TECHNICAL RESCUE IN VICTORIA

Executive Analysis of Fire Service Operations in Emergency Management

Technical rescue: Victoria’s partners to the Rescue

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April 2008
Certification Statement

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and the appropriate credit is given where I have used the language, ideas, expressions, or writings of others.

Signed:
Abstract

The problem was the lack of a strategic approach to the delivery of technical rescue across Victoria. Despite the legislative requirements for Country Fire Authority (CFA) to protect the life and property of all Victorians, technical rescue is being planned and delivered at a local level with little, if any State input resulting in inefficiencies and poor coordination across the State of Victoria. The purpose of the research paper is to identify best performance practices that could be utilised to maximise efficiencies in the delivery of technical rescue across Victoria. Descriptive research was conducted to answer four questions relating to the delivery of technical rescue: What services are currently being delivered across Victoria? What are the strengths, weaknesses and risks of our current method of delivery? What models currently exist in Australia and overseas that could be used to influence any new model? What are the strengths, weaknesses and risks of an integrated service delivery model utilising all of Victoria’s agencies assets? The paper conducts a survey of field officers, an analysis of the strengths weaknesses, opportunities and threats (SWOT), including a risk assessment. A literature review is conducted including a review of other emergency services and a comparative analysis of other agencies across Australia and other parts of the World.

The results indicate that this issue is not unique to CFA and many agencies had grappled with, and in some cases resolved this issue. The paper provides the principals’ that should apply to a new model of service delivery and recommends a broad framework that could be used for future implementation. The paper recommends an integrated service delivery model utilising all of Victoria’s agencies assets and resources.
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Introduction

The delivery of technical rescue is the primary responsibility of Victoria’s fire services as stated in the Emergency Management Act 1986. Currently within CFA the responsibility for the delivery of these services falls within the domain of the twenty CFA Regions that are geographically located around the State.

The problem is that each Region attempts to independently plan, resource, train and deliver the various services associated with technical rescue. While some Regions provide a professional product, other Regions provide little service at all, relying on neighbouring Regions to provide support when necessary.

The purpose of this research paper is to develop a State framework for the delivery of technical rescue that will ensure consistency and maximise efficiencies in the delivery of technical rescue across Victoria. The descriptive research methodology was conducted to answer the following four questions.

What services are currently being delivered across Victoria? To establish this, a survey of the senior operational person in each Region will be conducted. Having established the current service being delivered within Victoria, a second question will be researched regarding what are the strengths and weaknesses of our current model? Questions within the previously mentioned survey will assist in providing this information, along with a workshop that will be conducted of technical rescue practitioners. At this workshop a SWOT analysis of our current model will be conducted from which the high risks will be identified. The third question will be to identify what the different models are that currently exist in Australia and overseas
that could be used to influence any new model? This will be achieved by a variety of measures including a search of the internet and local fire service libraries involving a comprehensive literature review. The final question will establish what are the strengths, weaknesses and risks of an integrated service delivery model utilising all of Victoria’s agencies assets? To establish this information a: Strengths, Weaknesses, Opportunities and Threat (SWOT) analysis and a formal risk analysis will also be conducted on the current service delivery model. From this approach a new framework for a service delivery model for technical rescue delivery in Victoria can be developed that will be effective and efficient.

Background and significance

Victoria is Australia’s second smallest State covering 227,600 square kilometres, roughly the size of the British Isles. (www2.visitvictoria.com) Victoria is Australia’s second most populace state with 4.6 Million people. (www.abs.gov.au). There are two fire services in Victoria responsible for the protection of private land: the Melbourne Fire Brigade (MFB) and the Country Fire Authority (CFA). The two fire services respond to approximately 62,000 emergency calls per year, across an area of 151,278 square kilometres. (a model of fire cover discussion paper, 2001,p.19). Another agency, the Victorian State Emergency Service (SES) also provides limited form of technical rescue response across the State. The three services have defined primary responsibilities clearly outlined in the Emergency Management Manual that is annexed from the Emergency Management Act 1986. These responsibilities are outlined in Appendix A.

Effectively Victoria has three agencies independently delivering technical rescue across the State. When you consider that CFA, the largest of these three organisations,
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is divided into twenty distinct areas, and all of these distinct areas have their own method and model of delivering technical rescue, you can effectively assume that Victoria has 22 service models for the delivery of technical rescue. All 22 independently seek financial support, develop their own Standard Operating Procedures, and set standards for equipment, training and procedures. All 22 operate independently of each other with little communications and little interoperability.

There is a need to review our current service delivery model and consider an alternative more efficient means of delivering our services including technical rescue.

The increasing number and impact of incidents here in Australia is another reason to ensure we are optimising our service delivery model. The increasing impact of climate change on our planet is, and will continue to have a profound impact on our lives. “…the likely speed and magnitude of climate change in the 21st century will be unprecedented in human experience, posing daunting challenges of adaptation and mitigation for all life forms on the planet.” (Dupont, 2006, p.79). In Australia we are already experiencing a greater numbers of natural disasters “The number of people killed in the Oceania region by weather related disasters rose 21% in the last three decades of the 20th century…” (Dupont, 2006, p.43). and “Worldwide, around 188 million people were adversely affected by natural disaster in the 1990s, six times more than the 31 million directly or indirectly affected by war.” (Dupont, 2006, p.43).

In these times of significant change on a global scale it is time for agencies responsible for the protection of life and property to unite to establish and effective means of service delivery.
David Templeton, Director General Emergency Management Australia identified the need to all work together. “Working together is the way of the future, given the practicalities of delivering a specialist response” (Commonwealth of Australia, 2003, p.1) He went further by stating “Inter-government and inter-agency rivalry not to be permitted to impact negatively on response effort.” (p.3).

Finally, we need to be more accountable for the delivery of services for which we are not formally measured. By way of example; the report on Government services (Emergency Management, 2003) produced by the productivity commission, reported on the 90th percentile of response times for the fire services of Australia. Both CFA and MFB achieve the required measure of the productivity commission to have a fire appliance on scene at a fire within 8 minutes 90% of the time. However, fire services in Victoria, indeed in Australia, are not measured or assessed for their performances in the more technical fields such as technical rescue. Without measurement there is no scrutiny of performance unless a problem occurs, at which time a post incident analysis may question and assess the standard of the service delivered. Without: a standard, proactive scrutiny, and assessment, we can only make the assumption that technical rescue can and will be delivered across Victoria to a satisfactory standard.

