CDEM National Capability Assessment Report

December 2015

Ministry of Civil Defence
& Emergency Management
Te Rākau Whakamarumaru

CONTENTS

1. SUMMARY

The capability assessment process provides a national snapshot of Civil Defence Emergency Management CDEM capability across New Zealand. This is the second national capability assessment. Comparisons between 2015 and the first assessment report produced in 2012 show that there has been significant improvement in some of the delivery areas, although less improvements in others.

Scores show that there have been nationwide improvements across all four goals and two Enablers of the National CDEM Strategy with the strongest improvements in Goal 2 (risk reduction) and Enabler 1 (management and governance). However, there is a consistently weaker performance nationwide in Goal 4 (recovery).

This National Capability Assessment report uses as its evidence base the data and issues identified through each of the 16 CDEM Group Capability Assessments. The assessment process uses both quantitative (assessment tool) and qualitative (interview) processes. Using a 'maturity matrix' scale, each of the 16 CDEM groups is scored in a number of performance areas across 'unsatisfactory', 'developing', 'advancing' and 'mature' score areas. The findings have identified themes that illustrate some of the opportunities and barriers to improving CDEM performance.

All of the 16 CDEM Groups have scores in the 'advancing' or above category, which is a significant improvement from 2012. Each Group was set a performance target and 11 of the 16 met or came very close to their target. Six CDEM Groups made such significant gains that they increased their overall score between 17 and 26% on their 2012 score; three CDEM Groups scored in the 'mature' score category indicating their performance is at 80% or more. These are significant and impressive achievements for these CDEM Groups.

At a CDEM functional level, scores vary indicating a greater confidence in some aspects of delivery than others. Highest performing CDEM functions include Public Information Managers, Emergency Operations Centre facilities, warning systems and CDEM Management, suggesting that many aspects of CDEM Group response arrangements are strong. The weaker scoring CDEM functions include logistics and critical resource management, and those functions that are intended to enhance New Zealand's capability to recover from emergencies. These areas are less well practised and indicate weaker confidence by CDEM Groups.

Factors that influence the ability of the CDEM Groups and stakeholders to perform at the highest level were discussed in the 2012 National Capability Assessment report. This assessment round has found that many of these are still impeding high performance in 2015. In order to support future CDEM improvements there is a need for CDEM to shift its attention away from managing disasters to managing risk, and building resilience within organisations and communities.

Notwithstanding the need to sustain robust response arrangements, CDEM agencies are increasingly examining the need to have a greater focus on risk reduction and resilience building. A focus on understanding the hazards that affect New Zealand, acknowledging the exposure to them, and being cognisant of underlying societal vulnerabilities, would allow for work that protects the long term prosperity and wellbeing needed for communities to thrive.

Aligned to the concept of resilience is the need for better connectivity between the CDEM professionals and those facilitating improved CDEM outcomes at an organisational and community level. CDEM Groups have a history of strong collaboration between partner organisations during emergencies, but this needs to extend into day to day activity. Local authorities have a range of business functions delivering services that greatly improve the resilience of its communities. What is less obvious is any deliberate, interconnected approach to building resilience across local authorities, stakeholders / partners and communities.

Rather than being seen as something 'extra', CDEM Groups need to examine ways to leverage the "resilience dividend" that delivers benefit through day to day service delivery, rather than simply focusing on recovering from shocks.

2. BACKGROUND

In line with the previous Civil Defence Emergency Management (CDEM) Capability Assessment Report: Part 1[1], the rationale for conducting the monitoring and evaluation programme remains the same reflecting requirements for the Director CDEM to monitor and evaluate:

- the National CDEM Strategy (s8(2)(c));
- the National CDEM Plan (s8(2)(d)); and
- the performance of CDEM Groups and agencies with responsibilities under the CDEM Act (s8(2)(f)).

2.1. THE STRATEGIC FRAMEWORK

The National CDEM Strategy outlines the vision, values and principles for the delivery of CDEM in New Zealand. The strategy has four main goals underpinned by a number of objectives that describe the outcomes New Zealand aims to achieve. The capability assessment tool tests performance against each of these goals and objectives (see figure 1).

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[1] CDEM Capability Assessment Report Parts 1 and 2, April 2012; Ministry of Civil Defence & Emergency Management

2012 table

Goal One	Goal Two	Goal Three	Goal Four	Enabler One
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Ensuring all agencies have the structures and authorities to be able to reduce risks, be ready for, respond to and recover from civil defence emergencies
1A: Increasing the level of community awareness and understanding of the risks from hazards	**2A:** Improving the coordination, promotion and accessibility of CDEM research	**3A:** Promoting continuing and coordinated professional development in CDEM	**4A:** Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	**5A:** Ensuring compliance with relevant legislative frameworks
1B: Improving individual and community preparedness	**2B:** Developing a comprehensive understanding of New Zealand's hazardscape	**3B:** Enhancing the ability of CDEM Groups to prepare for and manage emergencies	**4B:** Enhancing the ability of agencies to manage the recovery process	**5B:** Implementing effective organisational structures for CDEM
1C: Improving community participation in CDEM	**2C:** Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			**5C:** Ensuring agencies have funding for CDEM
1D: Encouraging and enabling wider community participation in hazard risk management decisions				**5D:** Ensuring agencies are able to function to the fullest possible extent during and after an emergency

2012: Capability Assessment Tool Goals and objectives of the National CDEM Strategy (with additional Enabler)

2015 table

Goal One	Goal Two	Goal Three	Goal Four	Enabler One	Enabler Two
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Governance and management arrangements support and enable civil defence emergency management	Organisational resilience supports effective crisis management
1A: Increasing the level of community awareness and understanding of the risks from hazards	**2A:** Improving the coordination, promotion and accessibility of CDEM research	**3A:** Promoting continuing and coordinated professional development in CDEM	**4A:** Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	**5A:** Implement effective organisational structures for CDEM	**6A:** Organisational resilience is developed through risk management and planned strategies
1B: Improving individual and community preparedness	**2B:** Developing a comprehensive understanding of New Zealand's hazardscape	**3B:** Enhancing the ability of CDEM Groups to prepare for and manage emergencies	**4B:** Enhancing the ability of agencies to manage the recovery process	**5B:** CDEM Group culture positively influences the effective delivery of CDEM	**6B:** Organisational resilience is developed through adaptive capacity
1C: Improving community participation in CDEM	**2C:** Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			**5C:** Ensure agencies have funding for civil defence emergency management	
1D: Encouraging and enabling wider community participation in hazard risk management decisions					

2015: Capability Assessment Tool Goals and objectives of the National CDEM Strategy (with additional 2 Enablers)

Figure 1: 2012 and 2015 capability assessment tool frameworks

2.2. CAPABILITY ASSESSMENT TOOL REVIEW AND PROGRAMME OUTPUTS

Prior to starting this round of capability assessments, the capability assessment tool was reviewed resulting in a number of minor amendments made to improve the quality of the tool, alongside some more substantial changes to reflect current CDEM delivery.. In summary, the key changes made to the tool were:

- New content was added in Goal 1 to assess Group progress in building community resilience;
- Goal 2 (risk reduction) was amended to clarify the actions that progressively contribute towards a reduction of hazards;
- Content within Goal 3 (managing emergencies) was amended to reflect revised thinking in Emergency Operation Centre arrangements, controllers, critical resources, welfare and lifelines;
- Enabler 1 (management and governance) had new measures added to capture emergency management culture and leadership;
- Enabler 2 (organisational resilience) was created to capture the adaptive and planned functions that organisations undertake to support effective crisis management.

The capability assessment process however, has remained largely unchanged.   Each of the CDEM Groups participated in:

- a quantitative component (self-assessment using the capability assessment tool);
- a qualitative component that includes the review of key CDEM Group doctrine; and
- interviews with key personnel across governance, management and CDEM delivery which informally explored CDEM Group performance from the perspective of those involved.

A core monitoring and evaluation team of two staff provided consistency in the approach for scoring, conducting interviews and generating reports across most of the 16 CDEM Group assessments.

The outputs of the capability assessment process are somewhat changed. CDEM Groups each received shorter reports, focussing on verified areas of strength and improvement opportunities across each of the four goals and two enablers. Reports make only one recommendation, asking each CDEM Group to prepare a corrective action plan based on the report and data, which is approved by its Joint Committee and is subsequently lodged with MCDEM. The corrective action plans will be used by CDEM Groups when reviewing its CDEM Group Plan, and developing annual work programmes. Collectively, the corrective action plans may inform future areas of focus for MCDEM in its business planning.

