New Zealand Fire Service

Research Report

Building Quality Working Relationships Across the Emergency Services Sector

Kaitiaki Research
July 2015

Successful interagency partnerships within the emergency sector are vital to ensuring the safety of the New Zealand public. This research aimed to:

- Provide NZFS with information needed to build quality working relationships across the sector
- Inform the implementation of future joint initiatives in both major incidents and day-to-day operations

The research identified four key areas that contributed to creating barriers to collaboration in the NZ emergency services sector: Response to Major Incidents, Strategic and National Collaboration, Local and Regional Collaboration and Legislation.

A number of strategies to enhance collaboration were identified. Many of the suggestions are relevant to improving the quality of day-to-day cooperation and co-location.

Recommendations for NZFS and the wider NZ Emergency Services Sector were:

- Amalgamation of the urban and rural fire services
- Collaborative engagement with communities and local volunteers
- Develop a mechanism to share case studies of successful collaborations
- Refinement of the Emergency Services Chief Executives Forum
- Mechanism for post-incident debriefs
- Co-location of first responders at a regional and national level

Building Quality Working Relationships Across the Emergency Services Sector

prepared for the

New Zealand Fire Service Commission

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1 Introduction

Successful interagency partnerships within the emergency sector are vital to ensuring the safety of the New Zealand public. The New Zealand Fire Service's vision statement, *"Leading integrated fire and emergency services for a safer New Zealand"*, embodies the importance of successful interagency partnerships to the New Zealand Fire Service.

The New Zealand Fire Service plays an active and significant role in the Co-ordinated Incident Management System (CIMS), a framework in which emergency management agencies coordinate and cooperate effectively in response to a wide range of incidents (Department of the Prime Minister and Cabinet, 2014). Further, it is anticipated that the New Zealand Fire Service will share infrastructure and integrate operations with the New Zealand Police, St John Ambulance of New Zealand and Civil Defence at the Christchurch Justice and Emergency Services Precinct (Christchurch Central Development Unit, 2015). Given the important role of the New Zealand Fire Service in emergency service collaboration, Kaitiaki Research and Evaluation has been commissioned to conduct research to understand:

- what is needed to build quality working relationships across the emergency services sector to inform the implementation of future joint ventures;
- what contributes to successful collaboration in major incidents, joint projects, and day-to-day operations; and,
- what New Zealand emergency sector agencies believe influences successful relationships.

Objectives of the research

The specific objectives of the research included:

- identify, from current New Zealand and international literature, what contributes to successful interagency collaboration in the emergency service sector;
- explore the key attributes that emergency sector agencies believe contribute to successful collaboration in major incidents and in day to day operations;
- compare findings from the literature to emergency sector agencies perceptions about what contributes to successful interagency collaboration;
- understand the key components that lead to the successful implementation of joint projects;
- identify differences and common views between individual agencies in New Zealand and factors that exist in the broader sector; and,
- identify what actions can be taken by the New Zealand emergency sector to improve interagency partnerships.

The study employed a participatory qualitative approach. The first stage of the research involved a review on national and international literature on collaboration. The second stage of the research involved in-depth semi-structured interviews with key stakeholders across the emergency services sector. For the third stage of the research a workshop was held with key stakeholders from the New Zealand Fire Service Commission. The current report presents the findings of the in-depth semi-

structured interviews. The literature review is attached as an appendix (see Appendix 1).

2 Approach

The study employed a participatory qualitative research approach. The research employed in-depth semi-structured interviews with key stakeholders from across the emergency services sector and a workshop with key stakeholders from the New Zealand Fire Service.

2.1 Key stakeholder interviews

Fourteen individuals from a range of organisations and agencies across the emergency services sector were interviewed. Of these interviews 13 were conducted face-to-face and one was a Skype interview.

The interviews occurred throughout May and June 2015 and lasted between 45 minutes to one-and-a-half hours.

- The interviews were structured around participant's perspectives and explored the following:
- current collaboration amongst the various emergency services in New Zealand;
- partnerships and collaborations that have worked well and why;
- partnerships and collaborations that have not worked well and why;
- elements that were crucial to the successful implementation of collaborations;
- barriers to interagency collaboration;
- agencies who are successful collaborators and why;
- agencies who are not successful collaborators and why;
- key attributes that emergency sector agencies believe contribute to successful collaboration in major incidents and in day to day operations; and,
- actions that could be taken by the New Zealand emergency sector to improve interagency partnerships.

Participants

Of the 14 key stakeholder participants, all were male (100%). This may be a reflection of the gendered nature of leadership within the emergency services sector. Fifteen participants in total were approached to take part in the research, however, due to recent staff changes and deployments at the New Zealand Defence Force, no one from this agency took part in an interview. The following table provides a breakdown of participants by agency / organisation.

Table 1: Participants

Organisation	n =
Civil Defence Christchurch City Council	1
Department of Prime Minister and Cabinet	1
Maritime New Zealand	1
Ministry of Civil Defence and Emergency Management	1
Ministry of Foreign Affairs and Trade	1
Ministry of Transport	1
National Rural Fire Authority	1
New Zealand Fire Service	2
New Zealand Police	2
New Zealand Search and Rescue Secretariat	1
St John Ambulance New Zealand	1
Wellington Regional Emergency Management Office	1
Total	**14**

Recruitment

A list of fifteen potential participants for the key stakeholder interviews was identified in collaboration with the New Zealand Fire Service Commission. As the first point of contact a letter and information sheet about the research was emailed to the potential participants by the New Zealand Fire Service Commission. The enclosed information outlined the background of the research, provided information about the research and invited individuals to participate in a semi-structured interview. Kaitiaki's contact details were provided and the potential participant were asked to contact Kaitiaki if to they wished to participate or had any questions. If no reply was received after ten days, a follow-up email and phone call was made by Kaitiaki to potential participants to confirm receipt and enquire about participation.

2.2   Analysis and reporting

A grounded theory approach to data collection, coding and analysis was employed. As such, a process of constant comparative analysis was used throughout the lifespan of the research, which meant comparing:

▪ different individual and stakeholder perspectives;

▪ information from the literature review;   and,

▪ perspectives shared from the different emergency sector agencies.

Through this process emerging findings were consistently tested to determine the extent to which they are common across participants. In practice this meant that codes were created within an analysis framework. Throughout the fieldwork, information was defined and categorised through a continual review of interviews and fieldwork notes. As a result, emerging patterns were continually tested through the interview as well as the exploration of new questions that arose in the preceding interviews. This process of constant comparative analysis also provides an opportunity to explore, at greater depth, reasons underlying emerging patterns. Quotes are used to illustrate the various codes/themes that emerged.

Emergency service collaboration in New Zealand

Collaboration between emergency service sector agencies within daily operations is common in New Zealand and for mid-to-large scale emergencies collaboration is essential. The emergency services sector in New Zealand is wide and includes a number of different agencies, not only first responders that the majority of the public would identify as traditional emergency services, such as the New Zealand Police, New Zealand Fire Service and Ambulance New Zealand (St John Ambulance and Wellington Free Ambulance).   The agencies represented on the Coordinated Incident Management System (CIMS) Steering Group provides an indication of the breadth of the emergency service sector in New Zealand:

- Civil Defence Emergency Management Groups nationwide;

- Department of Conservation;

- Department of Prime Minister and Cabinet;

- Maritime New Zealand;

- Ministry for Primary Industries;

- Ministry of Civil Defence & Emergency Management;

- Ministry of Health;

- Ministry of Social Development;

- National Rural Fire Authority;

- New Zealand Customs Service; and,

- New Zealand Defence Force.

A number of agencies serve as coordination agencies, rather than first responders, such as the Ministry of Civil Defence & Emergency Management and the New Search and Rescue Secretariat. While agency roles vary, all have a part to play in emergency service response in New Zealand.

This section of the report will explore:

- perspectives on emergency service collaboration in New Zealand;

- the broad definition of the emergency services sector in New Zealand; and,

- strategic and structural issues.

2.3   Perspectives on emergency service collaboration in New Zealand

All participants indicated that, in general, emergency service collaboration in New Zealand is strong. This was especially the case in regards to the response to business-as-usual incidents. The relationship between the three first responders, New Zealand Police, New Zealand Fire Service and the ambulance services was largely viewed as healthy by those interviewed.

> *I think in general terms they are collaborating. There are joint comms [communications] centres in Auckland, Wellington and Christchurch. Agencies jointly attend CIMS courses and CIMS on it's own as a model and framework, naturally draws and pushes all emergency services together to operate under a common command and control framework. At a local level across the width and breadth of this country I would say that police and fire, along with other emergency*

services, will operate together and do every day. (Emergency service representative #1)

I think they collaborate pretty well actually in terms of conversing about how we respond to all of government type events. I've been involved in the area for quite some time and there is good engagement by everybody. (Emergency service representative #2)

They are coordinating well locally. (Emergency service representative #3)

In the wider emergency service sector, the day-to-day incident level responses and collaboration is not as common. Nevertheless, even those agencies that held more of a coordination role or infrequently responded to multi-agency incidents viewed collaboration amongst the wider emergency services sector positively.

I think our experience would be that it has been very good for us, but it's relatively rare at an incidence scale because we don't have many incidents. The day-to-day routine stuff that we do in search and rescue that would probably be where we do the most small-scale, low level stuff, and the relationship with the police is excellent, but we've worked on that for a very long time and put a whole heap of things in place. (Government agency representative #4)

All the NZ agencies work really well together. There are strong relationships between us and the other agencies, which have been built and are maintained. All agencies know each other capabilities and what services can be provided. (Government agency representative #5)

Despite a generally positive view of agency wide emergency service collaboration, some participants expressed that collaboration was not strong in every area.

I hear mixed reports. I hear that there is a working relationship between the Police and Fire Service, but I hear that there is frustration between the Fire Service and what Police shares with them or how they collaborate with them. So the issue in this situation isn't really about how effectively Fire collaborates, but it's about how Police would integrate them into a response. (Government service representative #6)

In parts, well and in other parts not too well. It's not necessarily in my view the fact that there is a lack of a collaborative process set up. There's the really good collaboration that exists both nationally and locally, and that exists because of personalities. And there are some really, really good examples and there are some not good examples. And it's right across whether it is with ambulance, police or Civil Defence or Rural Fire, all the various agencies. (Emergency service representative #7)

According to participants there are a number of areas in which collaboration has been weak or not as effective as possible. Emergency service response to major incidents was an area that was commonly cited, as was collaboration at a strategic and national level. These areas are explored below.

2.3.1   Response to major incidents

Whilst it was acknowledged that day-to-day and business-as-usual incidents that involved small-scale multi-agency response were predominantly in good health, collaboration during major events or complex incidents that involved a large numbers of responders (for example the Canterbury earthquakes, Pike River Coal Mine Tragedy and the MV Rena Incident) highlighted a number of problems within emergency service collaboration response. As one participant commented when discussing the response to a major recent incident:

Shortcomings arose from deficiencies in planned capabilities, doctrine and structures which might not have shown up in a lesser event, but was exposed by the complexity of the incident and the multiplicity of the challenges. We don't disagree with this. The problem for us is as a very small organisation, is how do you deal with big incidents. That is fundamentally the problem for us. I think it's easier for larger organisations to deal with bigger incidents because they have more resources and more capacity and they do that more often themselves anyway. (Government agency representative #4)

Various formal reviews into emergency responses for these incidents highlighted a number of areas in which response to large-scale emergencies could be improved and many of the recommendations from these reviews have been incorporated into a new second edition of CIMS, which was released in April 2014.[1]

The Canterbury earthquakes were commonly mentioned when participants were questioned about emergency responses that did not work as well. Participants expressed various opinions surrounding why emergency service responses to Canterbury earthquakes were not as efficient or effective than they could have been. These reasons included:

1. A failure to learn from failings to the response and aftermath of the first Canterbury earthquake in September 2010.

   I guess it was recognised that people hadn't played as well as they should of done and it resulted in an early need for a national declaration and a national coordination following the second major earthquake. And I guess that also brought along it's challenges as far as it goes because there hadn't been, there was still quite a parochial approach to where the services were, how we would join together and take that broader view. Like most of those things, most it was personality driven. So you come into the tensions between individuals and those things not being sorted out in the planning and preparation environment, they're never going to work when there is a genuine need for full collaboration. So that resulted, there was a fair bit of evidence in Canterbury of people saying the right things and planning to do something different. (Emergency service representative #8)

   Both [territorial authorities] had to consider how they were likely to respond from an emergency management perspective to future events. Both quite clearly put in place their interim arrangements and did so very separately as far as they go. Both had been significantly impacted for their day-to-day operations from the first earthquake. Both had to make future arrangements and consider future structures and work through and both very clearly did that from an individual basis. And that said how they were setting up to respond. Now genuine collaboration would have meant them saying, well we've both been impacted by a significant event. We both have the opportunity to support each other into the future, how are we going to make this bad situation better for us? So when it can into the second major event, both were in make-do situations that were quite separate. The issues from the first event and relationship challenges hadn't been addressed or resolved and for some degree that resulted in a magnification of the challenge. We'll put our walls up and we'll get on and do what we need to do.

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[1]   These reviews included The Royal Commission on the Pike River Coal Mine Tragedy, The Independent Review of the Civil Defence Emergency Management Response to the 22 February 2011 Christchurch Earthquake, The Canterbury Earthquakes Royal Commission, The Independent Review of Maritime New Zealand's Response to the MV Rena Incident on 5 October 2011 and The CTV Building Coronial Inquest.

2. A poor working relationship between the various Canterbury territorial authorities both prior to, during and after the earthquakes.

    The Christchurch earthquakes are a good example. Our agency and the councils hadn't worked well together and the councils themselves hadn't worked well together. So because the councils didn't work together and talk to each, when the earthquake occurred they each set up their own silo in terms of running their part of the business from a Civil Defence viewpoint and they couldn't. And the Regional Council then took over the thing and there was a big problem getting information from the councils in regards to what have you done, what have you set up etcetera. So that's an example of the councils not working well together and we not working well with the councils. Civil Defence to a substantial degree was non-existent in Christchurch and it fell over in a huge way. (Emergency service representative #7)

3. A siloed approach to planning and response by all agencies both prior to and during the earthquakes.

    What it was showing us, to a degree during the earthquakes, was that we were all working in some ways in siloes. (Emergency service representative #9)

4. A lack of coordination at major scenes.

    Because it was found [by the review] that the emergency services weren't always on the same wavelength in terms of who is doing what. The review was critical about how the response agencies worked together, particularly in terms of the CTV building. (Government agency representative #10)

5. Inadequate information sharing.

    The review said there was a problem with situational awareness. So what that effectively meant was that some agencies had information that wasn't being shared around. And I don't think that was deliberate. It was just them working in three different locations, four different locations if you take St John in there as well, even though we have a liaison person from each of the emergency services in the Civil Defence Emergency Operation Centre there was still information that didn't get across. (Emergency service representative #9)

6. Confusion around who was the lead agency at major scenes, including the CTV Building.

    And this raised its head in Christchurch [confusion over who was the lead agency]. We had two or more buildings, more or less side-by-side, one was the CTV building and the other PCG Building. Both fell over with people trapped inside. Nevertheless, one was on fire and the other one wasn't on fire. So the jurisdiction on the ground varied between the one that was on fire and the one that wasn't on fire. (Emergency service representative #7)

7. Inexperience in dealing with the complexities with New Zealand's first national state of emergency.

As one participant above noted, collaboration in the Canterbury region between emergency services and the councils at a local level prior to the earthquakes had not been functioning as well as possible. Another participant noted that first responders had experienced issues with collaborators at other more complex events prior to the Canterbury earthquakes. From this participant's perspective a lack of coordination at other major multi-agency response incidents indicated troubles working together during more complicated incidents.

