

# CIMS Introduction

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*The New Zealand Coordinated Incident Management System (CIMS) provides a model for command, control and coordination of any emergency response.*

**Constructive feedback and suggestions for improvements to the SAR Training Matrix is appreciated. Please email feedback / suggestions to [sartrainingfeedback@coastguard.co.nz](mailto:sartrainingfeedback@coastguard.co.nz) providing as much detail as possible. Thank you.**

## Overview

The New Zealand Coordinated Incident Management System (CIMS) provides a model for command, control and coordination of any emergency response.



*CIMS involves common terminology and operating structures around an integrated emergency management framework.*

It is important that all Coastguard Unit members have a general overview of marine Search and Rescue (SAR) in New Zealand, and be aware of the various titles, roles and responsibilities of different personnel involved in SAR incidents.

## 1. CIMS Introduction



**Activity:**  
*Multiple Agency Response*

The range of agencies involved in search and rescue can be illustrated by the following chart  
<http://searchandrescue.council.org.nz/images/documents/nzsar%20linkages%20graph3.pdf>

- Have the crew look at the links and appreciate the complexity of SAR.

This reinforces the need for a system of common management.

- Check out the NZSAR website for more resources  
<http://searchandrescue.council.org.nz/>



Incident Management Systems (IMS) are being used by organisations throughout the world. Such systems are designed to respond to public emergencies of any type and any scale. The New Zealand Police, Fire Service, Ambulance, Civil Defence Emergency Management, Territorial Local Authorities, NZ Defence Force, NZ Forest Owners Association, Department of Conservation, Maritime New Zealand, Coastguard and other emergency response agencies have reached an agreement to use CIMS.



Irrespective of the scale of the incident or the particular services required, CIMS can be used to ensure that all the efforts of agencies are coordinated as they work towards the common goal of stabilising an incident and protecting life, property and the environment.



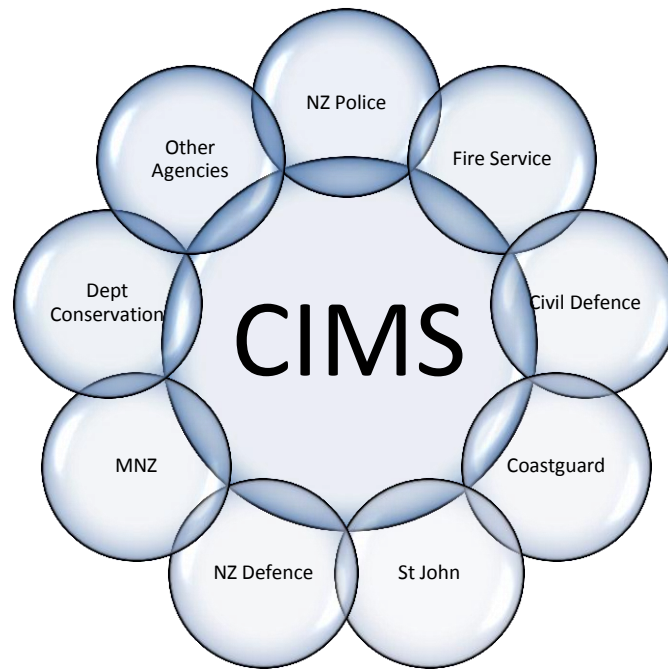
*CIMS serves to coordinate the effective use of all available resources and to reduce the extent of issues associated with managing multiple agencies responding to an emergency*



**Activity:**  
Multiple agency response

This activity explores the consequences of multiple agency responses.

- Set up a white board or large piece of paper by drawing two lines top to bottom, dividing it into three columns.
- Title the first column 'Negatives', the second 'Positives' and the third 'Interesting'.
- Have a discussion about using multiple agencies to respond to an incident. Create a scenario, such as a fire on board a vessel moored at a jetty with not all crew accounted for.
- Have the crew think about the negatives and positives of multiple agencies working together. For those responses that are neither, use the third column called 'Interesting'.
- This discussion will set the scene to show the need for a way to manage multiple agencies effectively and leads onto the seven key CIMS principles.



