Title	Mr
First name	Alastair
Last name	Breingan
I am making this submission as	Emergency services
Submission type	Personal
Organisation making the submission (if applicable)	
Your position in the organisation (if applicable)	Crew Leader, Lansdowne RFS Brigade
Consent to make submission public	Public
Your story	I am a crew leader in the Lansdowne RFS, and was heavily involved in the fires on the mid north coast this season, especially the Rumba Dump Fire which swept through my community of Upper Lansdowne. I am also a retired IT developer and manager and my working life has been spent designing and implementing complex systems around the world and in Australia.
	I have already made a submission on the 18 Feb 2020 and stand by those comments, but after discussing the triple zero call delays with other RFS volunteers around the state I feel I have to stress one issue as critical.
	During the local fires I encouraged everyone I knew to call me immediately after any 000 call, and on at least 3 occasions I knew about a problem between 7 and 10 minutes before my pager went off. Many others have also mentioned delays of 20 and 25 minutes, and apparently the problem is well known within

the RFS, and has been reported at previous enquiries.

These are emergency calls which are often a matter of life and death. This sort of delay will result in loss of life and is surely not acceptable when there is an alternative.

A smartphone app to report a fire is urgently needed. It allows nearly all of the important information to be collected quickly and automatically, and immediately transmitted to the responding brigades.

Please note that I feel that this facility should ideally be a part of a "one stop shop" app which simplifies all public interactions with the RFS as described in detail in the attached document.

However if that is not possible it should be released as a standalone application.

1.1 Causes and contributing factors	
1.2 Preparation and planning	
1.3 Response to bushfires	
1.4 Any other matters	
Upload files	The-RFS-App.pdf - Download File

A plea for an RFS App

I am a crew leader in the Lansdowne RFS, and the following suggestions come from my experiences in the fires on the mid north coast this season, plus working flat out for over two weeks as the Rumba Dump Fire swept through my community of Upper Lansdowne. I am also a retired IT developer and spent my career designing and implementing complex systems around the world.

Firstly many landowners did a terrible job of preparing their property for fire. Lots of them are now looking for help and education. Some of them will use online information, especially if there is a single point of entry and the interface is appealing as the benefits of gamification also apply to adults. However many will need personal interaction and RFS community engagement, while valuable is not available at the scale that is needed. The RFS can, however, help build and mould local fire groups.

Secondly the public need better information on local fire conditions, extents and permits and we need to much more effectively collect fire report information and pass it on to the responding brigades.

Most of the community makes increasing use of mobile phones and tablets, and it is increasingly assumed that up to date information is available on almost anything. "Fires Near Me" is an excellent start despite its problems, and I was very pleased to hear that the information presented is the latest available internally.

However one critical and several minor issues remain. The only way to report a fire is via a 000 voice call, leading to significant delays in a matter of life and death. This surely cannot be allowed to continue.

I would like to see Fires Near Me expanded into an "RFS App", a one stop shop which simplifies all public interactions with the service. It would help address all the above issues at a moderate cost. It would cover:-

- Fires Near Me - An improved version of the existing app which shows active fire extent as well as the containment area, satellite hotspots, predicted extent and fire permits.
- Fire Weather - Show predicted fire ratings and bans for this location, as well as a seasonal rating to promote early preparations.
- Report a Fire - A replacement for the 000 system, able to collect most of the important information rapidly and automatically and allow reporting a fire which is not an emergency.
- Local Fire Community – Encourage joining or starting street and village based fire groups and allow communication within groups as well between them and the RFS.
- Property Protection – Assessment tools similar to those on the RFS website and links to information including more information on fire pumps, sprinkler systems etc.
- Fire Permits – Allow fire permits to be requested and approved online, and shown to the public.

Fires Near Me
The Fires Near Me app is an excellent start, but needs work other than the updating issues:-

1. It needs to distinguish between the containment area and active fire, especially for very large fires.
2. It should show predicted extent.
3. It should show the position of approved fire permits.
4. It should show satellite hotspots.

Fire Weather
Fire ratings and any total fire bans for the local area should be shown and highlighted when severe.

A seasonal rating should be developed to encourage early preparation for dangerous seasons.

Report a Fire

There is no way for the public to report a fire other than calling 000, with the following disadvantages:-

1. Much information that can be automatically collected by a smartphone is either laboriously collected or ignored, re-entered manually, and is not available to the responding brigades.
2. There is a significant delay. On several occasions locals called me immediately after the emergency call, and I was able to save between 7 and 10 minutes of valuable response time. Others report that delays of over 20 minutes are common. For a matter of life and death this is unacceptable.
3. There is no way of distinguishing between an emergency and someone wanting to report something they believe is no immediate threat.

The process starts by selecting "Emergency" or "Non Critical Fire". The main camera view is shown on screen, along with the other information as collected. Voice and text prompts suggest the phone is pointed at the fire and the camera zoomed to highlight the fire. The following is automatically collected:-

1. Location.
2. Phone number.
3. Direction that the phone camera is pointing.
4. The displayed image.

If internet access is not available the user is asked to move so that either wifi or mobile data is available. Once available, information is passed to the server which starts the following:-

- Reverse Geocoding converts location to address, and returns this to the app.
- Open a voice chat connection to the app.
- An operator is assigned to the call, and starts to talk to the user. Key data which cannot be collected automatically is queried such as distance and size, speed of the fire, and the conversation captured and stored.
- The user is asked for the address as a check and corrected if necessary.
- The user is informed that the call is complete.

This process addresses most of the problems above. It significantly improves the quality of information while increasing speed. It allows fire location to be checked against fire extents and permits, with less urgent calls directed to the local brigade for follow up, rather than a full response. It ensures that the brigade has full information as soon as they are responded.

Local fire Community

Street or village based fire groups are important for the following reasons:-

1. They help improve the general fire knowledge and give people direct feedback on property protection, especially if connected to the local brigade or RFS community engagement.
2. They allow people to help each other during local fires so that those who do want to stay and defend are better prepared. Groups can move house to house in some conditions, and history shows houses with multiple defenders are considerably more likely to survive.
3. They can provide valuable information about fire extent to the group and to the RFS, especially if some of the members are known to the brigade. In the weeks after a fire passes though there are many false alarms that could be avoided by reliable local information.
4. The group allows the local control or the brigade to get information out to the community in a targeted way. This could be on back-burns, hazard reductions or changes in predicted extent.

This section operates in two modes; first encouraging the user to join a local group by displaying the nearest groups and allowing the user to join, or encouraging them to start a new group. Once joined it operates in a similar way to Messenger or WhatsApp, allowing pictures, text and voice to be directed at the group or at individuals. Each group would be attached to one or more brigades, with members able to participate, and be identified as RFS members.

Property Protection

Provide a collection of information and especially assessment tools like the excellent [Bush Fire Household Assessment Tool](#). It should contain practical information on measures to protect homes, including various types of bushfire sprinklers, window screens, and fire pumps. Importantly it must not concentrate on the ideal solutions, but include partial and DIY options, while explaining their limits.

Fire Permits

Allow fire permits to be requested and approved online, ideally with an assessment tool collecting information on size, available equipment and forecast weather. A reputation could eventually be collected and used to minimise the annoyance which the current system causes. Outside fire season it could allow landholders to inform the RFS and others of a burn, and could allow the RFS to inform the public of backburns and planned hazard reductions.