



# New Zealand Search and Rescue Consultative Committee Meeting

## Minutes of Meeting NZSAR Consultative Committee Thursday 25 August 2016 Meetings on the Terrace 152 The Terrace, Wellington

### Attendees:

Carl van der Meulen – NZSAR (chair)	Brian Ruiterman - NZDF
Duncan Ferner – NZSAR	Jonty Mills – WSNZ
Rhett Emery – NZSAR	Mark Lindsay – WSNZ
Jo Holden – NZ Police	Mike Daisley – MSC
Mike Hill – RCCNZ	Allan Mundy – SLSNZ
Rachel Burns – RCCNZ	Steve Caldwell – LandSAR
Kevin Banaghan – RCCNZ	Dave Comber – NZSAR Council
Rachel Roberts – NZSAR	Brendan Comferford - MOC
Nic Drew-Crawshaw – RCCNZ	Patrick Holmes – Coastguard NZ
Steve Kern – CAA	Simon Trotter – Antarctica NZ
Morgan Stevenson - NASO	

### 1. Welcome

Carl opened the meeting and welcomed the attendees, noting this is the first meeting for Jonty Mills as the new CE of WSNZ.

NZSAR had moved to new premises at Harbour Quays. NZSAR Secretariat staff have new email addresses ending with @nzsar.govt.nz

### 2. Apologies

Paul Turner – NZFS	David Waters – Ambulance NZ
Jeff Sayer – AREC	
James Lamb – MOC	

### 3. Minutes of previous meeting

The minutes of the 24 May 2016 meeting were accepted as a true and accurate record.

#### 4. Matters Arising from Minutes

Item	Action	Responsibility	Update
<b>Risk Matrix</b>	<b>A</b>	The Consultative Committee <b>referred</b> the paper to the NZSAR Council for consideration, and asked the Council to <b>note</b> the Consultative Committee's comments on the paper.	Complete
<b>Coronial Investigation – Fiona Wills</b>	<b>D</b>	The Consultative Committee <b>endorsed</b> the proposed method to review the issues of concern identified by Mr Gordon, and <b>referred</b> this to the NZSAR Council for approval.  The Secretariat will keep the Wills family apprised of the review.	Agenda item 9
<b>Arrangements for the 2017-2020 cycle</b>	<b>D</b>	The Committee <b>supported</b> the proposed funding bids, with caveats about the establishment of a contestable fund.	Agenda item 8

#### 5. SLA Monitoring Report: 1 January – 31 March 2016 Quarter

Reporting requirements for the SLA have been met by all partners, with 1,363 volunteers providing 8,050 volunteer hours in SAROPS during the quarter.

This is the first time that the report has been provided extracting data from the SAR Data Store.

#### 6. SAR activity 2015/16

Information extracted from SAR Data Store shows little change over the preceding years. The number of lives saved included 36 lives saved in the rescue of the crew from the F/V Pacific Glory. Those receiving assistance included 125 people after the Waimarie got into difficulty on the Whanganui River on 26 November 2015.

Lives saved	195
People rescued	730
People assisted	1,014

A series of slides was shown to illustrate SAR incidents by category, by environment, trends in land and marine incidents, land incidents (by category), beacon types, and Cat 1 land incidents (by subject behaviour). There is a steady increase in Cat 1 land incidents involving wanderers (dementia, intellectually impaired, missing child). An aging population

There have been some very difficult searches in recent years in part because of an ageing population. The data available was not of a sufficient quality to allow a breakdown in terms of residents and tourists.

Duncan reported that the Lottery Grants Board and Community Trust were interested in receiving some background information to aid their funding decisions.

**Action:** The Secretariat will provide a summary of SAR activity for 2015/16 to the Lottery Grants Board.

## 7. Sector Update

The sector update paper was distributed prior to the meeting. The following oral updates were provided.

### MSC

Mike spoke of the difficulty of getting consistency of forecasts where the language is sometimes misunderstood or greater emphasis is made. MSC is working on engagement with those who use the advisory service. There have been a few technical difficulties with the system embedded in the DOC web site.

A state of the nation report has recently been produced which outlines what is going on. Noted that 79% of incidents involved actual New Zealanders, it is not always the tourist at fault.

### SLSNZ

Three high profile searches in recent years have heightened the need to gain a better understanding of the rip currents particularly around the headlands. SLSNZ has started to map in-shore currents but most of the methods have been based off shore. There are two types of rips - fixed rips (headland) or moving (sandy beaches) which can move up to 500m per day. Little research has been carried out on rip currents worldwide. SLSNZ has employed a post graduate student from Plymouth University in the UK to carry out research during 2016-17 using his peer reviewed internationally recognised methodology. The research will be conducted at five selected beaches. These are Piha, Mt Maunganui, Whaungamata, Lyall Bay, and Muriwai.

SLSNZ has entered into a partnership with Emphasoft, an IT company, to undertake quantitative research on prominent rip currents around the country. The

company is funding the cost of the digital camera attached to each drifter. The camera, which takes a digital image every 10 seconds, is already providing information. Slides were shown illustrating the drifters to be used. This is a collaboration between SLSNZ and CGNZ personnel. Collation will be carried out by the post graduate student assisted by Waikato University. The method will be developed to set a data standard for future research on flow sites around the country. The data will also be compared with the UK and Australian data though the UK research only involved one beach whilst Australian research was on two beaches.

## **8. Arrangements for 2017-2020 cycle**

Duncan briefed the committee on the process for reviewing the PLA (Permanent Legislative Authority) funding for SAR for 2017-20. The process is managed by the Ministry of Transport, and the Secretariat has been working closely with them. PLA funding is sourced from the hypothecated fuel excise duty paid by recreational boaters.

A new/revised NZSAR strategic plan is required for the next three-year cycle. This provides an ideal opportunity to update the goals and risks and include a 'road map'. The plan does not suggest how to achieve these goals. This will be workshopped at the combined meeting with the NZSAR Council at the end of the year.

Duncan gave a quick update on some of the more significant items being considered in the PLA funding bid.

Service Level Agreement updates. The SLA partners have provided business cases for increases or adjustments to the existing agreements. There are five joint service level agreements so quite a lot of effort will be needed on this in the first quarter of next year. New funding will likely require new measures/reports. This is an opportunity to blend in bilateral MOUs to the joint SLAs to produce a significant document.

SAR Doctrine or Manuals. Funding has been requested to establish an agreed New Zealand SAR doctrine / manual. The two year project will require significant engagement. It is a great opportunity but there is a need to get it right so processes will be needed to allow for updating/changing etc. The document will be set at a high level and refer to other documents providing further detail from the different organisations.

SAR System Assessment. Areas of risk and concern are not well defined. There is a need to establish the capacity of the various organisations. Funding has been requested for this. Funding has also been requested for extra Mass Rescue Exercises.

SAR Data Store. A major project (should funding be approved) will be the creation of a unified SAR Data Store, including the capture, analysis, and sharing of SAR data across the SAR sector.

## **9. Coronial Investigation – Fiona Wills**

The NZSAR Council approved the proposed method to review the issues of concern identified by SARINZ. The committee engaged in a discussion to consider whether changes to policies and procedures were necessary. Following the coronial enquiry, a separate document had been received from SARINZ which included similar material and a number of additional recommendations. A member of the family had been approached for a family view. Rather than a family opinion they came back with a third party opinion provided by SARINZ. No other person who presented at the enquiry has had an opportunity to provide any information. This posed the question of whether the committee should consider any material received outside the coronial process.

The general view was that the Coroner had heard the information and had determined the findings. We should be keeping to the spirit and intent of the judicial finding which is more robust. The Committee noted that the new document raised no new issues. Consideration of the existing systems and processes has been carried out by an experienced and expert SAR Coordinator who had no involvement with the coronial process.

The committee discussed the nine issues raised from a systems improvement perspective. The conduct of the individuals or teams who participated in the Wills search is outside the scope of this work.

### **1. Initial field search abandoned too early**

#### *1.1 International best practice search methodologies and training not used.*

The Committee noted that a unified or collective view to what constitutes international best practice for SAR does not exist. A variety of SAR practices exist in different jurisdictions around the world.

New Zealand's SAR training content is able to provide satisfactory training and guidance suitable to the New Zealand environment. This includes foundation training, refresher training and SAR exercises. This training is readily available to New Zealand SAR practitioners.

#### *1.2 The search for Fiona didn't happen according to best practice.*

The Committee noted that SAR training in New Zealand has been extensively developed over the last decade, with a training regime where skills and development are taught to a level appropriate to that person's current ability and role within the SAR organisation. There are a number of SAR courses available which provide satisfactory training and guidance for NZSAR practitioners. Some procedural / process / practice variations exist between SAR organisations in NZ.

#### *1.3 Initial search phase abandoned too early.*

The Committee noted that existing SAR terminology relating to search does not include the term '*abandoned*'. It does include the term '*suspended*'. Neither term applies to this issue.

The Consultative Committee observed that it is difficult to apply a specific time span to an initial search phase due to a number of factors including mobility of the missing person, weather, size of the search area and time of day. The availability of resources available at the time will also impact on the decisions made. The Committee agreed more direction could be given regarding SAR resource prioritisation and allocation.

*1.4 Based on Lost Person Behaviour Survivability Tables for people with Alzheimer's Fiona Wills good physical health, the night temperature, lost in home environment – the search was abandoned too early.*

Lost Person Behaviour and Survivability are extensively covered in current training courses. Survivability should be determined by a suitably qualified medical practitioner, and is dependent on many contributing factors.

The Committee agreed more direction could be given regarding survivability and search suspension.

*1.5 Many of the points raised in the SARINZ reports are the result of poor policy decisions and the frontline response personnel being let down through poor support and a lack of current best practice training.*

The Consultative Committee is satisfied that the current SAR training programme provides adequate training and guidance suitable to the New Zealand environment and is available to NZSAR practitioners. Individuals have the opportunity to maintain currency of their training through exercises although more could be done to further enhance IMT preparedness. The implementation of the LandSAR competency programme is designed to ensure that individuals maintain their level of operational capability.

## **1. Fatigue poorly managed**

The Consultative Committee is satisfied that there are existing guidelines regarding the management of fatigue and for Health and Safety but that more guidance may be appropriate. Operations that start at the end of a day will typically have personnel coming on scene at the end of a normal working day. This should be taken into consideration when determining when changeover should occur.

The Consultative Committee is satisfied with the existing guidelines which describe procedures for operational changeover, including the timing when this should occur.

## **2. Limited CIMS structure implemented**

The Consultative Committee is satisfied with the existing guidelines for the planning and management of SAR operations. SAR planning is based on the CIMS incident management process and the sector has a suite of up to date operational forms and guidelines and IMT operations.

### **3. Incident Controller function**

#### *4.1 There appears to be limited search planning documentation beyond the early first operational period*

Police personnel responsible for the role of Incident Controller are qualified through a combination of training courses and operational experience. The Consultative Committee is satisfied with the existing documents and practice which are based on the use of CIMS for managing operations.

The Committee noted deficiencies with current SAR IMT Management information technology.

### **4. Lack of formal planning**

#### *5.1 Lack of written action plan*

The Consultative Committee is satisfied that specific training in formal search planning addresses extended search operations. The *Extended Search Planning* course, introduced in 2015, specifically covers this issue.

### **5. Limited replacement of personnel**

#### *6.1 It is difficult to identify what personnel worked Tuesday night only and or Wednesday. During the review process a number of people who were directly involved in, or observed the official response, identified the issue of fatigue... It is not apparent from the documentation when the decisions were made to source, or not source, replacement personnel.*

The Consultative Committee is satisfied that the current LandSAR Response Guidelines describe procedures for an operational changeover. This is also addressed within guidelines for health and safety.

### **7. Lack of appropriate equipment**

#### *7.1 There was a general lack of handheld GPS's which meant that electronic tracks, trails could not be recorded for subsequent analysis nor assist in determining how well areas or segments were searched. The Wills family have been generous in donating GPS units to the Hawkes Bay LandSAR unit to assist future SAR performance and this has been openly acknowledged by all parties.*

The Committee is satisfied that the current LandSAR Response Guidelines describe procedures for evaluating Search Effort. The Committee agreed that downloaded GPS tracks, along with other team tracking information, can be used in identifying areas not searched. The Committee also agrees that access to team tracking information is useful for Health and Safety purposes.

## **8. General duties Police used as searchers**

The Committee observed most Districts maintain an adequate membership of LandSAR volunteers and Police SAR squad members. However, an operation is reliant on the resources available at the time. Generally, most SAR operational requirements can be met without the need for out of District personnel to attend within the first days of an operation. Out of District support can be requested and is generally available as required.

## **9. Improved utilisation by search dogs**

The Committee noted that the existing NZSAR Resources database provides detailed information regarding the existence, location, capabilities and callout process for SAR resources and assets throughout NZ. This includes search dogs.