### 1.1 When CIMS is used

Incident Management Systems have proven effective in planning for and responding to all types of incidents:

- hazardous substances
- natural hazards
- fires
- multiple casualties
- transportation accidents
- search and rescue
- pathogen outbreaks
- public health and medical emergencies
- environmental incidents
- marine mammal strandings
- planned events



The introduction of CIMS has addressed a number of difficulties previously identified with incident responses. These problem areas included:

- lack of coordination between services
- non-standard terminology among the responding agencies
- lack of capability to expand and contract structures as required by the situation
- non-standard and non-integrated communications
- lack of consolidated action plans
- lack of designated facilities

Experience shows the success of CIMS has come from its regular application of:

*The Canterbury Earthquake.*

*“Coastguard volunteers from the Southern Region were tasked to help run the Windsor School Welfare Centre – a 24/7 operation for the first eight days after the earthquake. CIMS qualified personnel have been in great demand as this is the universally used command and control structure for emergency management in New Zealand. Coastguard teams from around the country remain on standby to relieve their colleagues as necessary.”*

*E-Bulletin. March (2011). Civil Defence NZ.*

- a common incident management structure
- information management
- key management principles in a standardised way

## 2. CIMS Principles

CIMS structure is based on a seamless approach and seven key principles:

1. Common terminology
2. A modular organisation
3. Integrated communications
4. Consolidated incident action plans
5. Manageable span of control
6. Designated incident facilities
7. Comprehensive resource management

### 2.1 Common Terminology

Common terminology is essential in any incident management system. When agencies have slightly different meanings for terms, confusion and inefficiency can result. CIMS terminology is standard and consistent among all of the agencies involved.



### 2.2 Modular Organisation

A modular organisation develops a 'top-down' organisational structure at any incident. 'Top-down' means that the first-arriving officer becomes Incident Controller. As the incident warrants, the Incident Controller activates other areas of the management structure.

### 2.3 Integrated Communications

Integrated communications requires a common communications plan, standard operating procedures, clear text, radio communication frequencies, and common terminology. Several communication networks may be established, depending on the size and complexity of the incident.

## 2.4 Consolidated Incident Action Plans

Consolidated Incident Action Plans (IAP) describe response goals, operational objectives, and support activities. The decision to have a written Incident Action Plan is made by the Incident Controller.

Incident Action Plans should cover all objectives and support activities that are needed during the entire operational period. A written plan is preferable to an oral plan because it clearly demonstrates responsibility, and provides documentation when requesting assistance. Incident Action Plans that include the measurable goals and objectives to be achieved are always prepared around a timeframe called an operational period.



*'Control' works horizontally across different agencies, while 'Command' works vertically and is within an individual agency.*

## 2.5 Manageable Span of Control

A manageable span of control is defined as the number of individuals or functions one person can manage effectively. In CIMS, the span of control for any person falls within a range of three to seven functions, with five being the optimum.

## 2.6 Designated Incident Facilities

It is important there are designated incident facilities with clearly-defined functions to assist in the effective management of an incident. Every incident requires one Incident Control Point. Additional facilities are designated as the complexity of an incident increases.





## 2.7 Comprehensive Resource Management

Comprehensive resource management is a means of organising the total resource across all organisations deployed at an incident.

Comprehensive resource management:

- maximises resource use
- consolidates control of single resources
- reduces the communications load
- provides accountability
- reduces freelancing
- ensures personnel safety

## 3. Organisational Structures

In CIMS the terms 'Control' and 'Command' to describe a person's role has particular meaning. The flow chart below illustrates the general structure of a SAROP using the CIMS system.

The Coordinating Authority in an incident will provide the overall coordination, and control of other agencies involved. In Marine SAR this will be either the Police or RCCNZ.



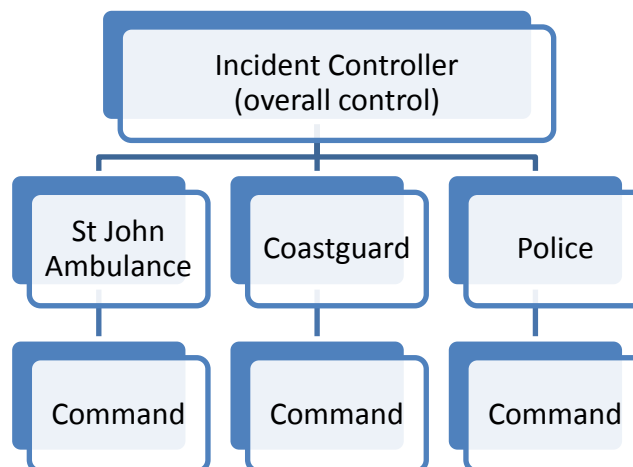
### Activity:

#### Roles and Responsibilities

Copy practical resource 8. 'Role and Responsibilities'

- Cut up resource into strips containing title role and descriptions.
- Have multiple copies prepared.
- In pairs, hand out the strips and have the crew match the roles with the appropriate responsibility statement.
- Once completed, discuss with all crew and explore those that they are not sure about.
- Further details of responsibilities can be discussed as the module

Each agency remains in command of its own assets, and determines what assets are available and what tasks they can undertake in response to the incident.