In addition to a CDEM Group-level capability assessment report, each CDEM Groups is provided with its collective capability assessment tool data. This data includes CDEM Group self-assessment scores alongside the scores moderated by MCDEM. Following feedback from the first round of capability assessments, CDEM Groups also now receive self-assessment data from the local authority (which is unmoderated by MCDEM). This data can further support the CDEM Group in identifying particular territorial authorities that are strong in areas of CDEM, and opportunities to leverage good practice across the CDEM Group.

2.3. SCORING

This section describes how the score for each CDEM Group is obtained and how this information contributes to the national picture of CDEM performance.
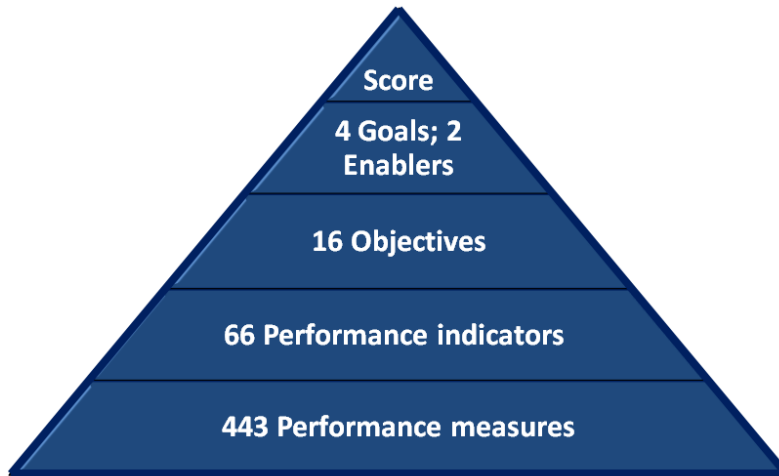
Figure 2: Framework of goals, objectives, indicators and measures that comprises the CDEM Capability Assessment Tool

The Capability Assessment Tool is comprised of goals/enablers and objectives ('the strategic framework', as derived from the National CDEM Strategy), which are broken down into performance indicators and measures ('capability criteria') – illustrated in Figure 1.

CDEM Groups are evaluated and scored at the performance measure level. These scores are then aggregated upwards into indicator, objective and goal-level scores. A final overall CDEM Group score provides a broad overview of performance.

Goals/enablers (and objectives, indicators, and measures) have weighted contributions towards the overall score, and this remains largely unchanged from the previous CDEM Capability Assessment Tool. Figure 2 shows the proportional contribution from each goal and enabler.

Figure 3: Weighted contribution to scores

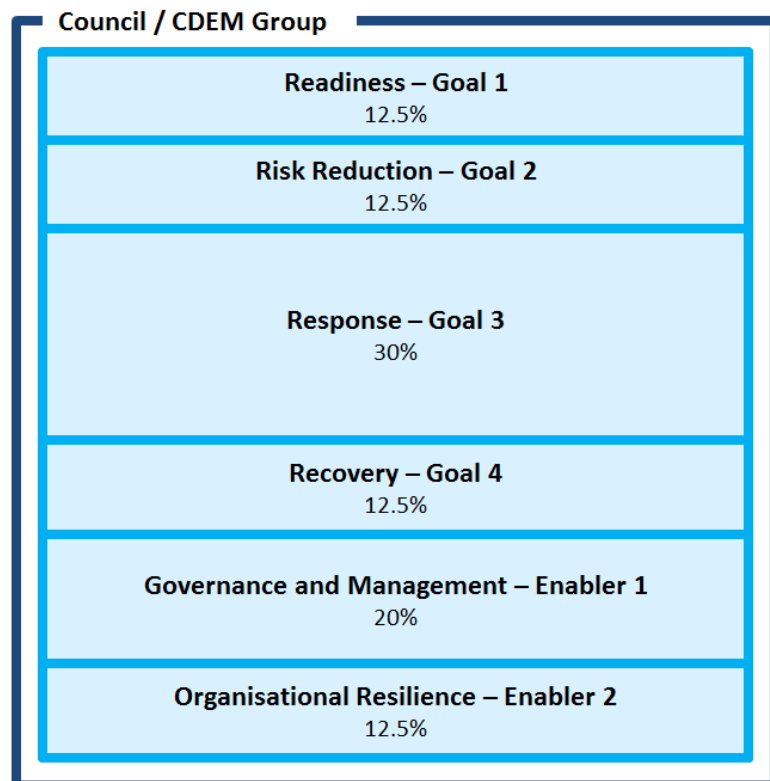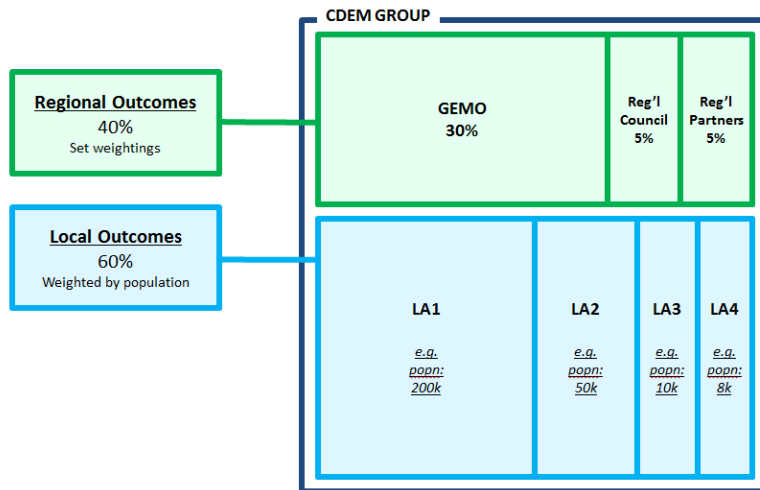A 'maturity index' was introduced in the first National Capability Assessment report, which categorises performance as 'unsatisfactory', 'developing', 'advancing' or 'mature'. These categories describe achievement across measures, indicators, objectives and goals in the Capability Assessment Tool.

Unsatisfactory	Developing		Advancing	Mature	
0 – 19%	20 – 39%	40 – 59%	60 – 79%	80 – 89%	90 – 100%

Figure 4: CDEM Group scoring framework ('maturity matrix')

Minor changes were made in the way CDEM Group (collective) scores were constructed for this capability assessment round. Allowing for structural variations in CDEM Groups (particularly for unitary authorities or those with shared service models) was important. In a 'traditional' CDEM Group model comprised of several member local authorities, a 'local component' represents 60% of the overall score, with each of the member territorial authorities having a weighted proportion based on population size. A regional component represents 40% and is made up of the Group Emergency Management Office, regional council and regional partners. For unitary councils that provide local and regional services, these are combined and there is only one level (100% of the score). For shared service models, a hybrid of weighting was applied to reflect the delivery arrangements. Figure 5 shows these scoring constructs.

CDEM GROUP

Regional Outcomes
40%
Set weightings

GEMO
30%

Reg'l Council
5%

Reg'l Partners
5%

Local Outcomes
60%
Weighted by population

LA1
e.g. popn: 200k

LA2
e.g. popn: 50k

LA3
e.g. popn: 10k

LA4
e.g. popn: 8k

Traditional CDEM Group score construct comprised of regional outcomes (40%) delivered by a Group Emergency Management Office (along with Regional Council and Regional partners), and a local outcome component (60%) delivered by Local Authorities (weighted by population).

CDEM GROUP

Regional / Local Outcomes
100%

Unitary Authority
95%
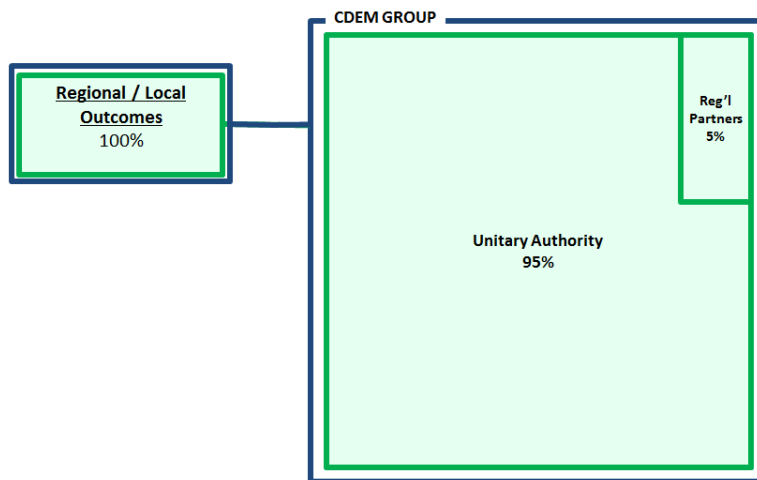
Reg'l Partners
5%

Unitary Council construct where both regional and local outcomes are delivered by one unitary authority alongside regional partners (100%).