The Committee also discussed two issues identified by the independent reviewer, and one issue identified by the NZSAR Secretariat.

## **10. File Management**

Management and compilation of the forms and documents from a search operation should be covered within SAR Exercises, SAR courses including MTIR, ESP and SAR Managers. Consideration should be given to file management templates, also the electronic backing up of documentation.

Following the demobilisation or suspension of a search operation there should be a file that is compiled in chronological order and separated into the various components of the search.

The Committee agreed IMT file management, teaching, process and technology were deficient.

## **11. Family Liaison Role**

MTIR and ESP have very little focus on the Family Liaison Role. While family liaison is covered with a 45 minute session during the SAR Managers, it should also be included in the MTIR and ESP courses to a higher degree, with considerations that should be part of the Initial Action process.

The Committee noted that very good family liaison teaching and process exist with the NZ Police but agreed more effort was needed to teach SAR personnel on family liaison requirements and Police capability in this area.

## **12. Search Suspension**

The two coordinating authorities have different criteria for search suspension. The Committee is concerned by this variance and would prefer similar or the same criteria and processes for search suspension.

**Action:** The Secretariat will collate the NZSAR Consultative Committee's commentary and recommendations on the 11 issues and distribute this for review. All agencies are requested to provide feedback to allow the recommendations to

be presented to the NZSAR Council for consideration at their meeting on 21 September 2016.

## 10. NZ Inc Recreation Framework

Duncan briefed the Committee on the NZ Inc Recreation Framework. As the attached slide shows, there has been an upward trend in SAR incidents over the last 11 years.

The Recreation Framework intends to play a role with SAR prevention support by:

- Supporting inter-agency collaboration
- Providing SAR information/intelligence to create better prevention programmes
- Measurement of prevention effect
- Fill gaps in current prevention initiatives

## 11. Aviation Engagement Framework

Duncan briefed the Committee on the draft aviation engagement framework. Initial findings of the review has identified three core issues:

- Inconsistent approaches to SAROPS
- Gaps in Assurance
- Areas where relationships are ineffective

## 12. Land Communications Framework

The draft recommendations of the Land Communications Framework project were received for consideration by the committee.

## 13. National SAR Support Programme 2016/17

Rhett briefed the committee on the status of the NSSP 2016/17 as described in the table below.

<b>Workshops &amp; Seminars</b>	<b>SAR Training</b>
Health & Safety Seminar	Training Support and Advice
SAR Case Study Seminar / Police Planning mtg	Air Observer training & Training material
SPC SAR Meeting support	SAR (ACE) Training Survey
<b>SAR Information and IT</b>	Evaluation Training
Maintain SARNET, Website, START, RDB etc	<b>Prevention</b>
Update existing SAR Date Store	AdventureSmart Communications
Data Store maintenance and operation	Recreational Safety Partnership
SAR Data Standard (Continues)	Visitor Intentions
<b>SAR Documentation</b>	Safety Codes, printing and advertising
SAR Forms and Guidelines	<b>SAR Research</b>
Operational Framework	Fatality Analysis
NZSAR Strategy	Wills request

<b>Exercises</b>	SAR Demand and Supply Study – Marine
Support Police SAREXs	SAR Demand and Supply study – Land
MRO SAREXs	Mass Rescue Study
<b>Secretariat</b>	SAR Communication - Land
Communications and publications	SAR Performance Measurement
NZSAR Awards	SAR Aviation Engagement Framework
Travel, meetings, advice, administration etc	
Advice	

**Key:**

- Dark Green – Completed
- Light Green - Underway
- White – Yet to be started
- Yellow – Still to be completed

**13a. Case Study Workshop**

The workshop will be run in New Plymouth following the LandSAR Conference.

**13b. Health & Safety Seminar**

Accommodation for the seminar is full. There is capacity for other agencies who wish to send attendees. Those interested should contact Rhett Emery.

**13c. Rauora II MRO exercises**

Exercises were scheduled for the following:

- 5 October - Northland
- 28 October - Bay of Plenty
- 14-15 February – Tasman
- 15/22 March – Southern

Carl advised that help was needed to run these exercises at a local level. It is an opportunity for organisations to be involved.

**14. Technology in SAR**

**14a. IMT IT Project**

Rhett briefed the Committee on the progress of this project.

**14b. Mobile phone locating**

Duncan briefed the Committee on this project, which is quite complex. A detailed study will be needed.

## 15. Training – SAR(ACE)

Rhett gave the Committee an update on the SAR (ACE) training to date, as shown in the table below. He asked to be advised if there is any demand for other courses.

As at 30 July	2015	2016
Number of courses planned for year	99	101
Number of courses to date	64	53
Number of courses cancelled (YTD)	19	16
Total number participants attending	881	709
Average number attending per course	13.7	13.4
Total EFTs used to date (max 155)	107.3	80.22

### 15a. Student Survey

The Search and Rescue Training Student Feedback Survey was received. Further feedback is available from Rhett Emery.

Results:

43% response rate overall (n=203)

97% rated subject knowledge of tutors as Excellent or Good

95% agreed that the course taught skills relevant to SAR tasks

Very strong score to recommend the course (NPS score 64)

Learning materials provided and rated Excellent or Good:

- Before the course 70%

- during the course 83%

- to support Post-course 46%

65% rated the suitability of the venue as Excellent

97% considered that Teamwork was encouraged.

## 16. General Business

### 16a. Next meeting – combined workshop – 22 November

Aim to workshop the SAR Sector Strategy, Values, and Roadmap for 2017-2020.

Carl van der Meulen  
Chair  
NZSAR Consultative Committee

## Actions and Decisions

Item	Action (A) / Decision (D)	Responsibility
6 SAR Activity for 2015/16	A The Secretariat will provide a summary of SAR activity for 2015/16 to the Lottery Grants Board.	Secretariat
9 Coronial Investigation – Fiona Wills	A The Secretariat will collate the NZSAR Consultative Committee’s commentary and recommendations on the 11 issues and distribute this for review.	Secretariat
9 Coronial Investigation – Fiona Wills	A All agencies are requested to provide feedback to allow the recommendations to be presented to the NZSAR Council for consideration at their meeting on 21 September 2016.	All

# New Zealand Search and Rescue Consultative Committee

## AGENDA

Thursday 25 August 2016, 1-4 pm

Meetings on the Terrace

152 The Terrace, Wellington

1.	Welcome (Coffee & Tea available)		
2.	Apologies		
3.	Minutes of meeting 24 May 2016	<i>for approval</i>	
4.	Matters arising from the minutes		
5.	SLA Monitoring Report	<i>paper</i>	
6.	SAR activity 2015/16		Snr Adv
7.	Sector update	<i>paper</i>	All
	a. SLSNZ work on rips		SLSNZ
8.	Arrangements for 2017-2020 cycle	<i>update</i>	Sec Mgr
	a. SAR Doctrine / Manuals		
	b. SAR System Assessment		
	c. SAR Data Store		
9.	Coronial Investigation – Fiona Wills	<i>update</i>	Sec Mgr
10.	NZ Inc Recreation Framework		Sec Mgr
11.	Aviation Engagement Framework		Sec Mgr
12.	Land Communications Framework		Sec Mgr
13.	National SAR Support Programme 2016/17	<i>update</i>	NSSP Co-ord
	a. Case Study Workshop		NSSP Co-ord
	b. Health & Safety Seminar		NSSP Co-ord
	c. Rauora II MRO exercises		Snr Adv
	d. SAR Data Standard		Snr Adv
14.	Technology in SAR		
	a. IMT IT Project		NSSP Co-ord
	b. Mobile phone locating		Sec Mgr
15.	Training – SAR(ACE)	<i>update</i>	NSSP Co-ord
	a. Student Survey		NSSP Co-ord
16.	General Business		
	a. Next meeting – combined workshop		Sec Mgr



# New Zealand Search and Rescue Consultative Committee Meeting

**NZSAR Consultative Committee  
Tuesday 24 May 2016  
Ministry of Transport  
Level 6, SAS Tower  
89 The Terrace, Wellington**

## **Attendees:**

Carl van der Meulen – NZSAR (chair)	Brendon Comerford – MOC
Duncan Ferner – NZSAR	James Lamb – MOC
Rhett Emery – NZSAR	Mike Hill – RCCNZ
Kate Chong – NASO	Kevin Banaghan – RCCNZ
Allan Mundy – SLSNZ	Paul Craven – RCCNZ
Jo Holden – NZ Police	Rachel Roberts – NZSAR
Patrick Holmes – Coastguard NZ	Pete Jackson – NZDF
Mark Lindsay – WSNZ	Robert Te Moana – NZDF
Peter McCarthy – Antarctica NZ	Pete Turnbull – Aviation NZ
Steve Caldwell – LandSAR	David Waters – Ambulance NZ
Henry van Tuel – Coastguard NZ	Paul Drysdale – NZDF
Mike Daisley – MSC	Dave Comber – NZSAR Council

## **1. Welcome**

Carl opened the meeting and welcomed the attendees, with particular welcomes directed to:

Henry van Tuel – Coastguard NZ  
Mark Lindsay – WSNZ  
Pete Jackson – NZDF  
Robert Te Moana – NZDF  
Peter McCarthy – Antarctica NZ  
Pete Turnbull – Aviation NZ  
Kate Chong – NASO

## **2. Apologies**

Simon Trotter – Antarctica NZ	Steve Kern – CAA
Paul Turner – NZFS	Tinaka Mearns – DOC

## **3. Minutes of previous meeting**

The minutes of the 10 February 2016 meeting were accepted as a true and accurate record.

#### 4. Matters Arising from Minutes

Item	Action	Responsibility	Update
7 Risk Matrix	A	Refresher/continuation training to be added to the risk matrix for the cohesive SAR training risk.	Complete
11 Performance Measurement of NZSAR Goals	A	Committee members are invited to provide to the Secretariat any ideas or feedback regarding the performance measurement of NZSAR goals.	Taken as complete – members are welcome to provide ideas at any time

Duncan informed the committee that attendance at NZSAR meetings will be one of the performance measures used by the NZSAR Council.

#### 5. SLA Monitoring Report: 1 January – 31 March 2016 Quarter

Reporting requirements for the SLA have been met by all partners, with 1,710 volunteers providing 5,717 volunteer hours in SAROPs during the quarter.

##### ***Issues and Updates:***

##### LandSAR NZ

- During the quarter LandSAR has focussed on:
  - Familiarising the Chief Executive with LandSAR practices and culture
  - Producing the 2016/17 Business Plan and Budget
  - Reviewing LandSAR's Roadmap, with a view to meeting with stakeholders in April 2016

##### Coastguard

- Coastguard has completed and launched the national membership project, which is branded as "Boatie's Best Mate".
- Coastguard NZ held a Special General Meeting in April to pass a number of minor constitutional changes, relating to co-opting external board members and term of office for President and Vice-President.
- Coastguard Marlborough launched their new vessel in April, which contains an ambulance 'pod' to assist with medical evacuations in the Marlborough Sounds.

## AREC:

- Have no issues or updates to report to the Council.

## Surf Life Saving New Zealand

- The Capital Coast communications network is underway. The intercity Wellington Clubs will be operational by the end of May. The Southern Region network is beginning to be developed.
- Clubs that still use VHF sets are seeking funding to replace the older technology. SLSNZ is developing a strategy document to provide guidance as the Clubs seek to purchase future communications equipment.
- SLSNZ is working to develop strong data links between the communications network and the Life Guard Data Management System.

## Mountain Safety Council (avalanche advisory)

- MSC have provided the annual report for the 2015 avalanche advisory season.
- MSC is currently producing the provisional pre-season report, with it scheduled to be endorsed by the expert panel in June.
- MSC have confirmed forecasters are in place for the coming season.

## **6. Sector Update**

There was no further discussion on the sector update report, which was distributed prior to the meeting.

### Fire Services Review

Duncan provided an update on the ongoing fire services review, as he attends the review workshops on behalf of the SAR sector. The merger of the fire services into Fire and Emergency New Zealand (FENZ) provides an opportunity for closer cooperation and collaboration with the SAR sector. This will also prevent 'mission creep'. It was noted that while there is no legislative mandate for the fire services to fight fires on boats, there are ad hoc arrangements with Coastguard Units in some locations around the country (such as Hawke's Bay) to meet any such need.

## **7. Risk**

The committee engaged in a strategic discussion around the following agenda items, which were considered to be inter-related:

- 7a. Proposed risk item – SAROP Management
- 7b. Risk Matrix: Cohesive SAR Training
8. Coronial Investigation – Fiona Wills

## Proposed risk item – SAROP Management

Dave Comber introduced his paper proposing that deficient SAROP Management be added as an item to the risk matrix.