I'll use a natural disaster as an example. If we look at the cyclone that happened in North Harbour about three or four years ago. And to be frank what we basically had

was agencies doing their own stuff, the ambos [ambulance] and Fire Service and Police were uncoordinated. So what does that say? It says that whilst the first responders are good at responding to low-level type incidents, which is business as usual, when things become complex they don't work well together. Now if we fast-forward to the Canterbury Earthquake we see this play out in response to the CTV building. Where there was a lack of command and control and coordination. And in the end the review said it was Fire Service's responsibility to take command and control of the situation, which they didn't do of course, as we all know during the incident. So what does that tell me? It tells me again that they are very good at business as usual, but when situations get complex they are lifted out of their comfort zone. (Government service representative #6)

2.3.2 Strategic and national collaborative issues

While relationships between the first responder agencies at the operational level were described as predominantly good the majority of issues were identified at a strategic level.

Both at a local level and a national level I think we are not as joined us as we could and should be. We all have a push towards Better Public Services. So government have clearly said to all CEs [Chief Executives] why are we having duplication across a range of government services that government agencies provide? And hence are demanding of CEs that there are more effective, efficient and joined up public services. So we're already doing some things around that with things like comms [communication] centres. But I do sense that we could be more joined up nationally with Fire Service and that is across further developing those strong working relationships at all levels. (Emergency service representative #1)

The existence of two separate organisations, the New Zealand Fire Service (urban) and the National Rural Fire Authorities (rural), created confusion and frustration amongst a number of participants. Not having one executive contact to deal with due to the divide between the New Zealand Fire Service and Rural Fire Authorities was a barrier to building relationships and forging collaborations at the most senior level. Further, perceived tensions between the volunteer component of the New Zealand Fire Service and the New Zealand Fire Service and historical conflict between New Zealand Fire Service and Rural Fire Authorities were also viewed as a barrier to collaboration.

The search and rescue community are a 95% voluntary organisation. We would stop overnight if volunteers didn't feel absolutely valued by everyone in the system. And often they are the leaders. So there is no possibility of us having a split between those who are paid and part-paid and those who aren't being paid. That all has to get left behind. It has to be otherwise we can't perform our job. And any organisation that allows a split between paid staff and non-paid staff, and I do say allows, because it is a leadership thing, they have to go through a cultural transformation because that is just not ok, it is not acceptable. (Emergency sector representative #11)

The wider New Zealand Fire Service connection into that arrangement [Civil Defence and Rural Fire Authority] is mostly very solid; I'd say 80% of that connection is really solid. Twenty percent of it is based on community and personality connections around how it doesn't work or it does work or how it's flawed or how it's tense. So 20% of the time there is quite a lot of tension, or an amount of tension between Rural Fire and Urban Fire and it's generally personality based and not system based. (Emergency service representative #13)

There was a strong feeling that the creation of one fire service would help strengthen the quality of relationships with the New Zealand Fire Service and aid in improving collaboration.

> *The split between the rural fire service and urban fire service is hugely problematic to an outside agency that is trying to engage with them. It's really difficult to understand who we can talk to within the fire apparatus that will speak for them collectively because they are very separate organisations… You can speak to us in a way that you will get a coherent response. And that is very hard with the Fire Service because of the way that they are structured and are organised. And their internal relationships are near on impossible. So for example if we did have a representative coming here from the New Zealand Fire Service I have no confidence that they would speak for the Rural Fire folks at all. Which is frustrating. (Emergency sector representative #11)*

> *If there is one thing that comes out of the New Zealand Fire Service review, for god sakes, combine Rural Fire Service with the main Fire Service…. It is a big culture change and it's hard and I get all of that. But in the long term it's the way to go. You talk about Better Public Services; well there is a great opportunity, internally within Fire right there. (Emergency service representative #1)*

> *Two sets of chain of command and management structures, you've got two of everything across the country. The second part of that is that you have two different cultures, and no surprises that they are not singing kumbaya. And I think it's time, it's past time, that they recognise that they are falling behind and that they are way behind in that strategic sense. Because you've got the government saying Better Public Services, we want you more efficient, more effective, more joined up and yet you've got one functional public service called fire that has been sitting as two organisations. So you've got duplication within, let alone interacting with anyone else. But to be fair I am conscious that the Executive sitting within New Zealand Fire Service have been aware of that for quite some time and want to do something about it, but it's a big thing to do. (Emergency service representative #1)*

According to multiple participants the existence of two fire agencies in New Zealand and the perceived lack of national oversight, could negatively impact on collaborations with the New Zealand Fire Service, as the success of coordination and response would subsequently rely on personalities.

> *I think because there is not the national coordination or national oversight of what's occurring then it does come down to the personalities at the place where the squad happens to be and what happens within that squad. There is always going to be that flavour, but if you have national oversight and support to the stuff that you are doing you should be better able to provide a more comprehensive response to whatever you are responding to. (Emergency service representative #2)*

Another participant noted that the split between rural and urban fire services also created issues.

> *With the New Zealand Transport Agency, for example, everybody knows it's Safer Journeys, that's their primary operating strategy, that's what they live for. That's their vision right there. With police the primary operating strategy is "Prevention First", everybody knows it, it's been well ingrained and people in government know what police are about. Whereas if you go Fire Service - what's their vision or operating strategy? If they've got one, I don't know it. Straightaway they are undermined because are you talking about the New Zealand Fire Service or the Rural Fire Service? So they split their critical mass of being able to deal with other agencies in half straightaway before they have even left the starting box. (Emergency service representative #1)*

The twelve separate police districts in New Zealand were also mentioned by two participants as presenting minor collaborative challenges. However, the New Zealand Police, despite having twelve districts were regarded differently by participants and did not present the same issues that dealing with two separate fire services in New Zealand did.

There is one New Zealand Police force, no doubt about it. But there are 12 different power centres within the Police force. You have an inconsistency within the New Zealand Police force, but you are dealing with one organisation. That is an ongoing challenge we have because we work very closely with police and the different approaches in the different districts energises us a lot. But it's quite different from the Fire Service organisationally - you don't have a second tier of Police who are only in the countryside. (Emergency sector representative #11)

The perception of internal organisational issues within the New Zealand Fire Service Commission, through the split between urban and rural fire, and perceived tensions between professional volunteer and professional paid fire fighters in the organisation has resulted in some agencies interpreting this as an example of a lack of commitment to cross-agency collaborative spirit within the New Zealand Fire Service.

They appear, to me, a fairly self-contained organisation with no need to refer to any other organisation and no desire to, so they don't. And it's a cultural thing I'm convinced. They are utterly self-contained. By contrast an area such as search and rescue, only works through cooperation with agencies. There is almost no job that search and rescue don't do that is two or more organisations working together. While if you look at the Fire Service, almost every job they do is just the Fire Service. (Emergency sector representative #11)

One organisation that took part in the study held a more negative perception of the New Zealand Fire Service's willingness to collaborate with all agencies in the emergency service sector in New Zealand. Despite multiple attempts to engage with the New Zealand Fire Service, they had been unsuccessful securing any real commitment to collaboration. There was a perception that the organisational culture of the New Zealand Fire Service did not encourage wider collaboration with smaller agencies.

We ought to have a strong relationship with them [New Zealand Fire Service], but we don't because they are not very collaborative. In fact they are really un-collaborative… They are internally arrogant. There is absolutely no requirement or need for them to refer to anyone else… They are self-isolated actually, through all of their mechanisms… From our point of view we have no, other than the ad hoc person-to-person, relationship and we have no systemic relationship with the Fire Service. It's a huge loss of opportunity. They have capacity that we would dearly love to access in a systemic way. (Emergency sector representative #11)

So the question for some of these agencies, for the Fire Service I guess in this context, to what extent do they see themselves as an entity with a job to do that they can do and largely do on their own. Or to what extent are they part of larger community which requires them to engage in a whole range of ways and places that may not necessarily directly benefit them. So you come back to my point earlier where at a regional level you get, in the Police, a regional Search and Rescue Coordinator that develops a whole heap of relationships that actually might just prove to be gold one day. (Government agency representative #12)

However, while the perceived lack of a collaborative culture at New Zealand Fire Service was expressed by a number of participants, most stressed that individual relationships with New Zealand Fire Service staff were strong and these individuals

were supportive of cooperation and collaboration. Another participant highlighted that sometimes assumptions that a lack of a collaborative approach is attributable to an unsupportive cultural environment could be misconstrued.

I think organisation culture is an important element. But then culture is quite a big subject and depending on what you classify as culture. Because sometimes you might presume a culture, you know an agency doesn't go to a debrief because that is their culture. But is that the real reason, or is it because they can't free up the crew to go to the debrief because there are other jobs happening. (Emergency service representative #3)

People [in the Fire Service] aren't opposed to collaborating. But the awareness of the importance of it is lacking. If it's put in front of people and you can demonstrate the benefits they are readily quite open to it. But it doesn't occur to them as a natural thing for them to think about.   But as soon as they are presented with it, they say well, that makes sense. Which is not a bad place to be, but it's about a lack of awareness rather than a lack of interest. (Emergency service representative #13)

This lack of awareness was tied by one participant to the historical operation of the organisation.

It's very historical. It's just the way the business has always run. It's a conservative hierarchical sort of a business. It needs to be hierarchical in responding to emergencies but it doesn't need to be hierarchical in the rest of its business. So when you are doing all your systems development and your training and all those sorts of things, they can be approached in a way that is not rigid, but you can still have rigidity in the processes you use in an emergency to ensure you get a good response. (Emergency service representative #13)

Closely linked to organisational culture, and also viewed as impacting on the collaborative spirit of an agency, was their guiding organisational philosophy.

So we've got a set of values and goals and one of our values is collaboration and cooperation. We are trying to drive it into our DNA, so whilst we are multiple organisations we are one. And that's one of our values. (Emergency sector representative #11)

For smaller agencies, entire strategic philosophies centred on building relationships and ensuring strong collaborative partnerships. However, some viewed the New Zealand Fire Service as possessing a lack of a collaborative philosophy which constrained opportunities for wider collaboration, where there was no perceived to the New Zealand Fire Service.

This view was in contrast to the formal philosophical approach of the search and rescue community, who were highlighted by a number of participants as providing a good example of a collective of agencies that embraced a philosophy and values in which collaboration and partnership with other agencies were integral.

Search and rescue is a fascinating space, because it is almost always a multi-contributor event. It's quite rare for there to only be one agency or department. Because even when police do search and rescue they will use the LandSAR volunteers and very often in the more difficult rescues it's typical to have multiple agencies involved. So search and rescue is quite interesting from an emergency services perspective because it's basic method of operating is to use people from multiple areas. So it lives and dies on the relationships. And it doesn't work, when they don't work, and it works really well where they do work. So there is a real focus on this thing called 'One SAR', one search and rescue family. (Government agency representative #4)

But the longer I have been here the more I am absolutely convinced that the values proposition is the right way to articulate and model the behaviours you want. Values are everything actually. If you get the values right then everything else flows from those behaviours, because they are instilled in a collective way and exhibited in a collective way. And living to your values is hugely important. I'm a bit of a convert to that kind of thinking now. (Emergency sector representative #11)

The collective of search and rescue agencies were also highlighted by participants as very community based and focused, and one participant forwarded that New Zealand Fire Service could benefit with a closer relationship with the search and rescue sector.

Search and rescue volunteers get a reasonable amount of training doing some quite generic stuff, which would be useful for communities. Then if you combine that with the lack of volunteers in the New Zealand Fire Service has in smaller communities in particular and that is just my assumption, I don't have any facts or numbers about that, but I see that there could be a joining of forces in some respects. So when I looked at the Fire Review and what was happening there, I thought well wouldn't it be good for smaller communities in particular if there was a community emergency response to the stuff that the communities have a demonstrated need for, providing the opportunity for a merged response. If you know that you have search and rescue people that are under utilised in a particular area and you know that the Fire Service are crying out for volunteers, you know you can say, have you tried looking over here for some people that already have training and are actively fit, they know some CIMS. So they know how different agencies are supposed to work together and they have the desire and expertise. (Emergency service representative #2)

2.3.3   The New Zealand Coordinated Incident Management System

The New Zealand co-ordinated Incident Management System (CIMS) is a framework for the response to emergencies at a community level, incident level, local level, regional level and national level. The framework exists to provide guidelines to effective coordinated incident management across responding agencies and according to the latest edition it establishes common structures, functions and terminology that can be used by agencies during incident management. According to the manual it is a flexible framework that can be modified to fit any level or type of incident and also enables agencies to develop their own processes, procedures and training for the execution of the model (Department of the Prime Minister and Cabinet, 2014, p.1).

As previously noted, the second and latest edition of CIMS was released in April 2014, having been compiled over several years and, as noted, taking into account many of the recommendations that stemmed from multiple reviews of major emergency incidents in New Zealand from 2010-2012.

A number of participants noted that the New Zealand Fire Service had not "signed up" to the revised edition of CIMS. While this did not impact on the efficiency and effectiveness of multi-agency responses, for some this was used to highlight the perceived "arrogance" of the New Zealand Fire Service and confirmed perceptions regarding the rigid culture and mandate of the organisation. While it was recognised that there are two sides to the issue, some participants viewed New Zealand Fire Service's decision not to sign up to the revised CIMS framework, at the time of writing, as indicative of wider territorial issues and need for the New Zealand Fire Service to always take the lead.

Because it is an issue. To me it's probably indicative of something not quite right in the culture within New Zealand Fire Service, because they should be one of the first to sign up to this. And I'm wondering if they think that they are specialists, that they are special. Which is a common trap as well. (Emergency service representative #1)

We just decided to go along. But going back to I think what you're asking, I think there is an inherent Fire Service desire to be in charge or not be involved. And that's my perception and they are very strong about being in charge and who is in charge of a given incident. (Emergency sector representative #11)

Yes, we use CIMS and we don't disagree with CIMS. That's another problem with Fire Service they disagree with the new version of CIMS. So they should just get on the train…it's just getting down to hyper-technical arguments about certain terms within the new version of CIMS. So it's highly nuanced and highly technical and not worth the breath….My personal thinking is this is a government thing and there is no option for them not to sign up to it. They must. In terms of command and control there can be no argument about this sort of thing. Even if you disagree you make your point, you lost it and then you move on. (Emergency sector representative #11)

So Fire Service when it comes to CIMS is very black and white. That is what I say; they are not very often a very agile organisation. The new CIMS manual gives more flexibility…so you mould it to fit around your response. You've still got your operations, your planning and your intel, your public information and all those things, but it's not quite as rigid. There have been some minor tweaks to it that are not acceptable to Fire Service. And that is that inflexibility. It's not legislative that you've got to do all those things, you can take small functions out…. But Fire Service seems to have got a real bee in their bonnet. (Emergency service representative #9)

While participants acknowledged that the revised CIMS was not the perfect model, they had still "signed on" and could not understand why the Fire Service had not.