CDEM GROUP

Regional Outcomes
60%
Set weightings

Formalised shared service/ Group-wide functions
50%

Regional Council 5%

Regional Partners 5%

Local Outcomes
40%
Weighted by population

LA   LA   LA   LA LA LA LA
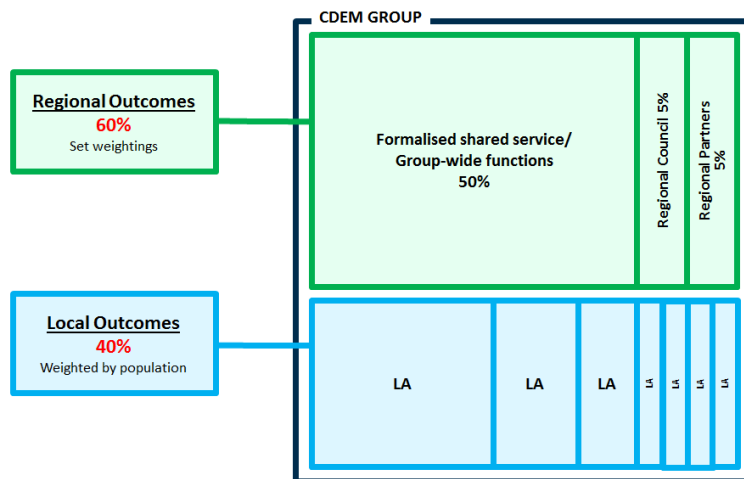
Formalised shared service delivery model where the majority of CDEM functions (60%) are delivered from one centralised team (supported by the Regional Council and regional partners), alongside local delivery outcomes (40%) delivered by local authorities (weighted by population)

Figure 5: Scoring constructs for traditional CDEM Groups, unitary authorities and formalised shared service arrangements.

2.4. CDEM CONTEXT

Since the first National Capability Assessment Report, CDEM Groups and stakeholders have reflected on the experiences and early lessons from the Canterbury earthquakes of September 2010 and February 2011. With the completion of the corrective action plan arising from the *Review of the Civil Defence Emergency Management Response to the 22 February Christchurch Earthquake*, revised approaches in a number of functional areas (such as welfare arrangements) will be reflected in CDEM Group-level corrective action plans and subsequently through revised CDEM Group plans.

Additionally there is growing recognition of the need to consider the role of risk[2] in the management of disasters. The second extended *United Nations International Strategy for Disaster Risk Reduction (ISDR)*, the *Sendai Framework for Disaster Risk Reduction 2015 – 2030*[3] and notably its 'priorities for action'[4] places a greater emphasis on those activities that are conducted ahead of emergencies, rather than those solely focused on response management. This has informed this round of capability assessments and the revisions to the capability assessment tool.

The findings from this report will support MCDEM in its ongoing conversations with the CDEM Groups and stakeholders, as well as providing an invaluable input into the upcoming revision of the National CDEM Strategy. In particular, integrating professionalisation across CDEM Groups and stakeholders and moving from managing disasters to managing risk, are key areas for improvement (discussed further in section 4).

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[2] Examples include: *Protecting New Zealand from Hazards (October 2014)*; *Insurance Council of New Zealand; Managing natural hazard risk in New Zealand – towards more resilient communities (October 2014)*; and *Local Government New Zealand*. There are many other examples.

[3] See http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf

[4] Priorities are: (1) Understanding disaster risk, (2) Strengthening disaster risk governance to manage disaster risk, (3) Investing in disaster risk reduction for resilience and (4) Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

3. 2015 CDEM CAPABILITY SNAPSHOT

3.1. HIGH LEVEL PROGRESS ON THE NATIONAL CDEM STRATEGY

3.1.1. National level overview

Figure 6 shows steady progress has been made by the CDEM Groups since 2012 with performance improvements across all goals and enablers. National CDEM performance is determined by the average score across each of the 16 CDEM Groups. At a goal /enabler level, comparisons of the scores between 2012 and 2015 show that improvements in CDEM performance have been made across the board, with the most notable improvements in Goal 2 and Enabler 1. Enabler 1 is the most improved area suggesting that strengthened management and governance of CDEM has significantly contributed to improvements in all areas.

	Goal 1	Goal 2	Goal 3	Goal 4	Enabler 1	Enabler 2	National Score
2015	72.4	69.7	72.2	56.8	77.5	66.2	70.3
2012	62.9	57.6	67.5	46.8	58.1	n/a	58.8

Developing	Advancing		Mature	
40 – 59%	60 – 69%	70 – 79%	80 – 89%	90 – 100%

Goal 1:   Increasing community awareness, understanding, preparedness and participation in civil defence emergency management
Goal 2:   Reducing the risks from hazards to New Zealand
Goal 3:   Enhancing New Zealand's capability to manage civil defence emergencies
Goal 4:   Enhancing New Zealand's capability to recovery from civil defence emergencies
Enabler 1: Governance and management arrangements support and enable civil defence emergency management
Enabler 2: Organisational resilience supports effective crisis management

Figure 6: High level comparison of Goal/Enabler scores in 2015 and 2012.

3.1.2. CDEM Group level overview

Figure 7 shows the distribution of CDEM Group scores in 2015 and 2012. The delineation between the 'developing' and 'advancing' score categories shows that in 2015, all 16 CDEM Groups attained a performance ranking of advancing or higher. This is a significant improvement on the 2012 scores, where only nine CDEM Groups scored in the advancing score category. The red and green arrows indicate the 'clusters' of CDEM Group scoring in both 2015 and 2012. In 2015, the largest proportion of CDEM Groups sit within the 60 – 69% cluster.
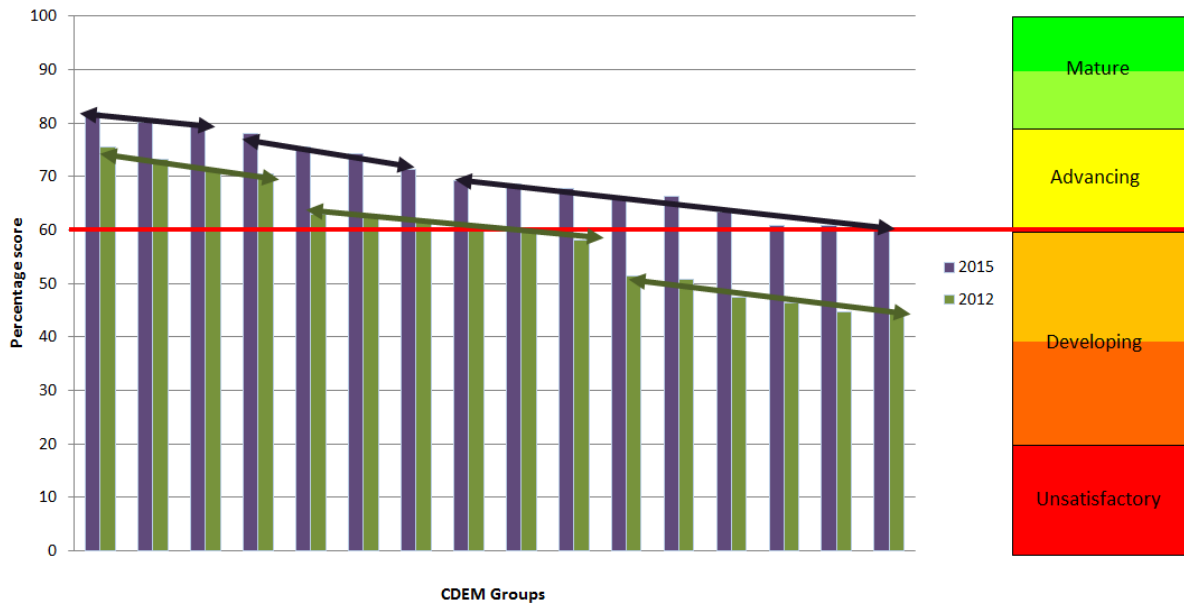
Figure 7: **2015** and **2012:** Distribution of CDEM Group scores

A comparison of goal and objective level performance in 2015 and 2012 can be seen in figure 8. The lower scoring areas from the 2012 assessment can be seen in the orange coloured boxes, namely objectives 1C; 1D; 2B; 2C, 5D and all of Goal 4. In 2015, these show improvements in all areas (excluding Goal 4), having moved from the 'developing' into the 'advancing' score category. In addition, objectives that scored in the 'advancing' category in 2012 have increased their scores further in the 2015 data.

Although the national average scores provide a broad brush indication of CDEM performance in New Zealand, there are significant variations in performance scores between CDEM Groups. These are for a range of reasons that are discussed further in section 4.

