Development Needs Analysis

Best Practice Guideline for Civil Defence Emergency Management Sector [BPG 5/10]

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Authority
This guideline has been issued by the Director of Civil Defence Emergency Management pursuant to s9(3) of the Civil Defence Emergency Management (CDEM) Act 2002. It provides assistance to CDEM Groups to plan and conduct a development needs analysis.

The Ministry of Civil Defence & Emergency Management (MCDEM) consulted with CDEM Groups in producing this guideline.

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The New Zealand public has high expectations of the Civil Defence Emergency Management (CDEM) sector to lead the way in reducing risk, ensuring preparedness, and responding to and recovering from civil defence emergencies. It is up to us to ensure our communities that those they put their trust in are professional, well-trained, and competent to lead them toward “A Resilient New Zealand”.

The CDEM Competency Framework was issued in June 2009 as a technical standard under the CDEM Act 2002. It provides CDEM agencies with the competencies needed in staff to be effective at each level and role in CDEM. The competencies are important foundations to develop and maintain an effective level of capability through recruitment, selection, performance management, and needs-based professional development for CDEM personnel. The Development Needs Analysis (DNA) process will enable agencies to provide and use CDEM professional development initiatives that are based on the real needs of the individual and organisation and which are aligned with the competency framework.

This Development Needs Analysis Best Practice Guideline (the DNA Best Practice Guideline) is the recommended process and is based on comprehensive research and current best practice, and is derived from engagement with the sector. The audience for the Guideline is broad. It is important therefore to note that the Guideline is not a prescriptive document although it provides a recommended process and key considerations. The process is adaptable to a range of scenarios and can be scaled up to include multiple organisations and roles, or scaled down to look at the development needs of an individual.

A well supported and carefully planned DNA is a significant step towards providing professional development in the CDEM that is coordinated, timely, cost-effective, and based on real needs. Done well this process will put us in good stead to build capability and create professionals in CDEM and demonstrate that we are professional, well-trained, competent, and up to the demands expected of us.

John Hamilton
Director of Civil Defence Emergency Management
Executive Summary

This guideline has been designed for anyone responsible for designing, delivering or coordinating professional development in the CDEM context. The aim is to provide practical support to CDEM Groups and agencies to build and maintain effective capability across the 4Rs, through understanding and responding to their development needs.

The DNA Best Practice Guideline provides a range of practical advice and templates to conduct an effective development needs analysis, by guiding CDEM Groups and agencies to:

- Define the purpose of a DNA
- Plan a DNA
- Collect data for a DNA
- Analyse DNA data, and
- Report the findings of a DNA.

This process can be scaled and adapted to a range of different professional development scenarios.

This guideline has been written to be read and applied alongside the CDEM Competency Framework and role maps, National CDEM Plan, Guide to the National CDEM Plan, Director’s Guidelines, codes, and technical standards published by MCDEM, as well as Group and Local CDEM plans, policies, standard operating procedures and documentation.
Definitions and Abbreviations in this Guideline

**Attribute**  a personality characteristic or attitude.

**Blended learning**  An approach to professional development that blends a range of different modes of delivery. The different modes are designed as part of a bigger package, so each component builds on, or reinforces, learning from other modes.

**Capability**  The degree to which an organisation, team or individual is able to perform. Capability is linked to skills, knowledge and attributes (SKAs), as well as environmental factors and influences.

**Capacity**  The adequacy of resources in terms of quantity, and suitability of personnel, equipment, facilities and finances.

**CDEM**  Civil Defence Emergency Management.

**CDEM Competency Framework [TS 02/09]**  This technical standard describes the high-level competencies relevant to all CDEM roles and functions. It also provides indicators that describe the behaviours that will be observed when a competency is being performed.

**CDEM Group**  A Civil Defence Emergency Management Group is a group established under section 12 of the CDEM Act.

**Development needs analysis (DNA)**  A process of gathering and analysing information to identify where there are gaps between how a role should be performed, and how it is being performed.

**DNA**  See development needs analysis.

**Knowledge**  Knowledge (in the professional development context) refers to the things a person needs to know and understand in order to perform a role (as opposed to ‘skills’).

**MCDEM**  Ministry of Civil Defence & Emergency Management.

**PD**  See professional development.

**Performance**  Performance is a combination of what people do in their job and the results they get. Results can generally be seen or measured. Performance is influenced by SKAs and workplace environment.

**Professional development**  This broad terms refers to any activity or initiative (including training) with the purpose of ensuring people can acquire the skills and knowledge that will enable them to perform their role effectively and demonstrate competence.

**Qualitative data**  Information in the form of words, pictures or stories. It is likely to be derived from interviews, focus groups, observation or documents.

**Quantitative data**  Information in the form of numbers, figures, percentages. It is likely to be derived from surveys, questionnaires and observation.

**RAPID®**  RAPID is an introductory-level CDEM training and assessment programme designed and administered by MCDEM.

**REMA**  Regional Emergency Management Advisor. A MCDEM employee appointed to provide a conduit between the national and regional levels of CDEM. A REMA supports the CDEM Group to achieve their CDEM goals.

**Role map**  A role map is a document containing all the skills, knowledge and attributes relevant to a particular CDEM role or function. Role maps are aligned with the CDEM Competency Framework.

**SKAs**  An abbreviation for skills, knowledge and attributes, as described in role maps.

**Skills**  Skills are the things a person needs to be able to do in order to perform their role, as opposed to “knowledge”.
SOPs  Standard operating procedures are documents that detail the processes and procedures required to perform various tasks.

Training  Training is considered to be a subset of professional development. It is usually delivered face-to-face, either with an individual or a group of learners. Training is particularly appropriate to support learners in the acquisition and development of specific skills, rather than to simply transmit information or knowledge. Training can take many approaches and include a combination of instructional techniques.

Training needs analysis (TNA)  This term is generally more common and widely understood than a “development needs analysis”. A TNA is similar to a DNA, however a DNA does not assume training is the only solution. DNA is the preferred term in the CDEM professional development context.

Triangulation  Triangulation is similar to “corroboration” and “substantiation” and is used to enhance the validity of any interpretations during the data analysis. It is achieved by comparing data from a range of sources collected using a range of methods to ensure it is corroborated and fits together to form a coherent picture.
Welcome to the CDEM Development Needs Analysis

Purpose

The purpose of this Guideline is to support civil defence emergency management (CDEM) Groups and organisations to conduct an effective development needs analysis (DNA). This guide provides practical advice, tools and templates for CDEM Groups to apply and adapt the DNA process to a range of professional development scenarios.

The DNA Best Practice Guideline and supporting resources are part of the CDEM Competency Framework Toolkit. The Toolkit has been designed to support people working in the CDEM environment to use the CDEM Competency Framework and the role maps.

Target audience

The DNA Best Practice Guideline and resources have been designed for anyone working in the CDEM environment intending to carry out a DNA. However, it is recognised that the primary audience is likely to be CDEM Group and Local Emergency Management Officers/Advisors. With that in mind, the intention has been to provide a simple process that can be adapted to a range of scenarios with the support of a set of customisable tools and templates.

Structure of this Guide

This Guideline contains the following sections:

- Understanding a Development Needs Analysis  This section introduces key concepts and provides information for people who may be new to professional development, and who plan to conduct a DNA.
- The CDEM Development Needs Analysis: Getting Started  This section describes the DNA process designed for the CDEM sector, and introduces some scenarios where a DNA could be applied.
- DNA Process: Stages 1-5  These sections outline the five stages of the DNA process. Each section includes a description of the stage and practical guidance to use the tools and templates.
- Appendix  The appendix at the end of the Guideline provides a range of examples to demonstrate to users how to adapt and apply the DNA process in a range of scenarios.

How to use this Guide

This Guideline includes practical advice and guidance to apply the DNA process to a range of CDEM scenarios. Refer to the examples provided to see how the DNA can be adapted in the section The CDEM DNA Process: Getting Started.

The DNA Best Practice Guideline is supported by a set of customisable tools and templates. These are available from the CDEM Competency Framework Toolkit webpage on www.civildefence.govt.nz. From here, identify and download the templates you need from the list available.

This icon indicates that there is a tool or template associated with that section of the DNA Best Practice Guideline. The italicised text next icon provides the template reference so you can easily identify the correct one to download.

This icon indicates that more information is provided on this topic or idea in another section of the Guideline. The reference will state where to locate this information.
The DNA tools and templates available to support this Guideline include:

- DNA Template 1.1 – Initial Investigation Questionnaire
- DNA Template 2.1 – DNA Planning
- DNA Template 3.1 – Suggested Interview Questions
- DNA Template 3.2 – Performance Formula
- DNA Template 3.3 – Self-assessment Survey
- DNA Template 4.1 – Data Analysis Matrix
- DNA Template 4.2 – Summary of Findings & Recommendations
- DNA Template 5.1 – DNA Report Template
Understanding a Development Needs Analysis

Overview
This section provides key concepts and information for people who are new to professional development, or who plan to conduct a DNA in the CDEM context. It also explains what a DNA is and the benefits of conducting one.

Professional development includes a range of activities and initiatives that are designed to improve a person’s performance in a role. These activities might include training, workshops, coaching and mentoring, exercises and online learning.

Performance is a combination of what people do in their job and the results they get – these are usually things you can see or measure. Performance is influenced by the skills, knowledge and attributes of individuals, and the environment they operate or work in. This can be expressed as:

\[
\text{Skills, Knowledge, Attributes} + \text{Workplace environment} = \text{Performance} \rightarrow \text{RESULTS}
\]

The aim of professional development is to ensure that people are able to acquire skills and knowledge that will enable them to perform their role effectively and demonstrate competence. Professional development is more effective when it provides learners with the skills and knowledge they need to perform their role AND they are supported to apply these skills and knowledge in the workplace. A development needs analysis (DNA) is a tool for understanding these needs.

The CDEM Competency Framework includes all the high-level competencies common to a range of CDEM roles. These competencies put CDEM in the position to deliver robust, evidence-based professional development. This will contribute to enhanced CDEM capability at a consistent national standard. The CDEM Competency Framework role maps describe all the skills, knowledge and attributes required for a range of CDEM roles.

The CDEM Competency Framework provides the foundation for effective professional development that will improve performance, build capability and professionalise CDEM.

What is a Development Needs Analysis?
A development needs analysis (DNA) is a process of gathering and analysing information to identify where there are gaps between how a role should be performed and how it is being performed. As we have seen, performance is influenced by an individual’s skills, knowledge and attributes, as well as the environment they work or operate within.

The aim of a DNA is to find out what is being done well, where there are any gaps, and to understand why these gaps exist. In other words, do the gaps exist because individuals lack specific skills, knowledge and attributes required for their role, or is it because of environmental factors? A DNA may show that any gaps are the result of a combination of both. These gaps are translated into development needs.