I guess we took the view that you can run this continuous improvement mindset. The world is a dynamic and changing-fast paced place and if you are going to wait around for the perfect version, it's like waiting for the perfect man isn't it. It's just not going to happen anytime soon. So you can get that paralysis by analysis, whereas as we did with CIMS version one, you just fire a shot, see how it's looking, come up with version 2, see how that's looking and there might be a version 3 in another couple of years. But meanwhile let's not still be stuck with version 1 for the next ten years. (Emergency service representative #1)

For something like CIMS, which has got to cater for all agencies, that's the whole idea of CIMS, it's never going to get to a stage that they want it to be, that it totally suits them. And that's what I think that they don't get, it's not all about you guys. It is a coordinated incident management system to cater to the general needs of all agencies. And provide command and control framework for all agencies. Therefore it will never be 100% suited to you as New Zealand Fire Service or any other agency for that matter. So there is an element of suck it up and get over yourselves. This is what it is… Because the other part of this is that I think this is damaging their brand with the other agencies as well. (Emergency service representative #1)

I believe the why they haven't signed up is because they like the way AIMS is run, the Australian Incident Management System, and they think that that is better than the revised second edition of CIMS. I think there were probably quite a few people in the re-write of the CIMS to the new edition that had got to the stage that it was project that had been going for a long time and they wanted to see a product produced at the end of it could be used and it was workable. And a lot of people

probably went down the track and said that this is the path of least resistance to get something that may not be the best thing, some people might think it was the best thing. But people think that it is definitely workable and will enhance CIMS first edition. So it's better than the first edition, possibly not as good as a new edition might contain and I'm saying that in the knowledge that the next AIMS edition comes out in 2017 and I think there is a lot of supporting documentation and training that is coming out with out, which may be quite attractive. (Emergency service representative #2)

2.4 A broader definition of collaborative emergency service sector partners

A number of participants noted the general widening of what constitutes emergency service sector partners in recent years. While partnerships with traditional emergency agencies, such as the police, fire service and ambulance were still central and crucial; there is a growing appreciation for the importance of forging partnerships with organisations that traditionally sit outside the emergency services sector. Working with the community and spontaneous volunteers, not only during emergency incidents, but also in the planning stages was viewed as invaluable to ensuring an efficient and effective response that not only meets community needs, but taps into their resources. This became especially apparent during the Canterbury earthquakes:

I think it developed over time into some broader understanding of this isn't just the immediate response agencies deal, there is a whole heap of need for engagement and collaboration across a broad sector of the community. And even driving that through to engagement with things like the student army and working through on that basis. Those things were particularly challenging to manage if they just spring up out of nowhere, they are far more valuable if you had some engagement and some understanding and some ability to meet some of their needs and ensure that what they were doing was valuable as part of the bigger picture as well. I think again some of the frontline stuff, where members of all of the organisations involved actually got in and did what needed to be done. (Emergency service representative #8)

…it was broader than that and that added to the learning as far as who should be more broadly engaged with beforehand as well. We did see some examples of where the communities themselves drove good collaboration. And one example of that was around information sharing. I went down to Sumner Fire Station at some point and some members of the community were there and were saying we don't know what's going on, so we came down to the fire station to find out. And as a result of that we started putting up information boards in front of the fire station where others could contribute to, to say well this is what is going on, this is what has been recognised, the response to it and what you can expect. And working through it. So it provided a good source of information sharing that was really community directed. I guess information sharing became, it got better, but showed us how broadly different our platforms were for capturing information and how difficult it is to share that. (Emergency service representative #8)

The Canterbury earthquakes also highlighted, to one emergency service in particular, the important role that their 'professional volunteers' (as opposed to spontaneous volunteers) have to play in coordination with communities. Those who volunteer within the emergency services sector often volunteer for numerous organisations within their communities and thus have a wide knowledge base and strong relationships with other organisations. The recognition of this and the need to better utilise these connections was discussed by one participant:

I guess one of the challenges and one of the strengths in collaboration is the volunteers. So one of the challenges is that in a lot of cases the same people are committed to their communities and volunteer across a broad range of organisations. And that was one of their collaborative strengths as a result of that they bring quite a bit of knowledge of other organisations, how they work and what resources and skills they have and how they can be pulled together. I think one of the things that we need to ensure we don't underestimate is that broad engagement, in particular, at a real base community level that volunteers have. (Emergency service representative #8)

The revised CIMS second edition also recognises the role that communities have to play in response to emergency incidents. The new edition includes information regarding community level response and recommends that communities and the business sector should be appropriately incorporated into response coordination planning and advises that response agencies need to accommodate, link with, support and coordinate community participation in response (DPMC, 2014). However, one participant noted that the Civil Defence Emergency Management Act (2002), while not discouraging a wider inclusion of partners, did not actively encourage it.

I would argue that it doesn't actively discourage, but it doesn't actively encourage. It doesn't drive people to better utilise and better understand communities. I think some of the education that is occurring around that has got better, so it is starting to push some of those things down. (Emergency service representative #8)

2.5   Structural and strategic issues

While collaborative relationships exist at multiple levels across the emergency services sector (local, regional and national) a number of structural issues were identified. The majority of issues were reported to occur at a regional and national level.

2.5.1   Local and regional issues

Local and regional collaboration between emergency services, including Civil Defence, territorial authorities, Police, the New Zealand Fire Service, and ambulance were hampered by a number of structural issues.

At both a local and regional level the differing regional and district boundaries that exist across all key partner agencies was identified as a challenge to efficient and effective engagement. Regional and / or district boundaries between agencies rarely aligned, and this in the view of participants hindered the ability to build quality-working relationships at a regional level. This impacted particularly on Civil Defence structures and the Coordinating Executive Groups (CEGs) that exist in each Civil Defence region. CEGs are statutory mandated committees made up of agencies that have a leading role in delivering civil defence emergency management (senior member of Police, New Zealand Fire Service, chief executive from the District Health Board and any other persons co-opted). The requirement for CEGs reflects the fact that, as required by legislation, civil defence is a multi-agency responsibility.

One participant provided an example of the difficulties experienced at the regional level by different territorial boundaries:

Well that's the other difficulty at the moment. You take Civil Defence - you have the group or the region based on the regional council boundaries, so you have Canterbury. You then get in each of the patches the territorial authority areas, you

overlay say the fire districts or St John and police districts and you find you have different boundaries all over the place. For me the ideal model for emergency services, the boundaries are all aligned. So that's Civil Defence, fire, police and St John. And in the South Island you would only have two or three zones, we're not that big a country. (Emergency service representative #9)

The Civil Defence boundaries are based on the regional councils boundaries for legislation. However, they don't align [with other partners]. For instance take Kaikoura. It's fire services are provided by the Marlborough Urban Fire District and I think they've got an enlarged rural fire district up there as well….when it comes to an emergency response you've got Civil Defence reporting to the Canterbury Region Civil Defence Group, but it's fire going the other way. So there are just some anomalies around that. I don't know what it's like working up there in Kaikoura and who comes in, they'll have their local fire person coming in, but they'll be reporting up to Marlborough with someone else reporting back down to the Canterbury Civil Defence Office. I have a feeling that might apply for health up there too. They might report to the Marlborough health board, not the Canterbury Health Board. (Emergency service representative #9)

Participants also highlighted issues related to the older style regional structure of Civil Defence. In recent years there has been a growing trend to develop a more centralised civil defence emergency management structure to encourage resource sharing, shared planning and collaboration. However, a number of regions still prescribe to the older, less collaborative, civil defence regional model, with each individual territorial authority in a region possessing its own emergency operation centre where Civil Defence has its headquarters. According to participants in areas where there had been challenges setting up centralised regional Civil Defence offices this was largely due to:

- a lack of political will;

- territorial issues between the various territorial authorities; and,

- local mayors and Chief Executives not receiving the correct advice from relevant parties.

The disinterest to form a centralised regional Civil Defence was especially discussed in relation to the civil defence situation in Canterbury. This is explored in greater depth in Section 5 of this report.

Politically it is not acceptable. Each Chief Executive and particularly the mayors… at your governance level, but that level and to a certain degree down at this level, the Council chief executive level, there is not the will to do it. (Emergency service representative #9)

I think some of it is trust. And I think in the past with the regional team, there is a bit of being told how you should do it, which gets people's backs up. We also have, probably in Canterbury, a couple of pretty strong personalities. (Emergency service representative #9)

I think, to a degree they are thinking, "I've got to have this right for my area. And therefore I've got to do it. I've got to take responsibility". Rather relying on others. You can't rely on one person to get all the goals. (Emergency service representative #9)

A lack of information and the correct advice about the benefits of forming a centralised civil defence response was, in one participant's opinion, the reason that territorial authorities in Canterbury were not willing to form a group similar to one that exists in the Wellington region.

I don't think we put the right sort of information up to the CEs and the mayors... So there is just this whole misunderstanding about what the Civil Defence Emergency Management Act was trying to do. When they created the Civil Defence Emergency Management Act in 2002 which led to the formation of these regional groups, I look at it as being one team. It's trying to create the one team approach, not continue in that nine team Civil Defence Area in Canterbury. But somehow it hasn't gelled that way and part of that is the structure pretty much being the same as it was pre-the new legislation coming in in 2002. Territorial authorities just carry on as before. We all need to come together as a team, because we all have the same interests at heart, we're all for the best for the communities and to make them as resilient as we can leading into an emergency. (Emergency service representative #9)

Across local and regional levels continued fiscal restraint and funding issues were identified as a structural barrier to building effective working partnerships, especially in regards to the ability of organisations to participate in training and exercises and conduct debriefs.

But one of the consequences of the fiscal pressure that the government agencies are under is that there is less and less capacity in their individual organisations, but a drive to cooperate more and get on together. Those things are actually mutually exclusive and I think the government understands these things, we've have these discussions in a few places now, but it's frustrating the shit out of them, because they want us to be lean and efficient and they want us to cooperate. But the flipside of screwing the money down has been to create a barrier to relationship building. And the barrier is driven by lack of resource, lack of capacity, lack of effectiveness, the large departments slightly less so because they are so big you can squeeze over here and get more there. But for the smaller agencies it's a real struggle. (Government agency representative #4)

The lack of capacity that funding issues or increased fiscal restraint creates was also noted by another participant as a challenge to participating in training and exercises with other agencies.

There maybe the need in some areas [for more training and exercises], but then we're all busy, so we probably don't get the chance to and there are costs involved. That's the same with debriefs of bigger incidents where it would be, in the ideal world, it would be good to do a lot more debriefs together, but it gets so hard when everyone is so busy to get everyone back together again and the costs involved. So that would be something that would be great, to collaborate more on debriefs, but the cost and time is a barrier there. (Emergency service representative #3)

2.5.2 National issues

At a national level, the creation of the Emergency Services Chief Executives Forum was viewed as a positive way to foster collaboration and strengthen partnerships between the emergency services. The 2012 Report of the Fire Review Panel recommended the establishment of this Emergency Services Chief Executives Forum originally comprising of the Chief Executives of the Department of Internal Affairs, New Zealand Fire Service, New Zealand Police, emergency and ambulance services (St John Ambulance and Wellington Free Ambulance), and the Director of the Ministry of Civil Defence and Emergency Management.[2] The Forum was formed to be an advisory body to Ministers and agencies, and could address legislative issues, inter-agency coordination and gaps and overlaps in service provision.

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[2] According to one participant, the DIA are no longer a member of the Forum.

However, according to one participant, the effectiveness of the forums is currently negatively impacted by irregular meetings and an agenda that does not tackle collaborative issues.

> *So again that's an example of a really good collaborative committee that should work strategically, but in questioning those people about how well it is working, they arguing that it is not meeting regularly even and the agenda is not strategic enough. So that is not a criticism of any one person, it's probably just indications of its infancy. But that's the sort of thing that has huge potential if it operates properly at a national level. I think despite what the Swain report said, it would be worth questioning whether the membership is too narrow and we'd get wider benefits if we took a few other partners in the frame. But that's a good example of one that should work particularly well at a national level. (Emergency service representative #7)*

The same participant identified the need for the Forum to be opened to a wider range of emergency sector participants, including the New Zealand Defence Force, the National Rural Fire Authority and Ministry of Foreign Affairs and Trade. Overall, the participant considered the Forum to be a great platform for the discussion of important collaborative and strategic issues, however, currently viewed the Forum as a missed opportunity to support collaboration amongst key emergency sector agencies.

> *So I think there is probably another three or four [agencies] that could be added to that mix to make it a really strong team. And then I think the regularity of the members and the agenda. And I know they don't want to get into the weeds, but perhaps having a pretty firm idea of what the agenda might look like, that is not just my view, but we met with some people as part of this Fire Service review that is going on at the moment and asked them what they thought of the Swain report and a common theme throughout all of them, was that it's a really good forum but it hasn't really gained momentum yet. (Emergency service representative #7)*

3   Case studies

Throughout the interviews a number of exemplary examples of successful collaborations were highlighted, alongside collaborations that were not. This section will present two case studies, one which highlights the successful amalgamation of Rural Fire Authorities in Southland into the Southern Rural Fire Authority and the other explores the problems experienced in Canterbury in forming a centralised regional civil defence office.

3.1   Successful collaborations

A number of successful partnerships and collaborations in the emergency services sector were noted by participants. The most commonly mentioned were the:

- Wellington Regional Emergency Management Office (WREMO);

- Southland Civil Defence Emergency Management Group;

- Auckland Tourism, Events and Economic Development's Major Events Operations Centre;

- The Ministry of Transport's Safer Journeys road safety strategy;

- New Zealand Search and Rescue Committee;

- Enlarged Rural Fire Districts;

- multi-agency response to international disasters and emergencies (for example the New Zealand Inc. response to Cyclone Pam in Vanuatu); and,

- Officials Committee for Domestic and External Security Coordination (ODESC).

The above were all described as successful due to a number of factors:

- lack of territoriality;

- shared vision;

- political will;

- unity of purpose;

- trust; and,

- strong relationships.

In discussing the Southland Civil Defence Emergency Management Group, one participant noted:

> And what was really obvious there, and similar to the Southern Rural Fire Authority arrangement, was that everybody was there for the right reasons, they didn't bring egos, they understood the purpose of their membership, they understood that they were their to contribute to the greater good of the broader entity. And so again, that is what has formed my views of the personalities. What drove that was not the structure of the thing, not the fact that it was legally mandated or whatever, it was that the people who wanted to play or were asked to play actually did so and made it work. So that set the basis for my thoughts about people and personalities. They made it work. And so you do not see the same degree of cooperation and coordination in other parts of New Zealand and you don't see it quite as well nationally either as well. (Emergency service representative #7)

Each of these factors was present in the following example of a successful collaboration, the creation of the Southern Rural Fire Authority.

Case study: Southern Rural Fire Authority and Enlarged Rural Fire Districts

One of the main strategic goals of the National Rural Fire Authority in the last decade has been the merging of smaller rural fire authorities into larger rural fire districts.

According to documentation produced by the National Rural Fire Authority the purpose of the Enlarged Rural Fire Districts Strategy is to:

> *"improve the effectiveness of the rural fire sector through better resource management. This will be pursued by promoting and supporting the voluntary amalgamation of rural fire authorities in the regions"* (National Rural Fire Authority (NRFA), n.d., p. 9).

Each enlarged rural fire authority is governed by a board. Board members generally comprise of suitably qualified representatives of the rural fire authorities key stakeholders (e.g. territorial authorities, department of conservation, forest owners etc.) and the Board is accountable to these stakeholders.

▪ the primary responsibility of the Board is to:

▪ ensure the rural fire authorities statutory responsibilities are met;

▪ set the strategic direction of the authority; and,

▪ oversee the principal rural fire officer's performance (NRFA, n.d.).

One of the first regions to voluntary amalgamate was the Southern Rural Fire Authority. The Southern Rural Fire Authority was established through the amalgamation of five separate Rural Fire Authorities (Southern Plantations RFD, Department of Conservation Southland Conservancy, Southland District Council, Gore District Council and Invercargill City Council) on 7 August 2003 (Southern Rural Fire Authority, 2014). The Southern model is viewed as one of the more effective of rural fire authorities to be formed and Internal Affairs Minister Peter Dunne heaped praise on the model last year and stated in a newspaper article "*The Southern Rural Fire Authority is an impressive model for others to follow…We are very keen to see the type of model applied here replicated nationally*," he said. "*There are very strong lessons [in the Southern Rural Fire District] for integration of the rural fire service, volunteers and the New Zealand Fire Service working together.*" (Ratley, 2014).

The Southland Rural Fire Authority was also raised as an example of a successful collaboration by participants.