## 4. Incident Management Team (IMT) structure

### 4.1 Incident Controller



The overall control of the incident is managed by the Incident Controller who will be a member of the Coordinating Authority (either NZ Police or RCCNZ). They are responsible for the overall direction of the operation.

An effective Incident Controller must be assertive, decisive, objective, calm, and be a quick thinker. To handle all of the responsibilities of this role, the Incident Controller also needs to be flexible and realistic about their limitations. They need to be able to delegate positions appropriately as needed for the incident.

Their responsibilities include, but are not limited to;

- taking control of the incident
- establishing lines of command
- developing an Incident Action Plan (IAP)
- maintaining accountability and public safety
- establishing and maintaining communications with outside organisations



*'The number of people involved, and the distribution of individual responsibilities within the Incident Management Team will vary depending on the size and complexity of the incident, and the personnel available.'*

## 4.2 Planning and Intelligence

Responsibilities include gathering, evaluating, and disseminating information about the incident and status of resources, and contributing to the development of the IAP.



## 4.3 Operations

Responsibilities include;

- directing and coordinating all operations assigned to them
- controlling personnel and equipment
- assisting the Incident Controller in developing an IAP
- requesting additional resources through the Incident Controller

- keeping the Incident Controller informed of the situation

#### 4.4 Logistics & Administration

Provide the facilities, materials, services and resources (including personnel) to support the operation.

### 5. Other key roles in the IMT structure

There are other roles that are more specific to the incident management of a marine emergency. These include:

#### 5.1 Marine SAR Controller (MSC)

A MSC is a person specifically trained in the Marine search planning aspect of incident management. MSCs are normally either Coastguard or NZ Police personnel who have completed specific training in search plotting and planning. The role of the MSC may include:

- Responding to the requirements of the Controlling Authority or duty personnel at the Coastguard unit.
- Providing information such as defined target, area of probability and search methodology to the Planning and Intelligence group.
- Developing search plans.



#### 5.2 Duty Officer (DO)

Some Coastguard Units / Regions have permanently manned operations centres, with a designated Duty Officer. The Duty Officer is often the first person to be made aware of a developing incident. Their duties may include:

- Being available, on a roster basis, to take charge of routine operations of the Coastguard communications facility, and to initiate an appropriate initial action to any incident.
- Informing the relevant agencies of an incident that may require a Category I or II response.
- Logging all incident-related communications and actions.
- Ensuring all communication procedures are correctly followed.

The burden of interpreting the severity of the incident, and hence what response is required, often lies with the Duty Officer. They must consider all factors and must decide by referring to established procedures / protocols if the incident is sufficiently serious to warrant a SAR response.



### 5.3 Radio Operator (RO)

In some areas of the country (with a permanently manned operations centre) there may be Radio Operators on duty in addition to a Duty Officer. If not, an incident requiring the establishment of an IMT will often involve designated Radio Operators to facilitate communications with the on scene resources.



### 5.4 Subject Matter Expert (SME)

The role of the SME is to provide expert advice in a SAR incident. Their advice could include details of local conditions, specific local resources that may be available, technical knowledge about vessels, medical advice, details of local clubs and associations.

It may be for example, that the SME has specific personal or technical knowledge regarding the target of a search - a local fisherman in the case of a missing fishing vessel.

*The Subject Matter Expert may not have any training in SAR but will be able to assist due to their particular knowledge and experience.*

## 6. On-Scene Resources: A description

### 6.1 Coastguard Rescue Vessel (CRV) Skipper

The CRV Skipper's role is to perform the tasks assigned to them by the IMT, and keep the IMT fully informed of any developments on scene.



Every Skipper is ultimately responsible for their vessel, their own actions, and those of the crew. Therefore CRV Skippers should assess their vessel, their own abilities and their crew's strengths and weaknesses

before accepting any assigned task. They must ensure that the IMT or On Scene Command is fully informed of any deficiencies or limitations.

## 6.2 On Scene Command (OSC)

Where more than one SAR response is involved, the appointment of an On Scene Command may be made by the IMT. The On Scene Command is often the Skipper of the vessel on the scene with the most experience in SAR operations.