As a statutory organisation with the legislative responsibility to provide such services across the State, we are required to know and understand our ability to deliver such services, and where there is an identified short fall, we should have a system in place to deliver the service. It is at this time CFA and the Victorian community at large are potentially exposed and could rightfully ask the question, are our emergency services meeting their obligations under the Emergency Management Act 1986?
Literature review

The literature reviewed came from four specific locations: Previous research papers relating to technical rescue, books and journals, the internet and information supplied from other organisations that have already addressed this issue. The literature review focused on the different models used by the various fire services around Australia and overseas and the advantages and disadvantages of a team approach. The review also considered the impact change would have on a new approach. A brief summary of the literature follows.

One of the most insightful documents researched was from Emergency Management Australia. This document discussed the interagency rivalry between the various emergency services in Victoria. This was a lesson learnt from September 11 and the Bali bombing “Inter-government and inter-agency rivalry not to be permitted to impact negatively on response effort.” (Commonwealth of Australia, 2003, p.3). This one statement set the tone for the further research in this paper.

Two papers from the Library of the National Fire Academy were considered as part of the literature review. The first, “Technical Rescue Response Procedures Assessment of the Warwick Fire Department” was written by David Del Vecchio (2006). Del Vecchio describes a situation in Warwick, Rhode Island that is very similar to that faced by CFA today. The Warwick Fire Department (WFD) established specialist teams as the need was identified. “In the mid 1980s the WFD developed a hazardous materials response team to meet the needs of the community…” (p.6). And a dive team was established in Warwick “after three separate drowning incidents…” (p.6).
The primary focus of Del Vecchio’s paper was to “…assist the department in implementing adequate procedures to ensure safe technical rescue operations.” (p.7).

The second paper considered from the National Fire Academy Library was “Executive analysis of Fire Services Operations in Emergency Management” (2003) by Robert Singletary of the Warner Robins Fire Department. Singletary research “…was to determine the feasibility of developing a multi jurisdictional response team…” (p.2). Singletary identifies the advantages and some disadvantages of having a multi jurisdictional approach, stating that it would allow “having more resources available” (p.12), the “acquisition of grants and equipment…” (p.13), “…each department combines their money, more equipment and a wider variety of equipment can be purchased” (p.13). Singletary identified four primary disadvantages that should be considered: “…communications, ambiguity of command, special resources not used effectively and someone dealing with the media.” (p.28).

The literature review also identified three Australasian Fire Authorities Council (AFAC) research papers relating to the delivery of technical rescue. The first of these papers from Brett Barclay (2003) “Specialist rescue/Response within MFB”. The focus of this paper was internally MFB orientated on the provision of new vehicles within MFESB to respond technical rescue throughout the MFB area. This paper identified further opportunity to investigate whether the recommendations to purchase specialist appliances were accepted and whether there is an opportunity for CFA to build a partnership with MFB for the potential use of these services.
The second AFAC paper was written by David Kemp (2002) “Business Plan on the Implementation of Technical Rescue into the South Australian Metropolitan Fire Service”. This business plan is broad in its focus and recommends a plan to deliver technical rescue across South Australia within three years of the commencement of the plan. Further, it discusses the potential to provide support for the delivery of these services across and outside Australia. The paper recommends the establishment of a ‘Multi Agency Taskforce’ involving the Country Fire Service, State Emergency Service, Police, the defence forces within South Australian, and the Government Engineering department. The paper makes recommendations regarding: training, resourcing, and financial implications of service delivery. The paper also recommended timeframes for the delivery of these services across South Australia: Immediate- Within South Australian metropolitan fire service area, One hour- within South Australia and four hours- interstate response.

The third paper, “Technical Rescue in the Queensland Fire and Rescue Service: A framework for technical Rescue Policy in Department of Emergency Services Response Agencies”. (Gallina.J, 2001) has comprehensive comparative analysis of other Australian states regarding the delivery of technical rescue and a review of the current Queensland position. The paper addresses Queensland’s issues relating to the delivery of technical rescue across that state. The issues in this paper are similar issues facing emergency services in Victoria. The paper makes nine recommendations focusing on: systems, techniques, training, sharing of resources, a teamed approach and the reduction in the duplication of services.
A number of journals that had published articles relating to technical rescue were also considered as part of the literature review. In an article in Fire House magazine, (Carter, 2003) states in relation to the benefits in sharing of resources “The multi-directional sharing of resources and services strengthens the position of every player in the equation.” (p.98). In Fire Chief Magazine, (Keeter, 1989) states that “…it is economically not feasible to staff, train and equip hazardous material units for individual fire districts.” (p.33). And finally in American Fire Journal, (Bryan, 1996) states “The joint powers agency has applied for and received grants and equipment in part due to its multi agency/ regional approach.” (p.13).

Research was also conducted from the book section of the library. Unfortunately reference books pertaining to technical rescue were difficult to find, however there were books regarding related topics such as change including cultural change and the effectiveness of working in teams. One such book written by (Kanter, 1997) stated “When organizations have shared methodologies for approaching tasks and shared values guiding decisions, they can afford more empowerment.” (p.132). Referring to the value of sharing and the results that can be achieved with an empowered workforce. (Robbins et al, 2003) discussed cultural change “A culture takes a long time to form, and once established it tends to become entrenched. Strong cultures…are particularly resistant to change because employees have become so committed to them.” (p.360). This would be an important factor in changing the culture of the three identified organisations currently delivering technical rescue. The final author to add value to the research was Brewer (1995) “People are very hard to change, they are very reluctant to change their habits…” (p.142). Again an indication that changes would not come easily.
A comprehensive search of the Internet specifically targeting other agencies in and outside Australia was conducted. Most of the sites visited did not articulate a comprehensive review of policies relating to the delivery of technical rescue.

The New South Wales Fire Brigades web site (www.nswfb.nsw.gov.au) refers to USAR as being a “Task force” of an integrated nature consisting of different agencies providing various expertises from trauma doctors to ambulance specialists and so on. Like other states of Australia, New South Wales, are registered with the United Nations to respond to requests for international assistance when required. It should be noted that the New South Wales Rural Fire Service have little, if anything, to do with technical rescue in New South Wales. There are other agencies involved in the more conventional type rescue, such as the State Emergency Service and the New South Wales Police; however New South Wales Fire Brigades are the lead agency for the delivery of technical rescue across that State.

In Western Australia (WA) technical rescue falls under the responsibility of FESA as stated on their web address (www.fesa.wa.gov.au). WA has undergone a change in the structure of their service similar to that of Queensland. The Fire and Emergency Services Authority of Western Australia (FESA) administer all of WA’s emergency services. Like the other States of Australia they have a State Emergency Service who predominately responds to storm and tempest issues. However, conversations with a FESA associate suggests that FESA is in a similar situation as Victoria in that Technical Rescue could possibly be delivered on an ‘as requested’ basis although there is no formal structure for its delivery.
The South Australian Metropolitan Fire Service (SAMFS) Web site (www.samfs.sa.gov.au) identifies this service as having the primary responsibility for the delivery of technical rescue across South Australia. Once again, there are support agencies such as the ambulance and the State Emergency Service, who also have a support role to deliver these services. The South Australian Country Fire Service has little, if any role to play in the delivery of these services.