1 Words appearing in the text in bold and italics, e.g. professional development, are key terms that are explained in the Definitions and Abbreviations section of this Guideline.
2 The CDEM Competency Framework and role maps are available online from www.civildefence.govt.nz.
3 The Emergency Management Officer (EMO) role map is comprehensive and in many cases describes the skills, knowledge and attributes required of a range of roles. This may be useful when analysing the development needs of a role for which a role map has not been created.
4 The CDEM Competency Framework and role maps provide the evidence basis for how a range of CDEM roles should be performed.
Training needs analysis is the more common and widely understood term, and is a process that has been undertaken by CDEM Groups in the past. A DNA is a similar process, however, a DNA does not assume training is the best and only option to address any gaps. Understanding why a gap exists is essential for determining the best way to address it.

The workplace environment can refer to the immediate context a person operates in, such as the physical space and their team, as well as the broader context, such as the CDEM Group or national CDEM context. Environmental factors can include just about anything affecting performance that is not related to a learning need (i.e. skills, knowledge and attributes). Some examples might include unclear expectations, lack of clear leadership, lack of feedback, inadequate policies, processes or procedures, limited human resourcing or capacity, and unavailable resources or equipment.

Addressing development needs

Development needs related to gaps in skills, knowledge and attributes will typically be addressed by providing professional development initiatives, such as training, on the job learning, or coaching. Development needs related to the workplace environment may be addressed by determining how people can be better supported to operate in the CDEM Group. This might be achieved by making changes within the workplace.

Summary

To summarise, the purpose of a DNA is to determine the development needs of people appointed to perform a CDEM role or function. A DNA achieves this purpose by:

- defining how the role should be performed (desired performance)
- determining how the role is currently being performed (current performance)
- identifying the gaps between current and desired performance and understanding the underlying issues, and
- determining how to address these development needs (gaps) to support people to achieve the desired performance.
Professional Development Cycle

Introduction

A DNA is the first stage in the professional development cycle. It begins by understanding what the development needs are by applying a DNA process. Once these needs are understood, the subsequent stages of the professional development cycle can be carried out.

This cycle can be used to implement the recommendation of a DNA with the purpose of addressing gaps in skills and knowledge. A DNA will likely identify other development needs that may be addressed by making changes in the workplace environment.

The stages in the professional development cycle are:

Development needs analysis – conduct a DNA to identify the development needs of staff. This Guideline is designed to help organisations to carry out this first stage of the PD cycle.

Design – plan the professional development initiative or activity, or identify existing opportunities.

Develop – create or tailor the professional development initiative or activity.

Implement – deliver the professional development initiative to learners. This includes support in the workplace to apply what is learnt.

Evaluate & assess – evaluate the effectiveness of the initiative or activity, and assess the competence of learners.

Figure 1. The Professional Development Cycle

A DNA is a useful process to help CDEM Groups understand the development needs of personnel. A thorough, well-planned DNA will put a CDEM Group in a good position to:

▪ Provide professional development (including training) that is targeted to real development needs.
▪ Ensure people are well supported in their work environment to perform their role and responsibilities successfully and effectively.
▪ Identify the most appropriate ways to address the development needs (gaps).
▪ Link professional development to the CDEM Group’s strategic objectives.
▪ Provide evidence-based rationale for the recommendations of a DNA to gain support and buy-in at senior level, e.g. CEG.
▪ Promote consistency within and across CDEM Groups.
▪ Address the recommendations of an M&E capability assessment report.
▪ Respond more effectively to emergencies through enhanced capability.
The CDEM Development Needs Analysis: Getting Started

Overview

The purpose of this section is to help a CDEM Group initiate a development needs analysis. It explains the DNA process that has been designed for the CDEM sector, and introduces the concept of applying this process to a range of professional development scenarios. The appendix at the end of this Guideline provides a range of examples to demonstrate how the DNA process could be adapted and applied.

The DNA process includes five key stages:

1. Define purpose – an initial scan is conducted to gain an understanding of the background and context of the issue. This information is used to define the purpose and desired outcomes or results of the DNA. It is used to inform planning of the further DNA stages.

2. Plan – planning a DNA includes determining: what information is required; key sources of information; key individuals to involve; data collection tools and methods; who the key decision-makers and stakeholders are; and how information will be analysed and reported.

3. Collect data – data are collected from a range of sources using a variety of tools and methods to achieve triangulation. These sources and methods will have been determined during the planning stage.

4. Analyse data – the data collected are analysed to identify trends, themes and discrepancies, which are then translated into findings. Triangulation strengthens the validity of any conclusions reached. The findings provide the rationale for the DNA outcomes, such as any recommended courses of action.

5. Report findings – the findings and recommendations of the DNA are presented in a format suitable for the audience responsible for approving any recommended courses of action.

The development needs identified by the DNA are used to inform the subsequent stages of the professional development cycle – that is, the design, development, implementation and evaluation and assessment of professional development initiatives.

Support to conduct a DNA

MCDEM can provide support to CDEM Groups and agencies to conduct an effective DNA. Talk to your MCDEM Regional Emergency Management Advisor to discuss the level of support required.

Adapting the process

The DNA process described above provides a practical framework that can be applied to a range of CDEM professional development scenarios. For example, the DNA process could be applied to identify the development needs of individuals, teams, EOC functions, a range of CDEM roles, or the development needs across a CDEM Group. It is also a useful tool to address the recommendations of a CDEM Group’s monitoring and evaluation capability assessment report.

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5 Triangulation is about corroboration and substantiation. The validity of interpretations is enhanced by comparing data from a range of sources and using a range of methods to ensure it corroborates each other and fits together to form a coherent picture.

6 Please note, a DNA process is similar to any piece of research, and as such it can be applied to non-professional development scenarios.
The CDEM Development Needs Analysis: Getting Started

Important note: While this Guideline is comprehensive it is important to note this is a process that can be carried out in a short amount of time, for example, when analysing the development needs of an individual.

The appendix at the end of this Guideline provides a range of worked examples to demonstrate how the DNA process can be adapted and applied to a range of scenarios.

The examples provided in the appendix show how the DNA process could be applied to the following CDEM scenarios:

- An employee of a local council has been appointed to perform a CDEM role.
- A newly elected or appointed Mayor, Chief Executive, or council member needs to understand their CDEM role and responsibilities.
- An exercise suggests a particular EOC function is not meeting the required standards to perform effectively in a real emergency.
- A CDEM Response Team needs to know how to use a new piece of equipment.
- A CDEM Group wants to improve communication and relationships between the key stakeholder agencies.\(^7\)

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\(^7\) This is an example of how the DNA process can be applied to a non-professional development scenario.
1. Define the purpose

1.1 Introduction
The first stage of a development needs analysis is to carry out an initial investigation to define the issue, and gain an understanding of the context and background. This information is used to define the purpose of the DNA and to inform the planning stage. This stage is also a good opportunity to involve and gain the support of key decision-makers, such as senior managers, or members of the CEG or Joint Committee.

1.2 How to investigate
Document answers to the questions in section 1.3 by completing DNA Template 1.1 – Initial Investigation Questionnaire. Before you begin, consider who you will need to consult with to answer the questions. As this is a good opportunity to gain the support and buy-in of key stakeholders, consider consulting with the people who will be affected by the outcomes of the DNA or who will be responsible for implementing the outcomes.

Consult with the people who initiated the request, senior managers, and decision makers who will review the findings, as well as the target audience.

Informal methods, such as face-to-face meetings, telephone conversations and email, are useful for gathering the information required to define the purpose of the DNA.

1.3 What to investigate
Answers to the questions below can be used to define the purpose of the development needs analysis\(^8\).

1. Who has suggested there is an issue or that a DNA is required? Who initiated the request? What is the issue? What has happened to suggest there is an issue? What is the current perception of the issue?
The intention is to gain an understanding of the background to the request for the DNA and why it is considered a worthwhile exercise. For example, it may have been identified in the CDEM Group’s monitoring and evaluation capability assessment report.

2. Who are the key decision makers who will review the findings and recommendations of the DNA? Who will be responsible for implementing the outcomes of the DNA? Who will they report to?
This will have some implications for the subsequent stages of the DNA (such as defining and agreeing expectations about outcomes, reporting requirements, etc), so it is worth identifying who these individuals or groups are from the start.

3. Who will lead or conduct the DNA? Will the DNA require a team? Who will champion the DNA at a senior level?
In most cases, the Group or Local EMO will be the person conducting a DNA. It may be useful to identify a sponsor to champion the DNA outcomes at a strategic level.

4. Who is the target of the DNA, i.e. who are the learners or the users of the outputs?
How big is the target population? What levels is it aimed at – individual, function/team, CDEM Group/organisational, or a combination? (Refer to section 1.4).
It is important to determine who will be the focus of the development needs analysis. For example, it might be targeted at a newly recruited individual, a team, or a multi-

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\(^8\) Note that the questions and supporting details in section 1.3 are replicated in DNA Template 1.1.
1. Define the purpose

Is the issue important? What are the risks if it is not addressed? What will be the short or long term effects, if any? Will it damage customer, staff or stakeholder relations?
The intention of these questions is to assess the importance of the issue to be analysed. In other words, does it matter? If not, a DNA may not be necessary.

5. What are the expected results or outcomes of the DNA? What is the desired state or change in performance? What is the DNA trying to achieve? How will you know it has been achieved?
Identify how the results of the DNA will be used to change or enhance performance. This information can form the basis for evaluating the initiatives implemented as a result of DNA.

6. What are the expected outputs of the DNA? What will be produced at the end of the DNA?
'Something' will be produced in the final stage of the DNA. This may be a formal report, an outline of a proposed learning and development programme, or a list of recommended actions. It is worth determining what the expectations of key stakeholders and decision makers are at this early stage. Refer to section 2.8 for more information about reporting.

7. What is the purpose statement for the DNA?
The purpose statement should summarise the key points from answers to the above questions. That is, what is driving the DNA – what are you analysing and why. It might describe an overarching purpose with several objectives beneath this. The purpose statement should describe the context, what the project will deliver, and why it is worth the effort. Once the purpose has been defined you are ready to undertake further planning.

1.4 Levels of analysis

During the initial investigation determine which level the DNA sits at, as this will guide what sources of information and data collection methods to use. A DNA in the CDEM context will typically analyse development needs at one or more of the following levels:

- **CDEM Group or organisational level** – development needs across the CDEM Group or within the employing organisation, e.g. a DNA across a range of agencies, roles or functions.

- **Operational or function level** – development needs across a CDEM function, possibly conducted at the local level, e.g. a DNA for the EOC Logistics team.

- **Individual or role level** – development needs of individuals performing a specific role, e.g. a DNA for a newly appointed Public Information Manager, or all Local Welfare Managers within a CDEM Group.