Dave suggested the NZSAR Council requires assurance that appropriate and consistent management methods are being used during SAROPs on a national basis.

## Risk Matrix: Cohesive SAR Training

The matrix has been updated to include the risk relating to continuation/refresher training.

## Strategic Discussion

During the discussion, the following items were raised in relation the SAROP Management and Cohesive SAR Training risk items:

- The 'SAR Expectations Research' (agenda item 9c) has recently been completed. This has highlighted some of the expectations members of the public have regarding SAR response capabilities (e.g. expecting to be found within 2 hours if lost in the bush). These sometimes unrealistic expectations can be exacerbated by good news stories, such as the NZSAR Awards and TV programs.
- Training does not guarantee competence. Training needs to be appropriate to the need required, and there should be a system to monitor and maintain training. For some training systems there are expiry dates for qualifications (i.e. IRB crews), however there are other training courses which do not have qualification expiry limits.
- There is a challenge in maintaining skills and competencies if they are not used. For example, Queensland Police conducted a survey of their Police SAR Controllers and identified this as a significant issue, which has been addressed by establishing an online refresher training system.
- SAROP management and training competencies can be evaluated during SAREXs and SAROPs. There is a challenge in developing systems for tracking competencies, capturing lessons, and improving practices and processes, which is not cumbersome or expensive. NZDF have a good system, but this could not be replicated with the resources available to the SAR sector.
- One suggestion was the use of peer review of training and operations. This would require creating a cadre of assessors/evaluators, and establishing a moderation process for evaluations.
- Other Committee members considered there would be diminishing returns from putting effort into a peer review system, as this would require a significant amount of resourcing, which was considered to be excessive given the infrequency of operations not going well.
- It was suggested that the focus of effort could be directed towards addressing risk parameters and creating guidelines for operational principles.
- Duncan advised the Committee that the Coroner had referred a review of the Wills search to the NZSAR Consultative Committee and NZSAR Council. Evidence provided to the inquest included claim and counter-claim regarding

best practice for SAR (land based). Where the SAR system does have articulation of SAR policies, practices, and processes, this is held in a fractured manner, rather than being centralised.

The discussion then focussed on the topic of a centralised body of SAR doctrine:

- At a systemic level the lack of a centralised body of SAR doctrine exposes the SAR sector to criticism, as in the Wills Inquiry. When someone refers to international best practice, it is difficult to defend operational decisions and practices that differ in approach when the doctrine is fragmented.
- Members discussed the idea of having a centralised body of SAR doctrine (for example a SAR Manual similar to Australia's), and agreed this can lead to greater consistency and rationale for operational decisions taken during SAROPs. However, a possible concern is that a centralised body of doctrine could become too prescriptive and the sector can become vulnerable to criticism when actions deviate from the doctrine, even when justified by the circumstances.
- Furthermore, a substantial amount of effort is needed to create and maintain a sector wide SAR Manual. This has been the observation of the Australian SAR Manual.

### **Decisions**

The Consultative Committee **referred** the paper to the NZSAR Council for consideration, and asked the Council to **note** the Consultative Committee's comments on the paper.

## **8. Coronial Investigation – Fiona Wills**

The findings of Coroner Devonport's inquest into the death of Fiona Wills were released on 8 April 2016 (distributed prior to the meeting, along with a report produced by SARINZ). Coroner Davenport has directed *that a copy of my findings be forwarded to both the NZSAR Council and the NZSAR Consultative Committee for them to review the issues of concern identified by Mr Gordon and consider whether changes to policies and procedures are necessary.*

Many of the issues raised appear to be of a technical SAR nature for which neither the NZSAR Consultative Committee nor Council is well equipped to address without further analysis and advice. Duncan presented a paper proposing a three stage process to give effect to the Coroner's recommendation (the paper will be attached to the full minutes posted on the NZSAR website). This process may also address some of the points raised during the strategic discussion, as recorded above.

### **Decisions**

The Consultative Committee **endorsed** the proposed method to review the issues of concern identified by Mr Gordon, and **referred** this to the NZSAR Council for approval.

### **Action**

The Secretariat will keep the Wills family apprised of the review.

## 9. National SAR Support Programme 2015/16

Duncan briefed the committee on the status of the NSSP 2015/16 as described in the table below.

Workshops & Seminars	SAR Training
SAR Evaluation Seminar	Training Support and Advice
Organisational Support	Air Observer training & Training material
SAR Case Study Seminar	Marine SAR Technical
SAR Data Management and IT	START material
Maintain SARNET, Website, START, RDB etc	Formal Search planning Land (Complete)
SAR Dashboard	Prevention
IMT Time Line	AdventureSmart & Rec Safety Partnership
Data Store maintenance and operation	Visitor Intentions
SAR Data Standard (Continues)	Safety codes, printing and advertising
SAR Documentation	Wander Support
SAR Forms and Guidelines	NZ Inc Recreational Safety Strategy
Exercises	SAR Research
Support Police SAREXs	Fatality Analysis
MRO SAREXs	Outdoor Safety Code – evidence base
Abnormal Flight Behaviours	SAR Demand and Supply Study – Marine
Secretariat	Prevention knowledge research
Communications and publications	SAR Expectations
NZSAR Awards	SAR Demand and Supply study – land
Travel, meetings, advice, administration etc	SAR Communications – Land
Advice	

### Key:

Dark Green – Completed

Light Green – On track

Yellow – Still to be completed

White – Yet to be started

Red – Cancelled

### SAR Expectations Research

This was a qualitative study, which will set a base mark for future research to see if expectations have changed over time. The report is available at <http://nzsar.org.nz/Publications/Research>.

### NZ Inc Recreational Safety Strategy

Duncan briefed the committee on the proposed framework, which will be presented to the Council at its next meeting.

## 10. National SAR Support Programme 2016/17

Duncan briefed the committee on the intended NSSP for the 2016/17 year. Once it is approved by the Council, a copy of the NSSP will be available on the NZSAR website [nzsar.org.nz/Publications/Strategic-Docs](http://nzsar.org.nz/Publications/Strategic-Docs)

## 11. Training

### SAR (ACE) Training Update

Rhett gave the Committee an update on the SAR (ACE) training to date, as shown in the table below:

As at 30 April	2015	2016
Number of courses planned for year	99	101
Number of courses to date	16	23
Number of courses cancelled (YTD)	8	5
Total number participants attending	238	337
Average number attending per course	14.8	14.7
Total EFTs used to date (max 155)	44.7	32.7

One of the members noted that there was criticism of the delivery time for one course made as part of the Wills inquest. The Committee was advised that TEC has commissioned Deloitte to investigate Tai Poutini Polytechnic to ensure their programme delivery matched TEC funding conditions, and we need to await the outcome on this investigation. TEC funding is based on an EFTs allocation and made on an annual basis.

## 12. Arrangements for the 2017-2020 cycle

Duncan briefed the Committee on the process that the Ministry of Transport is using to confirm section 9(1) funding for the 2017-2020 three year period. The NZSAR funding bid is likely to include the following key items (if approved by the NZSAR Council):

- Replacing the DOC component of avalanche advisory SLA
- Mass Rescue Operations exercise series, including preparatory work for the 2019 national level exercise
- Assurance and performance capability as outlined in the recent governance review and from H&S requirements
- Centralised Incident Reporting and Data Store system
- A mobile location system for tracking phones
- A contestable fund. This was raised in the governance review, however Committee members noted that such a fund requires a robust administration system, and also has the risk that funding decisions can end up being divisive.

### Decision

The Committee **supported** the proposed funding bids, with caveats about the establishment of a contestable fund.

### **13. MRO Policy (2016 Update)**

The rewritten MRO Operational Policy has almost been completed, and it addresses the three key findings identified during the first series of *Raoura* MRO exercises. It also contains a series of expectations for the Secretariat and Coordinating Authorities, the main one being the development of a single common MRO Response Plan.

### **14. Technology in SAR**

No further issues or updates raised about the pager replacement.

### **15. General Business**

#### SAROPs of a questionable nature

RCCNZ and NZSAR completed a high level analysis of SAROPs as the result of PLB activations over the last 4½ years, in response to a query from DOC. The Data Store contains records of 633 PLB alerts, of which 15 were coded as 'inadequate preparation/capability' and 20 as 'questionable need for SAROP.' The analysis of these 35 incidents shows that only 6 or 7 could genuinely be coded as 'questionable need for SAROP' which equates to 1.1% of PLB alerts. There is also no discernible trend in these types of incidents.

#### NZSAR Awards

The Committee members were reminded that the NZSAR Awards will be held at Parliament this evening.

#### Next meetings

The Committee was advised that the combined NZSAR Council and Consultative Committee workshop scheduled for August has been moved to November. There will be a normal NZSAR Consultative Committee meeting in August with details to be advised.

Carl van der Meulen  
Chair  
NZSAR Consultative Committee

## Actions and Decisions

Item	Action (A) / Decision (D)	Responsibility
7 Risk Matrix	<p><b>D</b> The Consultative Committee <b>referred</b> the paper to the NZSAR Council for consideration, and asked the Council to <b>note</b> the Consultative Committee's comments on the paper.</p>	Secretariat
8 Coronial Investigation – Fiona Wills	<p><b>D</b> The Consultative Committee <b>endorsed</b> the proposed method to review the issues of concern identified by Mr Gordon, and <b>referred</b> this to the NZSAR Council for approval.</p> <p><b>A</b> The Secretariat will keep the Wills family apprised of the review.</p>	Secretariat
12 Arrangements for the 2017-2020 cycle	<p><b>D</b> The Committee <b>supported</b> the proposed funding bids, with caveats about the establishment of a contestable fund.</p>	All

NZSAR 2-1

23 August 2016

NZSAR Council  
NZSAR Consultative Committee

**Joint Service Level Agreement monitoring report:  
1 April - 30 June 2016 Quarter**

1. **Provision of Services.** Services have been provided by the SLA partners as described in the table of outputs.

Outputs	Coastguard	LandSAR	AREC	SLSNZ
Provision of expert services				
Provision of expert advice				
Provision of IMT Members			Not Required	
Summary of non-SAR activity		Not Required	Not Required	Not Required
Up to date details available				
Participation in joint SAREX				
Attendance at Forums				
Nominations NZSAR Awards				

2. A summary of activity as reported by the SLA partners for the quarter.

Outputs	Coastguard	LandSAR	AREC	SLSNZ	Totals
<b>SAROPs Attended</b>	67	108	14	6	--
<b>Volunteers Involved</b>	356	956	30	21	<b>1,363</b>
<b>Volunteer Hours</b>	726	6,991	144	189	<b>8,050</b>

3. **Activity for the Quarter.** A summary of overall activity for the quarter, as extracted from the NZSAR Data Store.

Measures	Police	RCCNZ	Totals
SAROPs	332	248	580
Lives Saved	22	9	31
People Rescued	120	51	171
People Assisted	151	45	196
LandSAR Taskings	97	8	112
Coastguard Taskings	47	1	48
SLSNZ Taskings	11	0	11
AREC Taskings	7	1	8
Performance of SLA Partners	Satisfactory	Satisfactory	Satisfactory

### Summary of Issues and Updates

#### 4. Coastguard

- Planning for the VHF change project is progressing well, with the project being ahead of schedule and significantly under budget.
- Coastguard has made a submission for the SLA funding review.
- The Coastguard Annual Conference is scheduled for 15-16 October at Wairakei.
- The new Coastguard Rescue Vessel for Whangaroa is nearing completion and due to start seas trials.

#### 5. LandSAR NZ

- During the quarter LandSAR has focussed on:
  - Completion and audit of annual accounts; production of 2015/16 Annual Report.
  - Producing the 2016/17 Business Plan and Budget; reviewing the LandSAR Strategic Roadmap.
  - Continued the development and refinement of the LandSAR Safety Management System, and workshops to accredit more LandSAR Competency Assessors.
  - The LandSAR Conference and AGM was held at the end of July.

#### 6. Surf Life Saving New Zealand

- Work is progressing on the various communications projects – details can be found in the sector update.
- The Clubs' emergency after hours call out squads (ECOS) have stepped up their training over the winter months, along with training for new IRB crews. SLS have

been involved in inter-agency exercises in Napier, Western Bay of Plenty, and Waikato.

- SLSNZ is undertaking quantitative research on a number of prominent rips around the country.
- SLSNZ is rolling out small scale trials for Water Rescue Craft (WRC), most likely in Wellington, Christchurch, and Tauranga.

7. AREC

- Have no issues or updates to report to the Council.

**Avalanche Advisory Service SLA (June-July 2016)**

8. Mountain Safety Council has supplied the monthly reports for June and July 2016.

- 79 avalanche advisories posted in June
- 303 avalanche advisories posted in July
- MSC Avalanche Forecasters workshop was held 22-23 June in Methven
- There were three reported avalanche incidents in July, all in out of bounds areas of ski fields.