> *What I noticed around the collaboration, between the individual board members was that they all really, really understood the purpose of being joined up and working together and so they understood their role as board members. None of them brought an ego to the meeting or a siloed I'm only going to talk about my part of the world sort of approach. And so they really, really worked well together. And that's an example of what I'm talking about when there is really good collaboration. (Emergency service representative #7)*

> *I think they've had a common purpose and they're running a business together and working as professional board to run a business and that has strengthened their understanding and relationship. And they've all had to chip in to make it work. They haven't been able to be freeloaders in any sense, they've all had to put their shoulder in to make the business operate. They get out of it what they put into it. (Emergency service representative #13)*

In general, the voluntary establishment of enlarged rural fire districts in a number of regions had resulted in the creation of strong inter-agency relationships and closer links to communities.

> *There are about 11 enlarged rural fire authorities around the country. And they've had quite a profound influence on the way the community responds. On your enlarged fire districts you have a board and that board is representative of the community. You have local government, DOC [Department of Conservation, forest owners, federated farmers and the Fire Service. So that group work as a board to run rural fire for the district and the district is an enlarged district, generally provincial size. So all those agencies come together to run a business, but when the pressure is on they can connect very easily in accessing what is required from each other to help with the situation. So yes, they have been successful in building relationships. And building cross-sector relationships. (Emergency service representative #13)*

3.2   Struggling collaborations

While the majority of participants struggled to name collaborations that were not successful, a number mentioned two examples of collaborations that were struggling to get off the ground. The failure to establish, voluntarily, an enlarged rural fire district in Central Canterbury was discussed by one participant, however, overwhelmingly most participants when questioned noted the struggles between the various councils in Canterbury and the failure to fully establish a functioning regional emergency management office in Canterbury.

Case study: Canterbury Emergency Management Office and centralised regional emergency management offices

The Civil Defence Emergency Management Act 2002 came into effect on the 1 December 2002 and replaced the Civil Defence Act 1983. One of the purposes of the act was to:

> *"… require local authorities to coordinate Civil Defence Emergency Management (CDEM) through regional groups across the "4Rs" (reduction, readiness, response and recovery) and encourage cooperation and joint action between those groups."* (Ministry of Civil Defence and Emergency Management, 2015, para. 6).

Therefore Civil Defence Emergency Management Groups (CDEM Groups) are a core component of the Act. A CDEM Group is a consortium of the local authorities in a region, working in partnership with emergency services, to undertake CDEM functions within their region.

In a number of regions, civil defence coordination and partnerships have gone a step further with the establishment of the centralised group office models, such as that established in the Wellington region, Southland and Hawkes Bay. This relatively new trend in regional civil defence emergency received praise from participants due to the ability to combine resources, people and knowledge:

> *If you have critical mass and a single approach you can be a lot more ballsy when it comes to initiatives, whereas a dispersed model like that [individual Civil Defence offices]. If there is only two people in each place who the hell is going to do all that stuff? You can add a lot more value as a team, as opposed to individuals and couples. (Emergency service representative #14)*

Despite a growing trend for a more centralised civil defence emergency management in regions, there have been issues establishing a more conjoint regional emergency

management response in Canterbury. This is despite the challenges faced by all the territorial authorities in Canterbury caused by the two earthquakes.

Well, Christchurch is really a very much unique one. The relationship between Christchurch City Council and the group office at the regional council level was probably the poorest in the country at the time of the earthquake. The group is supposed to provide coordination amongst all of those because there is one plan. And they are actually supposed to call the shots because that's where the group controller, they should listen. But it didn't work like that in Christchurch. (Government agency representative #10)

You talk to the mayors through the Civil Defence joint committee; the first thing they look at is about their own patch. I'm still going to have my whatever. I've said the way round this is to put us all under the one team, or you can even leave us employed by each TA, but our work is coordinated through the group. So we've got one work programme rather than individual programme territorial authorities. You've only got one planning document. You've got so many efficiencies it doesn't make sense the way it is at the moment. (Emergency service representative #9)

And there was a report done, commissioned by the regional Civil Defence team that said that the Wellington model is a step too far, which I think is a bit of shame actually. Because I personally think that it needs to be delved into.   As it was it caused us all sorts of problems having the two levels of Civil Defence in September 2010. You had the regional team in one location, the local teams in multiple locations and it gets resource hungry. (Emergency service representative #9)

Participants proposed a number of reasons why this model had yet to gain traction in Canterbury including:

- patch protection;

- personalities;

- lack of trust;

- lack of political will; and,

- poor relationships between territorial authorities.

The reason why this hasn't occurred is that the mayors and the Chief Executives in the region haven't said we've got to change. I don't think there is that compelling case for change has been recognised at that level. Because if the boss says we're going to do it differently, people need to understand that they need to hop on board and if the bosses are silent about these things then people will continue to do these things. (Emergency service representative #14)

So you had in Canterbury, each of the councils with their own structures and a limited degree of trust and a different degree of relationship and a different community focus to each other. (Emergency service representative #8)

The issues from the first event and relationship challenges hadn't been addressed or resolved and for some degree that resulted in a magnification of the challenge. We'll put our walls up and we'll get on and do what we need to do. We'll come to your teleconferences, but that's just about the limit of the play as far as it goes. There was a barrier to coordination with them. Now genuine collaboration would have meant them saying, well we've both been impacted by a significant event. We both have the opportunity to support each other into the future, how are we going to make this bad situation better for us? So when it came into the second major event, both we in make-do situations that were quite separate. (Emergency service representative #8)

According to one participant some territorial authorities are hesitant to commit to a fully centralised model of civil defence due to the perception that as it would be based in Christchurch that it would be too Christchurch-centric.

> *Some of the other authorities have got concerns that the regional team will be too focused on Christchurch. And it's a perception, more than a reality, but this could come up through the political level and stymy… if you can break that down they can see, because things in Canterbury are very parochial. (Emergency service representative #9)*

However, as a participant commented in regards to the development of WREMO in the Wellington region:

> *You give up something to get something better in return I guess. (Emergency service representative #14)*

4 Key facilitators and barriers of successful collaboration

The participants identified a number of facilitators and barriers to successful collaborative relationships and partnerships. Almost all of the facilitators and barriers that emerged throughout the interviews were also key enablers that were explored in the literature review. Many of the barriers and facilitators are also explored in some depth in Section 4 of this report.

A summary of the key barriers and facilitators that arose throughout the interviews are presented in the below table.

Table 1: Barriers and Facilitators to Building Successful Interagency Collaborations

Facilitators	Barriers
- Personalities - A shared vision - Unity of purpose - Trust - Open and honest relationships across all levels of organisations - Communication - Strong and supportive leadership - Willingness to work together (voluntary) - Multi-agency exercises and training at local, regional and national levels - Organisational culture that is supportive of collaboration - Buy-in from all levels of the organisation - Willingness to share resources - Conducting multi-agency debriefs - Strong knowledge of each others capabilities and capacity - Understanding of different organisational cultures	- Difficult personalities - Narrow collaborative inclusion - Territorialism / patch protection - Fiscal restraint - Time pressures - Historical organisational differences - Absence of a shared vision and unity of purpose - Lack of knowledge of intra and inter-agency responsibilities, skills and tactics - Forced collaboration - Internal agency historical and current issues - Organisational culture and / or philosophy that precludes collaboration - Legislation and mandate - Disparate district and regional boundaries

Of interest, current legislation was raised a barrier to collaboration as it provides a lack of clarity of roles. In this regard the Fire Service Act (1975) was reported as out dated and failing to reflect the modern New Zealand Fire Service. For instance, as noted in the 2012 Report of the Fire Review Panel, the New Zealand Fire Service responds to multiple types of emergencies that are not included within the provisions of the Act (DIA, 2012). Regardless, the New Zealand Fire Service have undertaken these extra functions due to their capacity to respond and their duty to ensure that New Zealand communities are safe (DIA, 2012). However, as the DIA (2012) report highlighted, a lack of formal mandate to respond to non-fire emergencies has led to gaps and overlaps in service provision and uncertainty at incidents regarding agency responsibilities and incident management.

According to the Fire Service Act (1975) when the Chief Fire Officer "considers the brigade could render assistance" at a non-fire emergency, it allows the brigade to attend that emergency. However while NZFS can attend these non-fire incidents the resources and training of fire brigades can only be used for fire fighting and Hazardous Substances and New Organisms incidents. As such, the Fire Review Panel proposed a redrafting the fire legislation to validate the current practices of the NZFS (DIA, 2012) and this was also recognised in the latest Fire Services Review discussion document (DIA, 2015). It should be stressed that despite the lack of clarity, and similar to the findings from the international literature, legislative obstacles are generally easily overcome and the legislation was not reported as directly impacting on the formation of quality working partnerships across the emergency sector.

> *Notwithstanding the impediments of legislation, if people understand the right thing to do and get on with it, it can be done. (Emergency service representative #7)*

Insufficient time to developing collaborations was a barrier that was mentioned by a number of participants, however, this barrier was not prevalent in the international literature. While time was mentioned in the literature in regards to having a timeframe that was realistic when establishing collaborative partnerships, in New Zealand, time issues were more related to a lack of hours in the day to commit to genuine collaboration and relationship building across the emergency services sector.

> *I think time is probably a genuine barrier now. Everybody's roles are busy roles with more and more expectations of delivery and much more accountability for that as it goes through. (Emergency service representative #8)*

Despite the existence of a number of barriers to collaboration within the emergency services sector in New Zealand, according participants most barriers can be easily overcome through the presence of strong relationships and unity of purpose.

> *Most of our barriers are probably quite artificial. You have a look at it and say there are barriers to collaboration, but they are all barriers that can be overcome easily, just as you can use them as a shield. (Emergency service representative #8)*

4.1   Facilitators

There were a number of facilitators that were mentioned by multiple participants. These included:

- strong relationships;
- communication;
- unity of purpose / shared vision;
- exercises and training;
- strong knowledge of each others capabilities and capacity; and,
- strong and supportive leadership.

Each of these key enablers to quality working partnerships and collaborations are explored in more depth below.

4.1.1 Strong relationships and communication

The presence of strong relationships and regular communication between organisations was viewed as vital by participants. These two factors were described as crucial foundations to successful collaborations, providing a base from which trust between agencies grew and knowledge and understanding capability and capacity of other organisations developed.

> *Relationships are absolutely vital. Having good and regular communication between parties… I think the more you know people, the more you understand how they work, the better you knit together. You can never overdo relationship building and communication. So it is something that you just have to keep working on. (Emergency service representative #14)*

One participant commented that robust relationships can bolster and outgrow formalised collaborative agreements and systems.

> *It is the relationships, but it's backed up by a formalised network of MOUs [memorandum of understanding] or service level agreements or is in procedures, at least once a year you've got to have a meeting or you've got to have an exercise, you've got to do such and such. So that's where the formal side comes in, that's a tangible exhibition of what you are trying to model. But it should outgrow that; a good relationship will outgrow the formalities and become just an inherent way of how people teams and organisations will operate. (Emergency sector representative #11)*

Communication was discussed as being important not only in building and strengthening relationships, but also when responding to multi-agency emergencies.

> *Communication is probably the biggest key to collaboration. And also identifying who is in charge. So knowing actually who is in charge and even in an operation centre type environment, establishing that right away, otherwise it gets confused and muddied and people don't know who is in charge. One of the big things is the command and control structure there. Being able to listen to other people, so communication is a biggie there. (Emergency service representative #3)*

> *What you need to do in a large-scale, complex emergency, you basically need to set up a system where multiple parties can work really well together. One of the key thrusts in here is all around building relationships so you can work better together in difficult circumstances. (Government agency representative #4)*

For collaborations to remain strong and grow, communication between agencies had to be open and honest, with a freedom to raise issues and discuss tensions that exist. One participant from a government agency noted that their organisation had engaged in a programme of relationship building with key stakeholders in order to foster honest and open communication.

> *So what we've done is basically over the years we've run a really aggressive programme of relationship building. We stick our people out on the ground on a regular basis and we build personal relationships with the people who do this. That's basically what we do. And we aggressively pursue real open, honest, clear communication and we encourage people to raise issues and we try to kill them straight away. Not ignore them, but deal to them. (Government agency representative #4)*

A number of participants noted that for communication between agencies to be effective it had to occur between the right people at the right levels of the organisation from those on the ground to those at the top. As one participant expressed:

We have a multi-level relationship matrix that we've done, and what we've tried to do with that, we're not trying to be funny with people, but we're trying to say the more senior managers should talk to the more senior managers, the next people should talk to the next people and the doers should talk to the doers. It's good for me to go and talk to the helicopter pilots, but it's not directly relevant, I'm not going to be ringing them up at 4am in the morning. The most effective thing is to have the liaison at the right level; so that management needs to be done by the right people at the right levels with a bit of cross fertilisation. Because you can't just have one level talking in isolation, it just doesn't work. (Government agency representative #4)

4.1.2   Unity of purpose / shared vision

Across the emergency services, successful collaborations were underpinned by a unity of purpose and shared values.

What binds all of us the local, regional and national level is unity of purpose. So the relationships you are talking about, I'm not very surprised that it is strong in the search and rescue domain. Because there is a very strong ethic, that regardless of where the volunteers come from, whether they are police, fire, civilians, there is a unity of purpose. (Emergency service representative #6)

I guess it's because you're all on the same mission, for the safety of the public and quick response and protecting everyone and minimising risk. So you all have got the same goal as such. (Emergency service representative #3)

One participant noted that a shared vision between agencies in New Zealand could overcome a multitude of barriers that can impact on successful partnerships and collaborations.

A shared vision…that will break down some of those barriers around legislative mandate, role responsibilities and working through that. We are a small country, a small population that is spread over quite a large geographical area in some cases. So we don't have the resource to do anything other than provide service through collaboration. (Emergency service representative #8)

The shared vision of Safer Journeys was used by one participant to illustrate the power of unity of purpose to unite organisations and build strong collaborative relationships.

And we actually all do different types of jobs, but we are all contributing to a common set of results we are trying to achieve for New Zealand. And that's at a national level, at a regional and at a local level - the same applies. If someone sits down with their colleagues from the other emergency services to stick with the focus of the discussion and says ultimately we all do slightly different things, but we all ultimately are working towards some common outcomes. How do we work together to help each other? If we've got someone who does that and builds the trust and confidence of others what you can observe occur is those relationships develop, initiatives emerge. I think even in the absence of national structures doing it, it can happen locally and from time-to-time it does, but it is very person centric is my understanding. (Government agency representative #12)

4.1.3   Multi-agency exercises and training

Cross agency exercises and training, at local, regional and national levels was identified by participants as crucial element in the building of trust and a mechanism to ensure effective and efficient multi-agency response in times of emergency.

I think a key point to make here is when people train together. When you have agencies doing exercises and training together you get a level of familiarity and

understanding that when you come into a real emergency situation it just works. Because they know each other, they're comfortable with each other, and they can hit the ground running. So yeah, I can't stress the importance of that. (Emergency service representative #13)

According to one participant, training and exercises also provided an opportunity to tackle any tensions that may exist between agencies and how they can be managed effectively to ensure they do not negatively impact on response and partnerships.

And that's where the training together comes in. At the training exercise you have two or three scenarios that you will work through. You know where the tension areas are and you make a meal out of those areas. And so you then establish an understanding around how those tension areas are going to be managed. If it's about what point you hand it over, then you make a meal out of that in your training. And you dwell on it and everyone involved in it and providing a solution. You get an agreement that this is the way that we will operate in these situations. And then when you get to a real incident people have an idea in the back of their mind that model that they know that there is general agreement to. They might have to adapt it but they've got a model. (Emergency service representative #13)

4.1.4   Strong knowledge of each others capabilities and capacity

Full knowledge and understanding of each other capabilities and capacity were noted by participants as not only being an outcome of strong relationships and communication, but in it's own right as being an essential element to ensuring effective and collaborative multi-agency response.