Refer to the *On Scene Command* Module.



The choice of On Scene Command may also be influenced by which vessel is most suitable for the role. This may change as more experienced personnel or other vessels become involved.

OSC duties include but are not limited to:

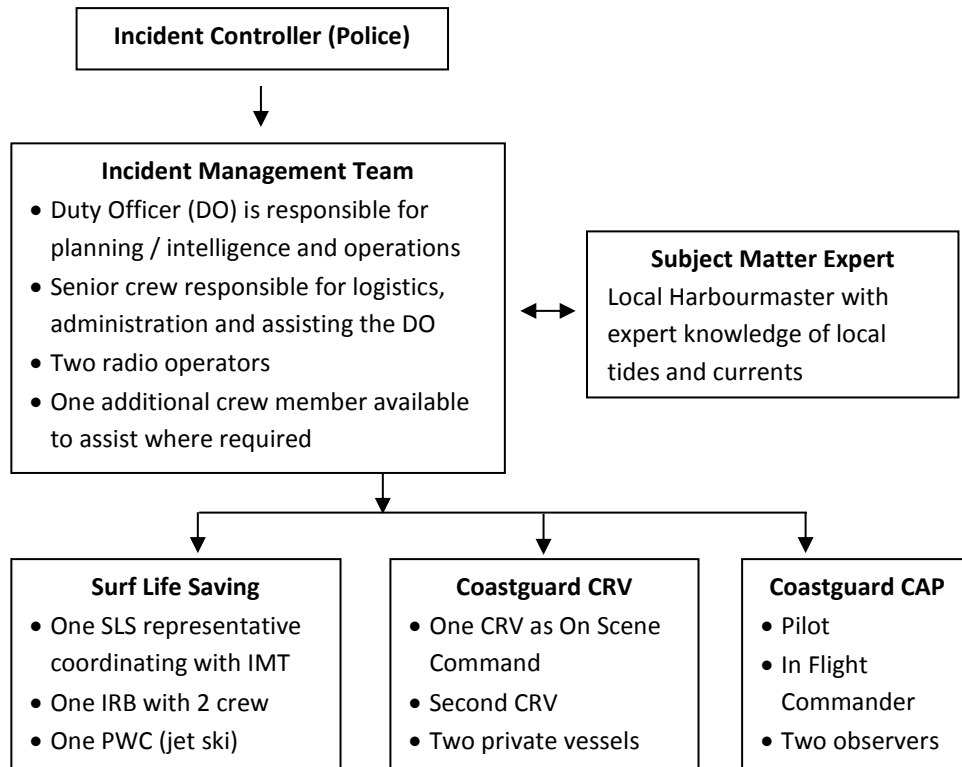
- assuming delegated command and control of their allocated resources
- establishing effective communications between SAR resources and IMT
- implementing required tasks as directed and coordinating resources as required
- logging all incident-related communications and actions and participating in any debriefing

## 7. CIMS – Example Scenarios

### 7.1 Category I SAROP

The following scenario illustrates CIMS in action.

The vessel 'Ice Maiden', an aged 6m fibreglass boat with a 150HP engine and 5POB has been reported overdue. Police have initiated a search. This is a Category I SAROP.



The agencies involved in the operation are Police, Harbourmaster, Coastguard (with Rescue Vessels and Air Patrol), local Surf Lifesaving and private vessels. The CIMS structure is shown in the flowchart.

The IMT have at their disposal;