New Zealand has a specific Urban Search and Rescue web site (www.usar.org.nz). New Zealand has established a multi agency response capability for dealing with urban emergencies. They have established a multi agency national steering committee with representatives from the key agencies. New Zealand is still developing its capacity. However the steering committee has identified 90 people for specialised training in USAR, although, at the time of writing this paper, 60 persons had been trained. Eventually three teams will be fully trained and equipped to deliver this service across the country working with local community rescue teams.

Other larger countries such as the United Kingdom and the United States of America (US) have specialist teams responsible for technical rescue. In the US each city fire department has the responsibility for the delivery of these services where the risk has been identified. By way of example, the The ‘Special Operations’ department of the Sacramento City Fire Departments description on its web site (www.cityofsacramento.org/fire) is evidence of this. However Federal Emergency Management Agency (FEMA) (www.fema.gov) has the specific responsibility for the delivery of USAR across the US. FEMA coordinates the national delivery of this service through the provisions of task forces spread throughout the country. In
summary, while each city fire department has the capacity to deliver the service on a local level, any national disaster would be managed, resourced and supported by FEMA.

Similarly, when we look at the London Fire brigade web sites (www.london-fire.gov.uk) they list technical rescue (Not their words) as a primary responsibility of the fire agency. In fact, The London Fire Service has a statutory responsibility to provide this service. These are delivered through specialist teams available for rapid deployment around the Country and, if required, overseas.

Procedures

Definition of terms

Technical rescue: is a term used to describe, but not limited to, such services as:
Trench Rescue, Rope Rescue, Confined Space Rescue, Urban Search and Rescue (USAR), Hazardous Material Rescue,
Heavy Rescue (Bus, Train, Plane), Swift Water Rescue, and Response to Chemical, Biological, Radioactive and Nuclear (CBRN) incidents.

Response times: are defined as “the interval between the communications centre answering the call and the time when the first firefighting unit arrives at scene” (Dawson, 2000, p.4)

Research questions procedures

The procedures for this Applied Research Paper (ARP) started with a literature review at the National Fire Academy’s Learning Resource Centre (LRC) situated in Emmittsburg, Maryland, in the United States of America. The LRC on-line catalogue was used to search for relevant publications relating to the delivery of technical rescue
across large geographic areas and in multi disciplined teams. This provided the opportunity to obtain previous ARP’s, books and journals that had addressed this issue or similar issues in the past. These were then prioritised with the most relevant documents being the two ARP papers and the three journals analysed in this paper.

On return to Australia contact was made with the Australian Institute of Police Management (AIPM) located in Manley, New South Wales. It was through access to the AIPM library that three previous papers that had been written on this subject were identified. These papers were reviewed in the literature review and related to Melbourne Fire Brigade, South Australian Fire Service and the Queensland Fire and Emergency Service.

A search on the Google search engine enabled further in depth analysis of how different fire services around Australia and overseas delivers technical rescue. The New South Wales Fire Brigades, South Australian Metropolitan Fire Service, Fire and Emergency Service Authority (Western Australia), New Zealand, United States of America and the United Kingdom all had web pagers with some reference to the delivery of technical rescue that have been analysed in this paper.

Attempts were made to make contact with a number of fire service personnel who had previously studied on the Australasian Fire Authorities Council Executive Programs at the AIPM. Of the twelve contacted, three did not return calls, Appendix B, is a list of the agencies contacted for information including the names of the persons contacted and their responses.
Two SWOT analyses were completed. One to analyse the broad Strengths, Weaknesses, Opportunities and Threats associated with CFA’s current position in relation to the delivery of technical rescue, Appendix C, and the other analysing an integrated service delivery model utilising all of Victoria’s agencies assets Appendix D. Both analyses were conducted using a white board and three local technical expertises who were asked to write down any strength, weakness, opportunity or threat that came to their mind. From this two comprehensive list of risks were drawn up; one detailing the risks of our current service delivery model, Appendix E and the other detailing risks associated with an integrated service delivery model utilising all of Victoria’s assets, Appendix F. The list of weaknesses and threats were then placed in a table where a subjective analysis of the likelihood and consequences were considered. Where a high likelihood and high consequence was identified it was assumed that this would then be considered a high risk. Using this process seven high risks were identified in addressing the delivery of technical rescue across Victoria and four high risks were identified for an integrated service delivery model utilising all of Victoria’s agencies assets and resources, of which both would require further treatments to mitigate the risks.

A survey, Appendix G, was sent through Australia post to all the CFA Operations Managers in the State to determine the current position in relation to existing service delivery arrangements. There was a lack of response from those targeted to respond to the written survey. This was partially overcome by directly contacting respondents using the phone however this still did not provide a 100% response. It was established that some had made a deliberate decision not to provide a response due to the fact they had little if any formal arrangements in place. The completed returned surveys
were a compilation of written responses received within the timeframe and handwritten notes taken from responses to questions made using the telephone.

The survey was broken down into 10 questions. The first question would be deemed as an ice breaker to establish who actually knew what technical rescue was. The second and third question related to statutory responsibility asking whether Operations Managers were aware of their statutory responsibility to provide this service and if so whether they had formalised these arrangements. The next five questions ask about their ability to provide services in their area and the final two questions relate to their willingness to work in an integrated team and what issues would be encountered if we were to take this approach.

A meeting was convened to establish a consultation process involving local practitioners of technical rescue in one of the CFA Regions called Westernport. CFA Westernport currently has technical experts in some of the fields identified in the Emergency Management Act 1986 and the Emergency Management manual. This includes qualified technicians in: Trench, Rope, Confined Space, USAR, Hazmat, and CBRN. This meeting was conducted to ascertain whether these senior field officers had considered the existing problems and advantages associated with the delivery of the service in Victoria. This meeting took two formats; firstly open discussion was had regarding the delivery of the service. Secondly, a formal SWOT analysis, Appendix C, and Risk assessment, Appendix E, was conducted to ascertain the strengths, weaknesses, opportunities and threats concerning the delivery of technical rescue across CFA.
Personal contact was made with representatives from other agencies to glean their method of service delivery beyond what had been stated on their web site. Names of the persons contacted and the results appear in Appendix B.

**Limitations**

The lack of responses to the survey had the potential to limit the credibility of this research. A follow up phone conversation had to occur to validate my research. This approach was not originally identified when the process for the research was initially scoped. Further, despite in-depth research at the National Fire Academy there was little information regarding the delivery of technical rescue in a published form other than journals. There was information relating to the value of working in a team environment however the topics researched were not considered relevant for this paper.

