

Australian Field Trial

Background

It is difficult to transfer complex, especially spatial, information by radio, often resulting in field and office based staff having a different situational awareness.

"Other issues may require greater change or reforming processes, for example building better ways of sharing more timely information between the Incident Management Team and the fire-fighters."
Bushfire CRC (2011)

97% of inquiries identified situational awareness and communication as an issue



0% offered a practical solution with most implying "Try harder"

Zirkarta | Unite was specifically developed to address this issue and was trialled in the Australian Capital Territory.

What is it?

A mobile friendly, map centric, cloud based, real time mapping, collaboration and information management system for use by the office and field, before, during and after emergency incidents.

One of the main concepts in the system are shared maps which are electronic maps that both office and field staff may contribute to and see each others changes in real time.



Method

Shared Maps were used for collaboration, by the following roles, during a wildfire suppression exercise:

- Fire-fighter
- Division Commander
- Incident Management Team

Data collected through a questionnaire and by the system itself was analysed.

Results



Information Transfer

90% indicated the transfer of information was either improved or greatly improved. Most information transferred related to:



- fire location,
- coordination,
- advantages,
- operations,
- safety, and
- assets.



System Use

Up to **12** staff used the system simultaneously for a total of **30** hours, performing three different roles, with **151** new features plotted on the map.

Conclusion

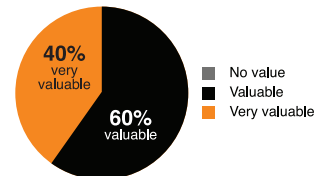
The concept of shared maps, as embodied in Unite, is an effective means for the field and office to transfer information and create a shared situational awareness.

Improving situational awareness of both office and field staff at the incident level will improve situational awareness at the state coordination level and better inform the public.



General Impressions

100% indicated shared maps were either a valuable or highly valuable concept for maintaining situational awareness.



Situational Awareness

100% indicated situational awareness was either improved or greatly improved. There was no difference between the role the respondents performed or their level of fire experience.