The level will influence the scope of the DNA. For example, a wide-ranging DNA at the CDEM Group level may need to involve people from a range of agencies, and possibly those in more senior, managerial or strategic positions. A DNA at this level may also need to account for high-level strategic documents.
2. Plan

2.1 Introduction

Once the purpose of the DNA has been defined you are ready to plan the DNA. Evidence of robust planning will strengthen the validity of the findings and the rationale for any recommended courses of action. The intention is to provide a persuasive and compelling case to decision makers and stakeholders at the end of the DNA.

Refer to DNA Template 2.1 – DNA Planning
Use DNA Template 2.1 – DNA Planning to document your planning for the remaining stages of the DNA as you work through this section.

2.2 What to plan

Planning a DNA includes determining the following:

<table>
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<th>What to plan</th>
<th>Questions to consider</th>
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<tr>
<td>Focus of the DNA</td>
<td>What information is required to reach valid and evidence-based conclusions? What are the key themes, topics or areas to focus on?</td>
</tr>
<tr>
<td>Sources of data and information</td>
<td>Who are the key individuals, groups or organisations to collect information from? What key documents or resources will be referenced? Will you reference the CDEM Competency Framework and role maps? Have you considered a range of sources to achieve triangulation?</td>
</tr>
<tr>
<td>Data collection tools and methods</td>
<td>What methods will be used? Will you need to design any tools to carry out these methods? Have you considered a range of methods (two or more) in order to achieve triangulation? Have you considered methods to collect both qualitative and quantitative data? Are your proposed methods feasible?</td>
</tr>
<tr>
<td>Data analysis approaches</td>
<td>How will the data be analysed? Have you considered how qualitative information will be coded and analysed? Have you planned to gather too much information?</td>
</tr>
<tr>
<td>Reporting the DNA findings</td>
<td>Who is the audience for the DNA findings? Who are the decision makers? How will the DNA findings and results be reported? In what format will they be presented? What will the findings be linked to, e.g. strategic plans?</td>
</tr>
<tr>
<td>Timeline</td>
<td>What is the timeline for conducting the DNA? What are the key milestones? When will key activities take place? When are the results of the DNA expected?</td>
</tr>
</tbody>
</table>

The remainder of this section provides more information about planning each of these components of a DNA. More detail about conducting the subsequent stages of the DNA (data collection, analysis and reporting) is then provided in the remaining sections of this Guideline.
2.3 Triangulation

An important concept in any piece of research is the use of triangulation. Consider triangulation as similar to corroboration and substantiation. It is used to enhance the validity of any interpretations made during the data analysis. Triangulation is achieved by comparing data from a range of sources collected using a range of methods to ensure it corroborates each other and fits together to form a coherent picture.

The critical points for this are:

- Identify a range of information sources,
- Collect a mix of quantitative and qualitative data, and
- Use two or more data collection methods.

2.4 Focus the DNA

The purpose statement from the initial investigation is used to determine the specific focus of the DNA and what information will be required. Focusing the DNA will guide the selection of data sources and collection methods that will be used.

Determine the key themes, topics or areas that should be explored to create a coherent picture that can be used to make valid judgments. Required information might include:

- The specific skills, knowledge and attributes required to perform a role effectively,
- Expectations of stakeholders, such as the target audience, the CDEM Group, the EMO, senior managers, line managers, etc,
- An understanding of the workplace environment, and
- Other key themes and topics.

2.5 Identifying sources of information

Once you know what information is required you can determine where this information will be sourced. The main sources will likely include people and existing data, such as key documentation. As a guide, include everyone in the target audience for a group of fewer than 30 people. When analysing the needs of a larger target audience, the larger the sample size the more representative it will be of the wider group. Include individuals from different levels of the organisation or CDEM Group.

Key people to consider include:

- Target audience of the DNA.
- EMOs.
- Line managers and other senior managers.
- CEG and/or Joint Committee members.
- Partner agencies and organisations.
- The Mayor, Chief Executive or elected council members.
- Other stakeholders who interact with the target audience.

Existing data sources to consider include:

- CDEM Competency Framework [TS 02/09] and role maps.
- Job descriptions, performance reviews and professional development plans.
- CDEM Group Plan, and supporting plans, Monitoring & Evaluation report and SOPs.
- Relevant organisational documents, such as business plans, strategies, policies and procedures.
- Director’s Guidelines, technical standards, and codes published by MCDEM.
2. Plan

Section 3 (Collect data) provides more information about collecting information from the different sources.

2.6 Selecting data collections methods

The most common methods of data collection for a DNA are interviews, focus groups, observation, surveys and questionnaires, and review of relevant documentation. When conducting a DNA, particularly a large-scale one, consider maintaining a journal or log to record personal insights during the process to compare with other data during analysis.

Interviews and focus groups will elicit a mix of quantitative and qualitative data, while observation, surveys, and documents will provide more quantitative information. Surveys are useful when collecting data from large groups of people.

The table on the following page summarises the advantages and disadvantages of each data collection method.

Section 3 (Collect data) provides more information about how to apply these data collection methods.
2. Plan

### Table 1: Data collection methods

<table>
<thead>
<tr>
<th>Data collection method</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>Produce large amounts of data. Generate rich qualitative data, including personal opinions, emotions and experiences. Allow exploration of ideas in more depth, providing more salient, relevant and focused data. Questions and responses may be clarified on the spot. Face-to-face interaction is an opportunity to gain support for the DNA through an inclusive, consultative approach. Approach can vary to meet the need – from a semi-structured to a structured interview.</td>
<td>Time consuming to conduct and analyse. Enough people need to be interviewed to ensure valid conclusions can be made. Qualitative data are more difficult to analyse. Individuals may be intimidated. Individuals may present information in a biased way (whether intentionally or not). Interviewers need to be skilled facilitators. Open to interviewer bias. Opinions reflected may not be representative of the population.</td>
</tr>
<tr>
<td>Focus groups</td>
<td>Produce large amounts of data. Quick and efficient to facilitate. Face-to-face interaction is an opportunity to gain support for the DNA through an inclusive, consultative approach. Effective for exploring sensitive issues.</td>
<td>Strong personalities may take over and dominate. Qualitative data are more difficult to analyse. Requires skilled facilitators.</td>
</tr>
<tr>
<td>Observation</td>
<td>Gather quantitative and qualitative data. Gather direct information about skills, knowledge and attributes as well as the workplace environment. Observe behaviours and skills in a naturalistic setting. Field notes can be taken during the process to record personal insights to reflect on during analysis.</td>
<td>May be influenced by observer bias. People may perform differently when being observed. More time-consuming to conduct. May be more expensive. Requires skilled observers.</td>
</tr>
<tr>
<td>Surveys and questionnaires</td>
<td>Efficient, quick and cost-effective. Opportunity for everyone to contribute. Reach geographically-dispersed groups. Gain a broad overview of the current situation. Gather quantitative data to corroborate qualitative information gathered.</td>
<td>Harder to enforce response to the survey – may have a low response rate. May only provide a picture that lacks depth and overlooks nuances. Long surveys have a lower response rate. While relatively quick and easy to develop, designing a good survey is more difficult.</td>
</tr>
<tr>
<td>Review of existing data (e.g. documents)</td>
<td>Readily accessible and inexpensive. Gather useful information about the wider context or environment, such as vision, values, political climate, etc.</td>
<td>May not be up to date or reflect current arrangements, best practice or policy. More time consuming to analyse.</td>
</tr>
<tr>
<td>Journal or field notes</td>
<td>Strengthen triangulation by adding another source of information for corroboration.</td>
<td>Subjective information that is open to bias.</td>
</tr>
</tbody>
</table>

#### 2.7 Analysing the data

During the planning stage, start to consider how the data will be analysed. Data analysis requires some specific technical skills so endeavour to keep it simple. Being clear about the purpose of the DNA will ensure the right data are collected. This will help avoid information overload and the collection of irrelevant data.
2. Plan

Quantitative data, while easier to obtain and analyse, generally lack the depth required to fully understand what is happening. While qualitative data are typically harder to analyse, this is what provides the meaning behind the numbers.

The aim of the analysis is to turn the raw data into something meaningful. Using triangulation means that analysing information from a range of sources using a variety of collection methods will lead to more valid conclusions.

Section 4 (Analyse data) provides more information about how to analyse the quantitative and qualitative information collected.

2.8 Presenting the DNA findings

The initial investigation will have identified the audience for the DNA outcomes, and their expectations for how this information will be reported. Ensure these expectations are clearly understood before undertaking data collection.

At the conclusion of a DNA you might be expected to produce:

- A list of recommended actions with rationale.
- A formal report with recommendations.
- A guide to create a professional development strategy and/or plan.
- A proposal for a professional development programme.
- Proposed content for a course, workshop, seminar, etc.

Section 5 (Report findings) provides more information about how to report the findings of the DNA.
3. Collect data

3.1 Introduction

Having planned the DNA, you are now ready to collect data from the identified sources of information using the tools and methods selected. Regularly reflect on the purpose of the DNA when selecting and designing the tools and methods to ensure data collection is focused in the right areas. The main data collection methods are:

- Interviews
- Focus groups
- Surveys
- Observation
- Review of existing data (such as documents), and
- Maintaining a journal.

This section provides some guidance to use these methods of data collection. A large-scale DNA (e.g., a multi-agency DNA across a CDEM Group) may require a higher level of data collection and analysis, in which case it may be worthwhile consulting with specialists. A number of useful books and resources are available from the library at the Department of Internal Affairs.

A key source of data for a DNA in the CDEM sector will be the CDEM Competency Framework. This section also provides guidance on using the framework and role maps in this process.

3.2 Confidentiality

Confidentiality is an important element when collecting data for any purpose. It means that only the person or people collecting the data will know who participated. Determine the degree of confidentiality when selecting the data collection methods. Decide how the data will be used and stored, and who will have access to the data.

Explain to participants that the any information gathered will be amalgamated with other data and analysed to provide an overall picture. Assure participants that any views, opinions and quotes expressed will not be attributed to individuals.

3.3 Using the CDEM Competency Framework and role maps

The CDEM Competency Framework [TS 02/09] underpins all CDEM professional development. Along with the role maps, it will be a key source of information for any DNA in the CDEM context. These documents are available from the MCDEM website – www.civildefence.govt.nz. Role maps have been created for the following CDEM roles:

- Manager – CDEM Group Office
- Emergency Management Officer\(^9\)
- Controller
- Recovery Manager
- Public Information Manager

\(^9\) Contact MCDEM’s Professional Development Team for more information on titles and access.

\(^10\) The Emergency Management Officer (EMO) role map is comprehensive and in many cases describes the SKAs required of a range of roles. This may be useful when analysing the development needs of a role for which a role map has not been created.
3. Collect data

- Welfare Manager
- Lifeline Utility Coordinator
- CDEM Response Team Member
- EOC Staff\(^{11}\)
- Welfare Centre Supervisor\(^{12}\)

The following steps describe a suggested process to use the framework and role maps in a DNA to identify the skills and knowledge required to perform a role effectively:

1. Refer to the annex of the CDEM Competency Framework and locate the *Summary of Competencies* table for the particular role of interest. In the blue column, identify the competencies with a relevance rating of 3. These priority competencies considered to be essential at all times for carrying out the role. Note down the competency reference, e.g. PL02.