9. Mountain Safety Council has not yet provided details for the public information signage that the avalanche advisory is supported by NZSAR and DOC.



NZSAR 2-2

23 August 2016

NZSAR Council  
NZSAR Consultative Committee

## **Search and Rescue Sector Update**

The Search and Rescue sector update for the NZSAR Council and NZSAR Consultative Committee meetings for August and September 2016 is contained below.

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### **Ambulance NZ**

Nil report

### **Antarctica NZ**

Nil report

### **AREC**

AREC has updated their internal Health & Safety policies.  
AREC is testing the Long Range Digital Radio (LRDR) for suitability and practicality of deployment on SAR operations.

### **Coastguard NZ**

Planning for the VHF changes is progressing well with the project being ahead of schedule and significantly under budget.

SLA funding review submitted – now awaiting outcome.

Coastguard Annual Conference is scheduled for the weekend of 15/16 October at Wairakei Resort, Taupo.

Completion of our latest Coastguard Rescue Vessel for Whangaroa is nearing completion and sea trials start this week.



## Department of Conservation

During 2016-2017 financial year the Department plans to continue our visitor safety improvement project across public conservation land. The prioritised work for this next stage will comprise of:

**Implement policy and standard operating procedures** through development of hazard analysis process within the Departments existing asset management system.

**Improvement of quality, consistency and reach of safety information.** This will cover identifying avenues to communicate consistent safety messages to visitors and plan to align Department systems to leverage these avenues.

**Initiate review of merits of quantitative analysis** at high profile sites which also have high natural hazards. A pilot has been undertaken at Tongariro Alpine Crossing to assess level of risk and management of that risk.

**Working with others in the sector for greater success.** Examples include: **Avalanche** Support and advice for Mountain Safety Council on pre-season, during, post season assessment. **Mountain Weather Forecast** The tender process is underway with request for tender closing middle of September. **Insights** Provision of data and advice on analysis and presentation to Mountain Safety Council's there and back insights project.

## Organisation and Staff changes

The national team that advises and improves DOC's systems and process in relation to visitors has taken on additional roles and responsibilities. The unit is now called Recreation, Tourism and Heritage. Gavin Walker has been permanently appointed in the position of Director, Recreation, Tourism and Heritage.

Tinaka Mearns continues on secondment as Tourism Manager covering Richard Davies' visitor safety responsibilities until October 2016.

Don Bogie has transitioned roles to become a Senior Advisor in the Business Assurance team providing assistance and advice with risk management.

## LandSAR NZ

### Operations:

During the period 1 April to 30 June 2016 the number of SAROPS that LandSAR was involved in (108) remained similar to the number from the previous year for the same period (113). However the total volunteer hours expended, increased significantly from 34,238 in 2014/5 to 45,029 this year, a 31% increase.

Quarter 4	2015/16	2014/15	2013/14	2012/13	2011/12
<b>Number of SAROPS</b>	<b>108</b>	<b>113</b>	<b>64</b>	<b>53</b>	<b>130</b>
<b>Category 1</b>	<b>96</b>				
<b>Category 2</b>	<b>12</b>				
<b>Volunteer hours during SAROP</b>	6,991	4,668	2,936	6,221	10,469
<b>Volunteers used during SAROP</b>	956	868	485	567	782
<b>Number at risk:</b>	<b>216</b>	<b>164</b>	<b>87</b>	<b>68</b>	<b>225</b>
<b>Lives saved</b>	23	12	11	14	11
<b>Rescued</b>	90	60	45	48	83
<b>Persons assisted</b>	68	79	32	14	115
<b>Perished</b>	23	7	5	4	15
<b>Not located (Missing)</b>	12	6	5	2	2

### Support Activities:

The total amount of support effort (non-operational) in Quarter 4 in 2015/16 was 8,475 hours up 10% from the previous year and the highest over the 5 years reported.

Quarter 4	2015/16	2014/15	2013/14	2012/13	2011/12
<b>Time attending meetings</b>	4,278	3,758	2466	2128	2499
<b>Secretarial Admin duties</b>	1,310	1,397	1053	953	737
<b>Commercial and media (finance admin)</b>	697	566	1322	1041	847
<b>Other Administration</b>	2,190	198	2051	2937	3839
<b>Total Admin support effort</b>	<b>8,475</b>	<b>7,710</b>	<b>6892</b>	<b>7058</b>	<b>7921</b>

### Training consumed by LandSAR volunteers (hours):

Total Volunteer hours involved in training activities during the 4<sup>th</sup> quarter of 2015/16 increased by 35% from the 4th quarter high of 2014/15. The uptake of SARACE funded training in this period continues to be significantly higher than in previous years.

Quarter 4	2015/16	2014/15	2013/14	2012/13
<b>Training Preparation &amp; Planning (Internal, External &amp; SAREX)</b>	1,470	1,417	4515	6743
<b>Training Internal (Local/Regional Courses)</b>	9,168	6,122	7140	15,173

<b>Training External</b> (including both SARACE and refresher/continuation training)	13,732	8,941	905	1407
<b>SAREX</b>	5,193	5,380	6215	5486
<b>Total Training</b>	<b>29,563</b>	<b>21,860</b>		

### Organisational Initiatives:

The focus of effort in the 4th quarter of 2015/16 has been on:

- The review of the LandSAR Strategic Roadmap, including a meeting with stakeholders in June 2016
- Planning for the AGM and Conference on 28 July 2016
- Continuing development and refinement of the LandSAR Safety Management System
- Induction workshops to accredit more LandSAR Competency Assessors

### Maritime Operations Centre

#### SOLAS activity

The normal winter quiet period has seen only 203 Maritime Incidents since April.

#### MOC Anywhere

Kordia has been trialling a portable solution for the MOC. The technology used by the MOC was designed for future use in event of natural disaster - in that the MOC itself should not be a single point of failure.

To date the MOC anywhere concept has been trialled on a Laptop and has proven to be an effective moveable disaster recovery option. In addition to being able to move the MOC at short notice in future, the platform can also include other networks if required.

#### Taupo Maritime Radio/ZLM - August snow storm damage.

Significant antennae damage was sustained in the August snow storms on the North Island central plateau and ZLM did not escape this damage. The site affected was ZLM's transmitter site "Matea"

The two spiracone antennas' sacrificial clips gave way under the weight of ice build-up and required significant rigging by Kordia tech to restore. The clips are designed to give way at a certain loading thus saving the antennae and masts from permanent damage.

This is the first time in 23 years (since the start off the MOC) that ice build-up has been significant enough to be damaging. The site is now fully restored although still running on Generator whilst we await mains power restoration.



*Ice damage*



*Repaired spiracone*

## **Mountain Safety Council**

Nil report

## **NZDF**

### NH-90

23 May 2016 – 1 x NH90, 38 4WD pers stuck on mountain range IOV Roxburgh near Alexandria. NH90 forward deployed to Roxburgh, however the weather did not allow a helicopter rescue of pers and they were retrieved by 2 x SNOWCAT tracked vehicles. 12 total hours

5 June 2016 – 1 x NH90, Hunter separated from party Tararua Ranges IVO Levin. NH-90 tasked to transit from Ohakea - Levin to collect and infil search teams, began searching and located hunter in clearing. Hunter was winched and returned to SAR base. A number of search members retrieved before NH90 returning to Ohakea. 2.8 total hours

## P-3K2 Orion

24 May – SV DIGNITY was reported overdue arriving into Lautoka, Fiji. The Yacht had been seen by the P-3K2 moving slowly on patrol two days prior, which focussed the search area. The SV was located and two occupants reported in good health, a revised ETA for Lautoka was provided. No further action taken. 7.5 hours Flown.

13 June – Whilst on routine NZ EEZ Patrol, a P-3K2 was retasked to investigate a beacon set off by SV Platino. The Yacht had been battered by strong winds and rough seas, during which one crewmember was knocked overboard and another fatally wounded on the deck. The Yacht was located with the remaining 3 POB reported in good health and a search commenced for the man overboard. A second P-3K2 took over until dark. During Day Two, the Yacht was relocated and an RV undertaken with the Merchant Vessel Southern Lily whilst also searching for the Man OverBoard till dusk. 3 POB were successfully rescued by the Southern Lily. The SV Platino was subsequently towed back to NZ with deceased onboard, and no sign of the ManOver Board. 22.5 Hours Flown over two days.

28 June – A routine P-3K2 tasked flight in the Pacific was retasked to search for a 40 Ft Wooden Boat travelling between Nukualofa and Fonofifua Islands, Tonga. A 100% coverage of the search area was conducted, looking for the vessel with 11 POB. The aircraft focussed its search on the open water away from the many island groups while local helicopters and search vessels searched around the islands. While the P-3K2 was refuelling in Tonga the vessel was located in the northern island group and under tow back to Nukualofa. The aircraft returned back to NZ on its original task as planned. 10.9 Hours Flown over one day.

Total: 3 SAR Missions over 4 days, 40.9 hours flown

## **NZFS**

Nil report

## **New Zealand Helicopter Association / Aviation NZ**

Nil report

## **Police**

### **SAR Statistics**

In the reporting period from April to June 2016, 339 Category I incidents were reported - 232 Land and 107 Marine. This represents a decrease of 42.5% from the last quarter (590>339) and also a 15.8% decrease from the same period in 2015 (403>339).

### **SAR Coordinators workshop**

Police SAR coordinators from around the country met in New Plymouth after the LandSAR Conference for the annual Coordinators workshop; the agenda included Sector updates from partner agencies and a Case Study Forum. A range of case studies were selected where the presenters shared ideas and lessons identified from their operational experiences; this proved to be a very valuable forum which will hopefully be repeated annually.

## SAR Managers Course

12 Police and 8 volunteers attended the 2016 course at the Police College in June. The course received positive feedback from all attendees.

Sgt Mick Wear from Western Australia evaluated this year's course; Mick has previously been the director of the Australian National SAR Managers course, and his feedback will be used to further improve the course and keep it in line with Best Practise.

A workshop is scheduled for September to work on improvements for the 2017 course. An invitation has subsequently been extended for a NZ SAR Trainer to assist with the delivery of the Australian Course.

## Mass Rescue exercises

Following on from the series of inter-agency exercises last year, Rauora II will consist of 4 tabletop exercises designed to test each District's Mass Rescue Plan. Dates have been set for October 2016 and February/March 2017.

## SAREXes – NZSAR-funded

Most dates for the 2016-2017 District SAREX programme have been confirmed including a projection of NZSAR funding for these events. These can be found on the NZSAR website calendar.

## Staffing update

Applicants are being interviews shortly for the vacancy left after the retirement of Inspector Joe Green in January 2016.

## RCCNZ

### Highlights from the last quarter:

The last quarter of 2015/16 has been busy for RCCNZ with the following key highlights: The formal opening of our new premises at Avalon Studios by the Minister of Transport in June

Completion of the MEOSAR system build, with MEOSAR data now supporting our coordination activities; and contract finalization for the build of two new GEOSAR antenna on the same site (replacing our existing GEOLUT which is beyond end of life). Graduation in May for our two new SAROs Nick and Andrew.

### Our Core Business:

Incident breakdown by environment type, April – June 2016:

		Sea	Air	Land	Unknown	Quarter
<b>CAT II</b>	SAROP involving tasking	15	2	35	1	53
	Resolved by comms action	58	49	32	57	196
<b>CAT I</b>	Active involvement by RCCNZ	3	0	1	0	4
	SAD Produced by RCCNZ	2	0	0	0	2

	Active involvement & SAD	0	0	0	0	0
<b>Other</b> SAREX'S/ MAS/ Medevac	Operation involving tasking	1	0	0	n/a	1
	Resolved by comms action	1	0	0	n/a	1
<b>Total (Quarter)</b>		80	51	68	58	257

<b>People Involved in incidents for the Quarter</b>	
Number at Risk	872
Lives Saved	9
Lives Rescued	57
Lives Assisted	51
Perished	5
Not Located	0
Self Assisted	750

### **Beacons**

Beacon alerts made up 80% (206) of all incident alerts.

- About a third of these were resolved to other Search and Rescue Regions (65)
- With the new MEOSAR data, a greater number of undetermined alerts are being received 17% (35).

Of those that were activated in the NZSRR:

- about 37% were real distress situations (52), and one was deliberate with questionable need for a SAROP
- the remainder were inadvertent or false activations.

### **Our Work Programme:**

Throughout this year, RCCNZ has a busy work programme supporting the development of SAR capability with our pacific partners in collaboration with MFAT: trips have already been undertaken to scope out SAR related needs and deliver SAR training and other capability building activities in Kiribati, Niue, and the Cook Islands, RCCNZ is also visiting Samoa, American Samoa, Tonga and Tuvalu this year.