But also knowing somebody's role and understanding what capacity and capability they have… And knowing where each service adds value is quite important. (Emergency service representative #14)

Understanding and continuously learning about agencies deployable capabilities is vital to emergency service collaboration. (Government agency representative #5)

Possessing sound knowledge of the capabilities and capacity of other emergency sector agencies was viewed as important by one participant, as knowledge had the ability to combat changes in contacts and staff that often occurred across organisations.

People change, so it's important to have a rolling program of understanding what capacity and capability people bring to the party. (Emergency service representative #14)

Another participant commented that a lack of knowledge of the roles, responsibilities, powers and capabilities of their agency had been an issue for their organisation in the past and impacted negatively on their ability to collaborate across agencies in times of emergency.

The problem we had was that people didn't understand what our organisation does. They didn't understand our roles, our responsibilities and our powers. So one of the things that we learned was that people need to understand where you fit and what you do and how you do it and why you do it. And I think that's another one of the keys to this thing, role clarity. Roles, responsibilities, powers and capabilities. And one of the things you need to understand is what those things are. Because there are big differences between a role and responsibility, a power and a capability. And actually to be an effective collaboration you need knowledge of all of them. (Government agency representative #4)

4.1.5 Strong and supportive leadership

A leadership that was strong and fully supportive of collaboration across multiple agencies was perceived as essential facilitator of success working partnerships and collaborations.

> *Leadership is hugely important. (Emergency sector representative #11)*

Leadership had the ability to positively influence the culture of an organisation and drive a collaborative focus.

> *I think leadership is a key factor. Because leadership will drive having the right, not just right mandate, but performance indicators, behavioural signals and expectations. (Emergency service representative #8)*

> *If people have good leadership they understand the importance of those sorts of things [collaboration]. (Emergency service representative #7)*

4.2 Barriers

Many of the barriers that emerged from the interviews with key stakeholders were the converse of facilitators, for example a lack of strong leadership and absence of a shared vision or unity of purpose. However, the most commonly cited barriers by participants were:

- personality clashes;
- patch protection / territorialism;
- organisational culture that precludes collaboration; and,
- internal issues within organisations.

These factors are explored in greater depth below.

4.2.1 Personality clashes

As highlighted in the case studies presented in Section 5 of this report, the presence of personality clashes between organisational representatives presents as a major barrier to forging strong collaborative partnerships. A clash of personalities was one of the primary reasons that a centralised model of civil defence has not been able to be fully realised in the Canterbury region.

> *Relationships are born out of personalities I suppose, often when the relationships go badly it's a result of personality clashes. (Emergency service representative #14)*

> *I generally find that with emergency services, you generally come together if you've got those personalities right. (Emergency service representative #14)*

> *I think the problems we were having with this other agency stemmed from personality clashes. (Government agency representative #4)*

4.2.2 Patch protection / territorialism

Patch protection and territorialism were also barriers discussed by participants, especially in relation to collaborations and relationships that struggled (for example civil defence arrangements in Canterbury and tensions between the urban fire service and rural fire service). Territorial attitudes and patch protection not only impacted on the quality of working relationships, but also could potentially have a minor impact on the management of emergency responses.

But are isolated cases where there have been tensions and been arguments about territory and it hasn't resulted in shambolic events occurring, but it has resulted from a far than perfect situation being managed. (Emergency service representative #13)

And I'd say also probably in the past there has been some tensions between some of the regional group team, but they've had changes over there as well, so that is historic. So I think we're passed that, but there is still this culture of this is my patch. It's patch protection in a way. (Emergency service representative #9)

4.2.3 Organisational culture that precludes collaboration and internal issues within organisations

Within the New Zealand emergency services sector, if it is perceived that an organisational culture is not inclusive and collaborative, this can impact on the quality of working collaborative relationships. This was especially discussed in relation to the New Zealand Fire Service, due to a number of factors, including the division between fire and rural services and tensions between volunteers and paid fire fighters.

Because if your organisational culture is agile and proactive, then you won't get a lot of the complications that you can get. If your culture is traditional and hierarchical and rigid, then you get problems. So I think culture does have quite an impact. (Emergency service representative #13)

To turn it around I think the Fire Service internally needs to ascribe to a set of values and exhibit those values that reinforce not only their internal cooperation, rural versus urban and volunteer versus paid and those splits that occur, but I guess most importantly is that they need to have a much more outward look and understand what assistance they can render other parts of New Zealand society. And that doesn't mean they have to be in charge. They tend to only be interested, they have a formal mandate written in the law that says they are in charge and they are going to be doing something and they are the lead agency for XX. And if everything is viewed through that prism, then we are just going to fail. They have a lot of offer, but they don't allow themselves in a systemic way to be used as a resource by others in my view. (Emergency sector representative #11)

Organisational culture and internal issues within organisations were commonly linked by participants. An organisational culture and mandate that was supportive of collaboration was also one that cared about it's people, which in turn, according to one participant, lead to engagement with other agencies.

The thing about culture I guess, is that I would want to develop people and create a culture where they, the people in the organisation care and that links through to engagement. Because if people care, like if they give a shit, then the rest follows. They will be happy, they will be productive, they'll use good judgement, they'll show initiative. (Emergency service representative #1)

5   Commonalities and differences across the sector

There were numerous common views pertaining to collaboration across the emergency services sector, especially in regards to the attributes that help foster quality working relationships and those elements that inhibit collaboration.   While very few differences were identified during the key stakeholder interviews, the primary difference was the importance and centrality of collaboration to smaller and volunteer emergency service sector organisations in New Zealand.

5.1   Common views across the emergency services sector

All key stakeholders interviewed agreed that, by and large, emergency service collaboration in New Zealand was in a strong state, especially in regards to day-to-day operations and response to business-as-usual incidents. There was a recognition by the relevant agencies interviewed that responses to major incidents, such as the Canterbury earthquakes, had revealed gaps in multi-agency response to complex events and a need to do better in these situations.

In an attempt to address some of the gaps and incorporate learnings that arose from a number of recent large-scale complex emergency incidents into emergency service response, a revised issue of the CIMS has recently been released. All agency representatives questioned the New Zealand Fire Service's reluctance to "sign onto" the new CIMS model and many agencies perceived this decision as an indication of the non-collaborative nature of the agency.

All participants agreed that there was no one agency that stood out as engaging better than others, and in turn, no agencies were identified as particularly worse at collaboration than others. However, the search and rescue community's values and philosophies were noted by a number of participants as being completely inclusive of other agencies. The search and rescue community were held up as an example of a collaborative model that works well, especially in regards to collaborations at a community and local level. One participant when questioned about exemplar collaborative cultures within the emergency services provided LandSAR and the Coast Guard as examples:

> *LandSAR, they're really good….it does work well. And it's a relaxed culture. And maybe Coast Guard. I don't know much about Coast Guard, but people say it's a good organisation and that it works well. And it's a hugely enthusiastic organisation. But LandSAR comes to mind best for me. It's a good exemplar of an organisation that works well. It's always had a can-do attitude and it's never had a lot of resources. But it's always been pragmatic and community focused and I don't know it's an interesting question. (Emergency service representative #13)*

The key enablers and facilitators discussed across the agencies were similar, and all discussed the importance of strong relationships and communication. The importance of an organisational culture that was agile and supportive of collaboration was also commonly mentioned across agencies. Many participants questioned the collaborative nature of the organisational culture of the New Zealand Fire Service, a perception that emerged due to the existence of two fire organisations in New Zealand.

Barriers to building quality working relationships were also similar across agencies. The majority of participants noted that where collaborations had struggled, the main issue was personalities and patch protection. The issues between the territorial

authorities in the Canterbury region were frequently mentioned by participants as an example of a situation in which both personalities and territorialism had impacted on quality working relationships between emergency sector agencies.

Participants also shared the perspective that the amalgamation of urban and rural fire services in New Zealand would greatly impact on their ability to build stronger working partnerships with the New Zealand Fire Service and would provide a chance for the New Zealand Fire Service to create an organisational culture that encouraged and fostered quality collaborations with others from the emergency services sector.

5.2   Differences across the emergency services sector

While differences in views about collaboration across the emergency services sector in New Zealand were scarce, there were differences in the importance that smaller, less well funded, largely volunteer based agencies placed on collaboration, especially local level community collaborations, when compared to larger emergency sector agencies.

A number of participants noted the difference between the importance placed on collaboration by volunteer agencies, especially within the search and rescue arena in New Zealand. Volunteer organisations, by their very nature, exist only through strong community collaborations and partnerships with other agencies. As quoted earlier in the report the search and rescue sector *'lives and dies on the relationships'*. Further in an area such as search and rescue, all of their incidents involve multi-agency coordination and cooperation, which is not always the case for larger, more traditional emergency services such as Police, the New Zealand Fire Service and ambulance.

> *I suppose one of the characteristics is those large organisations have quite a large element where they are doing a single role. They are doing it by themselves. When they have to cooperate, they almost have a built-in tension. They do what they do, and now all of a sudden they have to do something with someone else. Search and rescue is always with someone else. (Government agency representative #4)*

The ability of smaller and non-hierarchical agencies to empower their members to build collaborations, especially at community and local levels, when compared to larger agencies was noted by participants as a difference.

> *Empowerment. It's absolutely key. The other way is that you restrain everybody and you don't them do anything and nothing gets done. And I guess we have a philosophical approach that will run the risk of confusion and diversification of opinion, we'll run that risk, rather than the risk of not getting people out and about. The other thing was for and this is where the challenge is for bigger agencies I'm sure, we are just small. So you're talking about corralling 15 people which is not that difficult actually…it's actually relatively easy to keep them in line. I'm sure if you've got 5,000 policemen it's a bit more tricky. So I have some sympathy for the big organisations. And I think the police have got better, you will see low-level people fronting the media and that is a deliberate policy on the police's part. (Government agency representative #4)*

> *So if your agency is clear about your mandate and is liberal about the interpretation of the mandate, then I think generally it can be solved. When people are empowered to make sensible and pragmatic solutions and discussions around solving things, things get solved. But if their agency doesn't give them that mandate, or empower them to make those calls, you get people digging in and*

saying, well Rule 37B is this and you can't deviate from it because it says. (Emergency service representative #13)

Another participant also noted that, for a large organisation, the New Zealand Police appeared to better at collaboration, especially at a community level due to the nature of their policing role.

They are obliged in many ways to engage intimately with their communities because that is the nature of their role. They regularly work with and across organisations, sometimes in a leadership role, sometimes in a supporting role. And so my impression of the police is one of an organisation that have got this sorted… I think the Police force is an outward thinking organisation that know that they police with the consent of the community. I think that is absolutely embedded in their DNA and I wouldn't say that at all for the Fire Service. (Emergency sector representative #11)

Larger emergency service organisations were seen by some smaller and volunteer agencies as being more rigid and less agile. The professionalism associated with larger organisations was seen to impact on collaboration and in cases create tensions between agencies.

We see it between the tensions between St John and the New Zealand Fire Service for an example. And even for instance, over the use of radios between the police and fire service and ambulance service. Quite unnecessary tensions, but it's professionalism, it's a hierarchy of thinking, so the police may think that they are the most critical and their work is so confidential and it needs to be so secure that nothing else can be on the radio band. And so if you're coming into it from that mindset and that small view, nothing will work except for you having exclusivity of a band or exclusivity of a process. (Emergency service representative #13)

6 Actions and strategies to improve New Zealand emergency sector interagency partnerships and collaborations

Participants suggested a number of actions and strategies that could be undertaken to improve New Zealand emergency sector interagency partnerships and collaborations. Actions and strategies for the emergency service sector in general are explored first, followed by suggested actions that are specific to the New Zealand Fire Service.

6.1 Actions and strategies that can be taken across the emergency services sector

Action / strategy	Details
Mechanism to share case studies of successful collaborations	A need for a mechanism to share case studies of collaborations, which incident specific or a more formalised collaboration was identified. While independent reviews and reports provide lessons learned from major incidents, the majority of these focus on failings or negative aspects of multi-agency response. A mechanism in which success can be explored and celebrated would provide: ▪ a platform to recognise positive collaborations; ▪ a chance to explore and learn from the successful aspects of the collaboration; and, ▪ the opportunity to promote successful collaborations to other agencies and regions. *So it would be good to recognise people more and doing that together would be even better, because it helps the relationships. (Emergency service representative #3)* *And they just explained the benefits from their point of view, it was personal commentary on the benefits and advantages they saw, so it wasn't about any objective analysis or business analysis, it was simply social and personal commentary. And it is quite compelling and it can make a difference, because you present numerous reports or surveys and people just yawn. But if you get people to actually go to the meeting and talk to them they say my experience is this and if they are a reasonable presenter you can capture people quite quickly with an idea. (Emergency service representative #13)*
Refinement of the Emergency Services Chief Executives Forum	The Emergency Services Chief Executives Forum was identified as an ideal platform to strengthen collaboration between those agencies present. However, currently the agenda and frequency of the meetings has restricted the

	ability of the Forum to respond at a strategic level to collaborative issues. The development of quality working partnerships between emergency service agencies in New Zealand could potentially benefit from a more regular meeting schedule and an agenda that tackles the strategic issues associated with collaboration.
Mechanism for post-incident debriefs	The need for more frequent post-incident multi-agency debriefs was suggested by a number of participants. While debriefs of responses frequently occur internally within organisations, the need to come together for debriefs post-events was identified. Shared debriefs would allow for the continued improvement of multi-agency responses to emergency situations, provide an opportunity to develop a deeper knowledge of other agencies capabilities and capacities and help strengthen relationships between agencies.
	Multi-agency debriefs following responses ensure that collaboration is future focused and takes into account lessons learned. It's about wanting to make continuous improvements to our multi-agency response and listen to our partner agencies and government feedback. Debriefs allow us and other agencies to tweak their own standard operating procedures based on feedback and what has been learned during a response. (Government agency representative #5)
	So that would be something that would be great, to collaborate more on debriefs. (Emergency service representative #3)
Co-location of first responders	The establishment of the Christchurch Justice and Emergency Services Precinct, which will see the New Zealand Fire Service, New Zealand Police, St John and Civil Defence share infrastructure and integrate operations, was discussed by those agencies involved as the possible future of emergency services in New Zealand. It is hoped that co-location of multiple agencies will allow for greater information sharing, sharing of resources and greater coordination of services.
	I don't know if the executives of police, fire and ambulance etcetera have a clear view themselves of what good looks like for New Zealand emergency services ten years from now. I think everybody has a feeling that co-location is probably the way to go, but nobody wants to commit that to black and white writing right now. (Emergency service representative #1)

Greater collaboration between police, ambulance and fire at the national operations level	Both police and ambulance representatives suggested that collaboration between police, fire and ambulance could be improved by more frequent and regular communication between the most senior national operations managers in each agency. Greater collaboration between the three first responders at an operational level would provide the opportunity to explore strategic relationships and common operating models.
	There is probably good individual relationships between the Fire Service and Ambulance, Fire Service and Police, Ambulance and the Police, but I think getting the whole three together that's where we could probably add some good value. And that might just be a couple of meetings a year where we all get together at that higher level. (Emergency service representative #3)
Nationwide adoption of the centralised regional civil defence model	The nationwide adaption of the centralised regional civil defence model, such as WREMO and the Southland Civil Defence Emergency Management Group was recommended by those participants linked to civil defence response in New Zealand. This new regionalised model of civil defence had in the regions in which it had been implemented fostered joint planning and coordination, sharing of resources and allowed for a more effective regional response. The alignment of emergency service sector regional boundaries could also greatly enhance the collaboration that is possible at a civil defence regional level.
	It was stressed by participants that the development of a centralised model needed to allow for flexibility and did not need to follow a 'one model fits all' scenario.
	I recognised that a lot of the old system, the old ways worked reasonably well, but they were inhibited by certain structures that didn't allow them to work better. So I took them through a facilitated process, so this model they developed it, it's not my idea; this is what we came up with. (Emergency service representative #14)

6.2   Actions specific to the New Zealand Fire Service

Participants overwhelmingly agreed that their collaborative relationships and partnerships with the New Zealand Fire Service could improve through the amalgamation of the urban and rural fire services. The existence of one fire service, from the perspective of other emergency services, would allow for greater ease of communication and collaboration with the New Zealand Fire Service. The opportunity to forge a new organisational culture that embraces collaboration, both internally and externally, was also noted as a benefit of amalgamation.