2. In the same table, identify the competencies with a relevance rating of 2. These competencies are useful at most times for carrying out the role. Determine which of these competencies are most relevant to people performing the role in this particular context. Note down the competency reference, e.g. CM03.

3. You will now have a list of the prioritised competencies for people performing the role in this context.

4. Refer to the role map for the particular role of interest and locate the red table, titled *Statements common to all key areas*. These skills and knowledge will be applicable to all the competencies of most relevance to this role.

5. Look up each of the competencies prioritised in steps 1 and 2. Under each competency select the skills and knowledge required of people demonstrating the competency in this context. As a guide, select three or four skill and knowledge statements for each.

6. You will now have a list of skills and knowledge required for this role. This information could be corroborated by using a focus group to discuss and agree the statements. Once a final set of statements is agreed, this information could be adapted into a self-assessment survey (as a method of data collection – refer to section 3.6), where participants rate their level of proficiency for each.

### 3.4 Interviews

Interviews are an effective way to obtain rich, descriptive qualitative information. A semi-structured approach is recommended to elicit personal opinions, emotions, and experiences and to clarify and explore ideas in more depth, through open and honest naturalistic discussion. Semi-structured interviews take a more conversational approach than a fully-structured interview. It means the interviewer acts as the facilitator of the discussion, and actively listens while the interviewee does most of the talking. The interviewer is guided by a set of predetermined open-ended questions. These are used as prompts to gather information about the right topics and to refocus the interview if it starts to move away from the purpose.

#### Planning the interview

Develop a set of guiding open-ended questions around the areas of focus identified during the planning stage. Behavioural-based questions are useful for gaining specific examples of people undertaking a task or role. Combined with other data, past performance may be indicative of gaps in skills, knowledge and attributes, or environmental factors influencing performance.

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11 EOC Staff role maps will be developed in 2011.
12 The Welfare Centre Supervisor role map will be developed in 2010.
3. Collect data

Refer to DNA Template 3.1 – Suggested Interview Questions

DNA Template 3.1 – Suggested Interview Questions provides a list of possible questions for a DNA interview. Tailor these to the specific purpose of the DNA and the interview, ensuring they are worded in a neutral way. The aim of the questions might be to elicit information about:

- specific behaviours and performance
- personal feelings, emotions, opinions and experiences
- skills, knowledge and attributes, and
- context and the broader environment.

A typical approach is to make initial contact with the interviewees, either by phone, email or face-to-face, to confirm their willingness to participate and to describe the purpose of the DNA and the interview. This is also a good opportunity to establish rapport. Following the interview send the interview transcript or notes back to the individual and ask them to confirm that it reflects what they intended. This will enhance the validity of interpretations based on the interview data. Choose a neutral venue with few distractions, and as a guide, schedule 30-60 minutes for each interview.

Determine how the information gathered from interviews will be recorded. One option is to use a voice recorder and then transcribe the full conversation. Another option might be to take clear notes, using a system to highlight key points, such as perceived gaps and issues. In this instance ensure the interviewer is supported by a skilled note taker. If different people will conduct each interview, consider how consistency will be achieved.

Conducting the interview

Build rapport and establish a safe environment so interviewees feel they can be open and honest. Establish the purpose of the interview at the beginning – describe the purpose of the DNA, how the interview fits into the DNA process, and how the information provided will be used.

In order to conduct effective interviews, the interviewer needs to be able to:

- Clarify the purpose of the interview and how it fits into the DNA
- Build rapport to establish a safe and open environment
- Facilitate an open discussion by listening, guiding the conversation to ensure it stays on track, probing for more information when required, and transitioning to another topic
- Ask questions using clear, succinct language, and clarify points when questioned
- Remain neutral and refrain from offering personal opinions, and
- Accurately record the key information articulated.

3.5 Focus groups

A focus group can be thought of as a group interview as it involves getting a group of people together to discuss and explore ideas in a structured way, led by a facilitator. Like an interview, a set of pre-determined questions are used to guide the discussion and ensure it remains focused on the right areas. Participants will express personal opinions, emotions, ideas and experiences, providing qualitative data for analysis.

Clearly define the objectives of the focus group and use this to select the topics to explore and the questions to ask. Determine who will be invited to participate, how many people to include, and how many focus groups to run.

An observer supports the facilitator by taking notes, and providing their insight and
observation during data analysis. It is important to voice record focus groups to ensure all information is accurately captured.

Focus groups are particularly useful for exploring the environmental factors affecting performance, such as issues in the immediate workplace. A useful process to do this, called the performance formula, is described in the following pages.

Successful focus groups
The following factors will ensure the success of a focus group:

▪ Define clear ground rules and principles,
▪ Explain the purpose and outline the agenda,
▪ Ensure everyone has an opportunity to participate and contribute their ideas,
▪ Determine how to deal with difficult situations, such as conflict or dominant individuals.
▪ Expertly refocus the group when it goes off topic
▪ Recognise when to probe for more information or transition to a new topic, and
▪ Ensure it is led by a skilled facilitator with good interpersonal skills.

Identifying environmental factors – performance formula
Working through the performance formula process with a focus group can be an effective way to explore and understand development needs related to the workplace environment. This process starts with the end in mind – the desired results – and works backwards. Before using the performance formula, it may be beneficial to use the relevant CDEM Competency Framework role maps to identify the required skills, knowledge and attributes (refer to section 3.3).

Refer to DNA Template 3.2 – Performance Formula

Use DNA Template 3.2 – Performance Formula to facilitate a group through the following steps:

1. Determine the measurable results or outcomes that will be through effective performance.
2. Define desired performance – what do people need to do to achieve these results? What would be observable?
3. Identify actual performance – what results identified in step 1 are currently being achieved? What are people demonstrating to show these results are being achieved? What result areas are not being achieved?
4. Explore the following factors in the workplace environment that might be affecting performance and brainstorm solutions to address any issues related to direction, opportunity or motivation (see Table 2 – Workplace Environment Factors on the following page).
5. An optional step is to then review the findings of any assessment of skills, knowledge and attributes (SKAs) required, such as through a self-assessment questionnaire (refer to section 3.3).
Direction | Opportunity | Motivation
--- | --- | ---
Do people know they need to do it? Are they given the direction to do it? Are expectations clear and consistent? Are expectations achievable? Is adequate management and leadership support provided? Are there clear and measurable performance standards? Is relevant information communicated or accessible? Is great performance role modelled? | Are people given opportunities to do it? Do they have the time? Is workload too high? Is there a capacity issue? Do people have the right resources and equipment? Is the physical work environment adequate? Do SOPS, policies, systems, processes and procedures support desired performance? Are people empowered to take ownership of their work or to make decisions? | What are the barriers to motivate people to do it? Are there incentives? Are there positive consequences for good performance? Are there negative consequences for poor performance? Is adequate feedback provided? Do people value the desired results and performance?

Table 2 – Workplace Environment Factors

3.6 Surveys

Surveys can be an effective way to obtain information from a big group of people, and in particular, they are particularly useful for gathering quantitative data. The survey response rate can be increased by identifying a champion to support and promote it, such as an influential CDEM leader.

Refer to DNA Template 3.3 – Self-Assessment Survey Tool

A good application of surveys in a DNA is a self-assessment survey for people to rate their own competence against a list of skills and knowledge. Start by identifying the skills and knowledge required for a specific role (refer to section 3.3), and use this to design a survey that requires the target audience to provide an assessment of their skills and knowledge.

Tailor DNA Template 3.3 – Self-Assessment Survey Tool by removing the irrelevant skill and knowledge statements and adding others.

To enhance the validity of the ratings provided, encourage individuals to discuss the survey (with or without presenting their responses) with their CDEM manager or leader. This may not necessarily be a person the individual reports to. It may be someone who has more experience in the role or field.

Planning the survey

Consider the following when designing a DNA survey:

- Clearly define the purpose of the survey and the areas it should investigate.
- Identify who will complete the survey – this will depend on the population size.
- Determine how the survey will be delivered, e.g. online, email, pen and paper.
- Use a spreadsheet to collate and analyse the data collected.
- Determine the degree of confidentiality.
3. Collect data

Developing the survey
Consider the following when developing the survey:

- As a guide use 70% closed questions and 30% open-ended:
  - Closed questions – for example: yes/no, true/false, scales, multiple choice, rank in order, interval scales. Respondents are forced to make choices, providing quantitative data.
  - Open-ended questions – respondents can choose how much or how little information to give and are not forced to make a choice, therefore will elicit more qualitative information.
- Avoid jargon
- Avoid leading questions
- Keep the survey as short and simple as possible
- Ensure each question asks only one thing
- Use gender-neutral language
- Ensure open-ended questions are succinct and clear
- Include a question at the end for comments, and
- Include a clear introduction and instructions.

3.7 Observation

The behaviour of people can be observed to gather both qualitative and quantitative information about the particular area of analysis. An observer watches a person perform tasks and makes field notes about their actual behaviour. Observation is an effective way to corroborate the information gathered using other methods, as people do not necessarily perform the way they say they can or will. Try to observe people in the most naturalistic setting possible in an unobtrusive manner.

Observation can be approached as structured or unstructured. Structured observation looks for specific, pre-determined skills and knowledge, and evidence of attributes. A checklist is a useful way to list the SKAs to observe and rate the individual’s competency of each.

A more unstructured approach is open for interpretation around elements of performance, such as the workplace environment, habits, patterns, or systems. Notes are taken around emerging themes.

Clearly define the purpose of carrying out the observation and what it is that the observer will be looking for. Determine whether a structured or unstructured approach is more appropriate for this purpose.

3.8 Review of existing data

Existing data are gathered from sources already available. These sources, identified during the planning stage, are likely to be key documents such as:

- CDEM Competency Framework [TS 02/09] and role maps (refer to section 3.3).
- Job descriptions, performance reviews and professional development plans.
- CDEM Group Plan, and supporting plans and SOPs.
- Relevant organisational documents, such as business plans, strategies, policies and procedures.
- The CDEM Group’s Monitoring & Evaluation capability assessment report.
- Director’s Guidelines, technical standards, and codes published by MCDEM.
Review the identified sources and record information relevant to the focus and purpose of the DNA, noting how they link together. Some examples of how information from an existing source might link with the performance of individuals are provided in Table 3.