To illustrate this variation, the highest and lowest scoring CDEM Groups are compared in Figure 9.

Similarly, within each of the objectives, there are also variations of higher and lower performing indicators at both CDEM Group and local authority level that illustrate trends in the uptake of CDEM at a more operational level (see sub-section 'Performance Improvements by CDEM Indicator).

2012: Average national CDEM performance across goals and objectives

Goal One	Goal Two	Goal Three	Goal Four	Enabler One
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Ensuring all agencies have the structures and authorities to be able to reduce risks, be ready for, respond to and recover from civil defence emergencies
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Ensuring compliance with relevant legislative frameworks
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: Implementing effective organisational structures for CDEM
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensuring agencies have funding for CDEM
1D: Encouraging and enabling wider community participation in hazard risk management decisions				5D: Ensuring agencies are able to function to the fullest possible extent during and after an emergency

2015: Average national CDEM performance across goals and objectives

Goal One	Goal Two	Goal Three	Goal Four	Enabler One	Enabler Two
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Governance and management arrangements support and enable civil defence emergency management	Organisational resilience supports effective crisis management
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Implement effective organisational structures for CDEM	6A: Organisational resilience is developed through risk management and planned strategies
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: CDEM Group culture positively influences the effective delivery of CDEM	6B: Organisational resilience is developed through adaptive capacity
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensure agencies have funding for civil defence emergency management	
1D: Encouraging and enabling wider community participation in hazard risk management decisions					

Unsatisfactory	Developing		Advancing	Mature	
0 – 19%	20 – 39%	40 – 59%	60 – 79%	80 – 89%	90 – 100%

Figure 8: Comparison of performance by goal and objective in 2012 and 2015

2015: Highest scoring CDEM Group

Goal One	Goal Two	Goal Three	Goal Four	Enabler One	Enabler Two
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Governance and management arrangements support and enable civil defence emergency management	Organisational resilience supports effective crisis management
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Implement effective organisational structures for CDEM	6A: Organisational resilience is developed through risk management and planned strategies
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: CDEM Group culture positively influences the effective delivery of CDEM	6B: Organisational resilience is developed through adaptive capacity
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensure agencies have funding for civil defence emergency management	
1D: Encouraging and enabling wider community participation in hazard risk management decisions					

2015: Lowest scoring CDEM Group

Goal One	Goal Two	Goal Three	Goal Four	Enabler One	Enabler Two
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Governance and management arrangements support and enable civil defence emergency management	Organisational resilience supports effective crisis management
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Implement effective organisational structures for CDEM	6A: Organisational resilience is developed through risk management and planned strategies
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1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensure agencies have funding for civil defence emergency management	
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Unsatisfactory	Developing		Advancing	Mature	
0 – 19%	20 – 39%	40 – 59%	60 – 79%	80 – 89%	90 – 100%

Figure 9: Illustrating the variation in CDEM performance - highest and lowest scoring CDEM Groups (2015)

Whilst the CDEM Group scores contribute towards a national picture of improved CDEM performance, some CDEM Groups have made greater improvements than others.

With a vision of continuous improvement, MCDEM set performance targets for each of the CDEM Groups after the first National Capability Assessment Report to encourage a consistent rise in performance across the country. Greater levels of improvement were required for the lower performing CDEM Groups, with lower performance improvements required for the already high performing CDEM Groups.

Figure 10 compares the scores from the 2012 capability assessment round against scores from the 2015 round, alongside the target score set by MCDEM. The greatest levels of improvement are shown by those CDEM Groups that have the most diverging scores between 2012 and 2015.

The 2015 data shows that 11 of the 16 CDEM Groups met or came close to their target score (half exceeding their performance targets, and a further three CDEM Groups only narrowly missing their target by less than 2%). The six most improved CDEM Groups increased their overall score between 17 and 26% on their 2012 score. Three CDEM Groups scored 80% or more in their capability assessments with these scores sitting in the 'mature' score category. These are significant and impressive achievements for these CDEM Groups.

Figure 10: **2015** and **2012** Capability Assessment scores and target by CDEM Group

3.2. PERFORMANCE IMPROVEMENTS BY CDEM INDICATORS

Within each of the objectives of the National CDEM Strategy, there are clusters of performance indicators and measures that illustrate the functional delivery of CDEM (e.g. public education, controllers, capability development, recovery planning etc.). As part of the analysis of these functional areas, it became apparent that much of this activity sat within the 'advancing' category. Whilst the capability assessment tool had only one broad scoring area of between 60 – 79% for the advancing category, for the purposes of national granularity, this has been split into two sub scoring areas to better illustrate where the vast majority of CDEM delivery areas lie.

The scoring areas and percentage ranges used during the analysis of national data are illustrated below which excludes the unsatisfactory score category as no national data fell in this range.

Developing	Advancing		Mature	
40 – 59%	60 – 69%	70 – 79%	80 – 89%	90 – 100%

Figure 11: Maturity matrix scoring used for this national report

Figure 12 shows the range in performance across the maturity matrix for the varying CDEM functional areas across the scoring range.

Developing	Advancing		Mature
Logistics Critical resources Recovery planning Recovery mangers Recovery implementation Community resilience monitoring	Volunteers Investment in social capital Community resilience programmes Community preparedness Reducing risk from hazards Welfare planning / delivery Planned organisation resilience	Public education Public information management Availability of hazard info. Public awareness of hazards Hazard research Capability development EOC staffing Exercising Multi agency collaboration Controllers Lifeline utilities CDEM planning & monitoring Adaptive organisational resilience CDEM Governance	Public Information Managers EOC facilities Warning systems CDEM management

Figure 12: Maturity matrix overview of indicators 2015

3.2.1. Mature score indicators (80 – 89%)

CDEM functional areas that sit within the mature scoring category include Public Information Managers (PIMs); Emergency Operations Centre (EOC) facilities, warning systems, and management and governance. These four functional areas are consistently stronger within most CDEM Groups.

Scores for public information management were consistently high across the country. This was one of the few areas illustrating the effect of good CDEM integration within local authority service delivery. Most PIMs tended to be communications professionals with well-established networks and practices for communicating with the public. With some supplementary training for transitioning this into emergencies, the PIM function tends to be well connected to the emergency management team and is generally quick to fulfil the role as emergencies unfold.

EOCs and warning systems are two of the response functions that are the most regularly activated and tested, with strong scores across the CDEM Groups indicating confidence in these areas.

The strong scores within CDEM management specifically considers the performance of the Coordinating Executive Groups. A key theme identified in the 2012 National Capability Assessment Report was the need to build better foundations for CDEM – namely the leadership, structure, funding and culture of CDEM Groups – in order to drive progress. Coordinating Executive Groups have assumed a greater responsibility for overseeing CDEM activity, with a number of CDEM Groups reviewing their management and governance arrangements in the intervening years. Coordinating Executive Groups have ensured a greater engagement and accountability for CDEM performance, and have in general assumed a more active leadership role. This change has contributed to noticeably improved performance in those CDEM Groups that took action, which is reflected in the much improved scoring in this area nationally.

3.2.2. Advancing score indicators (60 – 79%)

There are a number of CDEM functions that sit at the upper end of the advancing category that have strengthened to a greater or lesser degree since the previous national capability assessment report. Notable gains have been made in building the capability and capacity of controllers, EOC staffing and multi-agency collaboration.

Gains in these areas are in part due to collaboration across CDEM in building response capability through the Controller Development Programme and the Integrated Training Framework (ITF). The ITF is led by CDEM Groups and supported by MCDEM, and has created a tiered approach to building capability across a range of response functions. Although a work in progress, it has contributed significantly to the growing skill base within the EOC environment. In addition, stewardship by Coordinating Executive Groups to ensure that the right number of EOC staff are identified, trained and exercised is growing which also supports an enhanced response performance. The inclusion of multi-agency staff in capability building creates foundations for connectivity between agencies during emergencies. These are still areas of progress and continued investment in them will yield stronger gains over time.

Other areas that sit within the upper end of the advancing category include:

- public education;
- the public's awareness of hazards;
- the availability of hazard information and hazard research;
- CDEM planning and monitoring;
- adaptive organisational resilience;
- lifeline utilities; and
- CDEM governance.

At the lower end of the advancing score category are a number of emerging functions that are gaining traction across CDEM Groups. The growing acknowledgement that the community is a vital component of response management means CDEM Groups are investing in community response planning. Some CDEM Groups are moving beyond having communities simply 'prepared' for disasters. They are working alongside communities to enhance 'networks of networks' that can support communities beyond response and into recovery. By understanding the existing community fabric of an area and their particular vulnerabilities, CDEM Groups can support communities in planning to manage these vulnerabilities. This is discussed further in section 4.