RCCNZ has visited Fiji and hosted their SAR leaders as we seek to support them and enhance collaboration

RCCNZ has taken the Chair role for the Secretariat of Pacific Community SAR Working Group, and is hosting the next SPC SAR conference, to be held in Auckland in early 2017

RCCNZ has also begun work on reviewing our distress beacons registration system, to ensure this is sustainable, effective and efficient into the future.

In anticipation of the International Civil Aviation Organisation (ICAO) audit of New Zealand's aviation SAR capability in December, RCCNZ is working with CAA to prepare responses to the Compliance Checklist. In the 2006 ICAO audit many of the criticisms of New Zealand's arrangements related to the lack of an independent SAR Inspectorate. This role is being discussed with ICAO and it is likely that it will be able to be considered a function of the CAA audit team.

## SLSNZ

### SAR Operations:

The period April to June 2016 (Fourth quarter) has seen Surf Life Saving involved in six (6) Category 1 Search and Rescue Operations (Table 2-1). The operations led to four (4) people being saved, four (4) people being rescued. Surf Life Saving provided over 21 hours service as part of official Search and Rescue operations totalling 189 personnel hours for the quarter.

Category 1 Search and Rescue Operations occurred in two Police Districts during the fourth quarter, namely: Canterbury and Waikato.

Search and Rescue Operations: Fourth Quarter	
Category 1 Search and Rescue Operations	6
Category 2 Search and Rescue Operations	0
Lives saved	4
People rescued	4
People assisted	0
Perished	0
Other incidents	1
Unknown	0
Search and Rescue Operations: hours	7
Search and Rescue Operations: personnel	21
Search and Rescue Operations: total hours	189

### SLSNZ Operations:

This period April to June has been very quiet time of year for Surf Life Saving services; due to the tail end of the lifeguarding season and on into the winter months. The ideal conditions that lead to one the busiest summers for SLSNZ came to a very abrupt end with an extremely cold snap that coincided perfectly with the last week end of most of the volunteer surf patrols around the top of the country.

Even with the abrupt change into the cooler weather our members have still been kept busy with a number of searchers and rescue.

In addition to the Category 1 Search and Rescue Operations listed above (and detailed in the Appendices), surf lifeguards rescued (27) people, treated (17) members of the public for injuries, conducted a further 4 searchers and assisted 1786 people through preventative activities (i.e. educated on rip currents and advised to swim between the red and yellow flags). Surf Lifesaving services amassed over 993 hours patrolling the beaches, attending incidents and providing other services where required.

Surf Life Saving Operations: Fourth Quarter	#
People rescued	27
People treated (first aid)	17
Number of Searchers Carried out	4

**SLSNZ Organisational Update:**

The following organisational changes or progress has occurred of relevance to the search and rescue sector:

- The Bay of Plenty // Coromandel Communications Network is near completion, and is operational covering an area from Maketu to Onemana.
- The Capital Coast Communications Network is underway, and will be completed in time for the 2015/16 off season. The Central Wellington clubs and the Wellington south coast will be operational in September. The Kapiti Coast will be developed next subject to funding.
- The Southern Region Network is beginning to be developed; the Christchurch and Otago clubs have been issued their terminals and both are working through 1 repeater. The next phase is to install at least 1 more repeater in each area to increase the coverage and ensure a level of redundancy within the systems.
- The remaining clubs still using only VHF sets are seeking funding to replace out their old technology with the new when funding becomes available. SLSNZ is developing a Strategy document to help guide the clubs when purchasing future communications equipment.
- Work is now being carried out looking to develop strong data links between the communications network and the Life Guard Data Management System.
- During the winter months the clubs emergency after hours call out squads ECOS step up their training along with the training of most of the new IRB crews .This creates less disruption to summer patrols with essential assets being used for training as well as during winter there is far less public in the water where the training will take place. Exercises involving NZP and NZSAR interagency training will include training operations in Napier, Western Bay of Plenty and Waikato.
- SLSNZ has entered into a partnership with a IT company to undertake quantitative research on a number of prominent rip currents around the country. Using an existing peer reviewed international recognised methodology the aim of the project is to gain information on inshore current directions both on top of the water column and the benthic currents (the sea floor) where bodies are thought to drift once the person is deceased. It is hoped the information generated will assist in the current calculations already in use when developing search determination estimates. The Waikato University is also assisting the project with some of their Hydrology staff and equipment. The initial results will be made available to the community as soon as they become available.
- SLSNZ through their regional offices are rolling out small scale trials for WRC Water Rescue Craft (Jet Skis), most likely into Christchurch, Wellington and Tauranga. Following the successful testing of the capability in the Northern Region and Australia through the development of SOP's and availability of more durable craft, SLSNZ believes it is time to trial the adoption of the technology. The two phased deployment will be initially focused on mainly training this coming season with some units becoming operational once a required standard has been reached. If successful the second phase will be "Full Operation" being aimed for the 2017-18 season along with further acquisition of the resources where required.

## **WSNZ**

Jonty Mills has been appointed Water Safety New Zealand's new Chief Executive, and began work on 1 August 2016.

### **Drowning statistics as at 19 August 2016**

- There have been a total of 51 drowning deaths within New Zealand in the year to date.
- Of these, 40 (78%) are considered preventable. At the same time last year, 54 (73%) were considered preventable.
- There have been a total of 539 drowning deaths within New Zealand for the five year period 1 January 2011 – 31 December 2015. We have some 174 drowning related hospitalisations per year.

Drowning continues to be the fourth highest cause of accidental death in New Zealand.

WSNZ estimates that over ten years the cost of drowning deaths and injuries to New Zealand is in the order of \$4.79 billion.

WSNZ's annual Funding Programme has been concluded, with some \$1,535,000 being distributed to 24 organisations, for drowning prevention interventions that deliver to the goals of the New Zealand Water Safety Sector Strategy 2020. The Programme was over-subscribed by some 84%. In 2015 – 16 \$1,576,359 was distributed to 28 organisations through the Funding Programme.

Report For NZSAR/Ministry of Transport/ Organisation of Coronial Material/Inquest into the Death of Fiona Julia WILLS

Issues raised by Ross Gordon	Stakeholder's Views	Doctrine / Policy / SOP / Training / Forms/ Guidelines	Comment
<p>1. Initial field search abandoned too early</p>	<p><b>Coroner</b>                      "I am not satisfied that steps were not taken which, had they been taken, would have prevented Mrs Wills' death." (Coroner's Report, 65- CR)                       "I do not consider it my role to determine what search tools should be used in New Zealand. My role is to determine as best as possible if Mrs Wills is deceased, the cause and circumstances of her death, place and date of death, and if I consider it appropriate to make any comment or recommendation to prevent deaths in circumstances similar to the death of Mrs Wills." (CR, 77)                       "I direct that the SARINZ report be forwarded to both the NZSAR Council and NZSAR Consultative Committee for them to review the issues of concern identified by Mr Gordon and Consider whether changes to policies and procedures are necessary." (CR, 82)</p>		
<p>1.1 International best practice search methodologies and training not used. Individual Police/LandSAR not to blame. (Media Statement Fiona Wills Inquest 8-11 March 2016 – MS1). [Wills Family]</p>	<p><b>LandSAR</b>                      "The SARINZ report contains many references to international best practice in the context of land search and rescue – this is a nebulous notion and to suggest New Zealand is not following international best practice is incorrect.                       Having attended search and rescue conferences in North America, Canada and Croatia I am unaware of any single piece of doctrine that stipulates or prescribes international best practice for the search for individuals in a terrestrial environment.                       The international search and rescue community does not have a unified or collective voice about what constitutes best practice – there is no comparable entity such as the World Health Organisation (WHO) that sets norms and standards and promotes and monitors their implementation to achieve its purpose of global health for all people.                       What is frequently touted as being international best practice, particularly by training providers, is the content and materials of training packages or courses which are often licensed and subject to intellectual property. There are however many examples throughout the western world of these various training packages that demonstrate a clear divergence of thinking around what best practice actually means, particularly in the areas of search management and search planning. Consequently to promote the idea that there is global agreement about what constitutes best practice, internationally or otherwise is misleading." (LPC, 1-2)</p>	<p>Search planning/documentation is covered in the following courses and guidelines (a summary of each course content is attached in appendix 1)                       The SAR training pathway shows the base courses available to Police SAR squads and LSAR volunteers (SAR training pathway attached appendix 2).                       Police National SAR Course                      CIMS4                      Response Guidelines                      Managing the Initial Response Course                      Extended Search Planning                      SAR Managers Course                       District SAR Exercises/IMTEXs   <b>Police Manual, District Exercises</b>                      Each year District Commanders must conduct at least one Police controlled Category I land and separate marine exercise annually. Additionally, districts with a large geographical spread or unique or individual areas of risk should hold more than one SAREX.                       A remains the cornerstone of interagency training. The quality of the exercise will be significantly improved if attention is given to the pre planning stage and to post operation evaluations. There is a direct feedback link from evaluation to confirmations of good practice but also to improvements to be made to future planning and training activities. Therefore, SAREX should feature evaluation activities carried out by moderators and referees during the exercise. In some circumstances, consideration should be made to bringing in a person from outside the group that planned the SAREX.                       All current SAR related operational forms and guidelines are available on line and are able to be downloaded from: <a href="http://nzsar.govt.nz/Resources/NZSAR-Forms">http://nzsar.govt.nz/Resources/NZSAR-Forms</a></p>	<p>I cannot comment on the processes used during operation as I have had no previous involvement with it.                       We have robust processes, guidelines, forms and training to allow SAR squad members and LSAR volunteers to perform to a high standard                       Police LSAR SAR Ex, these are normally conducted over a 2 or 3 day period                       They usually take the form of a scenario based exercise, utilising local resources and include the establishment of an ICP, IMT, using CIMS structure, and response guidelines.</p>

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<p>1.2 The search for Fiona didn't happen according to best practice. (SR1, 4)</p>	<p><b>SARINZ</b>                      "There were also many good SAR actions" which occurred on the operation and these should not be lost amongst the issues and suggested improvements. " (SR1,1)                      Issues with inaccurate Statistics used by SARINZ. (Memo, 30 June 2016 Re. Wills Report- Statistics and Report Findings). (SM)</p> <p><b>Police</b>                      "We were appraised of and were happy with the investigations undertaken to date." (Police &amp; LandSAR Peer Review, 3) (PR)                      "Given the lack of 'in-depth analysis' I believe it is important to put the issues and recommendations raised by the SARINZ Review into perspective." (Police Letter to Coronial Services, 16 July 2015, 1) (PLC,1)</p> <p><b>LandSAR</b>                      "We believe the points raised in the review to be largely inaccurate and clearly show that some information to have been gathered second hand, rather than from the key personnel involved in the search from the outset who would have provided a more accurate account of the search effort that took place from the evening of Tuesday 9<sup>th</sup> December 2014 forward. It is noted that the large secondary search for Fiona Wills, facilitated by Ross Gordon of SARINZ, achieved the same result as the initial search." (E16,2)</p> <p>"Measuring the Effectiveness of SAR Operations. LandSAR has initiated a project, in conjunction with NZ Police, NZSAR and SARINZ, to ascertain whether or not meaningful measures can be developed that will enable some measurement of the efficiency and effectiveness of SAR operations. If successful this may enable us to gain an understanding of the impact of investments such as training, and also to better understand the performance of SAR teams at a systemic level." (LRC,2)</p>	<p>The NZSAR training programme addresses what we consider best practice, it is covered in the following courses and guidelines (a summary of course content is in attached appendix 1)</p> <p>Police National SAR Course                      CIMS4                      Response Guidelines                      Managing the Initial Response Course                      Extended Search Planning                      SAR Managers Course</p> <p>District SAR Exercises/IMTEXs</p> <p>All current SAR related operational forms and guidelines are available on line and are able to be downloaded from:  <a href="http://nzsar.govt.nz/Resources/NZSAR-Forms">http://nzsar.govt.nz/Resources/NZSAR-Forms</a></p>	<p>SAR training in New Zealand has been extensively developed over the last decade, we have a progressive training regime where skills and development are taught to a level appropriate to that person's current ability and role within the SAR organisation.</p> <p>It is important we give our SAR squad members and LSAR volunteers the training and ability to work to a high level, I believe the current SAR training courses and pathway achieves this (see attached training pathway appendix 2).</p>
<p>1.3 "Initial search phase abandoned too early." (SR1, 1).</p>	<p><b>Police</b>                      "1. SARINZ have contended that the initial search phase was abandoned within less than 18hrs; this is not correct and is misleading. ...The first phase of the search lasted approximately 18hrs, during which time this area of high probability was searched several times, using different techniques. ...</p> <p>...the authors of the SARINZ Review managed a private search on the weekend of Sat 31/01/2015 and Sunday 01/02/2015. This private search primarily utilized the same LandSAR volunteers, family members and friends that had been part of the official search.</p> <p>The SARINZ search identified the same area of high probability; searched it over a similar timeframe (about 18 hrs) and turned up the same negative result. When this first phase of the search had been completed with no result, the official Police/LandSAR search was continued over a 9 day period between Tuesday 09/12/2014 and Thursday 18/12/2014. ...The official search was scaled back after 9 days and only after every possible search technique and resource had been utilized in an effort to locate Mrs Wills. The official search was only suspended after approval from the Coroner's Office. The search operation was later peer reviewed by very experienced Police SAR Coordinators from Central District. They found no fault with the search plan, response and management.(PLC, 1-2)</p>	<p>Initial Search Phase is covered in the following courses, exercises and documentation (a summary of the course content is in the attached appendix 1)</p> <p>Police National SAR Course                      Response Guidelines                      Managing the Initial Response Course                      Extended Search Planning                      SAR Managers Course</p> <p>District SAR Exercises/IMTEXs</p>	<p>It is difficult to give the initial search phase a specific time span. It is reliant on many variable factors, including the theoretical distance, the statistical travel distances, the mobility of the missing subject, in this operation the severity Alzheimer's, the environment, the vegetation, the size of the search area, travel corridors, the number of initial action tasks, the number and type of search teams deployed, re-searching segments in day light that had been searched at night, re-searching using different search techniques, the information from debriefs and search effort evaluation.</p>