**Results**

The overall results identified the current limitations associated with our current service delivery model. It further identified the risks associated with attempting to take a multi disciplinary approach to the delivery of these services across Victoria. The research identified that many fire services within Australia and abroad had experienced similar difficulties and had worked to overcome these problems although many were at various stages of resolving the issues.

**Research question 1 results**

To establish what services are currently being delivered across Victoria a survey was conducted, Appendix G. Twenty surveys were distributed to CFAs Operations Managers across Victoria. Of the Twenty distributed only six surveys were returned within the required timeframe. It was considered that only six responses would have compromised the validity of the survey, therefore personal contact was made with
another eight Operations Managers resulting in a total response of 14 of the twenty surveys sent. Verbal discussion with some of the non responders indicated they had limited, if any capacity, to deliver these services and did not want to highlight their inability to provide the service by responding to the survey. This claim is unable to be substantiated as these officers were not prepared to commit this response to writing. It can only be surmised that there may have been other reasons associated with the non-return of the survey, of which workloads and apathy could not be discounted.

An analysis of the survey results confirms the ‘ad hoc’ nature in which CFA delivers technical rescue across Victoria. More specifically only 16% of respondents had an ability to deliver trench rescue, 16% rope rescue, 26% confined space, and 12% Urban Search and Rescue. Similar results were found with heavy rescue 12%, swift water rescue 5% and 12% of respondents said they were able to provide Chemical, Biological, Radioactive and Nuclear response to incidents. The one exception was hazardous material response where 63% of respondents indicated an ability to provide this service. Even more disturbing is the reliance of some Regions on State resources that either don’t exist or, where they do, aren’t aware of the reliance of the other Regions to provide these services. The following quote best reflects two comments written on responses to the survey “Our Region cannot provide the service, however we are aware that others do and we would contact the State duty officer to access these resources” It was also identified that some Regions expected other agencies to provide a service that was listed in the Emergency Management Act as a responsibility of the fire service. Whilst this is not a problem in itself, should some form of agreement or memorandum of understanding not exist between the two agencies agreeing to the transfer of these responsibilities, then CFA are potentially
legally exposed should an incident occur where it could be determined CFA did not meet its statutory obligations under the Emergency Management Act 1986.

Research question 2 results

Question 2 related to what are the strengths and weaknesses of our current model. The results from the survey gave a good insight to our strengths and weaknesses. In relation to our ability to deliver a hazardous material response, over 60% of the State indicated that they were able to provide this service. Unfortunately this was the main identified strength. There were some individual Regions that were obviously proud of what they had achieved and provided some detail on their ability to provide technical services. Generally the weaknesses were a broad inability to provide this service across the State, especially in an effective and efficient manner.

A SWOT analysis, Appendix C, was also conducted to determine the strengths, weakness, opportunities and threats of our current service delivery model. This information was used to identify the risks, Appendix E, associated with our model. Using this approach, twenty eight risks were identified in relation to our current approach of delivering technical rescue. Of these twenty eight, seven risks were identified as being high risks based on there being high likelihood and consequences should the risk be realised. The seven high risks that were identified are articulated here in no priority order: no recognised specialist in the field, no policy, organisational parochialism in Victoria, death of a member of the community, requirements for additional operational staff in the area, and death of a firefighter/rescuer.
Finally, the research identified that the Melbourne Fire Brigade (MFB) has a vast amount of resources and equipment to address most, if not all, of the requirements for technical rescue. MFB have limited manpower and are restricted to a small portion of Melbourne. The State Emergency Service (SES) and CFA have limited resources but have significant human resources and knowledge of the cultures and dynamics of the broader reaches of Victoria.

**Research question 3 results**

To identify what models currently exist in Australia and overseas that could be used to influence any new model a literature review was conducted. The literature review established that many agencies had identified the benefits in creating multi disciplined teams for the delivery of these services. South Australia, Queensland and New South Wales had all moved to an integrated approach to delivering technical rescue. With the exception of New Zealand, the overseas models analysed in this paper had a single agency focus to the delivery of this service. In the United Kingdom, technical rescue was effectively the domain of the fire service in its own right, while throughout the United States of America it was also the designated responsibility of the fire services to provide this service within small geographic locations. New Zealand, on the other hand has also taken an integrated approach to the delivery of these services by establishing a multi agency national steering committee.

**Research question 4 results**

The fourth and final question posed what are the Strengths, Weaknesses, Opportunities and Threats of delivering an integrated service delivery model utilising all of Victoria’s agencies assets. To achieve this a SWOT analysis Appendix D was utilised and identified the following. Our current strength is that CFA is currently delivering a product around the State. Unfortunately this strength is also a weakness
in that we are not sure what is being delivered and to what standard. Another weakness is the geographical spread of the organization thus presenting time and space issues associated with delivering this technical type of service across Victoria. A further weakness is our capacity to deliver the service in a timely manner with the appropriate skills and equipment. We should also consider the culture of CFA that requires locals to command and control their own emergency; how would an outsider be accepted? There is an opportunity to learn from similar experiences of other large organizations in Australia and overseas who face this similar dilemma when attempting to deliver this service. There are also opportunities to build partnerships with other organizations to assist in the delivery of technical rescue. For example; using Victoria Police’s helicopter to assist in transporting trained people and specialist equipment to an emergency scene. Another opportunity is to use another service provider within the State such as the MFB. Unfortunately this may also serve as a threat to CFA. Having another organization with a different culture delivering a service that would cause image and moral problems within CFA would be an issue requiring further consideration. A potential threat is that future recommendation would not be supported for various reasons such as: expense, politically not supported, or/ and being organizationally unacceptable.

Discussion

The tone for the paper and therefore the research was set up early during the literature review. When discussing lessons learnt from September 11 and the Bali bombing incidents, David Templeton, Director General of ‘Emergency Management Australia’ stated “The most important lesson was undoubtedly that cooperation and goodwill has to exists between all levels of the response team, Federal, State/Territory, and local government authorities, the business sector and relief organisations.” (Commonwealth
of Australia, 2003, p.2). He further reinforced this position when he stated David Templeman, Director General of Emergency Management Australia stated

“Australia’s capacity to respond to a large scale urban incident would be greatly enhanced by a cohesive and universal approach to planning, training and coordination.” (Commonwealth of Australia, 2003, p.1). It became obvious that an integrated approach to the delivery of technical rescue would be the most beneficial, however this would involve changing cultures and breaking down parochial barriers that have existed between the three agencies for many years and may take years to change. This was best summarised by Robbins (2003) “Even under the most favourable conditions, cultural changes have to be viewed in the years, not weeks or months.” (p.360).