Business continuity planning scored poorly in the first National Capability Assessment Report. This area has been split into two key areas (see enabler 2), that considers the formalised, planned strategies and work programmes that organisations implement, alongside the more adaptive, cultural aspects that help organisations navigate crisis situations. Whilst measures that consider the more 'intuitive behaviours' of crisis management score well (upper end of advancing), the elements of planned organisational resilience are still a work in progress for most CDEM Groups.

Welfare planning and delivery, and reducing hazards are also at the lower end of the advancing score category. Although there is a growing acknowledgement of the need to shift the focus away from response management and into risk reduction, these performance areas still require further development.

Many local authorities have programmes of work that support reducing risk, for example within their asset management and regulatory services, but the connectedness of this activity with the wider remit of CDEM remains weak.

Overall accountability for welfare planning and delivery has yet to bed down across New Zealand and planning is still in the early stages. Despite some shifts in leadership for the respective welfare sub-functions, these responsibilities are not new. Generally the weaker scores across welfare planning and delivery reflect CDEM's enhanced understanding of what constitutes effective welfare delivery following the Canterbury earthquakes. There is much to do and CDEM Groups and stakeholders need a more focused programme of work that supports communities that are affected in the short, medium and long term following significant emergencies. In-roads in welfare planning will also support improved recovery outcomes and this is discussed further in section 4.

3.2.3. Developing score indicators (40 – 59%)

At the lower end of the national scoring picture are logistics management, management of critical resources, recovery planning, recovery managers, recovery implementation, and community resilience monitoring.

Logistics management and critical resources are functions of response management that are not often well practised, with many CDEM Groups feeling less confident in these areas. The recent publication of the Director's Guideline *Logistics in CDEM: Director's Guideline for Civil Defence Emergency Management Groups [DGL 17/15]* is timely and can support CDEM Groups to better understand and plan for these critical response functions, and in turn gain more confidence in these areas. This will be supported in the future by the development of logistics management training as part of the ITF.

The three functional areas relating to recovery (namely recovery planning, recovery managers and recovery implementation) are consistently weak across CDEM and reflect an anticipation of change within the recovery discipline following the Canterbury earthquakes. Recovery managers lack formalised professional development, and current recovery capability focuses more on the production of recovery plans than the activities that bring these to life. The subject of recovery is discussed further in section 4.

Community resilience is an emerging CDEM function and while scores for its delivery sit in the lower end of advancing, how to usefully monitor the effectiveness of these programmes of work is still an area of development.

4. KEY THEMES

1.1. 2012 CDEM CAPABILITY ASSESSMENT KEY THEMES: REVIEW AND UPDATE

Following the first capability assessments (2009 – 2012), the 2012 National Capability Assessment Report identified five key themes. This section reviews those findings and provides a short update on their relevance to the 2015 Capability Assessment Report.

4.1.1. The Challenges of Undertaking CDEM

This theme examined the priority afforded to CDEM: who delivers it, how CDEM is perceived, and the challenges smaller councils face in meeting their obligations under the CDEM Act 2002.

Since 2012, the role of the traditional emergency management officer (EMO) 'being all things to all people' with a somewhat dated focus on response, has shifted. Smaller rural local authorities have sought partnerships with their neighbours to share this critical resource, and the concept of crisis management has become everyone's business rather than the EMO's to sort out.

However challenges remain in 2015 as local authorities have an ever-increasing statutory responsibility across a broad spectrum of legislation. What remains clear is that where a local authority experiences challenges in its business *prior* to an emergency, these challenges are unlikely to improve *following* an emergency. The ongoing professionalisation of CDEM Groups and stakeholders in respect of response management has provided confidence for local authorities, with a general feeling that they are able to support their communities through an emergency.

4.1.2. Integrating Emergency Management in Councils

This theme explored the breadth and depth of CDEM (as per the CDEM Act 2002) and the wide range of activities delivered by local authorities and partner agencies – with a particular focus on how this wider contribution was poorly understood. CDEM was seen as an activity that 'sat on the edge' of council business that was largely forgotten until an emergency. This theme explored the activities beyond traditional EOC-focused readiness and response, highlighting risk reduction and recovery planning as the 'poor' and 'poorer' cousins of CDEM delivery.

Whilst in 2015 neither of these areas is 'solved', there is a growing understanding of how both risk reduction and recovery planning strategically inform council business and make good business sense.

4.1.3. Getting the Foundation Right: Leadership; Structure; Funding and Culture

This theme examined some of the key success factors of higher performing CDEM Groups in 2012. Attributes such as an engaged leadership that is cognisant of its role and responsibilities; structures that interface well with each other; funding arrangements that are transparent and drive accountability, and a strong cultural tempo that reflects aspirations of continuous improvement, deliver tangible CDEM outcomes for the organisation and the community. Those CDEM Groups that scored lowest had the least number of these attributes, with some having almost none.

In 2015 there are a number of CDEM Groups that have clearly reflected on this theme and have proactively sought to address it – these are the CDEM Groups who have made the most significant performance improvements in 2015, which is a clear reinforcement of the importance of this theme.

4.1.4. Partnerships in CDEM

This theme identified the critical need for strong partnerships with a broad range of agencies for successful CDEM delivery. It examined the extent to which partner agencies contribute, where they engage (if at all); and the role CDEM has as a supporting rather than lead agency.

In 2012, the most successful CDEM Groups had partners that were far and wide reaching (particularly in welfare, lifelines, and community preparedness). Successful CDEM Groups had emergency services represented at Coordinating Executive Group from a management and governance perspective and led strong Emergency Service Coordinating Committees with an emphasis on response planning.

In 2015 this is still very much the case. Strong emergency services relationships at a CDEM Group level are supported by practical engagement by local stations at a local authority level. Relationships are built and collaborative training and exercising occurs. However, this level of performance varies significantly between CDEM Group to CDEM Group and over time, as much of this relies heavily on individuals rather than systemic policy – and points of contact with the emergency services change fairly frequently.

A further issue raised in this theme was the role that CDEM plays as a lead or support agency. In 2012, few CDEM Groups fully understood the contribution they make as a support agency. The publication of the second edition of the Coordinated Information Management System (CIMS) manual in 2014 clearly articulated the concepts of 'lead' and 'support' agency during a response. In 2015, particularly with the changes in welfare delivery, the value that CDEM Groups bring as a support agency is more widely understood by partner agencies and local authorities.

4.1.5. The New Way to Approach Community Engagement

This theme considered the maturing of CDEM since the CDEM Act 2002. Whilst in 2012 some CDEM Groups were still very much focused on response management in a lead agency environment, many were considering wider functions. The concept of CDEM Group performance in the context of

'developing', 'advancing' and 'mature' score zones examined what CDEM delivery might look like across a range of functions. It introduced approaches for engaging the community in CDEM and how this might best be achieved, and sowed seeds of an idea of community resilience as a significant contributing factor to successful CDEM outcomes.

In 2015, the performance categories formed the basis of the Capability Assessment Tool with CDEM Groups focused on raising their previous performance scores. This has been realised with all CDEM Group scoring 60% or more (advancing score category), including three Groups scoring within the lower end of the mature score category (80% or greater). The term resilience has been used extensively to describe a range of states – predominantly with a focus on preparations that allow communities or organisations to absorb shocks, adapt to a new normal and thrive in the face of change.

During the course of interviewing and through the analysis of CDEM Group data, there were a number of recurring themes that seemed to be either constraints to or enablers of effective delivery of CDEM. These are explained below.

4.2.1. From Response to Risk and Resilience

Scores across Goal 3 (the capability to manage civil defence emergencies), generally indicate that some 13 years on from the introduction of the CDEM Act 2002, there is a strong confidence across CDEM Groups of their response arrangements. Whilst this varies somewhat between the 16 CDEM Groups (predominantly based on response capacity and an absence of regular emergencies or 'testing'), CDEM Groups have collectively been exposed to managing small and medium-sized emergencies and, since the Canterbury earthquakes of 2010 and 2011, larger emergencies.

The need for multi-agency collaboration, clear response arrangements and engagement with communities has driven the majority of CDEM work programmes for many years. This environment has changed over time, with many CDEM Groups adjusting their operational arrangements in favour of shared service models aiming to provide a layer of professionalism across the range of activities that CDEM Groups undertake. This has in turn galvanised further collaborative work that will enhance the capability of key role holders through the introduction of the Controller Development Programme, and the development and implementation of the Integrated Training Framework; both aiming to define minimum competency standards.

However, data in 2015 suggests that the effort invested in building this response capability may have had detrimental effects on other areas within the 4Rs[5]; namely the areas of risk reduction and recovery. A range of 'think pieces' (see footnote 2), and work at a national level have aligned and reinforced the view that 'being ahead of the curve' and shifting the focus from managing disasters to managing risk may yield greater benefit over time.