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<p>1.4 Based on Lost Person Behaviour Survivability Tables for people with Alzheimer's, Fiona Wills good physical health, the night temperature, lost in home environment. (SR1, 2-3)...<i>the search was abandoned too early.</i></p>		<p>Lost Person Behaviour is covered in the following courses and documents (<i>a summary of course content is in attached appendix 1</i>)</p> <p>Police National SAR Course Response Guidelines Managing the Initial Response Course Extended Search Planning SAR managers Course</p> <p>Survivability is covered in the SAR Managers Course, and must be considered prior to search suspension.</p> <p>District SAR Exercises and IMTEXs</p>	<p>Survivability should be determined by a suitable qualified medical practitioner, it is dependent on many contributing factors, including weather, temperature, age build, clothing, ability to shelter, fitness, medical conditions, information from current GP, access to food and water. Currently in New Zealand we have 2 GPs who will advise and report on Time Frames For Survival based on the above information.</p>
<p>1.5 ``Many of the points raised in the SARINZ reports are the result of poor policy decisions and the frontline response personnel being let down through poor support and a lack of current best practice training.`` (SR2, 13)</p>	<p><b>SARINZ</b> "The reality of time pressures and the limitation on available documentation meant an in-depth analysis and review was not realistic or achievable". (SR1, 2).</p>	<p>SAR Training is covered in the following courses and documentation (<i>a summary of course content is in attached appendix 1</i>)</p> <p>Police National SAR Course CIMS4 Response Guidelines Managing the Initial Response Course Extended Search Planning SAR Managers Course District SAR Exercises. IMTEXs</p> <p><b>Police Manual, SAR, Squad training</b> District Commanders must ensure that the squad members undergo regular training exercises, appropriate to SAR, totaling 12 days duration in each year per squad member. 'Reserve' squad members must be included, subject to operational priority.</p> <ul style="list-style-type: none"> <li>· Training must include both Land and Marine .</li> <li>· At least one training day must be utilised for training in <a href="#">DVI procedures</a>.</li> <li>· Five of the training days of each squad member should be devoted to joint volunteer training initiatives.</li> <li>· A training programme may be developed based on the <a href="#">LandSAR competency model</a>, activities described in the <a href="#">LandSAR Field Guide</a>, and command and control capability ( and <a href="#">DMP/MSOPs</a>).</li> <li>· Helicopter training must be refreshed annually.</li> <li>· squads are to maintain members' training records.</li> </ul>	

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<p><b>2. Fatigue poorly managed</b></p>	<p><b>Coroner</b> 'No evidence fatigue issues impacted on search' [CR, 56]</p>		
<p>2.1 "A number of the searchers and the family described the Incident Control Point at one stage as being like a bombsite with tired and fatigued personnel." (Conversation with Wills Family referred to in SARINZ Report, 1 Feb 2015, p3). (SR). <b>[Wills Family]</b></p>		<p>Search and Rescue Response Guidelines: A suitable facility and procedure need to be established to debrief search teams.</p> <p>CIMS discusses structure, operational periods and changeover.</p> <p>Search Urgency forms indicate an immediate response.</p>	<p>It is difficult when starting the initial phase of a search in the evening or at night, this is when all searchers and IMT personal will have worked a normal day, then have been called in to assist with the search at night. In these circumstances we need to ensure a changeover occurs as soon as is practical.</p> <p>Consideration should be given to having an area separated from the ICP IMT for searchers that have completed tasks getting debriefed or those waiting to be tasked to rest, or have refreshments.</p>
<p>2.2 "The Police SAR were called out at 9.00pm on Tuesday 9<sup>th</sup> December, 2014 and arrived about 12.00am to start the initial search phase. They then worked through the night and next day with limited breaks and few fresh staff being rostered on. The initial search terminated at approximately 18:00 hours on Wednesday 10<sup>th</sup> December, 2014. Thus it is likely that search staff started the search already sleep deprived and then deteriorated throughout the search and this appears to have affected all facets of the search. A number of the searchers and the family described the Incident Control Point at one stage as being like a bombsite with tired and fatigued personnel." (SARINZ Report, 1 Feb 2015, p3). (SR).</p>	<p><b>Police</b> "Each phase of the 9 day official search was briefed and de-briefed. Safety and fatigue were discussed at every briefing and were never raised as an issue... Key members of the Incident Management Team were relieved and rotated. Extra resources and personnel were rotated into the official search throughout the 9 day period. (PLC, 2-3)</p> <p>There is some irony that one of the issues identified in the SARINZ review was the use of General Duties Police staff in the search when they were used specifically to search open farmland and pasture. This did not require technical expertise and ensured that other search personnel were not overused or fatigued. It is important to note that in excess of 100 personnel were used at different times and phases throughout the search with no reported injuries or formal complaints of fatigue. (PLC, 2-3)</p> <p>Fatigue (issues 2&amp;4) was not identified as an issue for any of these personnel and there is no evidence to support the conjecture that there was diminished performance or poor decision making during the search." (PLC, 3)</p> <p><b>LandSAR</b> (Issues 2&amp;4): LandSAR has a non-prescriptive approach to the management of fatigue... There were no complaints of fatigue during the operation and all members could elect to stand-down when they considered it appropriate... Teams were brought back to the ICP for breaks... ICP staff had regular breaks.</p>	<p>Search and Rescue Response Guidelines: Describes an operational changeover, the period should be set early in the operation and occur between 8 to 12 hours, should include an overlap for the (IMT) Incident Management Team.</p> <p>It describes tasks allocated as being achievable in 4 to 6 hrs.</p> <p><b>Police Manual, Emergency Response, SAR Operations</b></p> <p>The Communications Centre must take initial command and control of the situation in accordance with the provisions of Master Standard Operating Procedures (MSOPs) and District Mobilisation Plans (DMPs) until local command and control is established, and</p> <p>the Communications Centre's supervising team leader must immediately inform senior district field supervisors of the situation and the area's on call IC as per DMPs, and</p> <p>consider the urgent deployment of a asset (see the 'Police air operations' chapter which allows Comms to arrange this).</p>	<p>Most notifications for Search and Rescue are received by Police Communication Centres, given these incidents may require an immediate response they are authorised to deploy staff and assets to assist before additional resources or SAR are activated.</p> <p>Given that there may be a time delay in getting an ICP IMT established and searchers deployed local staff can assist in mobile patrols, containment and intelligence gathering</p>

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<p><b>3. Limited CIMS structure implemented</b></p>	<p><b>Coroner</b> Coroner notes lack of written action plan noted but doesn't believe search inadequate. (CR, 67)</p>		
<p>3.1 SARINZ comment to the effect that lack of comprehensive planning disadvantaged the search process and provide some diagrams to illustrate their point. (SR2,6)</p>	<p><b>Police</b> A formal (Coordinated Incident Management System) CIMS structure was in place throughout the official search. The combined Police and LandSAR management team deployed in the official search are Level 4 CIMS trained and qualified. A CIMS structure was implemented and was in place throughout the formal search period.</p> <p><b>LandSAR</b> All ICP staff involved have training to CIMS4 level.</p> <p>LandSAR Report to Coroner – Managing Search &amp; Rescue Operations on Land in NZ: The Roles of NZ Police and LandSAR – Management of SAR operations in NZ is carried out under the Coordinated Incident Management System (CIMS). Both Police and LandSAR personnel are thoroughly trained in the use of CIMS to manage searches. Depending on the location and nature of a particular SAR operation and the resources available, either Police or LandSAR personnel, and often both, will take on the key search management roles under the CIMS structure.” (LandSAR Report to Coroner,1-2)</p>	<p>CIMS is used in New Zealand to provide effective management of a wide range of incidents including SAR Operations. The key roles of CIMS include Incident Control, Planning, Intelligence, Operations, Safety Officer and Logistics. All IMT staff including Police SAR Squad and Land SAR Volunteers managing these roles should be trained and qualified in CIMS.</p> <p>CIMS4 is a 3 day course (a summary of course content is in attached appendix)</p> <p>Search planning/documentation is covered in the following courses and guidelines (a summary of course content is in attached appendix)</p> <p>Police National SAR Course Response Guidelines Managing the Initial Response Course Extended Search Planning SAR Managers Course</p>	

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<p><b>4. Incident Controller function</b></p>			
<p>4.1 "There appears to be limited search planning documentation beyond the early first operational period..." (SARINZ Report, 22 December 2015, 8). (SR2)</p>	<p><b>SARINZ</b>                      "As stated previously, the actions of the initial Incident Controller (Blair), and Incident Management Team (IMT) were performed as expected through the initial response phase and into the early first operational period. The actions also appear to be consistent with SAR doctrine at the time. It is a little unclear on the exact time that Officer Blair arrived on scene and took on the IC role, but the period from approximately 2200 through to tasking field resources at 0100 appears to be very well utilised and the actions generally consistent with best practice SAR management (other than minor issues with record keeping as mentioned earlier)." (SR2, 8)</p> <p><b>Police</b>                      Issues 4 and 5. "The Incident Management Team in the official search for Mrs. Wills considered every possible and probable scenario surround the disappearance of Mrs. Wills." (PLC, 2-3)</p> <p>The Incident Controller function and other personnel in the Incident management team were rotated and relieved during the Formal Search. (Police Review 16 July 2015, 3)</p> <p>Fatigue (Issues 2&amp;4) "Fatigue was not identified as an issue for any of these personnel and there is no evidence to support the conjecture that there was diminished performance or poor decision making during the search. (PLC 4)</p> <p><b>LandSAR</b>                      " (Issues 2&amp;4): LandSAR has a non-prescriptive approach to the management of fatigue...There were no complaints of fatigue during the operation and all members could elect to stand-down when they considered it appropriate... Teams were brought back to the ICP for breaks...ICP staff had regular breaks. ...</p> <p>(Items 4&amp;6): All IMT staff involved in the operation (including Management Support) have been trained to CIMS4 level and have completed formal training to a minimum "Managing the Initial Response" which covers the application of LPB, probabilities and coverage." (Mike Hawthorne, 16 July 2015, 1) (E16)</p>	<p><b>Incident Controllers</b>                      To qualify as a Search and Rescue Incident Controller candidates are part of a SAR training pathway before being considered competent, this includes completing the Police National Search and Rescue Course, CIMS4, Managing the Initial Response Course for Land (and Marine if acting as I/C in Marine SAR Operations), and then ultimately attending the SAR Managers Course and Extended Search Planning.</p> <p>Alongside this they need to have gained SAR Operational experience and have been mentored in the Incident Controller role.</p> <p><b>Police Manual, Search and Rescue, NZ Police SAR Organisation</b>                      The organisation of within Police comprises Police at national, district and area levels. Within each Police district, the District Commander appoints a District SAR Manager (senior sergeant, inspector or above) to administer and supervise SAR.</p> <p>In the event of a SAROP, a currently qualified Police employee is the IC. As a SAROP progresses a trained squad member should be appointed IC. The IC leads an Incident Management Team to manage the SAROP and must have completed the <a href="#">defined course of training</a> (see appendix 2) for this role.</p> <p>Search planning/documentation is covered in the following courses (a summary of course content is in attached appendix)</p> <p>Police National SAR Course                      CIMS4                      Response Guidelines                      Managing the Initial Response Course                      Extended Search Planning                      SAR Managers Course</p> <p>District SAR Exercises/IMTEXs</p>	