In Australia the fire agencies are all listed as the providers of technical rescue. While web sites identified fire services in Australia as having the statutory responsibility for technical rescue, more in depth ‘off the record’ research identified their ability to deliver a service: on the ground, at any given time, at any given location, was questionable. The survey of CFA operations Managers confirmed that CFA was no different in this respect to the other agencies in that there was a difference from the perceived level of service delivery and the actual service delivered. It was interesting to get this first hand account of what was actually happening on the ground rather than what is being told on a web site. When questioned, members of both the South Australian Metropolitan Fire Service (SAMFS) and the South Australian Country Fire Service questioned their ability to provide technical rescue to remote parts of that State. SAMFS were working to fill the void as quickly as possible and had sent
technicians overseas to further develop their technical expertise, although consideration into the delivery of the service had not developed.

It was difficult to draw parallels between the United Kingdom, United States of America (USA) and Australia. The United Kingdom does not have a volunteer system such as Victoria, rather, in some cases, a retained system. Technical rescue is delivered using career firefighters specially trained to perform this role. In the USA we can draw parallels at local city fire department levels that do have volunteers, however it was difficult to glean from the web site exactly how this was delivered on the ground. Certainly there ability to provide a National response through FEMA was above a level we have here in Australia, where it is left to agency responsibility. The trend of the USA towards an integrated approached was best summarised by Keeter (1989) “the fire chiefs throughout the country have agreed to combine resources to create a hazardous materials task force.” (P.34).

In real terms it would seem that the Queensland and New Zealand models are the two that require further scrutiny, as it would seem they have a closer parallel with CFA’s position. Both agencies have truly integrated teams, with policies, systems and processes established to provide the service to their communities. Both have broken down local parochial barriers that are still strong in other fire services throughout Australia, including Victoria.

In relation to the Queensland model, the Technical Rescue in the Queensland Fire and Rescue Service: A framework for technical Rescue Policy in Department of Emergency Services Response Agencies (Gallina, 2001) is an excellent reference
paper for Victoria. However, the Queensland political environment is significantly
different to that facing Victoria. Queensland has a Fire and Emergency Services
department, and their services are centralised. Victoria’s emergency services, on the
other hand, have independent statutory authorities with each agency having
responsibility to deliver services, as defined in the Emergency Management Act,
across their area of jurisdiction. From this perspective the New Zealand model is
worth greater consideration, while using Queensland’s for further reference.

The SWOT and risk analysis identified some inherent problems in our current model
the worst of which was the death of a rescuer and/or a member of the public. Of more
interest was the outcome of the SWOT and risk analysis pertaining to a new way of
providing the service. The identified risks of agencies unwillingness to share
resources and concerns about agencies actually agreeing to this approach were
surprising. This was also confirmed by Carter (2003) who stated “Rather than create a
strong regional team, whose members pass from town to town over bridges of
goodwill and teamwork, they choose to hunker down behind the comfortable walls of
their understaffed and under equipped forts.” (p.34).

In summary the research identified the current problems as a significant issue,
however, just as significant was the problems associated with moving to a different
service delivery model. Others, such as New Zealand and Queensland, had taken this
journey and had succeeded although cultures, traditions and service pride would still
be the enemy of change. A new model would have as much to do with change
management as it would for simply changing the systems and processes for the
delivery of technical rescue. There were many books regarding change one of which
best fits change in the fire service given that it is the firefighters themselves that will have to ride this wave of change. “The success or failure of organisational change programs has more to do with the behaviour of so-called ‘minor’ players in the change process…” (Brewer, 1995, p.6).

Recommendations

It is recommended that having identified the limitations in our current service delivery model, CFA should become the lead agency in changing the way we deliver technical rescue across Victoria. It is further recommended that an integrated service delivery model utilising all of Victoria’s agencies and resources, similar to that of New Zealand, is a model that should be considered as a viable option. There are political and cultural impediments to this option however given the potential this option could provide the entire State; it is an option worth further analysis.

The vision is easy; the journey to achieve the vision is the difficult part. The research identified that the biggest risk facing any future model is the change process itself. The historical and cultural differences between the three services will make change difficult and possibly slow. Any plan to change the way we deliver technical rescue should consider the change process itself and involve all practitioners in the change.

The proposed integrated model should consider a three-levelled response strategy as depicted in Appendix H with further descriptive detail in Appendix I. This option allows for local agencies to provide for the routine specialist responses, up to a State-wide response for the more complex and demanding calls.
In summary, the research identified the inadequacies of the current arrangements for delivering technical rescue across Victoria. Alternative models were considered that identified models that will require further analysis. A common theme of the better models of service delivery was the integrated or multi agency approach. The researched established that this should be a principle that underpins any future model developed here in Victoria. The research also identified that change itself is likely to be a significant factor that must be taken into account when developing any future service delivery model. Finally, a skeleton model was provided to start the process of further discussion.
Technical rescue: Victoria’s partners to the Rescue

References

Australian Bureau of Statistics
http://www.abs.gov.au/ausstats/abs@census.nsf


City of Sacramento Fire Department
http://www.cityofsacramento.org/fire/specialoperations.html


Federal Emergency Management Agency (US)

http://www.fema.gov

Fire and Emergency Services Authority Western Australia


London Fire Brigade

http://www.london-fire.gov.uk/about_us

New South Wales Fire Brigades

Technical rescue: Victoria’s partners to the Rescue

New Zealand Urban Search and Rescue


South Australian Metropolitan Fire Service


Victorian Tourism Commission

http://www2.visitvictoria.com/displayObject.cfm/ObjectID
APPENDIX A: VICTORIAN FIREFIGHTING AGENCY REQUIREMENTS UNDER THE EMERGENCY MANAGEMENT ACT 1986

<table>
<thead>
<tr>
<th>Category</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firefighting</td>
<td>Structure and non structure (e.g., grass, scrub, motor vehicles)</td>
</tr>
<tr>
<td></td>
<td>Gas leakage</td>
</tr>
<tr>
<td></td>
<td>Explosion</td>
</tr>
<tr>
<td>Accidents involving</td>
<td>Boilers/pressure vessels</td>
</tr>
<tr>
<td></td>
<td>Dangerous goods</td>
</tr>
<tr>
<td></td>
<td>Hazardous materials</td>
</tr>
<tr>
<td></td>
<td>Lifts, cranes, or scaffolding</td>
</tr>
<tr>
<td></td>
<td>Trenches and tunnelling</td>
</tr>
<tr>
<td>Environmental</td>
<td>Pollution in Inland water ways</td>
</tr>
<tr>
<td></td>
<td>Marine firefighting 2</td>
</tr>
<tr>
<td>Rescue</td>
<td>Road (where designated to the fire service)</td>
</tr>
<tr>
<td></td>
<td>Rail, aircraft and industrial</td>
</tr>
<tr>
<td></td>
<td>Trench or tunnel</td>
</tr>
<tr>
<td></td>
<td>Building and structure (USAR &amp; high angle 1 &amp; 2)</td>
</tr>
</tbody>
</table>