<table>
<thead>
<tr>
<th>Examples of existing data</th>
<th>Possible link to performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>A CDEM Group Plan might outline the vision and goals of the CDEM Group.</td>
<td>Performance of individuals should align with and contribute to the vision and goals.</td>
</tr>
<tr>
<td>The CDEM Competency Framework role maps describe all the possible SKAs that may be required to perform a particular CDEM role.</td>
<td>A role map might be used to determine the most important SKAs for people performing a CDEM role. This information may be used to assess the competency of staff performing this role.</td>
</tr>
<tr>
<td>Job descriptions might be reviewed as part of data collection and analysis to establish how CDEM roles are formalised for staff employed by a local authority to primarily perform non-CDEM roles.</td>
<td>Analysis might find CDEM roles are not formalised into non-CDEM job descriptions. As a result, a local authority finds it difficult to get managers and team leaders to support CDEM and encourage their team members to take on CDEM roles and responsibilities.</td>
</tr>
</tbody>
</table>

Table 3 – Linking Existing Data and Performance

Each researcher will develop their own methodology to manage, review and collate existing data. Some approaches include the use of coding, highlighting, compiling spreadsheets, or creating a template to record key points and emerging trends.

3.9 Maintain a journal

During a wide DNA, consider maintaining a journal to record personal insights and observations. After each interview or focus group note down any thoughts or ideas that may be overlooked when analysing transcripts at a later date.

Journals are particularly useful if more than one person is involved in conducting the DNA, as they will show the degree of consistency of the approaches taken by each member of the DNA team. This is also a good method to consider if the person analysing the data is not the same person who collected it. The journals will also serve as an additional source of information to compare with other data collected.
4. Analyse data

4.1 Introduction

Data analysis is the most technical stage of a DNA, so aim to keep the analysis as simple as possible. The data are analysed to identify trends, themes and discrepancies, which can then be interpreted and translated into findings.

The findings provide a description of the current situation – it might describe any gaps, issues and development needs identified, as well as what is working well. This provides the rationale for any recommendations. Clarity around the purpose of the DNA from the outset will ensure the data available are focused in the right areas.

The aim of the analysis is to turn the raw data into something meaningful. Using triangulation, by analysing information from a range of sources collected using a variety of methods, will lead to more valid conclusions.

4.2 How to analyse the data

Two types of data will have been gathered during the data collection stage:

- **Quantitative data** – this information is in the form of numbers and typically has a broad and shallow focus on an area or over several areas.
- **Qualitative data** – this information is generally in the form of words, pictures or symbols. It tends to have a narrow and deep focus on a specific area, therefore it is less valid to make generalisations from qualitative data.

Refer to DNA Template 4.1 – Data Analysis Matrix

There is no one way to analyse data, and your approach will depend on the type and amount of data collected, and what it is you are trying to find out. Keep in mind that you are also looking for what is working well, not just for any gaps or issues.

**Quantitative analysis**

It is generally easier to begin data analysis by examining quantitative data – this is the number crunching. Think of quantiative data as forming the skeleton or the framework for the findings. The qualitative data will provide the flesh or the depth and meaning to explain the numbers. That is, use the numbers to gain a sense of what is happening, and then apply the qualitative information to understand why.

Graphs, charts, tables, comparisons and percentages are useful ways to identify and present trends, patterns, themes and discrepancies. Microsoft Excel will generally be adequate for the type of analysis required for a DNA. For more thorough analysis, programmes such as Statistical Package for the Social Sciences (SPSS) might be useful, however will require more technical knowledge and expertise.

**Qualitative analysis**

Develop a coding system to analyse qualitative information. For example, review interview notes and highlight recurring themes, trends or ideas. Assign a code (such as a number) to each theme. In a sense, you are quantifying the qualitative data. Record each theme as a possible heading and tally the frequency they occur. Apply your own insight, experience and intuition to interpret this alongside the quantitative data.
4. Analyse data

Use DNA Template 4.1 – Data Analysis Matrix to compare information related to a common theme. This is an effective way to achieve triangulation as it enables you to examine the theme from the various perspectives and identify where the information corroborates each other and the picture it creates when reviewed together.

It may be worthwhile to send any interview notes or transcripts back to the individuals interviewed to ensure they agree that the information reflects what they intended (this is called member checking). To maintain confidentiality, remove all features from these notes and transcripts that might identify the individual.

Making valid Interpretations

Compare qualitative and quantitative information from a range of sources that was gathered using a variety of methods. Do the different pieces of information fit together to provide a big picture of what is happening? Does the information corroborate each other? Triangulation will enable you to make more valid interpretations of the data.

Another technique to enhance the validity of the interpretations is to arrange an assessor to review the data against the interpretations. A review of qualitative data (such as interview transcripts) alongside quantitative information presented in graphs, percentages, etc, may be undertaken by an individual, or even by using a focus group. A focus group is also a good way to present the initial findings by asking if the interpretations resonate with the group.

Analysis goes beyond the information presented and attempts to understand what it means. So the data are saying something – what could it mean and how are these inferences justified or rationalised?

4.3. Determining the DNA recommendations

Now that you have analysed your data and made your interpretations, you are ready to determine how to address any findings that require attention. Performance is influenced by the skills, knowledge and attributes of individuals, and the environment they work in. Depending on the purpose of the DNA the analysis might uncover development needs in one or more of these areas. Gaps in skills, knowledge and attributes are likely to be addressed by professional development initiatives.

Refer to DNA Template 4.2 – Summary of Findings & Recommendations

Use DNA Template 4.2 – Summary of Findings & Recommendations to create a picture of the findings and how they might inform the recommendations.

A DNA will likely uncover a range of issues impacting on performance that are associated with the workplace environment, rather than a gap in skills and knowledge. For example, identify where improvements could be made, or actions that could be undertaken to influence positive change in the environment. Another consideration is whether a gap in skill or knowledge is actually a result of environmental factors.

Table 4 suggests a range of workplace environment initiatives that could be considered to address environmental factors affecting performance. These are categorised under the headings of direction, opportunity and motivation. Refer to Table 2 in section 3.5 for more information.
4. Analyse data

<table>
<thead>
<tr>
<th>Direction</th>
<th>Opportunity</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide clear direction to inform people what needs to be done. Establish clear and consistent expectations. Resolve any conflicting expectations or priorities. Reach agreement that expectations are realistic and achievable. Ensure adequate management and leadership support is provided. Set clear and measurable performance standards. Ensure information is readily communicated and easily accessible. Role model great performance.</td>
<td>Provide people with opportunities to perform. Confirm the time commitment required. Ensure workload is manageable. Review resourcing and capacity. Provide people with the right resources and equipment to perform effectively. Review the adequacy of the physical work environment. Ensure SOPS, policies, systems, processes and procedures support desired performance – timely, easy to access, accurate, clear, and unambiguous. Empower people to take ownership of their work and to make decisions.</td>
<td>Identify any barriers that affect individuals’ motivation. Review incentives and rewards. Determine whether there are positive consequences for good performance, and who delivers them. Determine whether there are negative consequences for poor performance, and who delivers them. Provide adequate, timely, specific feedback. Foster a culture where people value the desired results and performance.</td>
</tr>
</tbody>
</table>

Table 4 – Workplace Environment Initiatives

Table 5 on the following pages provides a range of professional development initiatives or activities that may be suitable to address the identified needs. These will generally be most suitable to address gaps in skills and knowledge. Selecting the right initiative will depend on the need, as well as other factors, such as budget or geographical location of the target audience. Consider blended learning as a possible approach – a development need might be best met by implementing more than one initiative.
## 4. Analyse data

### Table 5 – Professional Development Initiatives

<table>
<thead>
<tr>
<th>PD Initiative</th>
<th>Description</th>
<th>Examples of Application</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On the job learning</strong></td>
<td>The majority of learning occurs on the job, where people enhance their skills and knowledge by applying them in real life situations. People should be given an opportunity to apply newly acquired skills and knowledge in the workplace, with support from managers and colleagues.</td>
<td>As CDEM emergencies can be infrequent, look for opportunities outside of response to undertake CDEM roles and responsibilities across all 4Rs of comprehensive emergency management. Identify projects that will apply skills and knowledge to reduction and readiness activities.</td>
</tr>
<tr>
<td><strong>Workplace learning</strong></td>
<td>Workplace learning, also known as vocational learning/education, is similar to on the job learning, however, it takes more formal or structured approach. It is usually designed to meet the needs of a group of learners and the outcomes are not usually specific to a role. Workplace learning can be supported by other PD initiatives, such as coaching or mentoring. Workplace learning might include completing a qualification externally through an accredited education provider. Unit standards are an example of workplace learning. These are achieved by demonstrating competence in the workplace, as evaluated by a Workplace Assessor. Learners are often enrolled in a national qualification.</td>
<td>A frequently identified training need is around increasing competence in functions applicable to an EOC environment. For example, understanding the Coordinated Incident Management System. The training need, though identified by the workplace (e.g., through performance management of Development Needs Analysis) is actually addressed by an accredited education provider in the first instance in a classroom setting. Once the training has been delivered, the workplace needs to follow up with the group of learners that attended the training to identify opportunities for these learners to put their learning into practice.</td>
</tr>
<tr>
<td><strong>Classroom training or courses</strong></td>
<td>Many CDEM roles require very specific skills and knowledge. Classroom training provides a good opportunity to learn and practice new skills. Training generally involves a group of people with similar development needs led by a trainer or facilitator. Training is often delivered using a combination of instructional methods, such as presentations, lectures, group work, worksheets, activities, discussions, debates, etc.</td>
<td>Some examples of training in the CDEM context might include the following: A Local EMO might design and deliver a series of short, modular courses welfare centre volunteers. A Group EMO might design training for personnel who will operate in the Group Emergency Coordination Centre during an emergency. MCDEM delivers face-to-face courses for several key CDEM roles, including Controllers, Recovery Managers and Public Information Managers.</td>
</tr>
<tr>
<td><strong>Coaching</strong></td>
<td>Coaching is support for an individual from a more senior person, such as a team leader or manager. The coach asks the right questions to help the individual to set goals and expectations to enable the individual to take charge of their own development. Regular sessions are arranged to check progress. Individuals determine what results they want to obtain, and coaching is a mechanism to set a path to achieve these. It is very much customised to the needs of the individual, however these needs should be linked to the needs of the organisation.</td>
<td>An example of how coaching might be initiated could be a Local EMO who wants to engage the Local Public Information Manager to play a more active role in CDEM outside of emergency response. A coaching relationship might be established between the EMO and PIM to set goals, create a development plan and regularly check progress.</td>
</tr>
<tr>
<td><strong>Mentoring</strong></td>
<td>Mentoring is similar to coaching however it has two distinguishing features. It is typically set up by the individual who wants additional support. The mentor is not necessarily a person in a more senior position, or from the same organisation. A mentor is usually identified by the individual as someone they identify with and regard as having experience, skill and knowledge the mentor can impart.</td>
<td>An example of how mentoring might be used in CDEM could be a local Public Information Manager who keen to get support and learn from a more experienced PIM. The person makes contact with a local PIM from another local authority within the CDEM Group who is highly regarded for their performance in this role. Regular informal meetings are held to set goals and discuss progress and challenges.</td>
</tr>
</tbody>
</table>
### PD Initiative | Description | Examples of Application
--- | --- | ---
RAPID® programme | RAPID is a training and assessment programme provided by MCDEM to support learners across the CDEM sector. The programme is aligned with the CDEM Competency Framework, and where possible, matched to unit standards. It provides introductory-level content on a range of CDEM topics. Talk to your training coordinator to find out if your organisation is registered with MCDEM to access the RAPID programme. | A newly appointed Local Welfare Manager may need to understand, in the CDEM context they are operating, how welfare fits into the picture. The person might complete the RAPID core skills and welfare strands as part of their development. A local EMO conducts a DNA and discovers that many EOC staff lack an understanding of the CDEM context. The RAPID core skills strand may be incorporated into the EOC learning and development programme. |
Workshops and seminars | A workshop is similar to a course however usually only involves lectures or presentations, rather than interactive tasks or group work. The audience may therefore be much larger. | Workshops and seminars might cover case studies, recent experiences, or a specific topic. It may be a presentation from subject matter experts or a visiting academic or practitioner. |
CDEM exercises | Exercises are activities that consider or simulate a real life situation so that an agency or multiple agencies at multiple levels are able to review or test procedures, and provide practice for participants in defined roles. The national CDEM exercise programme identifies four tiers of exercises: 1. local; 2. CDEM Group; 3. inter-group; and 4. national exercises. | An example of a tier 2 exercise could be a CDEM Group that decides to conduct an exercise to test Group EOC standard operating procedures. The exercise might be planned and coordinated by the CDEM Group Office, and include a range of local authorities and agencies at Group and local level. |
Qualifications | Qualifications are formal education programmes provided by accredited providers, such as universities or polytechnics. A distinction is made between national and provider qualifications. National qualifications provide nationally recognised, consistent standards and qualifications. They give recognition and credit for standards-based knowledge and skills. Provider (local) qualifications are those which have been developed by an education provider. | A range of recognised qualifications are available in New Zealand specific to CDEM, including National Certificates, diplomas, bachelor degrees, and Masters degrees. Individuals can be supported by workplace learning to complete a qualification. |
Forums or networks | A forum or network is a useful way to collaborate and build relationships with people who have similar roles or responsibilities. CDEM is about multi-agency collaboration, so this presents an opportunity to build relationships that may enhance response to a CDEM emergency. | An example could be a forum coordinated by a Group Welfare Manager for Local Welfare Managers. Regular meetings could provide an opportunity to network, share resources, and learn from one another. Similar forums could be set up for any CDEM role or function. |
Job aids | A job aid provides readily available information to support a person to perform specific tasks. Examples include processes and procedures, standard operating procedures (SOPs), checklists, worksheets, posters, quick reference cards, flowcharts, decision trees, templates, directories, samples. | Job aids have a wide range of application and examples might include: Quick reference cards for EOC staff to use during an emergency to efficiently perform a task in a near expert fashion; Templates for public information key messages and media releases; Checklists for an EOC duty team to efficiently activate an EOC. |
Online learning | This refers to courses or modules that are completed using a computer. These may be accessed via the internet or a CD-ROM. It is often incorporated into a blended learning approach. RAPID includes online modules as part of a blended approach. | A volunteer in a remote area, with access to broadband, may need to complete online learning in their own time. Learning could be maximised through face-to-face time with the volunteer manager. |
5. Report findings