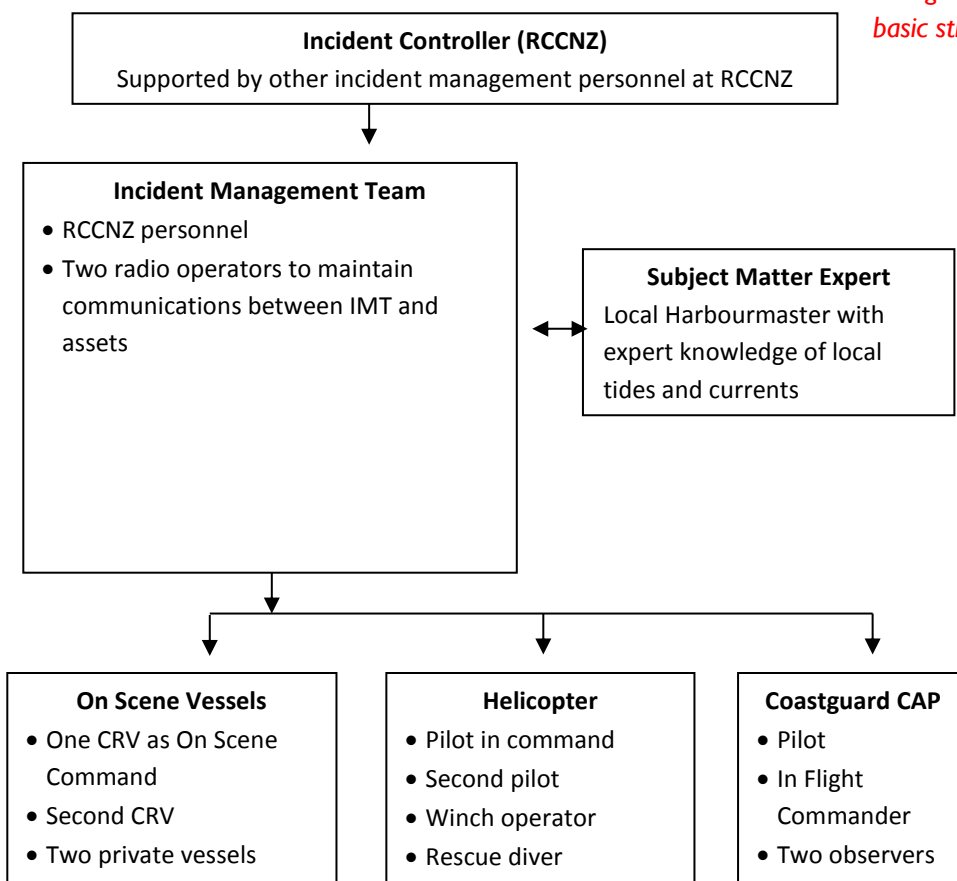
- Members of the local Surf Lifesaving who are conducting a shore line search.
- Two CRVs and two private vessels who are conducting an area search further offshore.
- One CAP aircraft that is being coordinated by the IMT to fly a search pattern in conjunction with the CRVs and private vessels.

## 7.2 Category II SAROP

Continuing from the previous example, whilst the search is underway an EPIRB is activated. It is identified as belonging to the 'Ice Maiden' – the vessel currently being searched for.

The overall responsibility for the operation changes and it now becomes a Category II SAROP under RCCNZ. To avoid disruption the original IMT is retained. The flowchart represents how the CIMS structure for this SAROP has now changed.

*With the CIMS system the response to an incident can be increased or decreased in scale without any change to the basic structure.*



### Activity: Developing IMT

- Ask the crew to describe a recent SAROP that the unit was involved in.
- Work together to reconstruct the IMT structure that was used.
- Think about how this could be improved. Discuss this.
- Alternatively provide the crew with a scenario best suited to the unit location and 'general business'. Have the crew plan out the IMT structure and identify who would take on those roles.

The IMT is run by personnel at RCCNZ in Wellington. Radio operators may be retained in the local area to maintain good communication links with assets. Local SMEs may be consulted on local conditions and assets available.

The shoreline search conducted by Surf Life Saving is concluded, and with the operation moving further offshore they are stood down. A rescue helicopter is tasked to assist in the aerial search.



It is important that all Coastguard Unit members have a general overview of marine Search and Rescue (SAR) in New Zealand, and be aware of the various titles, roles and responsibilities of different personnel involved in SAR incidents.

*It is important that Coastguard Units have a good working relationship with the other agencies and other Coastguard Units that they are likely to work alongside.*

## **8. Practical Resource: Roles and Responsibilities**

### **Operations Manager**

Responsible for the management of the Operations group in the IMT and reports to the Incident Controller

### **Marine SAR Controller**

Specifically trained in search plotting and planning

### **Duty Officer**

Often the first person to be made aware of a developing incident and responsible for informing the relevant agencies of an incident that may require a Category I or II response

### **Radio Operator**

Responsible for radio communications

### **Subject Matter Expert**

Person with specific knowledge or experience particular to the incident who may assist the IMT

### **On Scene Command**

Is the link between SAR resources at the scene and the IMT

### **CRV Skipper**

Responsible for their own resource and following the instructions of the On Scene Command or IMT

### **Aircraft Pilot**

Responsible for their aircraft

### **In Flight Coordinator**

Responsible for on-board planning, liaison with IMT and communications with agencies

### **In Flight Observer**

Responsible for observation, search and hazards in the air