USAR = Urban Search and Rescue, High angle = Rope rescue

(Not specifically stated in the Emergency Management Act 1986)
## APPENDIX B: EMERGENCY SERVICE AGENCIES CONTACTED AND RESULTS

<table>
<thead>
<tr>
<th>Service</th>
<th>Name</th>
<th>Result of contact</th>
</tr>
</thead>
</table>
| South Australia-Country Fire Service   | Andrew Lawson         | Alternative contact details provided-  
• High Angle rescue is provided by SES  
• USAR is provided by SAMFS            |
| Queensland Department of Emergency Services | Peter Willett         | Alternative contact details provided-  
• Main role of the QFRS                |
| New South Wales Fire Brigade           | Stephen Davis         | Alternative contact details provided (Superintendent John Denny)  
• NSWFB Provide the service            |
| Australian Federal Police              | Alan Scott            | Alternative contact provided, although no response provided                        |
| New Zealand-Fire Service               | Trevor Andrews        | Alternative contact provided- E mail and personal address given and actioned       |
| Melbourne- MFESB                      | Alan Quinton          | Alternative contact given                                                          |
| New South Wales- Rural Fire Service    | Dominic Lane          | His agency does not have this responsibility                                       |
| State Emergency Service- Victoria     | Majella Clarke        | Alternative contact given                                                          |
| Northern Territory Fire Service        | Alan Irwin            | No response received                                                               |
| Western Australia- FESA                | Gino Zaza             | Alternative contact provided                                                       |
| Tasmania Police                        | George Cretu          | No response received                                                               |
| Singapore Civil Defence Force          | Lee Yam Ming          | E Mail continually returned                                                        |
|                                        |                       | No contact made                                                                    |
APPENDIX C: SWOT ANALYSIS ADDRESSING THE DELIVERY OF TECHNICAL RESCUE ACROSS CFA

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Already providing a degree of service</td>
<td>• Utilise the staff to support the volunteers</td>
</tr>
<tr>
<td>• Not many of these type incidents</td>
<td>• Develop a state policy</td>
</tr>
<tr>
<td>• Existing broad range of equipment is available</td>
<td>• Strategic placement of new staff stations</td>
</tr>
<tr>
<td>• Good rapport with key partners</td>
<td>• Build further strengths with local communities</td>
</tr>
<tr>
<td>• Well trained members in emergency management</td>
<td>• Build partnerships with other agencies</td>
</tr>
<tr>
<td>• Well equipped members in emergency management</td>
<td>• Utilise existing infrastructure</td>
</tr>
<tr>
<td>• Experienced Volunteers and Staff at different levels</td>
<td>• Promote the organisation at every opportunity</td>
</tr>
<tr>
<td>• Good mix of appliances throughout</td>
<td>• Highlight the funding differences between agencies</td>
</tr>
<tr>
<td>• Willingness to provide the service</td>
<td>• Develop a CFA position</td>
</tr>
<tr>
<td>• Currently provide a professional service at a good price</td>
<td>• Increased experience through training</td>
</tr>
<tr>
<td>• Good coverage of staff brigades to support volunteer network</td>
<td>• Increased opportunities for all members</td>
</tr>
<tr>
<td>• Geographically small area (relatively)</td>
<td>• Enhance CFAs broader image</td>
</tr>
<tr>
<td>• Good communications network</td>
<td>• Promote Victoria as an integrated Emergency Service</td>
</tr>
<tr>
<td>• Strong community based service</td>
<td>• Build the capacity to support overseas and interstate</td>
</tr>
<tr>
<td>• Specialist expertise available in Victoria</td>
<td></td>
</tr>
<tr>
<td>• Political environment right to challenge the issue</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weaknesses</td>
<td>Threats</td>
</tr>
<tr>
<td>• No clarity in recognised specialists in the field</td>
<td>• Death of a firefighter/Rescuer</td>
</tr>
<tr>
<td>• Organisational parochialism in Victoria</td>
<td>• Death of a member of the community</td>
</tr>
<tr>
<td>• No policy</td>
<td>• Brigade continued failure to meet current service delivery standards</td>
</tr>
<tr>
<td>• No agreed MOUs between agencies</td>
<td>• Loss of community support</td>
</tr>
<tr>
<td>• Failure to meet current service delivery in some brigades</td>
<td>• Change in funding</td>
</tr>
<tr>
<td>• Lack of CFA coordination procedures across Victoria</td>
<td>• A major State disaster occurring</td>
</tr>
<tr>
<td>• Geographical area of Victoria</td>
<td>• Legislative responsibility given to an alternative service provider</td>
</tr>
<tr>
<td>• No standardised training</td>
<td>• Requirement for extra operational staff at the Area</td>
</tr>
<tr>
<td>• No standardised equipment</td>
<td>• A Brigade not being able to provide the service</td>
</tr>
<tr>
<td>• No coordinated agreement across agencies</td>
<td>• Duplication of service delivery centrally</td>
</tr>
<tr>
<td>• Reduced experience levels</td>
<td>• In ability to attract enough volunteers for a brigade to respond service</td>
</tr>
<tr>
<td>• Local brigades parochialism</td>
<td>• Other agency assuming control</td>
</tr>
<tr>
<td>• Perception by community CFA is an amateur organisation providing an amateur service</td>
<td>• Recognised command and control structure not being followed at a fire</td>
</tr>
<tr>
<td>• Lack of opportunities to perform the rescues</td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX D: SWOT ANALYSIS: AN INTEGRATED SERVICE DELIVERY MODEL UTILISING ALL OF VICTORIA’S AGENCIES ASSETS AND RESOURCES

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A united approach</td>
<td>• Foster more joint arrangements</td>
</tr>
<tr>
<td>• Standardised training</td>
<td>• Single approach to government for funding</td>
</tr>
<tr>
<td>• Standardised equipment</td>
<td>• Enhanced capability at a local level</td>
</tr>
<tr>
<td>• Recognition and broad maintenance of the cultures</td>
<td>• Utilise existing equipment already in the state</td>
</tr>
<tr>
<td>• More activity for all agencies</td>
<td>• To develop a single agreed command and control system</td>
</tr>
<tr>
<td>• The service will be delivered</td>
<td>• To build respect and confidence between agencies</td>
</tr>
<tr>
<td>• Clarity provided in the provision of the service</td>
<td>• To build an understanding of the complexities of the various agencies</td>
</tr>
<tr>
<td>• Cost effective</td>
<td>• National recognition thus potential to provide National support</td>
</tr>
<tr>
<td>• Ability to manage low level risks at multiple incidents</td>
<td>• International recognition thus being able to provide support at an international level</td>
</tr>
<tr>
<td>• Ability to manage a large incident</td>
<td>• Strengthen partnerships between the various agencies</td>
</tr>
<tr>
<td>• State capacity to manage incidents of any type</td>
<td></td>
</tr>
<tr>
<td>• Ability to create a ‘Team’ environment</td>
<td></td>
</tr>
</tbody>
</table>