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<p><b>5. Lack of formal planning</b></p>			
<p>5.1 Lack of written action plan.                      ``Initial (basic) search planning is NOT Formal Search Planning. Prior to the management handover and development of the consolidated Incident Action Plan (IAP) it would be expected that at least the scenario analysis and (shifting) POA allocation would have been revisited and investigated in greater depth. The outcomes of these processes would have driven the operational aspects of the Incident Action Plan for the coming operational period. There appears to be no evidence of a transition from initial response, initial search planning into full Formal Search Planning or any evidence of an IAP for the incoming IMT to ensure continuity of response efforts. '' (SR2, 9)</p>	<p><b>SARINZ</b>                      ``When SARINZ conducted the original review the Police reported that the paper work (search planning) was `not in a format for sharing and only a verbal brief could be given... The supply of the recent documentation was the first opportunity to review elements of the initial search planning paperwork. Included in this documentation was: the initial search urgency, initial segmentations, initial scenario analysis, and initial POA allocation. Having viewed these it can be said that they are consistent with the expected level of documentation and level of detail that should occur in the initial response, initial search-planning phase of the operation. '' (SR2,8)</p> <p><b>Police</b>                      ``Formal planning was conducted and documented. The search operation has been subject to peer review by other independent and experienced Search and Rescue personnel (refer report from Bill Nicholson/Steven Wilks/Barry Shepherd)... (and) commented on favourably. '' (PLC, 3)</p> <p>Issues 4 and 5.``The Incident Management Team in the official search for Mrs. Wills considered every possible and probable scenario surround the disappearance of Mrs. Wills. '' (PLC, 2-3)</p> <p><b>LandSAR</b>                      5. Formal planning was undertaken early in the operation in the form of Scenario analysis and segmentation of area based on LPB stats for Alzheimer's. Search tasks were prioritised in line with the analysis. (E16, 1)</p> <p>``Probability of detection (%)                      Inspector Joe Green from Police National Headquarters made the following points in a report on the subject:</p> <p>There is considerable doubt as to the validity of probability of detection as a mathematical equation.</p> <p>This is exacerbated when the math equation is used to determine some sort of `probability of success` - the % that a search is likely to have been successful (if the object were in the area). This type of flawed math, described as highly doubtful statistically with an outcome of questionable validity in the land search environment, has the potential to put Police, as a SAR coordinating authority at risk.</p> <p>...Towards the end of 2014 a combined NZ Police and LandSAR working group developed a search effort evaluation process to replace POD% - the primary tool driving the process being a revamped field team debriefing form. ''` (LPC, 3-4)</p>	<p>Search planning/documentation is covered in the following courses (<i>a summary of course content is in attached appendix</i>)</p> <p>Police National SAR Course                      CIMS4                      Response Guidelines                      Managing the Initial Response Course                      Extended Search Planning                      SAR Managers Course</p> <p>District SAR Exercises/IMTEXs</p>	

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<p><b>6. Limited replacement of personnel</b></p>			
<p>6.1 ``It is difficult to identify what personnel worked Tuesday night only and or Wednesday. During the review process a number of people who were directly involved in, or observed the official response, identified the issue of fatigue. ...It is not apparent from the documentation when the decisions were made to source, or not source, replacement personnel. '' (SR2, 10)</p>	<p><b>Police</b> Issues 6 and 8. ``The peer review identified that other Police and LandSAR personnel could have been brought in from other areas outside Hawke`s Bay. This was considered by the Incident Management Team however there were sufficient local search personnel available who were significantly bolstered by family, friends and other local farmers who had the benefit of in-depth local knowledge...these will be some of the same personnel utilised in the private search managed by SARINZ'' (PLC, 4)</p> <p><b>LandSAR</b> (Items 4&amp;6): "All IMT staff involved in the operation (including Management Support) have been trained to CIMS4 level and have completed formal training to a minimum "Managing the Initial Response" which covers the application of LPB, probabilities and coverage. " (Mike Hawthorne, E16,1)</p>	<p>Search and Rescue Response Guidelines Describes an operational changeover, the period should be set early in the operation and occur between 8 to 12 hours, should include an overlap for the (IMT) Incident Management Team.</p>	
<p>6.2 ``Limited replacement of personnel. '' (SR1,3)</p>			

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<p><b>7. Lack of appropriate equipment</b></p>			
<p>7.1 "There was a general lack of handheld GPS's which meant that electronic tracks, trails could not be recorded for subsequent analysis nor assist in determining how well areas or segments were searched. The Wills family have been generous in donating GPS units to the Hawkes Bay LandSAR unit to assist future SAR performance and this has been openly acknowledged by all parties." (SR2,10)</p>	<p><b>Police</b>                      " 7. Use of GPS- Additional Hand held GPS units would have been helpful, but only to the extent that they would have provided an electronic reference of the search area covered. Most search teams did have access to a GPS unit; however they were not individually supplied to search personnel. Large parts of the search were covered by 'contact search' (shoulder to shoulder or close contact between searchers) and were over open garden and farmland where GPS units would have provided very little benefit....The additional GPS units donated by the Wills family will be of benefit in future search operations. (PLC, 4)</p> <p><b>LandSAR</b>                      " (Issue 7): While the lack of GPS units didn't affect the search at the time, thanks to the Wills family the group now has sufficient GPS units that will benefit future search operations." (E16, 1)</p>	<p>GPS are mentioned in NZSAR debrief forms</p> <p><b>BEFORE STARTING THIS DEBRIEF YOU WILL REQUIRE:</b> Google Earth printout of search area (preferably with GPS tracks)                      Topo Map (preferably with GPS tracks)</p> <p>GPS are mentioned in the Response Guidelines under Search effort evaluation (SEE) and re-allocation of Probability of Area (POA)</p>	<p>Downloading GPS tracks are useful in the debriefing and search effort evaluation process. They are also useful in the re-allocation of Probability of Area, can be overlaid with alternative search techniques in the same area, and placed on Google Earth.</p>

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<p><b>8. General duties Police used as searchers</b></p>			
<p>8.1 . ``The Police peer review identified that other Police and LandSAR personnel could have been brought in from other areas outside Hawke`s Bay” (SR2, 11) (Reference to Coronial Enquiry document 20151015132602806 page 3-6, Police peer-review report).</p>	<p><b>SARINZ</b>                      ``The Hawkes Bay Police report identified that the area the general duties police personnel searched had already been searched and they were checking and rechecking. Conceptually this is sound operational practice as all areas need to be searched several times...” (SR2, 10)</p> <p><b>Police</b>                      (Issues 6 &amp; 8)                      `` General Duties Police staff were only utilised to search open farmland and pasture; which did not require specialist SAR training or experience. These areas they searched had already been searched by trained SAR personnel and they were merely checking and rechecking to ensure nothing had been overlooked. ” (PLC, 4)</p> <p>There is some irony that one of the issues identified in the SARINZ review was the use of General Duties Police staff in the search when they were used specifically to search open farmland and pasture. This did not require technical expertise and ensured that other search personnel were not overused or fatigued. It is important to note that in excess of 100 personnel were used at different times and phases throughout the search with no reported injuries or formal complaints of fatigue. (PLC, 2-3)</p>	<p>Peer Review and Search Suspension are covered in the SAR Managers Course.</p>	<p>Most districts maintain a strong membership of LSAR volunteers and Police SAR squad members, most can generally respond to most SAR Operational requirements for several days not requiring out of district personal to attend, this includes the rotation of search teams and IMT.</p> <p>This does not include specialists such as ACR teams, LSAR search dogs or an independent search review team.</p> <p>It is also reassuring to know that within a short timespan additional support can be sourced out of district if required.</p>
<p>8.2 ``... the use of fresh, trained personnel would likely result in higher performance with appropriate knowledge of search systems. ” (SR2, 10)</p>	<p><b>Police</b>                      Issues 6 and 8. ``The peer review identified that other Police and LandSAR personnel could have been brought in from other areas outside Hawke`s Bay. This was considered by the Incident management Team however there were sufficient local search personnel available who were significantly bolstered by family, friends and other local farmers who had the benefit of in-depth local knowledge...these will be some of the same personnel utilised in the private search managed by SARINZ” (PLC, 4)</p>		



Issues raised by Ross Gordon	Stakeholder's Views	Doctrine / Policy / SOP / Training / Forms/ Guidelines	Comments
<p><b>9. Improved utilisation by search dogs</b></p>			
<p>9.1 "The guiding statement with searching for people with Alzheimer's is that "they go until they get stuck" (see SARINZ Report December 2015, Reference 19) Given the terrain, vegetation and obstacles such as fences and streams there is a very high likelihood that Fiona is in a place where visual detection will be very difficult. The Wills family regarded Fiona as very fit and strong for her age. This compounded the issue in that if she was stuck she may wriggle and crawl further into the vegetation and make her visual detection even more difficult. This means the use of search dogs was crucial to get a detection in many of the difficult areas and the open country where a slight hollow or minor vegetation can make a visual detection difficult. LandSAR has operationally qualified dogs trained specifically for SAR and the question has to be asked as to why these dogs were not called to supplement the Police dogs especially in the second operational period.</p>	<p><b>SARINZ</b>                      "The Police have well respected and justified expertise with the use of Police dogs and they were rightfully deployed in the initial response phase of this operation. The use of human remains dogs in the later stages was also appropriate use of a specialist resource." (SR2, 12)</p> <p><b>Police</b>                      "A fully trained and qualified Police SAR dog team was one of the first resources deployed on this search. This resource was available and used throughout the official search. Additional specialist Police (Deceased Person Identification Dogs) Dog Teams were brought in from around the country and were also deployed on the search. Sergeant Allan McRae, Officer in Charge of Eastern Dog Section, is a highly experienced Police Dog Section supervisor. He is based in Hawke's Bay. He is a highly regarded dog trainer who specializes in the training and certification of Search and Rescue trained dogs; Police, LandSAR and other organisations. Sergeant McRae provided technical support and advice to the Incident Management Team about the best use and deployment of dog teams throughout the official search. (PLC, 4-5)</p> <p><b>LandSAR</b>                      "(Issue 9): A SAR trained police dog was utilized in the initial response phase of the operation, clearing critical areas of the garden prior to ground search teams being deployed in the area." (E16, 1)</p>	<p>Wilderness or Area Search Dogs and Tracking Dogs (LSAR search dogs) are a useful resource in a search and rescue operation, currently on their website searchdogs.co.nz there are 12 qualified (area search and tracking) Land SAR Search Dogs Nationally. Of these of these there are 4 qualified in the North Island, of which 2 are Area Search Dogs. The closest 1 to the WILLS search area is located in Palmerston North.</p> <p>All Police Operational dogs are trained and qualified in both tracking and area search.</p> <p>Lost Person behaviour (Alzheimers):                      Tracking dogs ideal if they have practiced with persons with dementia.</p> <p>The use of search dogs are covered in the following courses or documentation:                      Police National SAR Course, Response Guidelines, Managing the Initial Response and SAR Managers Course.</p>	<p>Given a travel distance of in excess of 200km for the nearest LSAR Search Dog it is logical to use the local recourses in the first instance.</p>
<p>9.2 The Trelinnoe area would have rapidly become scent polluted with the family, searchers, neighbors and Police personnel. This is a common situation in search where the above people plus the public can create issues for the search dogs. Internationally a number of SAR agencies and Police utilise scent specific dogs which are trained to follow one particular person's scent based on a scent article such as a piece of clothing or pillow. This would have been an extremely useful option to have available and even if the dog was only able to have given a strong direction of travel indication this would have been of immense search planning value. ...</p>			
<p>9.3 LandSAR certified dogs are considered a national resource and are generally available 24 hours 7 days a week via Police or the 111 system. (SR2, 12) (and see SARINZ Report December 2015, Reference 23)</p>			

**REFERENCES (Prefixed by Acronym used in table).**

CR - Coroner`s Report CSU-2015-HAS-000008.

In the Coroner`s Court at Hastings, under the Coroner`s Act 2006 and in the matter of an Inquest into the death of Fiona Julia WILLS. Dates of Hearing: 8-11 March 2016. Appearances: Detective Sergeant Gregory Macklow (for Police), Duncan McGill (for Mr English). Date of Findings: 8 April 2016. Findings of Coroner CJ Devonport.

EM13 - Email from HB LandSAR/Mike Hawthorne. Friday, 13 March 2015. Subject: Fiona Wills SAROP Debrief matters.

E16 – Letter from HB LandSAR- Mike Hawthorne, 16 June 2015. Re. SARINZ Review of the search for Fiona Wills dated 01 February 2015.

LRC - LandSAR Report to Coroner – Managing Search & Rescue Operations on Land in NZ. Circa July 2015.

LPC - LandSAR Report by Peter Corbett to Coroner`s Inquest, 4 March 2016. Peer Reviewed by LandSAR and Police.