5.1 Introduction
The DNA findings and outcomes need to be presented in a format suitable for the audience. The audience will be the people responsible for approving any recommended courses of action. During the initial investigation and planning the audience, their expectations and the presentation format would have been identified. This might be:

- A list of recommended actions with rationale
- A formal report with recommendations
- A guide to create a professional development strategy and/or plan
- A proposal for a professional development programme, or
- Proposed content for a course, workshop, seminar, etc.

5.2 Reporting considerations
Some questions to consider when presenting the findings include:

- How will it be quality assured? Will it be peer reviewed?
- Is it written with the audience and their expectations in mind? Is it written with the purpose in mind?
- What information is required? What is the most important information?
- Has rationale for any recommendations been provided? Is it convincing and persuasive? Is it supported by examples from the data, such as graphs, percentages or direct quotes?
- Has a champion been identified to support the findings?
- Does it include the positive as well as the negative? Does it describe what is working well as well as the perceived gaps and issues? Are the findings presented as an opportunity for improvement?
- Are the recommendations presented in a suggested priority order? Are ideas provided to support implementation of the recommendations?
- Have possible reactions to the findings been considered? What is expected – denial, emotion, rationalisations, acceptance, a willingness to change or improve?

5.3 Formal DNA report
The output of a DNA might be a formal report, particularly if the audience and decision makers are at a strategic or influential level, such as the CEG. The report should include:

- The purpose of the DNA and the report
- An overview of the process undertaken (such as planning, data collection and analysis)
- A description of the findings under the identified themes
- The recommendations, and
- Guidance to implement the recommendations.

Refer to DNA Template 5.1 – DNA Report Template

The findings should provide the rationale for the recommendations. Use DNA Template 5.1 – DNA Report Template to structure a report.
5. Report findings

5.4 Next steps  Once a DNA has been completed and the findings have been presented it is likely some actions will be implemented. Refer to the professional development cycle to consider your next steps. A documented plan might be useful to outline how the approved recommendations will be implemented.
Appendix: Adapting the DNA to a range of scenarios

This appendix provides a range of worked examples to demonstrate how the DNA process could be adapted and applied to a range of scenarios. Please note these are fictional scenarios and are not policy.

Important note: While this Guideline is comprehensive it is important to note this is a process that can be carried out in a short amount of time, for example, when analysing the development needs of an individual.

The examples provided in the appendix shows how the DNA process might be applied to the following CDEM scenarios:

1. A person has been newly appointed to perform a CDEM role.
2. A newly elected or appointed Mayor, Chief Executive, or council member needs to understand their CDEM role and responsibilities.
3. An exercise suggests a particular EOC function is not meeting the required standards to perform effectively in a real emergency.
4. A CDEM Response Team needs to know how to use a new piece of equipment.
5. A CDEM Group wants to improve communication and relationships between the key stakeholder agencies.

Support from MCDEM

Contact your MCDEM Regional EMA or the MCDEM Professional Development Team to discuss the level of support required to conduct a DNA within your CDEM Group.

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14 This is an example of how the DNA process can be applied to a non-professional development scenario.
Scenario 1: Newly appointed staff member

A Communications Advisor within a local council had recently been appointed as the new Local Public Information Manager (PIM). The Local EMO wanted to support the new PIM to perform the role effectively by identifying and addressing their development needs.

The new PIM was a full-time Communications Advisor who had been employed by the council for six months. The PIM had limited understanding of the CDEM context, however they did have a strong background in communications and working with the media. The Local EMO had determined it was more important to have someone with communications experience in the PIM role, rather than someone with a CDEM background.

The EMO agreed with the PIM and their line manager that a DNA would be conducted to create a development plan for the PIM. The Local EMO established this expectation early on to ensure full commitment to the role and its responsibilities from both the individual and from their non-CDEM line manager.

Stage 1 – Define purpose
The purpose of the DNA was to identify the skills and knowledge the PIM needed to develop in order to perform the role effectively, and to determine how these needs could be addressed. As a result the PIM would be well-supported to perform the role competently in an emergency. The output of the DNA would be a list of prioritised development needs and recommendations to address these. The Local EMO agreed to work with the PIM to implement the recommendations.

Stage 2 – Plan
The EMO planned the DNA by identifying what information was required, where the information would be sourced, and how it would be collected. The plan is described in the following table:

<table>
<thead>
<tr>
<th>Information required</th>
<th>Data sources</th>
<th>Data collection methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the key skills and knowledge required for an effective Local PIM?</td>
<td>• CDEM Competency</td>
<td>Document review</td>
</tr>
<tr>
<td></td>
<td>• Framework PIM role map</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• PIM standard operating procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• PIM Guideline (MCDEM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Local PIM plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• CDEM Group PIM plan</td>
<td></td>
</tr>
<tr>
<td>What are the current skills and knowledge of the new PIM?</td>
<td>New PIM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Self-assessment of skills and knowledge.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Follow-up interview</td>
<td></td>
</tr>
<tr>
<td>What does the role look like when it is being done well?</td>
<td>• Group PIM</td>
<td>Interview</td>
</tr>
<tr>
<td></td>
<td>• A PIM from the CDEM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Group identified as a high-performer</td>
<td></td>
</tr>
<tr>
<td>What are the expectations on a person in the PIM role?</td>
<td>• Group PIM</td>
<td>Interview</td>
</tr>
<tr>
<td></td>
<td>• Local Controller</td>
<td></td>
</tr>
</tbody>
</table>

Stages 3 & 4 (data collection and analysis)
These stages of the DNA process were then undertaken by the Local EMO. As part of this process, existing documents, such as the PIM role map, SOP and PIM plan, were analysed to identify the required skills, knowledge and attributes. The EMO also met with the Group PIM and the Local Controller to corroborate this information.
The new PIM completed a self-assessment survey which asked them to rate what they perceived to be their current level of skill and knowledge.

The EMO and the PIM met to review the skills and knowledge that were identified as necessary for the role against the PIM’s self-assessment of their own skills and knowledge.

**Stage 5 – Report findings**

A proposed development plan was presented, outlining the development needs and recommendations identified from the DNA. The EMO worked with the PIM and their line manager to agree a timeline and commitment to this plan. This plan is outlined in the following table:

<table>
<thead>
<tr>
<th>Development needs</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain an understanding of the broader CDEM context.</td>
<td>Complete the following RAPID core skills topics:</td>
</tr>
<tr>
<td></td>
<td>▪ Topic 1 – Introduction to CDEM</td>
</tr>
<tr>
<td></td>
<td>▪ Topic 2 – Information Management in CDEM</td>
</tr>
<tr>
<td>Gain an understanding of the expectations on the PIM at the local level.</td>
<td>▪ Attend regular EOC training and exercises, and meet with EOC staff from other functions.</td>
</tr>
<tr>
<td></td>
<td>▪ Become familiar with relevant PIM documents, such as the Local PIM plan and the PIM SOP.</td>
</tr>
<tr>
<td>Gain an understanding of public information management at a Group and Local level.</td>
<td>▪ Work with the Local EMO, the Group PIM and other Local PIMs from the CDEM Group to review and update Group and Local PIM plans.</td>
</tr>
<tr>
<td></td>
<td>▪ Work with the Local EMO and the line manager to agree PIM responsibilities outside response to an emergency.</td>
</tr>
<tr>
<td>Gain an understanding of the PIM role from a national perspective.</td>
<td>Attend MCDEM’s Public Information Managers course.</td>
</tr>
<tr>
<td>Establish relationships that will enhance the effectiveness of public information management during response to an emergency.</td>
<td>▪ Regularly network with the Group PIM and other Local PIMs from the CDEM Group.</td>
</tr>
<tr>
<td></td>
<td>▪ Establish relationships with local media.</td>
</tr>
<tr>
<td></td>
<td>▪ Identify an experienced and effective PIM who can act as a mentor for this role.</td>
</tr>
<tr>
<td>Develop the skills and knowledge to operate in the CIMS environment.</td>
<td>Complete CIMS 2 training.</td>
</tr>
<tr>
<td>Develop the skills and knowledge to work safely and effectively in the EOC.</td>
<td>▪ Attend regular EOC training and exercises.</td>
</tr>
<tr>
<td></td>
<td>▪ Complete First Aid training.</td>
</tr>
</tbody>
</table>
Scenario 2: Newly appointed council member

A CDEM Group’s CEG recognised that council members, including the Mayor and the Chief Executive, have the potential to play an influential role in CDEM in the region. The CEG wanted to gain the support of a newly elected councillor for the goals of the CDEM Group, and to support them to play a CDEM role in the region.