#### Internal

- Potential for continued delay in service for remote areas
- Potential to require further funding for set up
- Need agreement of all agencies involved
- Basic equipment already incompatible
- Not a willingness to share in joint arrangement
- Not a willingness to be an equal partner at the committee level
- Further analysis required for the best locations of level two support
- Transport availability for level two locations
- Willingness of staff to support the level two concept
- Ability of the staff to support the level two concept
- Requirement for the volunteers to support the concept, particularly at level; two locations
- Existing standards are unknown

#### External

- Local parochial attitudes
- One agency assuming control
- Agreement not reached regarding standardised equipment
- Agreement not reached regarding standardised rescue techniques
- Industrial negotiation break down with MFESB Staff accepting work alongside volunteers
- MFESB not accepting support into their area
- Victoria police wanting to control all such incidents
- Federal intervention during significant events such as a terrorist attack
- DERC not providing clarity as to who is the combating agency, particularly at level one/two incidents
APPENDIX E: RISK ASSESSMENT: ADDRESSING THE DELIVERY OF TECHNICAL RESCUE ACROSS CFA.

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>L &amp; C=</th>
</tr>
</thead>
<tbody>
<tr>
<td>No recognised specialists in the field</td>
<td>HH</td>
</tr>
<tr>
<td>Organisational parochialism in Victoria</td>
<td>HM</td>
</tr>
<tr>
<td>No Policy</td>
<td>HH</td>
</tr>
<tr>
<td>No agreed MOUs between agencies</td>
<td>MM</td>
</tr>
<tr>
<td>Failure to meet current service delivery in some brigades</td>
<td>MM</td>
</tr>
<tr>
<td>Lack of CFA coordination procedures across Victoria</td>
<td>MM</td>
</tr>
<tr>
<td>Geographical area of Victoria</td>
<td>HM</td>
</tr>
<tr>
<td>No standardised training</td>
<td>ML</td>
</tr>
<tr>
<td>No standardised equipment</td>
<td>ML</td>
</tr>
<tr>
<td>No coordinated agreement across agencies</td>
<td>ML</td>
</tr>
<tr>
<td>Reduced experience levels</td>
<td>ML</td>
</tr>
<tr>
<td>Local brigades parochialism</td>
<td>HL</td>
</tr>
<tr>
<td>Perception by community CFA is an amateur organisation providing an amateur service</td>
<td>LL</td>
</tr>
<tr>
<td>Lack of opportunities</td>
<td>LL</td>
</tr>
<tr>
<td>Lesser funding than to the MFESB</td>
<td>LL</td>
</tr>
<tr>
<td>Death of a firefighter/Rescuer</td>
<td>LL</td>
</tr>
<tr>
<td>Death of a member of the community</td>
<td>LL</td>
</tr>
<tr>
<td>Brigade continued failure to meet current service delivery standards</td>
<td>ML</td>
</tr>
<tr>
<td>Loss of community support</td>
<td>LL</td>
</tr>
<tr>
<td>Change in funding</td>
<td>LL</td>
</tr>
<tr>
<td>A major State disaster occurring</td>
<td>MH</td>
</tr>
<tr>
<td>Legislative responsibility given to an alternative service provider</td>
<td>MH</td>
</tr>
<tr>
<td>Requirement for extra operational staff in the Area</td>
<td>MH</td>
</tr>
<tr>
<td>A Brigade not being able to provide the service</td>
<td>MH</td>
</tr>
<tr>
<td>Duplication of service delivery</td>
<td>LH</td>
</tr>
<tr>
<td>In ability to attract enough volunteers for a brigade to respond service</td>
<td>LL</td>
</tr>
<tr>
<td>Other agency assuming control</td>
<td>LL</td>
</tr>
<tr>
<td>Recognised command and control structure not being followed at a fire</td>
<td>LL</td>
</tr>
</tbody>
</table>

\[ L=\text{Likelihood} \]
\[ C=\text{Consequence} \]
\[ R=\text{Risk} \]

\[ \text{Broken down into Low, Medium and High} \]

Identified High Risks:

1. No recognised specialists in the field
2. No Policy
3. Organisational parochialism in Victoria
4. Geographical area of Victoria
5. Death of a member of the community
6. Requirement for extra operational staff in the Area
7. Death of a firefighter/Rescuer
APPENDIX F: RISK ASSESSMENT: AN INTEGRATED SERVICE DELIVERY MODEL UTILISING ALL OF VICTORIA'S AGENCIES ASSETS AND RESOURCES.

<table>
<thead>
<tr>
<th>Potential for continued delay in service for remote areas</th>
<th>L &amp; C=</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential to require further funding for set up</td>
<td>HH</td>
<td>H</td>
</tr>
<tr>
<td>Agreement required from all agencies involved</td>
<td>MM</td>
<td>M</td>
</tr>
<tr>
<td>Basic equipment already incompatible</td>
<td>MH</td>
<td>H</td>
</tr>
<tr>
<td>Not a willingness to share in joint arrangement</td>
<td>MM</td>
<td>M</td>
</tr>
<tr>
<td>Not a willingness to be an equal partner at the committee level</td>
<td>MH</td>
<td>H</td>
</tr>
<tr>
<td>Further analysis required for the best locations of level two support</td>
<td>MM</td>
<td>M</td>
</tr>
<tr>
<td>Transport availability for level two locations</td>
<td>LM</td>
<td>L</td>
</tr>
<tr>
<td>Willingness of staff to support the level two concept</td>
<td>LL</td>
<td>L</td>
</tr>
<tr>
<td>Ability of the staff to support the level two concept</td>
<td>LL</td>
<td>L</td>
</tr>
<tr>
<td>Requirement for the volunteers to support the concept, particularly at level; two locations</td>
<td>LL</td>
<td>L</td>
</tr>
<tr>
<td>Existing standards are unknown</td>
<td>LL</td>
<td>L</td>
</tr>
<tr>
<td>Local parochial attitudes</td>
<td>ML</td>
<td>L</td>
</tr>
<tr>
<td>One agency assuming control</td>
<td>MM</td>
<td>M</td>
</tr>
<tr>
<td>Agreement not reached regarding standardised equipment</td>
<td>MM</td>
<td>M</td>
</tr>
<tr>
<td>Agreement not reached regarding standardised rescue techniques</td>
<td>LM</td>
<td>L</td>
</tr>
<tr>
<td>Industrial negotiation break down with MFESB Staff accepting work alongside volunteers</td>
<td>LM</td>
<td>L</td>
</tr>
<tr>
<td>MFESB not accepting support into their area</td>
<td>MM</td>
<td>M</td>
</tr>
<tr>
<td>Victoria police wanting to control all such incidents</td>
<td>MM</td>
<td>M</td>
</tr>
<tr>
<td>Federal intervention during significant events such as a terrorist attack</td>
<td>MM</td>
<td>M</td>
</tr>
<tr>
<td>DERC not providing clarity as to who is the combating agency, particularly at level one/two incidents</td>
<td>MM</td>
<td>M</td>
</tr>
</tbody>
</table>