The need for collaborative engagement with communities and local volunteers is now seen as vital by the emergency service sector in New Zealand. A number of participants, including those from New Zealand Fire Service, saw an opportunity for the New Zealand Fire Service to benefit from the strong community and multi-agency relationships that their volunteer base has at a local level. Further, the search and rescue sector was highlighted as exemplary model of how to engage with local volunteers and communities in a collaborative way, and the New Zealand Fire Service could benefit from closely links with the search and rescue community.

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8 Appendix 1: Literature Review

Building quality working relationships across the emergency sector:

A Literature Review

prepared for the

New Zealand Fire Service Commission

by

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1 Introduction

Successful interagency partnerships within the emergency sector are vital to ensuring the safety of the New Zealand public. The New Zealand Fire Service's (NZFS) vision statement, *"Leading integrated fire and emergency services for a safer New Zealand"*, embodies the importance of successful interagency partnerships to the NZFS.

The New Zealand Fire Service (NZFS) plays an active and significant role in the Co-ordinated Incident Management System (CIMS), a framework in which emergency management agencies coordinate and cooperate effectively in response to a wide range of incidents (Department of the Prime Minister and Cabinet, 2014). Further, it is anticipated that the NZFS will share infrastructure and integrate operations with the New Zealand Police, St John Ambulance of New Zealand and Civil Defence at the Christchurch Justice and Emergency Services Precinct (Christchurch Central Development Unit, 2015). Given the important role of the NZFS in emergency service collaboration, Kaitiaki Research and Evaluation has been commissioned to conduct research to understand:

- what is needed to build quality working relationships across the emergency services sector to inform the implementation of future joint ventures;
- what contributes to successful collaboration in major incidents, joint projects, and day-to-day operations; and,
- what New Zealand emergency sector agencies believe influences successful relationships.

Objectives of the literature review

A review of national and international literature on collaboration has been conducted to explore:

- key issues that interact to ensure successful working relationships;
- enablers of successful collaboration;
- barriers to collaboration;
- gaps in the literature; and,
- strategies for enhancing interagency collaboration.

Further, the literature review will inform the development of the project's fieldwork tools and provide the study's findings with a basis for comparison.

2 Approach

Search considerations

Information about relevant literature was sourced through literature searches using Google and Google Scholar and the following academic databases:

- Academic Research Library;
- Emerald Fulltext;
- ERIC;
- ProQuest Social Science Journals;
- MEDLINE;
- PyscINFO; and,
- SpringerLink.

The key word search terms used included: "emergency services", "cooperation", "collaboration", "blue light emergency services", "interagency collaboration", "interagency cooperation", "success", "barriers" and "facilitators".

Due to a limited amount of New Zealand literature, the majority of literature identified is international and includes literature from Australia, Canada, Norway, Sweden, United States and the United Kingdom. It should be noted that the majority of academic literature focuses on collaboration during major disasters and emergency incidents, as opposed to collaboration pertaining to daily operations. Therefore the search was not restricted to the emergency services sector and was broadened to include health, community and social services. In reviewing the literature it is evident that regardless of the sector, many of the findings surrounding successful collaboration are universal and applicable to the emergency services sector.

Definition and scope of collaboration

The concept of collaboration is broad and is used in a number of different ways (Majumdar, 2006). At the most basic level, collaboration refers to stakeholders working together to achieve a common purpose (Roberts & O'Connor, 2008). In other cases collaboration has been used to refer to joint efforts to achieve a common purpose in order to improve the quantity, quality, accessibility and cost effectiveness of services while simultaneously reducing gaps and duplication in current service provision (Majumdar, 2006). As highlighted by Eppel (2008), collaboration is used interchangeably with a range of other terms including partnership, alliance, strategic alliance, joint venture, consortium, coalition and group. The terms found in the literature indicated that collaboration is interpreted broadly and can include interagency activities that are defined as "cooperation," "coordination," "integration," and "networking".

Despite the broad range of terms used synonymously with collaboration, Kaiser (2011) stipulated that it is important to distinguish between the two more commonly used terms: collaboration and coordination. According to Kaiser (2011), *coordination* between agencies is:

> *"an arrangement in which a lead agency or officer directs an operation, project, or program among one or more other agencies" (Kaiser, 2011, p. 6)*

In comparison Kaiser (2011) forwarded that *collaboration* occurs when*:*

> *"… multiple agencies may perceive mutual benefit in working together, [whereas] coordination often is more of a top-down exercise. It [collaboration] takes place when a leader with authority over multiple organizations directs them to collaborate to achieve a specified joint purpose" (Kaiser, 2011, p. 6)*

Notably, Allen and Clarke (2010) argued that regardless of the term used, collaboration essentially involves seeking mechanisms to work more effectively together in order to be more efficient and achieve greater outcomes. For example, in an emergency setting collaboration allows for resources and risks to be shared which can lead to a more effective response (Stein, 1997). Strong partnerships are important and collaboration allows multiple agencies to tackle issues that one single organisation cannot accomplish in isolation (Allen & Clarke, 2010).

Rather than focusing on the applicability of specific terms Kapucu and Garayev (2011) have posited that collaboration should be viewed on a continuum, the actual form of collaboration being determined by the level of commitment. Within this framework, communication and coordination generally appear at the less intense end of the continuum and collaboration and integration are defined as more intense manifestations of collaboration (please see Table 1 below).

Table 1: Continuum of collaboration (Himmelman, 2002; Roberts & O'Connor, 2008)

Less intense ←				→ More intense
Communication / networking	**Coordinating**	**Cooperation**	**Collaboration**	**Integration**
Exchange of information for mutual benefit	Exchange of information for mutual benefit Alter activities Formal relationship Requires moderate time and trust Minimal sharing of resources	Shared policies or protocols for dealing with clients Exchanging information Alter activities Sharing resources to achieve a common purpose Formal relationships Substantial time and trust required Some sharing of risks and rewards	Exchange information Share resources Sharing resources, staff, decision making Enhance capacity of another to achieve a common purpose Formal relationship and structures Joint planning, implementation and evaluation Extensive time and trust required Share risks, responsibilities, rewards	Integrated programs, planning, funding

The current review has adopted the following definition to guide the analysis of literature as it most aptly encompasses key issues underlying interagency / cross-organisation collaboration highlighted in the literature.

> *"… a mutually beneficial and well defined relationship entered into by two or more organisations to achieve common goals. This relationship includes a commitment to mutual relationships and goals, a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards" (Mattessich & Monsey, 1992, p.102).*

3 Reasons for collaboration

Collaboration between emergency services within daily operation contexts and large-scale emergency situations is now seen as essential (Eide, Haugstveit, Halvorsrud, Skjetne & Stiso, 2012; Waugh & Streib, 2006). Emergency services routinely work together during disasters and accidents and, as previously noted, NZFS takes a leading role in the Coordinated Incident Management System (CIMS); the framework that agencies can apply in an emergency response situation (New Zealand Government, 2014).

Although emergency service collaboration is inevitable, there are a number of reasons why agencies collaborate. As a result of Allen and Clarke's (2010) literature review it was concluded that there were three main reasons for collaboration:

- to reduce costs and improve efficiency;
- to increase reach of provision; and,
- to achieve something that individual organisations could not achieve in isolation (Allen and Clarke, 2010, p.11).

According to Parry, Kane, Martin and Bandyopadhyay (2015) emergency service collaboration in England and Wales developed to improve both efficiency and effectiveness of the services and was also driven by a desire to reduce costs. These factors are evident in the influential Knight Report, a document that reviewed the efficiencies and operations in fire and rescue authorities in England and Wales in 2013. The report concluded that greater collaboration between emergency services would lead to reduction of costs and improved services (Knight, 2013). The Knight Report suggested:

> *"National level changes to enable greater collaboration with other blue-light services, including shared governance, co-working and co-location, would unlock further savings" (Knight, 2013, p.9).*

Emergency service collaboration and co-location is on the rise in the United Kingdom and, in September 2014, the cross-sector Emergency Services Collaboration Working Group was established (Parry, et al., 2015). The aim of the Working Group is to provide a coordinated, collaborative approach to ensure efficient and effective emergency service provision in the United Kingdom (Parry et al., 2015). The Working Group includes representatives from the Association of Chief Police Officers, Chief Fire Officers Association, Association of Ambulance Chief Executives, Association of Police and Crime Commissioners, the College of Policing and the Local Government Association. In their overview of emergency services collaboration in England and Wales, the Working Group (2014) noted:

> *"…with an increasing demand for some of our services, coupled with the current and expected restrictions on funding, collaboration provides opportunities to truly innovate and save money…" (p.6).*

In summary, despite the obvious necessity for emergency service collaboration in emergencies, collaboration is also initiated in order to reduce cost, develop opportunities to innovate services and to produce outcomes that cannot be achieved by one agency alone (Allen and Clarke, 2010; Emergency Services Collaboration Working Group, 2014; Parry et al., 2015).

4 Key components of successful and quality collaboration

A number of factors have been identified as contributing to successful collaborations in daily operational contexts and disaster situations . As noted by Hardy, Lawrence and Grant (2005) collaboration can strengthen agencies, with their differences in knowledge, skills, and resources allowing them to develop solutions to problems that could not be solved in isolation. Such benefits of collaboration are often referred to as 'collaborative advantage' (Huxham, 1996).

What is an effective and successful collaboration?

What a successful collaboration represents is difficult to determine and exactly what success constitutes is specific to an individual collaboration's goals (Australian Research Alliance for Children and Youth (ARACY), 2010). This is further problematised by the fact that there is no universal measure of success, which makes measuring collaborative success difficult (Frey, Lohmeier, Lee and Tollefson, 2006). However, two components of success have been highlighted as important within the literature - 'process success' and 'outcome success' (Dowling, 2004). Further, achieving outcomes that were set out at the start of the collaborative process has also been identified as crucial to collaborative success (ARACY, 2010).

Factors that support successful collaboration amongst emergency service agencies

Emergency services regularly face situations that are complex, urgent and uncertain (Aldunate, Pena-Mora, & Robinson, 2005; Comfort, 1999; Danielsson & Ohlsson, 1999; Moynihan, 2008). As such, crucial to successful emergency service collaboration is the ability for decisions to be made quickly and efficiently (Kapucu & Garayev, 2011). However, as Andersson, Carlstrom, Angren and Berlin (2014) have highlighted, for collaborations to truly work organisations must be willing to view issues from the point of view of their partner organisations. As forwarded by Huxham (2003) all collaborating partners must have respect for their partner agencies' objectives and strengths, in order for trust to grow.

The review of emergency services collaboration in England and Wales conducted by the Emergency Services Collaboration Working Group (2014) involved gathering information from strategic leads and programme managers across 39 police forces, the Department of Health, who provided information regarding ambulance services and the Department of Communities and Local Government who provided information about fire and rescue services. The overview outlined a number of characteristics that featured in successful emergency collaboration projects across England and Wales, including co-response collaborations between emergency services and co-location collaboration (Emergency Services Collaboration Working Group, 2014). Key elements to quality working relationships included:

- strong, open and honest relationships between the services chief officers;
- agreement of a strategic vision that aligns tightly with all the collaborating services' strategic goals;
- highly skilled and motivated programme managers from each service, with a balance of skills relevant to change management across the working group;

- open, consistent communication and consultation with staff from the earliest opportunity;

- willingness to abandon opportunities if politics or operational interests do not align, to avoid losing momentum or jeopardising relationships; and,

- an agreement that all parties will not seek to profit from one another; every service cannot benefit in every instance; if collaborative relationships are strong and improved public service remains the priority, savings will follow (Emergency Services Collaboration Working Group, 2014, p. 5).

Effective interagency communication was also regarded by Kapucu (2006) as crucial to successful working relationships following his review of decision-making and communication during the disaster that occurred at the World Trade Center in New York City on September 11, 2001. As highlighted by Kapucu (2006) to ensure successful collaboration in disaster situations the establishment of a strong communication system between agencies before disaster occurs is essential.

A recently published study by Parry et al. (2015) evaluated existing and emerging emergency service collaborations between the police, fire service and ambulance service in England and Wales. The study included qualitative and quantitative components, comprising of 51 semi-structured interviews with Chief Fire Officers, Chief Constables, Police and Crime Commissioners, Chief Executives of Ambulance Trusts, Local Authority Chief Executives and elected members in six case study sites and three focus groups with operational staff. Two emergency service surveys were also conducted in England and Wales. One survey questioned 58 emergency services personnel about collaboration and the other surveyed 59 representative bodies (such as trade unions and professional associations) about collaboration. As part of the research an emergency service collaboration public perception survey was also conducted (Parry et al., 2015).

The interviews and focus groups were conducted with key operational staff and senior staff responsible for developing, managing and monitoring emergency services collaboration. From these discussions with participants, seven key enablers of successful collaborations were identified (Parry et al., 2015). These facilitators are explored in depth below and included:

- a clear and shared vision of the objectives of the collaboration;

- trust at all levels of the collaborating agencies;

- clear, shared resource plans;

- agreed and realistic timeline and delivery pathways;

- local cross-party political buy-in and explicit support;

- robust governance architecture; and,

- retaining service identity (Parry et al., 2015, p. 3).

According to Parry et al. (2015) a key component of effective and efficient collaboration that emerged from their research was the presence of a shared vision of the collaborative objectives. The authors highlighted that, of the six collaborative situations they investigated, there were a number of vital components needed to facilitate collaboration, including ensuring the objective, the pathway, actions and responsibilities to delivery and clarity surrounding what successful collaboration represented are established (Parry et al., 2015). It was noted by Parry et al. (2015)

that these crucial factors were missing from collaborations that experienced difficulties from the outset and collaborations that failed to progress.

A transparent shared resource plan was also as an essential component of successful emergency service collaborations (Parry et al., 2015). Parry et al. (2015) indicated that effective cooperation required plans that included details surrounding staff, facilities, revenue and budgets. Clarity surrounding timeframes and service delivery were also crucial and, as such, plans needed to take into account collaborators' different funding and planning cycles. Next, timelines needed to be realistic for all agencies involved and divided into manageable actions that progressed towards the shared vision. Further, both intra- and inter-agency roles and actions needed to be detailed in any planning documents (Parry et al., 2015). The participants, across the six case study sites, also discussed how larger collaborative projects required thorough change programmes and hefty investment if they were to succeed. Thus, the need for a strong governance framework to be established at the beginning of a collaborative project was stressed by Parry et al. (2015) participants as a means to ensure that any risks and probable pitfalls are identified and effectively managed.

Another element necessary to the success of emergency services collaboration was the importance of retaining service identity. Parry et al. (2015) noted that police, ambulance and fire services have distinct and highly visible public and media identities, and each service is generally well regarded within their communities. The authors noted that their participants stressed:

> *"Retaining the best features of these identities whilst working towards closer collaboration and shared resources" (Parry et al., 2015, p.17).*

The retention of individual service identities was considered a crucial enabler of success for two main reasons. Firstly, a loss of identity could lead to discord and detract from the shared vision that the collaboration is attempting to achieve. Secondly, a loss of identity could impact negatively on public perceptions of emergency services and damage the strong relationships that exist between emergency services and their communities (Parry et al., 2015). While the retention of strong identities was largely seen as an enabler of success, the authors also noted that a small number of participants discussed the potential negative impact that identity protectionism could have on a collaboration (Parry et al., 2015). These participants worried that staunch identity protectionism could impede the development of strong relationships between services.