In order to test the temperature of CDEM Groups with respect to risk reduction, the capability assessment tool for Goal 2 (reducing the risks from hazards) was revised in an attempt to see where risk reduction efforts are currently applied at a local and Group level. Data suggested that whilst as a nation we are fairly good at investing effort in research, the ability to directly translate that knowledge into risk management was less obvious (with some exceptions where emergencies have occurred in the past).

Even where CDEM Groups or local authorities explore the tension between infrastructure improvement options (for example stop-banks; larger storm water drainage) and other management options (such as special land management policies; public purchase of specific at-risk properties), there is an inconsistent approach in consulting with affected communities to identify appropriate risk treatment options. In addition, there is almost no work that re-quantifies the residual risk post-

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[5] The 4Rs are Reduction, Readiness, Response and Recovery.

intervention, nor any deliberate transference or 'hand off' of that residual risk to emergency management professionals for preparedness planning (figure 13).

Hazard risk research	Research into known hazards to ensure knowledge capacity and currency
Analysis	Analysis of generic hazard risk research in order to determine likely local effects and to support identify specific areas of vulnerability
Reduction options	Proposed risk reduction options to reduce vulnerability to acceptable levels of tolerance
Risk mitigation	Funding and implementation of selected risk reduction option that will reduce vulnerability [facilitated by Long Term Planning]
Reassessment of hazard risk / monitoring	Re-assessment of hazard risk to identify whether intervention has reduced vulnerability to the proposed level of tolerance
Identification of residual risk	Confirmation of remaining hazard risk [acknowledging that often, hazard risk can not be eliminated]
'Hand-off' to emergency management planning	Deliberate transference or 'hand off' of residual risk to emergency management for planning [and response management in an emergency]

Left axis labels: Knowledge / Risk reduction / Residual risk & planning

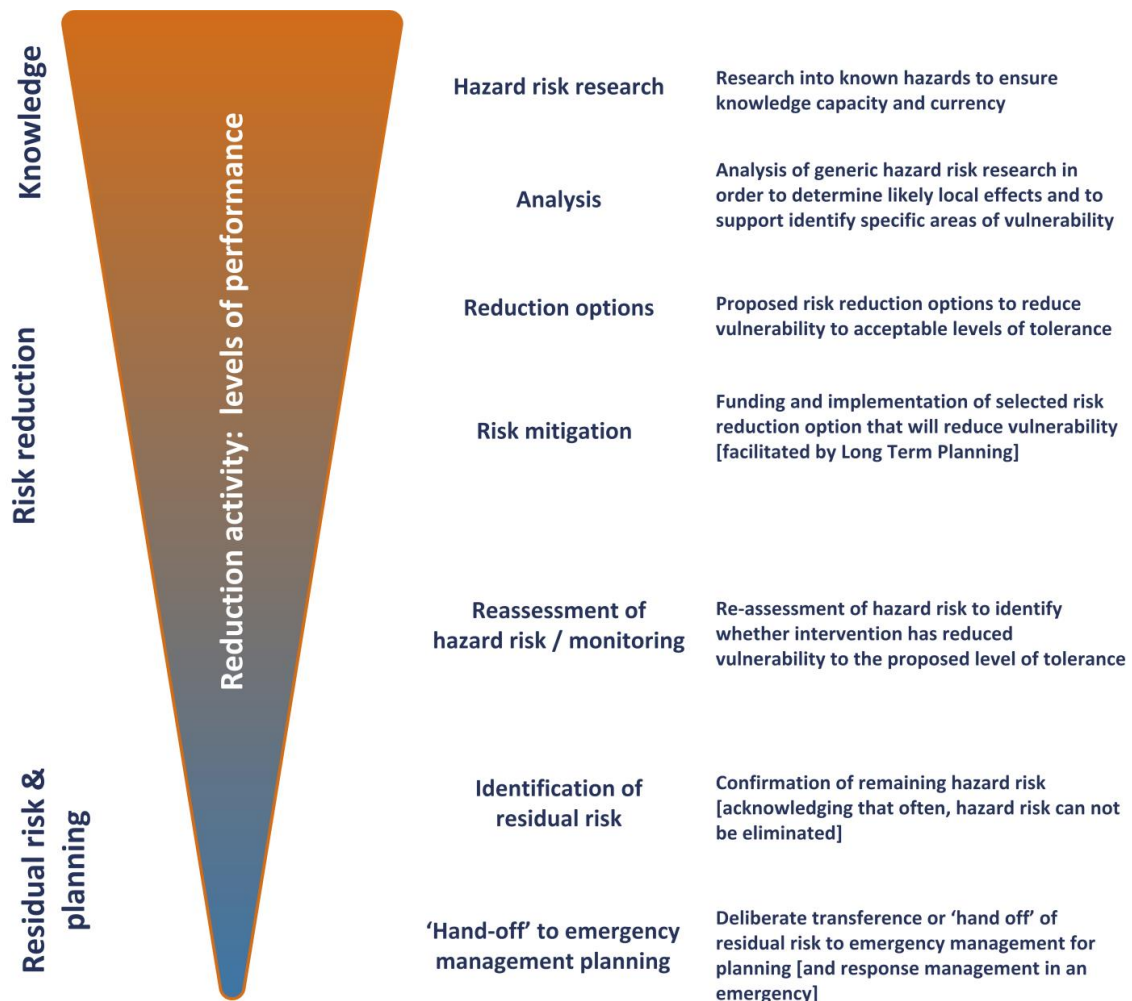Triangle label: Reduction activity: levels of performance

Figure 13: Reduction activity: levels of performance in New Zealand (schematic)

There are some notable examples where this linear approach to risk reduction is working well within local authorities; however, the Coordinating Executive Group rarely owns progress in this area. This suggests that whilst a risk management approach may well exist, it tends to occur at a local authority level without much collective risk reduction oversight at a CDEM Group level.

Aligned to risk reduction are the efforts in building 'resilience' at a community level. There is much discussion and activity around the development of Community Response Plans which generally provide for arrangements at a community level in the event of an emergency. Community response planning occurs in a range of settings (usually driven by the community) and has had the greatest traction in more rural areas, or those areas with an obvious hazard (i.e. coastal communities and tsunami risk).

Many CDEM Groups are delivering community response plans to or with the community, but often without an overarching consideration as to the purpose. Community response plans are usually supported by CDEM professional staff, often without engagement from other partners or stakeholders and tend to be focused on early provision of community level support (self-help and/or

community led centres), and an ability to be the on the ground eyes and ears for Emergency Operations Centres.

Some CDEM Groups have expanded the community response plan concept to have a more 'community resilience' focus (rather than preparedness). This means an emphasis on building contacts with neighbours and connecting networks within neighbourhoods for ongoing benefit (a community development approach rather than a response planning one). However, resilience in its broadest sense doesn't stop there. If 'being ahead of the curve' is beneficial, it may also be appropriate to look at how a resilience building approach affects a range of interventions at differing levels; i.e. at individual, household, community, government, business (asset) and societal levels.

During the capability assessment interview process, if the interview team asked interviewees not to talk specifically about their response arrangements, most were often confused as to what the interview team wanted to hear. When asked to talk about the work their organisation did to strengthen resilience, most were able to talk at length about the range of activity that was already underway. This suggests that resilience building in its broadest context is not necessarily a new idea for many organisations – it's just that perhaps this focus is not currently seen as a core outcome of CDEM.

4.2.2. The Effect of 'Reach' on CDEM Performance

Reach relates to the value CDEM Groups get from strong connections across council business units, partner agencies and ultimately the community. Although many local authorities have sought to combine CDEM resources through shared service models, there is an ongoing assumption by many CDEM Groups that CDEM is delivered primarily by a handful of 'CDEM professionals'. The challenges identified within the theme of 'Integrating Emergency Management in Councils' (2012 National Capability Assessment Report) still exist in 2015.

Interviews indicated that the majority of CDEM work plans consist mainly of core readiness and response activities delivered by CDEM professional staff. The topics below are featured regularly in reporting to Coordinating Executive Groups and Joint Committees (the mandated management and governance entities):

- Public education and preparedness;
- EOC maintenance and testing;
- Capability development and exercising;
- Lifelines; and
- Welfare

Interviewees were asked to consider how other council business units (or partner agencies) support in the delivery of CDEM outcomes. Most indicated that the responsibility for the delivery of CDEM rested predominantly with the CDEM professional staff, rather than it being embedded horizontally across the organisation as a core function. There were some good examples where the 'reach' afforded by engaging more widely with partners and stakeholders was better understood. The contribution by CDEM stakeholders in the delivery of welfare and lifelines was often cited, but in

many cases these were two of the least accountable and least discussed areas at the Coordinating Executive Group.