and resources"

L=Likelihood
C=Consequence
R=Risk

Identified High Risks:
1. Potential for continued delay in service for remote areas
2. Agreement required from all agencies involved
3. Not a willingness to share in joint arrangement
4. Federal intervention during significant events such as a terrorist attack
APPENDIX G: SURVEY DELIVERY OF TECHNICAL RESCUE INCLUDING RESULTS

DELIVERY OF TECHNICAL RESCUE
Survey

Name: _______________________________________
Rank: _______________________________________
Region: _______________________________________

Q1. What do you understand by the term ‘Technical Rescue’?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Q2. Are the Technical Rescue arrangements articulated in the Municipal Emergency Management plans?

□ No (9, 47.39% of the respondents)
□ Yes (4, 21.05% of the respondents)
□ Not certain (0)

Comment
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Q3. Are you aware of your statutory obligation to deliver technical rescue under the Emergency Management Act 1986?

□ No (0)
□ Yes (4, 21.05% of the respondents)
□ Yes, but not certain which components (8, 42.10% of the respondents)
□ Not Certain (2, 10.53% of the respondents)

Comment
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Q4. **Does your Region have the capacity to deliver Trench Rescue?**

- No/ Yes (Yes=3, 15.79%. No=11, 57.89% of the respondents)
- If No, who is responsible?.................................
- How long will you take to mobilise?......................

Comment:__________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Q5. **Does your Region have the capacity to deliver Rope rescue?**

- No/ Yes (Yes=3, 15.79% and No=11, 57.89% of respondents)
- If No, who is responsible?.................................
- How long would it take to mobilise?......................

Comment:__________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Q6. **Does your Region have the capacity to deliver confined space rescue?**

- No/ Yes (Yes=5, 26.32% and No=9, 47.37% of respondents)
- If No, who is responsible?.................................
- How long would it take to mobilise?......................

Comment:__________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

Q7. **Does your Region have the capacity to deliver Urban Search and Rescue?**

- No/ Yes (No=13 or 68.42% of the respondents)
- If No, who is responsible?
- How long would it take to mobilise?

Comment:__________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
Q8. Does your Region have the capacity to deliver the following:

- Hazardous material rescue? Yes 12, 63.16%. No 2, 12.5%
- Heavy Rescue (Bus, Train, Plane) Yes 2, 12.5%. No 12, 63.16%
- Swift water Rescue Yes 1, 5.26%. No 13, 68.42%
- Respond to CBRN Incidents Yes 2, 12.5%. No 12, 63.16%

Q9. Would you be prepared to work with other Emergency service organisations to deliver technical rescue?

- Yes 12 or 63.16% of respondents
- No
- Not certain
- Only certain agencies (Please list below) 2 or 12.5% of respondents

Comment:

Q10. What do you believe would be the issues relating to an integrated approach to the delivery of Technical rescue in your area?

- Financial 14 or 73.68% of respondents
- Equipment/ Resources 14 or 73.68% of respondents
- Relationships 12 or 63.16% of respondents
- Current arrangements 11 or 57.89% of respondents
- Knowledge and understanding 13 or 68.42% of respondents
- Systems, protocols and procedures 11 or 57.89% of respondents
- Time and space 6 or 31.56% of respondents
- Please specify in more detail
This is depicted in figure 1.

Where local response arrangements apply. Local Divisional Emergency Response Committee arrangements apply. On arrival of the combating agency a ‘situation analysis’ occurs to determine whether further support is required.

Where the commander of the combating agency has completed a ‘Situation analysis’ and determined further support is required, a request is made for the enhanced specialist response arrangements from the major centre or town.

Where the role is beyond a single agency response, the multi agency response team is dispatched in support of the local agency.

Figure 1

(1) Situation analysis: “A deliberate process where the incident situation, factors that are relevant to the incident, course open and their consequences are reviewed and an Incident Action Plan is recommended” CFA Operations Guidelines p 22.10
APPENDIX I: DETAIL SUPPORT POTENTIAL STAGES OF SERVICE DELIVERY

Level one recognises local brigades already have the basic life support equipment and expertise available to them. It also recognises existing local support arrangements already documented in Divisional Emergency Response Plans established in accordance with the Emergency Management Act 1986.

Level two is the local authorities recognising that the emergency is beyond their field of expertise. In this situation support maybe a multi agency approach. This model recommends that strategic geographic centres of excellence be established around the State. That is, of course, unless they already exist. This would require the utilisation of CFA’s career staff at locations such as Bendigo, Geelong, Wangaratta, Traralgon and so on. These locations would be required to have basic equipment and expertise to provide these services. They would also be required to have the capacity to respond the necessary equipment to large geographic areas for which they had responsibility.

Level three response is targeted at an incident having state-wide significance such as a: terrorism event, earthquake, or a disaster beyond the capacity of local arrangements to render the scene safe. Level three is designed to be responded centrally from Melbourne with high levels of equipment and expertise. Level three is also recommended to be a multi agency team consisting of representatives of all agencies, similar to the one currently being established by the New Zealand fire service. Representatives of each agency would be required to come together on regular occasions to determine equipment standardisation, common systems and practices and training methods. It is also recommended that this team be recognised as a combined
team and uniforms and equipment be badged to recognise this joint approach. This team would be dispatched and work with local teams as specialist and technical support to the overall incident. Incident command would still remain with the combat authority and, in accordance with the Emergency Management Act 1986, The Divisional Emergency Response Coordinator would be the arbitrator for any areas of conflict pertaining to service delivery.

Similar to the New Zealand model, the level three team would be made up of CFA, MFB, Ambulance and SES personnel. All would be required to work in accordance with a common command structure, utilising similar equipment and rescue methods.