Trust amongst participating agencies was viewed as critical to a collaboration's success (Parry et al., 2015). Inter-agency trust between front-line staff was viewed as especially necessary, and participants described how trust at this level led to greater innovation and buy-in. Parry et al. (2015) found that if trust was missing at a frontline level, the shared vision of more senior staff did not develop from vision to reality. Strong trust between organisations was also a primary enabler identified in the results of the survey of emergency services personnel. The other two crucial factors that emerged from the survey that support effective collaborations were a strong desire amongst organisations to work together and willingness on the part of key individuals to work together (Parry et al., 2015, p. 22). The final enabler of collaborative success highlighted by Parry et al. (2015) was the need for political support, at both a national and local level.

Factors that support successful collaboration in other sectors

Factors essential to effective non-emergency service collaborations have also been studied. Allen and Clarke's (2010) review of research on effective collaborations between community organisations identified the following eight factors present in successful collaborations:

- existing personal or informal relationships and a positive relationship history between organisations (Hosley, Geashimer & Yang, 2003; Linden, 2010; Mattessich & Monsey, 1992);
- clear, open, culturally understanding and frequent formal and informal communication (Hosley et al., 2003);
- a shared vision, collective identity and purpose (Butterfoss, Goodman & Wandersman,1993; Mattessich & Monsey, 1992; Roussos & Fawcett, 2000; Wilcox, 2009);
- respect, trust, and understanding diversity (Mattessich & Monsey, 1992; Warburton, Everingham, Cutthill & Bartlett, 2008);
- strong leadership (Butterfoss et al., 1993; Hosley et al, 2003; Lasker, Weiss & Miller, 2001);
- effective governance (Takahashi & Smutney, 2002);
- including the most appropriate individuals (Craig, 2004); and,
- a positive funding climate (Eppel, 2008; Mattessich & Monsey, 1992; Roussos & Fawcett, 2000; Warburton et al., 2008).

The importance of the presence of open communication on an effective collaborative relationship was also highlighted by Roberts and O'Connor (2008). In particular the authors noted that strong relationships at an operational level, rather than at a senior management level, were the most crucial and the authors argued that bottom-up collaborations are often stronger than top-down approaches (Roberts & O'Connor, 2008). Roberts and O'Connor (2008) also noted that voluntary collaborations, with a shared vision, were more successful when compared to forced interagency collaborations.

In regards to facilitators of successful collaborations in a New Zealand context, a literature review conducted by Gray (2002) explored government interagency collaboration and identified a number of elements that helped support effective interagency collaborations. The key principles identified by Gray (2002) included:

- a recognised need for interagency action;
- a shared vision and acceptance of collaboration as part of the collaborating partners' core business;
- the need for support from the wider community, political support and appropriate legislation were also necessary to ensure effective collaboration;
- strong leadership and buy-in from all levels in organisations;
- the allocation of adequate time and resources; and,
- the need to ensure all strategies and plans are put in writing, outcomes are monitored and partners share accountability for successes and failures (Gray, 2002).

Trust and respect was also highlighted as crucial by Gray (2002) and the author stated that there needs to be a:

> *"… culture of inclusiveness, representativeness, accessibility, fairness and integrity" (p. 46).*

A review of the centre of the New Zealand state sector conducted by the State Services Commission (2001) included a number of factors vital to the successful implementation of integrated service delivery, enablers which Majumdar (2006) argued are also applicable to interagency collaborations. One of these pertinent measures included the need to identify good collaborative practices and ensure that collaborative projects are based on best practice (Majumdar, 2006).

5 Barriers to collaboration

Interagency collaboration is challenging, particularly in the emergency service sector, due to the complexity of incidents that emergency services attend everyday, the diversity of the various agencies that must engage, and the different procedures and skills each agency possesses (Eide et al., 2012). These difficulties, amongst others, often cast doubt on the emergency service sectors' ability to collaborate during emergencies and as Eide et al. (2012) pointed out, there are many reports and evaluations of emergency collaboration in disasters that highlight numerous issues with emergency service collaboration.

Barriers to emergency service collaboration

Parry et al. (2015) highlighted a number of barriers that were identified by emergency services staff in their study. One barrier noted by participants was associated with collaborations having too narrow a collaborative focus (Parry et al., 2015). Rather, participants asserted that collaboration should not solely exist between emergency services, but also include other non-emergency agencies (Parry et al., 2015). Parry et al. (2015) noted that a collaboration should not only focus on emergency response, control and back office functions, but should also incorporate shared command, investment and collaboration. Another barrier identified by Parry et al. (2015) was the impact that a lack of funds or flexibility of government grants had on the ability of emergency organisations to take advantage of new opportunities that a collaboration generated or react effectively to the ever-changing collaborative landscape.

Next, a number of organisational differences between collaborative partners were identified by Parry et al. (2015). Within this context, mandates, governance regimes and organisational structures of the police, ambulance and fire services in the United Kingdom were cited as a barrier to successful collaboration. Another barrier to collaboration were differences between the various representative bodies associated with the police, ambulance and fire services (Parry et al., 2015). The different perspectives of representative bodies on staff safety and how to balance this with the delivery of public services also presented as a barrier to emergency service collaboration. The study highlighted that it is important to ensure that staff perspectives across agencies are included and given equal weight (Parry et al., 2015). According to Parry et al. (2015), barriers linked to representative bodies had been overcome by successful collaborations by engaging representative bodies and other non-associated staff members in a meaningful and thorough way.

Of the collaborations examined by Parry et al. (2015) there were a number of instances in which current legislation presented a barrier to emergency services working together effectively.[3] According to the authors policy and legislative changes are needed to deal with the more complex organisational and structural barriers associated with collaboration. While the research identified that there may need for changes at a policy and / or legislative level to resolve complicated structural and organisational differences, the authors noted that there were numerous successful

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[3] Please note that Parry et al. (2015) did not discuss specific legislation that posed a barrier to collaboration in England and Wales, nor did the authors discuss exactly what needed to change within legislation.

collaborations discussed by police participants that had overcome legislative obstacles (Parry et al., 2015). As such, according to Parry et al. (2015), successful collaborations could still develop, despite legislative problems, if there was a strong shared vision, robust leadership and a willingness to compromise.

The role that government departments played and inconsistencies in policy making were also identified as barriers by Parry et al. (2015). While participants noted that it was to be expected that government departments had different foci that influenced key policy decisions, in order to support successful emergency service collaborations there is a need for a more coherent, consistent and shared vision at a government level. In the United Kingdom, Parry et al. (2015) suggested that The Emergency Services Collaboration Working Group could play a role in feeding collaboration information into key government departments to ensure that inter-departmental barriers did not negatively impact on the effectiveness of emergency service collaborations (Parry et al., 2015).

In addition to the barriers discussed during the interviews and focus groups, the findings of the surveys with emergency staff and representative bodies also identified a number of barriers (Parry et al., 2015). The emergency services personnel indicated that there were the three main barriers to collaboration. The three barriers were: unwillingness of individuals to work together, differing organisational cultures and a lack of funding to take joint work forward (Parry et al., 2015, p. 22). The barriers identified in the survey of representative bodies were issues with proposed changes in staff job roles, problems with proposed changes in staff terms and conditions and the negative impact that collaboration could have on staff numbers (Parry et al., 2015).

A Norwegian study by Eide et al. (2012) examined key challenges to multi-agency collaboration during large-scale emergency management. A workshop was held with 10 experienced on-site emergency response staff from the police, fire and health services. Three main challenges emerged from the workshop, the first of which was communicating within and across agencies; the second was the establishment and maintenance of shared situation awareness, and the third challenge was understanding organisational structures.

In reference to communication-related barriers, participants discussed difficulties that occurred at both an operational and frontline level that hindered the effectiveness of communication between different agencies. Barriers to communication during an emergency incident included limitations linked to technical communication equipment, which resulted in only one agency having the ability to relay messages during an emergency at any one time (Eide et al., 2012). Misuse of the rescue channel during an emergency was also a communication barrier noted by participants in Eide et al. (2012), with intra-agency communication blocking inter-agency messages.

The Norwegian participants also highlighted a lack of common language or terminology used across the emergency agencies as a barrier (Eide et al., 2012). A lack of understanding of other emergency services terminology was viewed as a risk, as terminological differences could lead to critical situations being misinterpreted as minor, and indeed participants had been in situations where this had occurred (Eide et al., 2012). In order to mitigate this challenge, the authors highlighted the need for improved technology to support intra- and inter-agency communication during

emergency response. Eide et al. (2012) also suggested the use of electronic messaging devices to reduce verbal communication in preference for targeted electronic communication, which would reduce information overload.

One of the main barriers to establishing and maintaining shared situation awareness during an emergency was the absence of a mechanism to share information between agencies (Eide et al., 2012). Verbal communication was the most common method of sharing situation awareness in Norway, however, participants reported that audio-visual methods would be a much more effective way to share knowledge during an emergency situation. Eide et al. (2012) also noted that a lack of resource overview and management was a barrier to successful collaboration primarily due to the limitations surrounding the amount and nature of information that could be verbally communicated. Additional barriers related to the failure of emergency services to maintain shared situational awareness included information overload, problems with the prioritisation of information and a failure to communicate the right information at crucial times (Eide et al., 2015). Once again Eide et al. (2012) forwarded that efficient communication, whilst responding to emergencies, was essential to combat a lack of shared situational awareness and the authors suggested that technological advances in communications could mitigate this barrier to successful collaboration.

The final challenge identified by the Eide et al. (2012) participants was emergency services' lack of knowledge surrounding the responsibilities, needs, plans and tactics of their collaborative partners. As highlighted by the authors, all emergency agencies have different functions and tasks and this can result in opposing viewpoints of how emergency situations can be tackled (Eide et al., 2012). Not only was insufficient understanding of other emergency agencies a barrier to collaboration, but inadequate knowledge about the role of one's own agency was also cited as a barrier (Eide et al., 2012). A lack of understanding of organisational structures and compatible tactics and different approaches to planning across agencies can all negatively impact on collaboration during an emergency incident. Participants noted that this often adversely affected the development of approaches to be used during an emergency situation and it also negatively impacted on response time, leading to the possibility of errors occurring on the scene (Eide et al., 2012). Eide et al. (2012) acknowledged that this barrier was difficult to address, however, improved training and education, clarity surrounding first responder responsibilities, tasks, and roles across agencies could help alleviate issues surrounding a lack of understanding of organisational structures.

A Swedish study that explored the reasons underpinning the lack of collaboration between police, ambulance and / or police services at individual accident sites highlighted a number of barriers that influenced collaborative breakdowns (Berlin & Carlström, 2011). The study involved observations and semi-structured interviews with personnel from police, fire and ambulance services in two of Sweden's largest counties. One of the main findings to emerge from this study was the notion that collaboration was seen as a rhetorical ideal, as opposed to a vision that could exist in reality (Berlin & Carlström, 2011). A number of barriers identified by Berlin and Carlström (2011) have been explored above and included the different priorities of emergency services when attending emergency incidents, closed communication systems which inhibit information sharing at incidents, a lack of coordination at senior management levels and the notion of 'organisation egotism' which is the practice of individual services discussing collaboration only within their organisation and not with

their collaborators. A lack of feedback between agencies following joint attendance at emergency incidents was also identified as a barrier. In addition, a lack of incentive for collaboration was also highlighted as a reason why collaboration at the scene of incidents was minimised (Berlin & Carlström, 2011). Berlin and Carlström (2011) argued that a lack of incentive affected motivation and willingness to collaborate during incidents.

Many of the barriers explored in the literature above were also noted by Salmon, Stanton, Jenkins and Walker (2011) in their analysis of interagency coordination between military and civilian agencies, including emergency services, in the United Kingdom. Barriers to interagency collaboration identified by police, fire, ambulance, local authority, Environment Agency, Met Office, the Brigade and local electric company participants who took part in the study included a lack of clear and effective leadership, the absence of clarity regarding each agency's responsibilities and roles, a lack of communication and information sharing, inadequate understanding of situational awareness and insufficient knowledge of other agencies strengths and resources. Other identified barriers included those related to differing organisational cultures and a lack of multi-agency training exercises (Salmon et al., 2011).

Barriers to interagency collaboration in other sectors

Many of the barriers identified in the emergency service sector literature were also barriers to collaboration found in the literature from other sectors.

The review by Allen and Clarke (2010), which explored factors that enabled successful collaboration between community organisations, identified a number of barriers to effective collaboration. Seven main barriers were reported by Allen and Clarke (2010) and these included: a lack of organisational capacity, conflicts, a hostile environment, insufficient communication or knowledge, problems managing the costs of collaboration, and the over incentivisation of the collaboration. According to Foster-Fisherman, Berkowitz, Lounsburty, Jacobsen and Allen (2001) successful collaborations hinge on the ability and capacity of different agencies to simply work together. If the will to cooperate and resolve conflicts is absent and there is a lack of organisational understanding within the collaboration, these all will impact on the ability to form and maintain effective partnerships (Foster-Fisherman et al., 2001). A lack defined roles and responsibilities, also restricts the success of interagency collaboration (Foster-Fisherman et al., 2001; Gibbs, 1999).

Conflicts between organisations, whether pre-existing or current, were identified by Allen and Clarke (2010) as a barrier to effective collaboration. A number of different types of conflicts can arise in collaborative relationships. Conflicts between organisations commonly emerged from imbalances of power, turf and territorial issues, differences in organisational norms and procedures, a lack of communication or miscommunication, a loss of identity or independence, differential power relations, logistical issues, difficulties in maintaining community accountability, and issues identifying appropriate community representation (Sheridan, Swanson, Corderio, Patterson, Stibbins, Woodside & Houchin, 2000; Takahashi & Smutney, 2002). Similarly, power imbalances and inequality between partners was reported as a barrier to collaboration (Drumwright, Cunningham and Berger, 2004; Gray, 1989; Mintzberg, Jorgensen, Dougherty and Westley, 1996). As Kanter (1994) noted in his discussion of power imbalances, many collaborations are threatened due to managers:

> *"worry[ing] more about controlling the relationship than about nurturing it" (p. 96).*

Miscommunication was often attributed to the emergence of territorial disputes (Majumdar, 2006). Competition for funds or threats to perceived territorial boundaries were reported to have led to the erosion of collaborative relationships or presented a barrier to the development of a much-needed collaborative relationship. Similarly Majumdar (2006) discussed that historical tensions between organisations has been found to result in conflict and these tensions presented a barrier to building successful interagency partnerships.

The threat of a loss of independence or organisational identity was also identified as a barrier to effective collaborations (Allen and Clarke, 2010). This is especially a risk when working with larger agencies and organisations, which are generally not as nimble and flexible when faced with complex change that some collaborations require (Takahashi & Smutney, 2001). As noted by Nowland-Foreman (2006):

> *"Collaboration usually involves some level of power sharing, and power sharing means giving something up" (Nowland-Foreman, 2006, p. 3).*

On one level, tensions can arise from real or perceived power imbalances that are traced to an unequal distribution of resources (Le Ber & Brunzi, 2009). However, Coulson-Thomas (2005) argued that for agencies that do not clearly perceive the benefits of collaboration, partnerships are seen as a risk to their independence and result in heightened wariness.

In the New Zealand context, Gray (2002) identified a number of barriers to collaboration. These included differing protocols, structures, systems, cultures and values of individual agencies; lack of shared agendas; exclusion of any important stakeholder from the collaborative process; burdens resulting from a continuing stream of new initiatives; lack of management of the change process; differences in status and perceived power among agencies; mandated or forced collaboration and tight timeframes which could derail collaborations (Gray, 2002, p. 47).

Other New Zealand research by the State Services Commission (2001) identified a number of issues that can hinder interagency collaboration between government agencies. The presence of co-ordination problems, frequent structural changes, inadequate planning, risk aversion, unclear outputs, high costs, unequal power and influence, undefined responsibilities and relationships, inexperience of staff, insufficiencies in the area of performance evaluation, and a lack of strong leadership all impact on successful interagency partnerships (State Services Commission, 2001).

