastructure and the environment that occurs in bushfires.

If you require further information on technical aspects of bushfire prevention and management please contact me.

Yours sincerely

Malcolm Palmer
Research Officer