The Group Emergency Management Officer (Group EMO) was tasked by the CEG to conduct a DNA to determine how the new councillor could be supported to do this.

Stage 1 – Define purpose
The Group EMO met with the council member to get their buy-in into the DNA process, and to determine its purpose. It was agreed the purpose of the DNA would be to define what role the council member would play in CDEM and what support they required to fulfil this role and its responsibilities. The output of the DNA would be a list of actions for the councillor to implement, with support from the Group Emergency Management Office.

Stage 2 – Plan
The Group EMO worked with the council member to plan the DNA. They agreed what information was required, where the information would be sourced, and how it would be collected. This plan is described in the table below.

<table>
<thead>
<tr>
<th>Information required</th>
<th>Data sources</th>
<th>Data collection methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the expectations of the CDEM Group on the new council member?</td>
<td>Members of CEG</td>
<td>Interviews</td>
</tr>
<tr>
<td>What relationships will support the council member to fulfil their role?</td>
<td>Group Emergency Management Office personnel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local EMOs</td>
<td></td>
</tr>
<tr>
<td>What is their formalised CDEM role? How is it documented? Who do they report to?</td>
<td>Job description</td>
<td>Document review</td>
</tr>
<tr>
<td></td>
<td>Existing documentation</td>
<td></td>
</tr>
<tr>
<td>What do they see as their role in CDEM? What is their understanding of CDEM?</td>
<td>New council member</td>
<td>Interview</td>
</tr>
<tr>
<td>What are their expectations? What motivated them to stand for council?</td>
<td>A previous or current council member who is considered to have played an influential role in CDEM during their term.</td>
<td>Interview</td>
</tr>
<tr>
<td>What opportunities are there to leverage off their other activities and interactions (find out what interests them and pushes their buttons)?</td>
<td>MCDEM Regional Emergency Management Advisor</td>
<td>Interview (face-to-face or telephone)</td>
</tr>
<tr>
<td>What does the role look like when it is being performed well? What enables a person to do it effectively? What relationships are required? What are the conflicts and challenges? What level of attention does the role require?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is the national perspective on the CDEM role of elected members in the region and how they could be supported?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What has been done previously to introduce new council members, mayors and CEs to CDEM?</td>
<td>Existing elected member induction programme.</td>
<td>Review of induction programme content and delivery</td>
</tr>
</tbody>
</table>
Scenario 2: Newly appointed council member

**Stages 3 & 4 (data collection and analysis)**
These stages of the DNA process were then undertaken by the Group EMO.

**Stage 5 – Report findings**
The Group EMO presented a list of recommended actions, in prioritised order, for the new council member to implement, with support from the Group EMO:

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearly define your role in CDEM and how it can be incorporated into existing activities, interests and interactions.</td>
<td>Work with the Group EMO to define the contribution you would like to make and identify opportunities to leverage off existing activities.</td>
</tr>
<tr>
<td>Review the elected members presentation package. This is provided by MCDEM to support CDEM Groups and local authorities when briefing newly-elected members.</td>
<td>The Group EMO and MCDEM Regional EMA can work through the presentation with you to provide a good understanding of the CDEM context.</td>
</tr>
<tr>
<td>Establish relationships with members of the Joint Committee.</td>
<td>Attend Joint Committee meetings and meet with members informally outside meetings.</td>
</tr>
<tr>
<td>Familiarise yourself with current CDEM Group documentation, such as CDEM Group plans.</td>
<td>The Group EMO can provide you with relevant documentation and go through these with you.</td>
</tr>
<tr>
<td>Establish a ‘mentoring’ relationship with someone in the region who has played an influential role in CDEM.</td>
<td>You might like to set up an informal ‘mentoring’ relationship, to touch base with regularly about your CDEM contribution and to get advice.</td>
</tr>
<tr>
<td>Undertake relevant components of RAPID – an introductory CDEM training package provided by MCDEM. Of particular relevance is the declarations process.</td>
<td>RAPID can be completed individually, to ensure it is non-threatening. The Group EMO can support you to access the programme, and to select the most relevant components.</td>
</tr>
<tr>
<td>Attend the MCDEM courses to gain a good understanding of several key CDEM roles.</td>
<td>Talk to your Group EMO to find out more about these courses and when they are available.</td>
</tr>
</tbody>
</table>
Scenario 3: Development needs of an EOC function

During the debrief following a small-scale exercise at a local EOC, it became evident that the Local Controller was unhappy with the way the Planning and Intelligence (P&I) function had operated. The Controller felt that they were not getting the information they needed, when they needed it, from the P&I function, and that their decision making was impeded as a result. The Controller was concerned about this and urged the Local EMO to look into it as a matter of urgency. The Local EMO (who was also solely responsible for professional development and training) decided to explore the issue through a development needs analysis process. The EMO was the only EMO in this local authority, and reported to the council’s Asset Manager.

Stage 1 – Define purpose
The Local EMO knew that a lack of human resourcing for the EOC meant that the current P&I staff would be required to remain on that function. That is, there would be no opportunity to replace current staff on the P&I function if it was identified that they were not the right people for the job.

The EMO worked with the Controller (as the initiator) to define the purpose of the DNA: to identify the gap between desired and current performance of the P&I function, and come up with solutions to close these gaps. The output from the process would be a list of recommended actions, in priority order, with clearly defined responsibilities for implementation.

Stage 2 – Plan
The EMO planned the DNA by determining what information was required, where this information would be sourced, and what methods would be used to collect it. The data collection plan is outlined in the table on the following page.
## Scenario 3: Development needs of an EOC function

### DNA data collection plan:

<table>
<thead>
<tr>
<th>Information required</th>
<th>Data sources</th>
<th>Data collection methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>What was the experience of the P&amp;I staff and the Controllers during the exercise that prompted this process?</td>
<td>Exercise evaluation report&lt;br&gt;Debrief notes&lt;br&gt;P&amp;I staff&lt;br&gt;Controllers&lt;br&gt;Other EOC function managers&lt;br&gt;CDEM Group P&amp;I function Manager</td>
<td>Document review&lt;br&gt;Interviews</td>
</tr>
<tr>
<td>What do the Controllers expect from the P&amp;I function during a response? What do they see as the role and responsibilities of P&amp;I?</td>
<td>Controllers</td>
<td>Interviews</td>
</tr>
<tr>
<td>What knowledge and skills do they need in order to operate on that function?</td>
<td>EMO role map (PL, RM and IM key areas)&lt;sup&gt;15&lt;/sup&gt;&lt;br&gt;Job descriptions&lt;br&gt;EOC plans &amp; procedures&lt;br&gt;CDEM Group Plan&lt;br&gt;CIMS&lt;br&gt;P&amp;I SOPs</td>
<td>Document review</td>
</tr>
<tr>
<td>What are the current skill and knowledge levels of the P&amp;I staff?</td>
<td>P&amp;I staff</td>
<td>Self-assessment survey</td>
</tr>
<tr>
<td>What are the environmental factors impacting on the P&amp;D functions performance?</td>
<td>P&amp;I staff</td>
<td>Focus group using performance formula process (see section 3.4).</td>
</tr>
</tbody>
</table>

---

### Stages 3 & 4 (data collection and analysis)

These stages of the DNA process were then undertaken by the EMO.

### Stage 5 – Report findings

Based on the data analysis, four main areas for development were identified and recommendations were presented to the Local EMO’s Manager, the Controller and the P&I Manager. These areas for development are summarised in the table below.

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<sup>15</sup> EOC role maps are due for development and release in 2011. The key areas of relationship management, planning and implementation were the most useful from the EMO role map.
### Scenario 3: Development needs of an EOC function

<table>
<thead>
<tr>
<th>Development needs</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some of the P&amp;I staff were uncertain of their role in the EOC, and how their outputs contributed to the Controller’s decision making. Although all other functions in the EOC had standard operating procedures (SOPs), a longstanding lack of clarity on the role of P&amp;I in the EOC meant that the development of a P&amp;I SOP had been deferred for some time.</td>
<td>☐ That a standard operating procedure for the P&amp;I function is developed (or sourced from another EOC and adapted to suit).&lt;br&gt;☐ That a face-to-face workshop is developed to support P&amp;I staff to become familiar with the SOP and how their role supports the objectives of the EOC operations. Responsibility for this would be taken by the EMO, in consultation with the P&amp;I Manager, P&amp;I staff, their MCDEM Regional EMA and the CDEM Group P&amp;I function.</td>
</tr>
<tr>
<td>IT failures were occurring at the P&amp;I desk during the exercise, which was affecting the ability to access, collate and analyse information. Thus then caused delays in getting information to the Controllers. In addition, the time spent by P&amp;I staff attempting to resolve it meant that less time was available for P&amp;I activity.</td>
<td>☐ That the IT equipment on the P&amp;I desk is tested and the faults remedied.&lt;br&gt;☐ That a clear process for resolving IT issues is developed, and arrangements are made to have IT support on standby during both exercises and emergencies. Responsibility for this would be taken by the EMO as the EOC facility manager.</td>
</tr>
<tr>
<td>The Controller and the P&amp;I staff had not met until the exercise was taking place, meaning that relationships and expectations had not been established. This caused some tension, and a level of anxiety for both the Controller and the P&amp;I staff.</td>
<td>☐ That regular EOC activities (e.g. quarterly workshops/meetings) take place to enable all EOC staff to establish and maintain relationships and clarify roles and expectations. Responsibility for this would be taken by the Local Controller with support from the EMO.</td>
</tr>
<tr>
<td>The P&amp;I staff assumed that the Controller had a higher level of technical knowledge of the local hazardscape than was the case. This meant that the technical language in P&amp;I outputs were had not been translated.</td>
<td>☐ That the Controller undertakes development activity to enhance their understanding of the local hazardscape.&lt;br&gt;☐ That the P&amp;I staff undertake development to translate technical information, or that skill set is sourced brought into the P&amp;I function. Responsibility for this would be taken by the EMO.</td>
</tr>
</tbody>
</table>
Scenario 4: CDEM Response Team

A regional council purchased a new flood protection system for flood prone locations along the river that runs through town. In a flood event a volunteer CDEM response team would likely be responsible for installing the system. In previous flood situations, the response team deployed and installed sandbag walls along the banks of the main river that runs through the centre of town. A manufacturer’s training course in installing this new flood protection system was not available, however, the system was supported by an instruction manual.