Another piece of New Zealand research conducted by the State Services Commission, in conjunction with the Ministry of Social Development (2003), identified barriers that can impact on success interagency collaboration, many of which are echoed in the literature discussed above. These included the failure of agencies to devote time and emergency to collaborations, the absence of support of collaborations (especially at a managerial level), a lack of shared understandings between agencies, poor relationships between agencies and differing agency cultures and values (State Services Commission and Ministry of Social Development, 2003). In a separate report by the Ministry of Social Development (2003) various risks to effective collaboration between government agencies were explored. One relevant barrier identified in this

report was a culture of secrecy that hampered interagency collaboration (Ministry of Social Development, 2003).

6 Issues identified with emergency service collaboration in New Zealand

Recent New Zealand Fire Service collaboration with other agencies during the Christchurch Earthquake on 22 February 2011 have been explored in two separate reports: an independent report commissioned by the NZFS and a Ministry of Civil Defence and Emergency Management review. The findings of both reports highlighted that agency collaboration during the earthquake was commendable, however a number of issues were identified and these are explored below. In regards to day-to-day collaboration between the NZFS and other emergency services, the 2012 *Report of the Fire Review Panel* (Department of Internal Affairs (DIA), 2012) discussed how coordination and collaboration could potentially be improved and these are also outlined in this section.

The New Zealand Fire Service commissioned its own independent review of their response to the earthquake, conducted by Simon Pilling the Chief Executive and Chief Fire Officer of West Yorkshire Fire and Rescue Service (Pilling, 2012). Pilling (2012) praised the response of the NZFS operational personnel and commanders in the direct aftermath of the devastating earthquake, but highlighted problems with emergency services working together at a number of key sites, noting that collaboration was not as effective as it could have been (Pilling, 2012). To ensure that future multi-agency coordination at emergency sites is improved, Pilling (2012) suggested the exploration of:

> *"Multi-agency and single agency holding areas; enhanced logistics and command support facilities; and the means to develop effective tactical coordination of services at the scene" (p.49).*

As mentioned previously, NZFS and multiple other emergency agencies in New Zealand utilise CIMS and during the Christchurch earthquake CIMS principles were applied by emergency services (Pilling, 2012). The report by Pilling (2012) uncovered that multi-agency incident management at a number of rescue sites could have progressed in alternative ways and noted that all attending agencies using CIMS principles should have discussed and agreed on who had the lead at each site. However, as Pilling (2012) pointed out overall incident management should have been overseen and reviewed frequently by Civil Defence & Emergency Management during the disaster. According to Pilling (2012), it is noteworthy that incident command and control issues did not occur across agencies, but occurred within services (Pilling, 2012).

A Ministry of Civil Defence and Emergency Management review of the Civil Defence Emergency Management Response to the 22 February 2011 Christchurch Earthquake also commented on multi-agency collaboration and coordination during the disaster (McLean, Oughton, Ellis, Wakelin & Rubin, 2012). The report commended the initiative, efforts and resilience of NZFS career and volunteer firefighters and crews on sites, noting that the organisation should be proud of how its personnel responded (McLean et al., 2012). In relation to multi-agency collaboration, the review found that emergency services responded quickly and worked well together, especially the NZ Police, NZFS, the co-located Police and Fire Communications Centre, Fire Service Urban Search and Rescue, New Zealand

Defence Force personnel, ambulance service and health sector. However, the review was critical of the immediate incident control at the Canterbury Television site (McLean et al., 2012). The two primary responders at that site were the NZ Police and NZFS, however, McLean et al. (2012) forwarded that neither agency had clarity as to who was or should have been Incident Controller and that someone from either NZFS or Police needed to be directed to take that role. It should be noted that both the NZ Police and NZFS did not agree with the report's findings regarding incident control at the CTV building rescue site (Office of the Minister of Civil Defence, 2012). To address the collaborative issues faced during this large-scale emergency McLean et al. (2012) recommended that:

- greater priority be placed on quickly establishing incident control at major rescue sites to clarify arrangements and enhance operational effectiveness. At complex, multi-agency incidents, this requirement is paramount;

- Emergency Services should aim for a single, combined, resilient EOC [Emergency Operations Centre] capable of managing large Regional emergencies; and,

- IMT [Incident Management Team] and specifically logistic arrangements need to be in place to avoid agencies competing against one another for resources (p. 80).

The review also recommended that highly trained emergency managers from New Zealand Defence Force, NZ Police, NZFS, Civil Defence Groups and private sector organisations across the country be established to lead and control emergency responses (McLean et al., 2012).

Day-to-day collaboration between emergency services in New Zealand and what form this could take, was explored in the 2012 Report of the Fire Review Panel (DIA, 2012). The review discussed how the NZFS respond to multiple types of emergency, not just fire, and noted that there has not been a decision at a government level for these extra functions to be carried out by the NZFS. Regardless, the NZFS have undertaken these extra functions due to their capacity to respond and their duty to ensure that New Zealand communities are safe (DIA, 2012). However, the DIA (2012) report highlighted that a lack of formal mandate to respond to non-fire emergencies have led to gaps and overlaps in service provision and uncertainty at incidents regarding agency responsibilities and incident management.

The DIA report also drew attention to the fact that the Fire Service Act (1975) does not provide provisions for these extra functions to be adopted by the NZFS (DIA, 2012). According to the Fire Service Act (1975) when the Chief Fire Officer "considers the brigade could render assistance" at a non-fire emergency, it allows the brigade to attend that emergency. However while NZFS can attend these non-fire incidents legally, the resources and training of fire brigades can only be used for fire fighting and Hazardous Substances and New Organisms incidents. As such, the Fire Review Panel proposed a redrafting the fire legislation to validate the current practices of the NZFS (DIA, 2012).

To combat any collaborative issues faced by NZFS and other emergency services the Fire Review Panel argued that emergency and rescue services agencies needed to work more closely to determine opportunities for co-delivery, co-location and collaboration, especially when:

- an agency seeks to build a new facility for delivering services;
- there are opportunities for a more coordinated approach across services;
- resources could be shared;
- bulk procurement would be practical and cost-effective; and
- communities are stretched to provide the basic level of volunteers required (DIA, 2012, p. 37).

To this end the Panel recommended the establishment of an Emergency Services Chief Executives Forum comprising permanently of the Chief Executives of the DIA, NZFS, NZ Police, emergency and ambulance services (St John and Wellington Free Ambulance), and the Director of the Ministry of Civil Defence and Emergency Management. The Forum would be an advisory body to Ministers and agencies, and could address legislative issues, inter-agency coordination and gaps and overlaps in service provision.

7 Strategies to enhance collaboration

Collaborations are complicated and, as Butterfoss et al. (1993) asserted, the development and maintenance of successful collaborations requires much more work than the development of initiatives within organisations. In their evaluation of collaboration between emergency services in England and Wales, Parry et al. (2015) argued that collaboration can be achieved in various ways and that:

> *"There is no 'one model'" (p. 31).*

While there is not one formula that can be followed to improve emergency service collaboration, a number of successful strategies have been identified. A selection of the recommendations that emerged from the Parry et al. (2015) study of emergency service collaboration in England and Wales are outlined in the below table.

Table 2: Strategies to Enhance Collaboration

Strategy	Details
Collaboration needs to be grounded in a clear shared vision between partners	All partners need to agree and adopt the shared vision of the collaborative initiative, across all levels of an organisation.
Appropriate, universally agreed governance structures	This is essential to ensure that the collaborations are managed and developed appropriately.
Link collaboration to shared key performance indicators (KPIs) and targets	The development of clear and shared KPIs is important. Possible KPIs could include response times, public confidence, capital expenditure, cost savings.
Sharing resources	The sharing of buildings, vehicles and equipment can lead to 'quick wins' and provide many cost benefits.
Co-location of control rooms	Co-location of control rooms improves the efficiency of collaborations, and in emergency situations can ensure a more effective, integrated response.
Shared command structures	As collaboration is necessary not only at the front-line, shared command of collaborations can consolidate collaborations and provide evidence that the collaboration is supported across all levels.
Greater alignment of governance structures	Governance structures can greatly affect the success of collaborations. It is essential that collaboration is underpinned by a greater alignment of governance structures to ensure the success of collaborations.
Universal data resource and data sharing	The establishment of open and fast data sharing protocols is essential. The creation of a universal data resource, which can be accessed by all partners, can aid this.
Shared vision at a government policy-making level	Coherent and consistent policy making that supports collaborations and clear legislative directions are necessary if collaborations are to be enhanced.
Implementation of common protocols	Common protocols can and should be adopted (and used) where they can be of benefit to service delivery. This includes the adoption of a common language.
Sharing good practice	A mechanism to share good practice and lessons learned is important to improving collaborations.

Supporting leadership	The leadership of emergency services need to make considered decisions around collaboration, therefore an evidence-based approach to collaboration can greatly impact on the success of projects.
More comprehensive intra-service rationalisation	Intra-organisational change can impact greatly on collaborations, and effects on collaborations should be considered
Sustainable and timely funding	Funding is crucial to collaborative stability and ensuring that funding streams are coordinated aids in the continued support of collaborative projects.
Handover plans	Contingency plans for any leadership changes and appropriate communications and transfer of responsibilities need to be in place if personnel move on.

(Parry et al., 2015, pp. 32 - 36)

Many of the factors outlined in the above table are also found in literature pertaining to collaborations arising from other sectors. In their study of collaboration between disabled child service organisations in the United States, Johnson, Zorn, Tam, Lamontagne and Johnson (2003) reported that the following seven elements were the most crucial to the enhancement of interagency collaborations:

- commitment;
- communication;
- strong leadership from key decision makers;
- understanding the culture of collaborating organisations;
- engaging in serious preplanning;
- providing adequate resources for collaboration; and
- minimising territorial issues (p. 201).

The literature also highlighted the importance of the formalisation of plans, roles, policies and responsibility, as intricate collaborations always have a danger of dissolving into unstructured, unfocused and uncoordinated arrangements (Nowland-Foreman, 2008). It has also been suggested that formal contracts are put in place to cement all organisations commitment to collaborations (Courtney, 2006; Roberts, 2004).

New Zealand research suggested that agencies need to foster 'an ethos of collaboration' and ensure that it is central to their operations, primarily by encouraging and rewarding collaborative activity (Majumdar, 2006). The Ministry of Social Development and State Services Commission (2003) also noted that to ensure successful collaboration, agencies need to commit adequate time and resources to support the collaboration, and that legislation and policy need to be developed or re-worked to promote a collaborative culture. The avoidance of frequent changes within organisations, the building of staff capacity and the fostering of an organisational culture that encourages innovation were also vital to improving collaborations (Ministry of Social Development, 2003).

8 Gaps in the literature

A number of gaps in the literature were identified. The majority of literature related to emergency services collaboration tended to focus on collaboration in major disasters or emergencies, rather than collaboration that occurs within a daily operational context (Parry et al., 2015). This is surprising given that joint emergency response forces are common in the United States, France, Holland and Germany and fire services in Australia, Canada and New Zealand all have agreements in place with ambulance services to respond to medical emergencies (Ellwood & Philips, 2013). Collaboration at smaller emergency incidents, as opposed to large scale disasters and incidents are much more common, and further research is needed to gain a stronger understanding of how agencies can collaborate more effectively on a day-to-day basis.

Other gaps that were evident in emergency services and non-emergency sector collaboration literature is the lack of a thorough exploration of the benefits and outcomes of collaborations. Much of the literature focused on the specifics of studied collaborations, the enablers and barriers identified by the research, as opposed to the benefits and positive outcomes of collaborations (for example Emergency Services Collaboration Working Group, 2014; Parry et al., 2015). In assessing the collaboration literature, Majumdar (2006) concluded that the question of whether collaboration offered any benefits, financial or otherwise, was not adequately addressed. Majumdar (2006) also commented that there is a lack of information about what types of situations collaborations should be entered into as opposed to other formal arrangements.

There was also a lack of literature from New Zealand that explored collaboration, especially in regards to collaboration in the emergency services sector. While many of the findings from the international literature on collaboration are applicable within a New Zealand context, it is important that New Zealand research is undertaken to fully understand how New Zealand emergency services can successfully collaborate to achieve better outcomes in both major disasters and day-to-day operations. This is especially pertinent given the increased collaboration between emergency services in New Zealand and the future arrival of the Christchurch Justice and Emergency Services Precinct, which will see the New Zealand Fire Service, New Zealand Police, St John and Civil Defence share infrastructure and integrate operations (Christchurch Central Development Unit, 2015).

9 Conclusion

Collaboration between emergency services in both large-scale emergency situations and within a daily operational context is routine and common across the Western world (Eide et al. 2012). Although emergency service collaboration in times of emergency is inevitable, there are a number of reasons why agencies collaborate. The main themes found in the literature centred around three main reasons: cost reduction, improved service for the public and the ability to achieve shared goals that cannot be achieved in isolation (Allen & Clarke, 2010; Knight, 2013; Parry et al., 2015).

There are various definitions of collaboration offered in the literature, however, viewing collaboration on a continuum allows different types of collaboration to be understood (Himmelman, 2002; Kapucu & Garayev, 2011; Roberts & O'Connor, 2008). Similarly what a successful and effective collaboration represents is not straightforward to either define or measure. However the achievement of collaborative goals, better outcomes for the public and cost reductions are generally all key components of successful working partnership (ARACY, 2010; Frey, et al., 2006; Kapucu & Garayev, 2011).

A number of factors that facilitate successful collaborations and barriers that impede the ability to achieve quality-working partnerships were identified. The below table provides a summary of these enablers and barriers, both from the emergency services literature and other interagency collaboration literature. It should be noted that many commonalities were found across the literature, regardless of the sector.

Table 3: Barriers and Facilitators to Building Successful Interagency Collaborations

Facilitators	Barriers
- A clear and shared vision - Trust - Open and honest relationships - Strong and supportive leadership - Effective programme management - Willingness to work together (voluntary) - Shared resource plan - Realistic timeframes - Retention of individual service identity - Strong governance framework - Support from representative bodies and unions - Buy-in from all levels of the organisation - Effective communication at incidents - Understanding of differing organisational cultures	- Narrow collaborative focus - Lack of funding - Historical organisational differences - Issues with legislation - Absence of a shared vision at a government and policy-making level - Lack of buy-in from staff - Opposition from representative bodies and unions - Lack of situational awareness at incidents - Lack of knowledge of intra- and inter-agency responsibilities, skills and tactics - Lack of incentive for collaboration - Forced collaboration - Territorial issues - Historical and current conflict - Power imbalances - Threat of service identity loss

(Butterfoss et al.,1993; Eide et al., 2012; Mattessich & Monsey, 1992; Parry et al., 2015; Roussos & Fawcett, 2000; Takahashi & Smutney , 2002; Warburton et al., 2008; Wilcox, 2009).

A number of strategies to enhance collaboration were identified from the literature. The findings from Parry et al. (2015, pp. 32 - 36) suggested that emergency service collaborations could be improved if the following strategies are considered. Many of the suggestions are relevant to improving the quality of day-to-day cooperation and co-location:

- collaboration needs to be grounded in a clear, shared vision between partners;
- appropriate, universally agreed governance structures;
- link collaboration to shared Key Performance Indicators (KPIs) and targets;
- sharing resources;
- co-location of control rooms;
- shared command structures;
- greater alignment of governance structures;
- universal data resource and data sharing;
- shared vision at a government policy-making level;
- implementation of common protocols;
- sharing good practice;
- supporting leadership;
- more comprehensive intra-service rationalization;
- sustainable and timely funding; and,
- handover plans.

A surprising gap was the lack of literature that focused on collaboration that occurs between emergency services on a day-to-day basis (Parry et al., 2015). There was also a dearth of literature pertaining to emergency services collaboration in a New Zealand context.

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