Ad hoc or pre-formed?:
The influence of member familiarity on IMT decision making

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Introduction
Fires extending over several days are typically managed by Incident Management Teams (IMTs) whose members may (or may not) have worked together on previous IMTs. The actual impact on decision making of IMTs whose members have a history of working together is uncertain, although a number of observers and agencies suggest this is positive.

Previous research investigating the influence of team member familiarity on the performance of teams shows mixed results. For example McLennan, Holgate, Omodei and Wearing (2006) suggest that pre-formed teams are more likely to engage efficient cognitive processes than ad hoc teams. Whereas, research from other domains suggests that higher levels of familiarity can reduce team member interaction with both the wider organisation and other stakeholders, thus impeding team performance (e.g. Katz, 1982).

This project investigates the decision making differences between pre-formed and ad-hoc IMTs and some of the underlying team processes.

Research Questions
• To what extent does an IMT’s ability to make effective and safe decisions depend on whether its members have worked together on previous IMTs?
• What are the advantages and disadvantages of pre-formed IMTs, compared with ad hoc IMTs?
• What are the team processes that may account for the likely differences in decision making performance between pre-formed and ad hoc IMTs?
• If pre-formed IMTs are more capable, given the logistical constraints on their widespread use, how may some of the potential advantages of pre-formed teams be incorporated into ad hoc teams?
• Are there a minimum number or a certain configuration of roles in an IMT that ideally should have previously trained and worked together?

Methodology
The research will involve pre-formed and ad hoc IMTs managing simulated bushfire incidents. During the simulation teams will complete a range of fire management and incident control activities including predicting the development of the fire, media liaison, operational planning, and communicating with frontline fire commanders. Various measures of performance for each team will be assessed including:
• Decision making outcomes
• The quality of IMT decision making
• Team member perspectives on the effectiveness of their team

Next steps
This project is in its preliminary phases, gathering data on IMTs and will shortly begin development of incident scenarios. Simulations are planned for the later part of 2009 using experienced IMT personnel. We would warmly welcome any suggestions or input on this research. Peter Hayes can be contacted on 03 9479 1829 or pa2hayes@students.latrobe.edu.au

References