The Group Emergency Management Officer (Group EMO) and the Training Advisory Group (TAG) agreed to conduct a DNA to ensure that the CDEM response team was able to competently install the new system.

Stage 1 – Define purpose
The Group EMO recognised that while the new flood protection system required more technical skills and knowledge to install than sandbag walls, however nobody in the region had expertise using this system. The response team members were considered to be fast learners and there was little concern about getting them up to speed with the system quickly enough once a plan was identified to provide them with the right skills and knowledge.

There was scope to purchase more of the same flood protection systems in neighbouring local authorities and CDEM Groups. Training was required to ensure these systems could be used effectively, enhancing response capability.

The Hazards and Risks Policy Officer and the Group EMO were involved in developing the specifications for the system and facilitating the purchase. The Response Team Leader was not involved in this purchase but was aware of it and raised the issue of installation training for response team members (and other teams in the region) with the Group EMO. The Group EMO flagged this issue with the CDEM Group’s TAG.

The Group EMO clarified that the purpose of the DNA was to identify the skills and knowledge required to install the new flood protection system, and provide guidance on how these required skills and knowledge may be addressed. The Group EMO offered to undertake the DNA and report back to the TAG. The output of the DNA would be suggested content for a learning initiative (possibly training) to support response team members to acquire the skills and knowledge required to install the system.

Stage 2 – Plan
The Group EMO worked with the TAG to plan the DNA. Collectively they identified what information was required, where the information would be sourced, and how it would be collected. This planning is outlined in the table below:

<table>
<thead>
<tr>
<th>Information required</th>
<th>Data sources</th>
<th>Data collection methods</th>
</tr>
</thead>
</table>
| What are the skills and knowledge required to install the system? | ▪ Manufacturer documentation for the system  
▪ Current user of the system elsewhere in New Zealand | ▪ System user manual  
▪ Conversations with manufacturer  
▪ Telephone interview |
| What are the current skills and knowledge of response team members relevant to using this system? | ▪ Response Team Leader  
▪ Response team members  
▪ Training and development records | Self-assessment questionnaire |
| Learner preferences and motivations               | ▪ Response Team Leader  
▪ Response team members | Interviews |
Stages 3 & 4 (Data Collection and Analysis)

These stages of the DNA process were then undertaken by the Group EMO.

Stage 5 – Report findings

The results of the DNA were presented to the TAG and CDEM Response Team Leader by the Group EMO in the form of a presentation. Based on the data analysis the following findings were identified and a series of recommendations were presented:

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current response team members are not yet competent in installing this type of flood protection system.</td>
<td>That the training needs are clearly identified.</td>
</tr>
<tr>
<td>There is currently no training programme available in installing the purchased flood protection system.</td>
<td>That a training programme be designed, developed and delivered to address the training needs.</td>
</tr>
<tr>
<td>There is nobody in the immediate vicinity or surrounds that has experience in installing this system who could provide subject matter expertise.</td>
<td>That subject matter expertise is located outside of the region.</td>
</tr>
</tbody>
</table>

In addition to these findings the Group EMO provided an outline of the skills and knowledge the CDEM response team members would need in order to install the system competently. This would inform the content for a training programme to be designed, developed and delivered. The Group EMO would take responsibility for developing the training, with support from the CDEM Response Team Leader.
Scenario 5: CDEM Group communication and engagement

Feedback to the chair of the Coordinating Executive Group (CEG) suggested that various CDEM Group members and partner agencies felt they were not given adequate access to information about activities overseen by the CEG or its subcommittees. The chair also perceived that communication across the CDEM Group was disconnected in places and that some members had limited engagement at Group and CEG level. Feedback suggested that it could be very difficult to get in contact with some of the individuals who appeared to be disengaged.

One long running issue was that minutes of key meetings were not consistently distributed to both attendees and non-attendees. The chair observed that several key decision makers were noticeably absent from meetings. As a result, progress was hindered due to under-representation and a lack of authority to make decisions.

The CEG did hold the belief that most members of CDEM Group recognised that 100% participation and two-way communication was required in order to achieve the shared CDEM goals for the region.

The CEG wanted to determine how to improve communication channels could and how to support all CDEM Group members to engage at Group and CEG level. The CEG directed the Group Office to investigate the issue and it was agreed that a DNA process would be carried out by the Manager of the Group Emergency Management Office, with the sponsorship of the CEG.

Stage 1 – Define purpose
The CDEM Office Manager met with the CEG Chair and several CEG members to clarify the purpose of the DNA: to understand current communication strategies and activities across CDEM Group stakeholders and partner agencies, and to determine how relationships, communication and engagement could be improved.

By undertaking this CEG-sponsored DNA, the risks to response capability in the short, medium and long term will be reduced as connections are established and the level of engagement increases.

It was determined that the DNA would be conducted by the CDEM Office Manager with support from the CDEM Group Emergency Management Office personnel as required.

The output of the DNA would be a formal report to the CEG, as the key decision makers. It was agreed that the report would present the findings of the DNA and provide recommendations for how relationships, communication and engagement could be improved. The report would also include guidance for implementation of the recommendations.

Stage 2 – Plan
The CDEM Office Manager planned the DNA by determining what information is required, where the information would be sourced, and the data collection methods that would be used to gather it.
### Information required

<table>
<thead>
<tr>
<th>Information required</th>
<th>Data sources</th>
<th>Data collection methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the current perceptions of communication and engagement across the CDEM Group?</td>
<td>Strategic-level personnel from CDEM Group member organisations, partner agencies, and advisory groups.</td>
<td>Interviews</td>
</tr>
<tr>
<td>What is the current status of communication and relationships with the CDEM Group Emergency Management Office? What is and is not working?</td>
<td>Strategic-level personnel from CDEM Group member organisations, partner agencies, and advisory groups.</td>
<td>Interviews, Stakeholder survey</td>
</tr>
<tr>
<td>Understanding of various systems for communications that are used.</td>
<td>▪ Various meeting, advisory group, committee situations.</td>
<td>Observations of meetings, Interviews</td>
</tr>
<tr>
<td></td>
<td>▪ CDEM Group Emergency Management Office personnel.</td>
<td></td>
</tr>
<tr>
<td>Where is the (negative) feedback coming from? What are the themes? Can it be corroborated?</td>
<td>CDEM Group and CEG members.</td>
<td>Email and telephone conversations</td>
</tr>
<tr>
<td>What CDEM Group members and partner agencies are represented at meetings? Who regularly attends? Who doesn’t attend and why?</td>
<td>Meeting minutes</td>
<td>Review of previous meeting minutes</td>
</tr>
</tbody>
</table>

### Stages 3 & 4 (data collection and analysis)
These stages of the DNA process were then undertaken by the CDEM Office Manager. Triangulation was achieved by analysing data from a range of sources and methods.

### Stage 5 – Report findings
The results of the DNA were presented to the CEG in the form of a written report that outlined:

- The purpose of the DNA and the report.
- The background to the DNA.
- An overview of the DNA process undertaken.
- A description of the findings under the identified themes.
- The recommendations with rationale.
- A plan to prioritise and implement the recommendations.

The table below describes the key areas for development identified from the DNA. It also presents a series of recommendations to address these areas, as well as suggestions for implementation.
## Development Needs Analysis

### Scenario 5: CDEM Group communication and engagement

<table>
<thead>
<tr>
<th>Areas for Development</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>The CDEM Group does not have a communications strategy to direct communication effectively.</td>
<td>▪ That a CDEM Group communications strategy be developed and agreed to by all stakeholders/agencies and that this strategy details what communication will take place, when, who will be involved and where responsibilities lie. Responsibility for this would be taken by the CDEM Group Office with sponsorship from CEG.</td>
</tr>
<tr>
<td>Meeting procedures are out of date and inconsistent.</td>
<td>▪ That a consistent format for meetings be identified, documented, adopted and implemented across all meetings that have a CDEM focus. Responsibility for this would be taken by the CDEM Group Office with sponsorship from CEG.</td>
</tr>
<tr>
<td>There is frequent non-attendance at key meetings by stakeholders that have obligations and responsibilities under current legislation (in particularly, the CDEM Act and National CDEM Plan).</td>
<td>▪ That stakeholders and agencies with statutory responsibilities are reminded of the requirement to participate in meetings at the appropriate level. ▪ That meeting schedules be developed, agreed to and issued at the beginning of each financial year and referenced in the communications strategy. Responsibility for this will be taken by all CEG members and partner agencies.</td>
</tr>
<tr>
<td>In some instances, relationships have broken down or do not exist where they should be well established.</td>
<td>▪ That opportunities for informal interaction are identified in order to establish relationships (e.g. providing morning tea prior to a meeting commencing). Responsibility for this will be taken by all CEG members and partner agencies.</td>
</tr>
<tr>
<td>Opportunities to communicate and collaborate across the CDEM Group are ignored by some stakeholders/partner agencies.</td>
<td>▪ That a work plan is developed and implemented for each sub-committee and advisory group. Responsibility for this will be taken by each sub-committee and advisory group, with reporting to CEG on key activities and milestones.</td>
</tr>
<tr>
<td>Little follow up is carried out by the CDEM Group Emergency Management Office to check communication is received and stakeholders/agencies are supported to act on the information.</td>
<td>▪ That a proactive “follow up” protocol be developed and implemented by personnel in the CDEM Group Emergency Management Office. Responsibility for this will be taken by the CDEM Group Emergency Management Office.</td>
</tr>
<tr>
<td>Key stakeholder and partner agency participation in exercises, professional development, training and multi-agency seminars is at the lower end of the scale.</td>
<td>▪ That dates and programmes for exercises, professional development, training and multi-agency seminars are published well ahead of time and commitment to attend is proactively sought by the CDEM Group Emergency Management Office. Responsibility for this will be taken by the CDEM Group Emergency Management Office.</td>
</tr>
<tr>
<td>Timeline or reporting milestones for stakeholders/agencies to report back to the CDEM Group or CEG by are not clear.</td>
<td>▪ That a timeline and/or reporting milestones are agreed to by each responsible stakeholder, agency, committee or advisory group and documented in work plans and meeting minutes. Responsibility for this will be taken by all CEG members and partner agencies.</td>
</tr>
</tbody>
</table>