The purpose section of the CDEM Act 2002, clearly describes CDEM more broadly than response management, and is quite specific about the need for the coordination of planning and activities 'across a wide range of agencies and organisations'.

Those CDEM Groups that demonstrated the greatest reach were not necessarily the highest scoring during the capability assessment programme. Those CDEM Groups that are already working across various local authority business units, and with CDEM stakeholders in meeting the vision of a 'Resilient New Zealand' or region, have many levers to pull.

Although the alignment of this activity may still be work in progress, connecting relevant work streams across councils and CDEM stakeholders may yield the greatest opportunity for improvement. An oversight of this activity by the Coordinating Executive Group will ensure that all agencies share the responsibility.
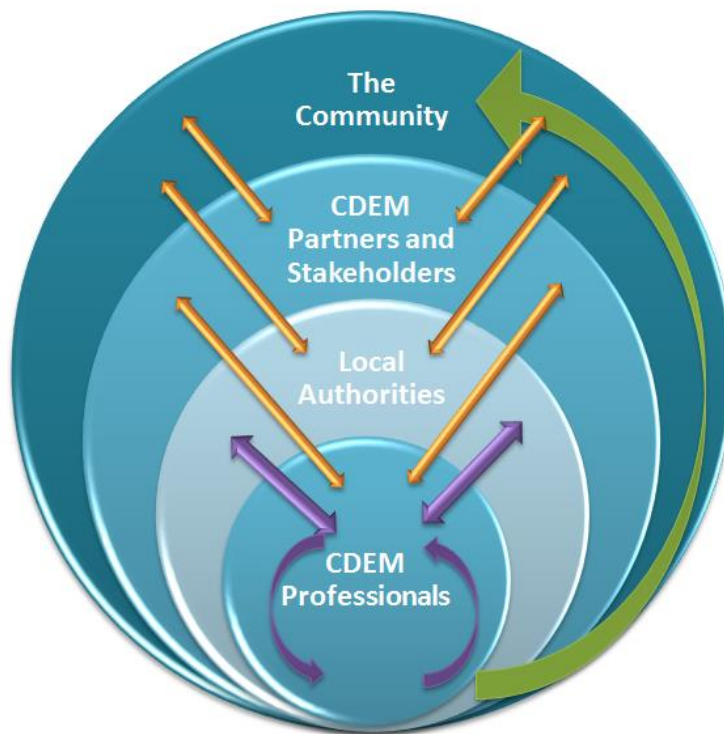

Figure 14 outlines that for some CDEM Groups, the activities of CDEM professional staff and some local authority business units was the extent considered when scoring the capability assessment tool (purple lines), with perhaps some direct engagement with the community (green line) For other CDEM Groups, scoring considered the benefits afforded by engaging across each of the circles (orange lines).

Figure 14: Expanded CDEM "reach" afforded by concentric circles of activity

Although this approach is more complicated to account for, recognition of the breadth of activity across CDEM stakeholders in building more resilient communities better reflects the intention of the CDEM Act.

The Coordinated Executive Group's ownership of a more integrated approach and a facilitation of strategic discussions with CDEM stakeholders could ensure that this connected approach is seen as a priority, which could in turn help join up work that is delivering similar outcomes.

4.2.3. Considering Exposure and Vulnerability, Scale and Complexity

One issue that was raised throughout the capability assessment process was that many local authorities (and hence CDEM Groups) felt that their circumstances were different from other local authorities. Some of this 'uniqueness' was described as differing hazards, exposure to hazards, and social fabric of its communities.

What became clear was that there isn't a 'one-size-fits-all' approach for CDEM. For each CDEM Group and their respective local authorities, different considerations were needed to address risk, exposure and vulnerability.

Whilst the individual elements that create risk may vary across New Zealand, the risks CDEM Groups face are comprised of the same basic components; hazards, exposure and vulnerability (figure 15). It is the variance in these components that creates different levels of risk.

Figure 15: Understanding our risk

Understanding the hazard scape was nearly always cited as an important factor informing CDEM planning. However, this was most often articulated as understanding the *types* of hazards that could eventuate, and the *probability* of them occurring. Understanding the range of likely consequences of different hazards – in terms of exposure and vulnerability of communities and their assets – was cited far less, and it was not clear whether this was really understood as a critical factor in understanding overall risk (and ability to prioritise work as a result). Within each CDEM Group there are council business units and/or agencies that understand the hazard scape, there are others that understand their exposure, and others that understand their vulnerabilities. What appeared to be less obvious, in most cases, was any mechanism to examine all three components together.

There were notable examples in the more rural councils where potentially affected communities cope better. They understand how likely it is that electricity or that telecommunications can be disrupted (hazard consequences), and tend to adapt their lives accordingly. There appeared to be a better community connectedness and an inherent resilience at a rural level. However, the implications of electricity or communication outages within urban environments (particularly CBD areas) seemed to be more acute, with urban populations having less well established coping mechanisms. There also appeared to be additional layers of complexity afforded by commerce,

fragile and interdependent infrastructure, tourists and transient populations - all of which are rarely systemically addressed by CDEM.

Further to this is the issue of scale. For many CDEM Groups, planning considerations address known or likely consequences – generally those that have been experienced in previous emergencies. The Canterbury earthquakes in 2010 and 2011 provided an insight and catalyst for CDEM Groups to consider a more catastrophic 'what if' consequence for their own communities. For New Zealand's larger cities, scale and complexity are already factors informing the way forward, including resilience programmes and intergenerational infrastructure investment. For other local authorities, particularly smaller city council areas, attempts to apply CDEM approaches that are more successful in rural areas may not be an appropriate solution for urban environments. A better understanding of local exposure and vulnerability may inform prioritisation of work that seeks to redress this.

4.2.4. Recovery Planning: Planning to Thrive?

Recovery is the weakest scoring area within the capability assessment tool by national average. The tool examines two main objective areas: the structures and arrangements in place to steward recovery, and the functions or approaches that Groups would undertake during recovery. Neither scores more strongly than the other.

Where individual CDEM Groups scored above the national average for recovery, these tended to be CDEM Groups that had recently experienced an emergency or had emergencies fairly regularly. In these instances, the events tended to be at the small-to-medium scale. Nevertheless, this provided opportunity to 'test' arrangements more frequently than those CDEM Groups that had not experienced an emergency in the recent past.

Figure 16 illustrates the recovery parameters influenced by the severity and duration, and the size of the affected area. Very few emergencies within New Zealand have occurred on the right hand side of the diagram. Impacts of the types of events that sit on the right hand side are generally poorly understood by local authorities, as are the subsequent impacts on long term planning.
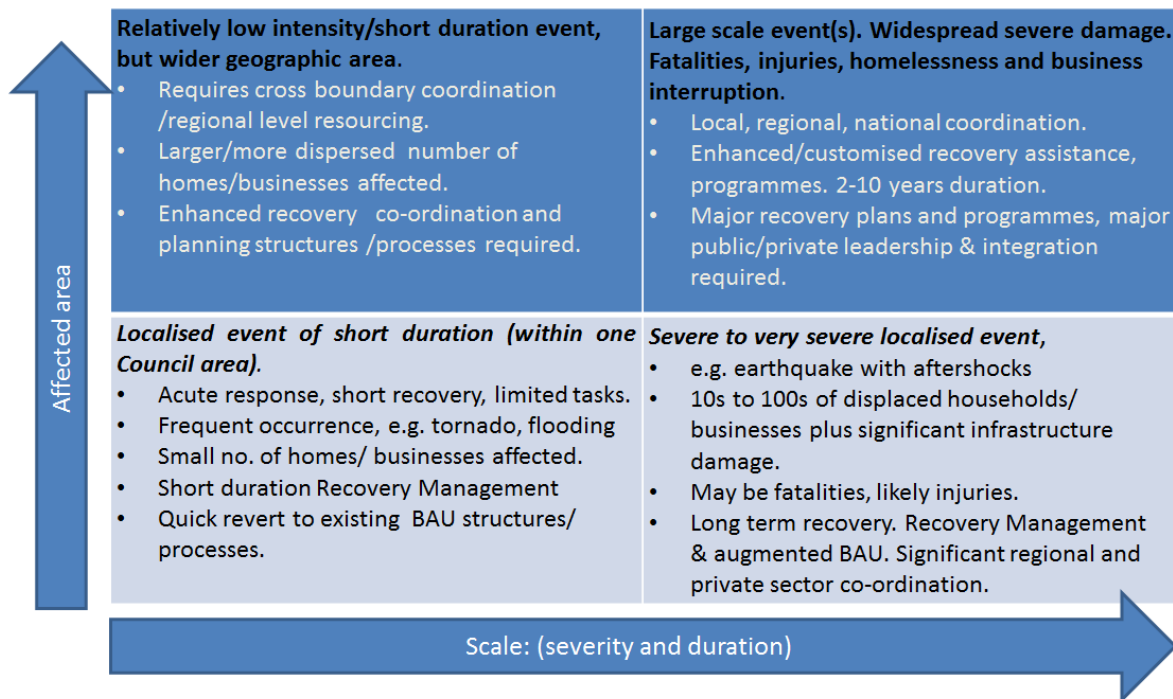
Figure 16: Recovery impacts from increased scale or affected area *(adapted from Simon Markham, Manager Strategy & Engagement (and Recovery Manager), Waimakariri District Council).*

During interviews, most respondents were clear that their recovery capabilities needed to improve, particularly around any aspect of recovery that was not focused on assets. During discussions there was a feeling that Recovery Managers themselves felt un-prepared for the role and had little opportunity for training or exercising. Generally, having recovery added onto their already busy role meant that the relationships needed for effective recovery planning and delivery were rarely established. A lack of confidence, a reliance on a recovery plan that often had no real implementation plan behind it and a general disinterest at an organisational level contributes to the poor performance within recovery. In summary, recovery has not been considered a priority.

When the issue of recovery planning was raised during interviews, senior managers generally felt that there was an appropriate level of insurance, and that access to emergency funds would support effective recovery. Very seldom did any interviewee discuss the potential effects of recovery on long-term planning or the potential fiscal impact on the council or business community. Recovery was very much seen as a 'dust-pan and brush' activity after the emergency itself. Strategic discussions about risk appetite, risk management, intergenerational investment through risk reduction and resilience approaches such as 'build back better' or retreat were generally thought of as 'too difficult' and an unlikely consequence.

Alongside the strategic considerations, there was little activity within the social recovery space. In addition to the impacts of the emergency itself, there appears to be little planning for the ongoing shocks and stressors that recovery can present (e.g. changing schools, unemployment, navigating insurance companies and EQC) and the effects of these on individuals along with the compounding effects this may have on the management of social recovery. Coordinating Executive Groups have

yet to connect the extensive 'Welfare Services in an Emergency'[6] reform work with successful social recovery outcomes. A failure to effectively steward welfare planning is likely to have repercussions during recovery following a significant emergency where communities are greatly affected. The work of the Canterbury Earthquake Recovery Authority (CERA) through its wellbeing index examines a breadth of indicators that take a 'temperature gauge' of how people are coping post-earthquake. Over time, this data has attempted to provide evidence for nimble adaptation of interventions to help people recover from the ongoing and cumulative effects of recovery. CDEM Groups could consider the areas of the wellbeing index[7] as part of their own social recovery planning.

Recovery options are complex, expensive and require strategic discussions, without which, CDEM Groups potentially face raising expectation about future environments or creating a 'menu without prices'. There were examples during the interviews where local authorities were able to cite investment in asset renewal programmes that leverage from technological advances. These 'betterment' programmes are likely to yield improved recovery outcomes from an asset perspective. These are incremental but will provide benefit to the end user over time through minimising the risk of disruption. Rarely does the Coordinating Executive Group have a collective oversight of this cumulative risk reduction.

At the time of writing this report, legislative changes are proposed that will provide for extra powers in recovery and require CDEM Groups to have appointed a recovery manager (akin to requirements for Group Controller), alongside a requirement to have prepared a strategic recovery plan. It is the implementation of these changes, however, that will, in part, be critical to supporting improved recovery arrangements. Notwithstanding the fact that over the coming years, lessons from the Canterbury earthquakes will inform recovery thinking, for now, Coordinating Executive Groups and CDEM stakeholders may like to consider how the breadth of its normal business functions would be delivered rapidly to support rebuilding communities that thrive, not simply survive.

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[6] Welfare Services in and Emergency; Director's Guideline for Civil Defence Emergency Management Groups and agencies with responsibilities for welfare services in an emergency [DGL 11/15].

[7] The CERA wellbeing index considers the areas of: social connectedness, knowledge and skills, economic wellbeing, housing, health, mental wellbeing and safety. http://cera.govt.nz/recovery-strategy/social/canterbury-wellbeing-index

5. SUMMARY AND CONCLUSIONS

The capability assessment process has identified some areas where efforts over the last five years have yielded solid improvements for CDEM. Response functions, a general focus on accountability and good customer service have raised the profile of CDEM across all agencies. There is good evidence of the connectivity between response partners and their engagement, not only during emergencies, but in shaping the future of CDEM at the Coordinating Executive Group table.

The collaborative effort to raise the standard of the capability needed to effectively manage emergencies has leveraged expertise across New Zealand. Supported by a range of guidance documentation developed after the Canterbury earthquakes, our response arrangements have matured. However, there are some areas that CDEM Groups need to address to ensure that this response capability is strong in all areas; specifically logistics management and recovery.

A number of think pieces over the last few years have emphasised that a continued focus on the management of emergencies does not reduce the risk of them occurring in the future. Risk is not static. The effects of New Zealand's hazards, our exposure to them and the increasing vulnerabilities of our communities means that new approaches are needed. CDEM is not starting from scratch in this regard.

If the current CDEM focus broadens from the almost exclusive activities of a few CDEM professionals to also consider the many other staff who work to reduce risk and improve resilience, a more comprehensive picture of activity is revealed. With some high level analysis of what is being delivered by local authorities and stakeholders as part of normal business (and under the CDEM banner), there may be opportunities to better connect activity, have an oversight of what is already being done, and spot opportunities to strengthen resilience. CDEM Groups may like to consider this approach as part of, or as a lead into, the revision of its Group Plan.

At a national level, the themes raised in this report will inform thinking when developing the National Resilience Strategy (due in 2017), and will guide the implementation of recently completed work (for example, Welfare in an emergency; Logistics management; and the Guide to the National Plan).

5.1. WHAT NEXT? THINGS YOU CAN DO TODAY

In order to improve New Zealand's CDEM performance, CDEM Groups and stakeholders could consider how each of the key themes raised in this report affects current contribution towards CDEM delivery, and factor what can be done to strengthen performance into strategic planning. The CDEM Group planning process may be one avenue.

The table overleaf provides a prompt for agencies to examine the themes highlighted in this report against potential future opportunities. Step 1 suggests an analysis of current activity. Step 2 challenges CDEM agencies to consider what actions could be undertaken immediately with no additional funding or dedicated resources – this is about spotting real opportunities to connect activities or consider things differently. A cross analysis of agency feedback at a CDEM Group level may provide some strategic oversight of where opportunities to strengthen delivery may exist.

DISCUSSION EXERCISE TEMPLATE
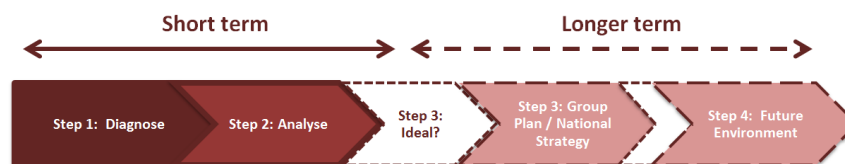
Step 1: Review current performance and identify factors that contribute to CDEM delivery (positive or negative).

Step 2: Consider how delivery could change in the short term to support building capacity.

Step 3: Consider what the ideal outcome might be and assign a priority

	Step one *How does this theme apply to current CDEM delivery?* *(some example questions to consider)*	Step two *What can you do to improve in the short term?* *(no more resources; no more dedicated staff)*	Step three *What might ideal look like and is it important?*
	Diagnosis	**Analysis of opportunity**	**Priority**
From response to risk and resilience	• *What proportion of our work is focused on response planning/management vs risk and resilience?* • *Is risk reduction activity connected to CDEM and is there any collective oversight?* • *Is the current focus on resilience building or preparedness planning?*		
The effect of 'reach' on CDEM performance	• *Can we grow our partner base?* • *Do our partners support CDEM delivery?* • *Do we define co-benefits when we work with partners?* • *Is CDEM delivery integrated across council and partners?*		
Considering exposure and vulnerability, scale and complexity	• *Do we understand our exposure and vulnerability as much as our hazards?* • *Do we consider the drivers of risk (e.g. building stock, demographics, community connectedness etc.?)*		
Recovery Planning: Planning to thrive?	• *Who owns and drives our recovery relationships?* • *Are we building resilience into our asset management?* • *Are we having strategic conversations about how we would approach recovery? And/or the hard conversations about our approach to issues like managed retreat?* • *Do we consider recovery implications on our communities, or how we would or could engage communities on matters of recovery*		