MS1 – Wills Family- Fiona Wills Inquest Media Statement March 2016

PLC - Police Letter to Coronial Services, 16 July 2015.

PR - Sergeant Bill Nicholson, Mr Steven Wilks, Senior Constable Barry Shepherd. Preliminary Review of Search and Rescue Operation for Fiona WILLS. 7 July 2015.

SE – Wills Family Supplementary Email 26 July 2016, accompanying Supplementary SARINZ Report July 2016.

SR1 - Review of the search for Fiona Wills by SARINZ, 1 February 2015.

SR2 – SARINZ Report Re. Coronial Enquiry – Fiona Wills. Tuesday, 22 December 2015.

SM - SARINZ Memo to Duncan Ferner, NZSAR Secretariat, 30/6/16.

SSR - SARINZ Supplementary Report Following the Coronial Enquiry held 8-11 March 2016. Prepared at the request of Fiona Wills' family, July 2016.

## Methodology

A framework based on achieving a goal of “affordable and sustainable radio communications that efficiently and effectively support land-based search and rescue activities while assuring the safety of SAR personnel and the public” was initially developed and subsequently refined to reflect information and advice from a number of stakeholders. This included input from a survey sent to SAR agencies and stakeholders.

Principles that underpin the framework include:

- Reliable – Reliable, replicable communications when/wherever required
- Usable – SAR teams can set up and operate the radio equipment under all conditions
- Available – radio services can be established where required on New Zealand’s landmass
- Effective – radio equipment and services (voice, data etc.) that are appropriate to the situation
- Sustainable – cost effective, environmentally sound, supporting SAR health and safety policies

### Framework elements

Framework elements that are influenced by the above principles include:

- Equipment
- Workforce
- Incident management
- Coordination
- Stakeholder management
- Protocols
- Environment management

The framework has been created through a combination of SAR organisation information, research and Caravel’s experience in developing and implementing similar reviews of current and future technology, and operating practices. It has been used to develop recommendations and an action plan to maintain and improve radio communications capability and usage by the SAR community.

## Recommendations

### **1 Technical working group**

- 1.1 A technical working group needs to be established with representation from Police, LandSAR, DOC, AREC, RCCNZ, NZ Defence, SLNZ, Civil Defence and Mountain Radio.
- 1.2 The working group’s terms of reference should include frequency management, procurement policy, maintenance policy, channel names and plans, training and the evaluation of new applications and technologies.

## **2 HF radio**

- 2.1 Retain and maintain the fixed HF radio stations, including the stations with telephone interconnect, which are owned and maintained by NZ Police and the Department of Conservation (DOC).
- 2.2 All HF radio equipment to be maintained regularly to an agreed standard.
- 2.3 Engage AREC to provide consistent training to search teams on the deployment and operation of POLSAR HF radios and to lead by example with radio procedure.
- 2.4 Search teams should take and use HF radios, particularly where there is unreliable VHF coverage.
- 2.5 Investigate opportunities for the use of the new NZ Defence HF radio system once it becomes operational and available.
- 2.6 Critically evaluate new applications such the Codan Long Range Digital Radio link (LRDR) using digital HF radio, multiple frequencies and Automatic Link Establishment technology.
- 2.7 SAR agencies should agree appropriate national HF frequencies and pay the licence fees.

## **3 VHF radio**

- 3.1 Encourage the use of radios with built in GPS receivers so that software such as the SARTrack feature can be used.
- 3.2 All radios should be programmed with the same channel plan and channel names. A special working group is required to design and implement this change.
- 3.3 All VHF radio equipment should be tested and maintained regularly to an agreed standard.
- 3.4 The installation of additional fixed VHF repeater sites should be reviewed and managed on a case by case basis.
- 3.5 Some VHF repeater sites could be linked together to provide wider area coverage.
- 3.6 The acquisition of additional transportable repeaters should be considered.
- 3.7 Liaison between SAR organisations and Regional Civil Defence groups is recommended to encourage better understanding of each other's VHF capabilities and requirements.
- 3.8 SAR agencies should agree appropriate national VHF frequencies and pay the licence fees.

## **4 Digital VHF radio**

- 4.1 Radios with digital trunk features can be used on the Police radio networks in Auckland, Wellington and Canterbury. Police should be approached to allow "non-Police" owned radios to use their VHF digital trunk networks.
- 4.2 Police to confirm whether their digital network can support GPS data burst traffic required for location monitoring services such as SARTrack.

## **5 Voice Recording of radio traffic**

- 5.1 Introduce appropriate technology to provide continuous voice recording and instant recall of VHF radio traffic terminating at each SAR Base.

## **6 Procurement with maintenance contracts of all radio equipment**

- 6.1 A standard for the procurement and maintenance of all radio equipment should be developed and published.

## **7 SARTrack**

- 7.1 SARTrack is software that can be used to help SAR operations. It includes live tracking of GPS embedded into VHF handheld portable radios and smartphones.
- 7.2 Adoption of the SARTrack package to support land based search and rescue operations should be considered by LandSAR.

## **8 Police**

- 8.1 Police should be asked to retain and maintain their existing HF radio network, consisting of several hundred POLSAR handheld radios, three HF stations with telephone interconnect and a number of HF base radios at Police Stations.

## **9 AREC radio equipment and service provision**

- 9.1 There are Service Level Agreements (SLA) and Memoranda of Understanding (MOU) between AREC, LandSAR, Police and NZSAR. These documents need to be ratified to confirm that they are current, appropriate and enforceable.
- 9.2 A focus on deployment and maintenance of radio equipment is required as part of any SLA review.
- 9.3 A proactive retention and recruitment programme is required to maintain current levels of AREC personnel involvement with SAR training and operations.
- 9.4 Many AREC people contribute their own, privately owned VHF and HF radio equipment to SAROPS. This should be supported and encouraged.
- 9.5 SLSNZ and AREC are both developing and implementing their own DMR VHF radio networks. These networks are not compatible with each other.

## **10 AREC Digital Mobile Radio (DMR)**

- 10.1 There is a New Zealand wide network of linked Amateur Radio digital UHF (70cm) DMR repeaters based on the ETSI Digital mobile radio (DMR) standard. This network is growing in size. The AREC community uses this network to communicate with each other.
- 10.2 If this DMR network introduces VHF repeaters, then it could be used in areas where the Police digital trunked network does not provide coverage. Currently there are six

VHF DMR repeaters provided by AREC (three in Wellington, two in Dunedin, two in Southland).

## **11 Department of Conservation (DOC) HF and VHF radio networks**

- 11.1 DOC should be approached to confirm that their VHF and HF sites with telephone interconnect and several hundred VHF repeaters will continue to be available for SAR use.

## **12 New Zealand Defence Force**

- 12.1 New Zealand Defence Force (NZDF) are about to implement a refresh program of their HF radio network but they have yet to decide how many sites their new network will have. These sites could be accessed remotely by LandSAR in the future.
- 12.2 A dialogue should be established with NZDF to provide input to their HF radio network refresh programme and ensure that its future capabilities are consistent with SAR requirements.

## **13 Surf life Saving NZ**

- 13.1 There are possible interconnection scenarios to explore between SLSNZ and SAR radio channels.

## **14 Whole of Government Radio Network (WGRN)**

- 14.1 The proposed WGRN is likely to reduce investment and maintenance in radio infrastructure such as DOC's HF and VHF networks.
- 14.2 Discussions should be initiated with the WGRN governance group to emphasise the importance of existing radio networks for SAR operations and training, and the ongoing need for such networks in a future dominated by cellular radio services.

## **Action plan**

The priority actions arising from this report that should be completed within the next 12 months include:

- Establish a technical working group with participants from key SAR agencies.
- Implement a common VHF channel plan for all radios to be programmed with nationally consistent channel names.
- Agree a common handheld radio purchase strategy that encourages dual mode (analogue and digital) capability.
- Agree the use of the Police's VHF network where it is available, and arrange the purchase of new digital radios for SAR agency access.
- Investigate use of the AREC DMR network where VHF becomes available and the Police's digital network is unavailable.
- Develop and implement a maintenance program for all radios, especially the non-Police owned fixed VHF radio stations.

- Engage with the All of Government Radio Network (WGRN) programme to ensure the continued availability of HF and VHF radio networks for ongoing SAR training and operations.
- Engage with NZDF to plan the future development of their HF radio infrastructure to support SAR operations and training requirements.

DRAFT

File NZSAR 9-2

August 2016

## **SAR INCIDENT MANAGEMENT TEAM MANAGEMENT SUPPORT**

1. **Introduction.** SAR operations vary in their complexity and time, with the potential to require the management of multiple assets and resources over a period of days. Different Police Districts utilise a variety of processes and systems to support Incident Management Teams (IMT). These are sourced and supported on an ad hoc basis, often in conjunction with local resources and relationships. There appears to be potential benefit in adopting a single, national IMT support system.
2. The project will be managed with minimum time-involvement and with use of virtual meetings; face to face meetings are not anticipated.
3. **Purpose.** This project will define the IT support needs of an IMT and compare the capabilities of existing systems against these requirements.
4. **Objectives.** The report will address the following:
  - a. Develop a SAR incident management process flow definition (needs assessment) for SAR operations at the local, Police District and National levels.
  - b. Identify current and potential IT systems to meet the needs assessment.
  - c. Conduct a technical assessment of the identified systems current or potential ability to meet the needs assessment.
  - d. Outline the longevity of, technical robustness, staffing/operating requirements development potential, support arrangements, cost, ownership model and other aspects related to ongoing sustainment of the identified systems on a national basis.
  - e. Make recommendation(s) for next steps.
5. **Steering Group.** The NZSAR Secretariat will maintain oversight of the project, in conjunction with a steering group that includes the following:
  - a. NZSAR – Rhett Emery (Project Manager)
  - b. NZ Police – John Fookes, Jo Holden, TBC
  - c. RCCNZ – TBC
  - d. LandSAR – TBC – Pete Corbett, Tony Groome
  - e. Coastguard - TBC
  - f. IMT Operations Manager - Dave Comber
  - g. ITRS – Andrew Tarr (as required)

6. **Project outline.** The component requirements of the project are detailed in the table below.

Action	Responsibility	Time
<b>1. SAR incident management process flow definition</b> Provide a needs assessment of the processes required for SAR operations at the local, Police District and National levels.	Dave Comber	Mid-August
<b>2. Review of process flow definition</b> Review the needs assessment and adjust as required	Steering Group	End August
<b>2. Stocktake of IT systems</b> Identify IT systems available for use in New Zealand with the ability, or potential, to meet the needs of SAR IMT management.	Andrew Tarr / Dave Comber	
<b>3. Technical assessment</b> Conduct a technical assessment of identified systems in terms of their current or potential ability to meet the needs of SAR IMT management.	Andrew Tarr / Dave Comber	
<b>4. Summary analysis</b> For those systems identified as meeting, or having the potential to meet, SAR IMT management needs, summarise the critical aspects of: Technical robustness, development potential, staffing/operating requirements, support arrangements, cost, ownership model, longevity, and any other aspects that may affect or impact the sustainability of the system.	Andrew Tarr / Rhett Emery	
<b>5. Recommendations</b> Based on an analysis of the information, make recommendations for next steps, which may or may not make reference to any specific system(s).	Rhett Emery	

7. **Administration**

8. **Costs.**

Rhett Emery  
 NSSP Coordinator  
 New Zealand Search and Rescue



## Search and Rescue Training Student Feedback Survey

July 2016

Prepared for: Rhett Emery,  
New Zealand Search and Rescue Secretariat

Prepared by: Steve Blank, Sarah Major and  
Theo Muller, **MMResearch™**

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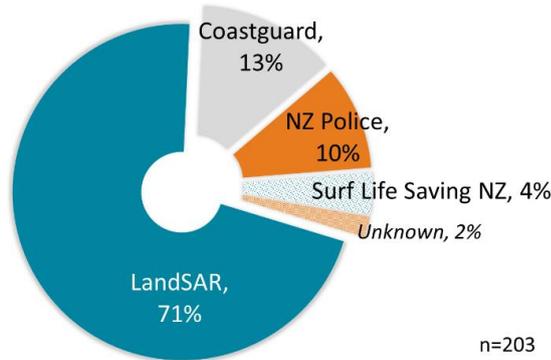
This study was designed and conducted in accordance with the Code of Practice established by The Research Association of New Zealand.

**MMResearch™** believes that this report represents a fair, accurate and comprehensive analysis of the information collected, with all sampled information subject to normal statistical variance.

# 1. Executive summary

This report presents the results from the Search and Rescue Training Student Feedback Survey conducted online during July 2016. The survey was administered by NZSAR from a database of students held by Tai Poutini Polytechnic (TPP). Results are based on feedback from n=203 respondents, with the majority (71%) from LandSAR.

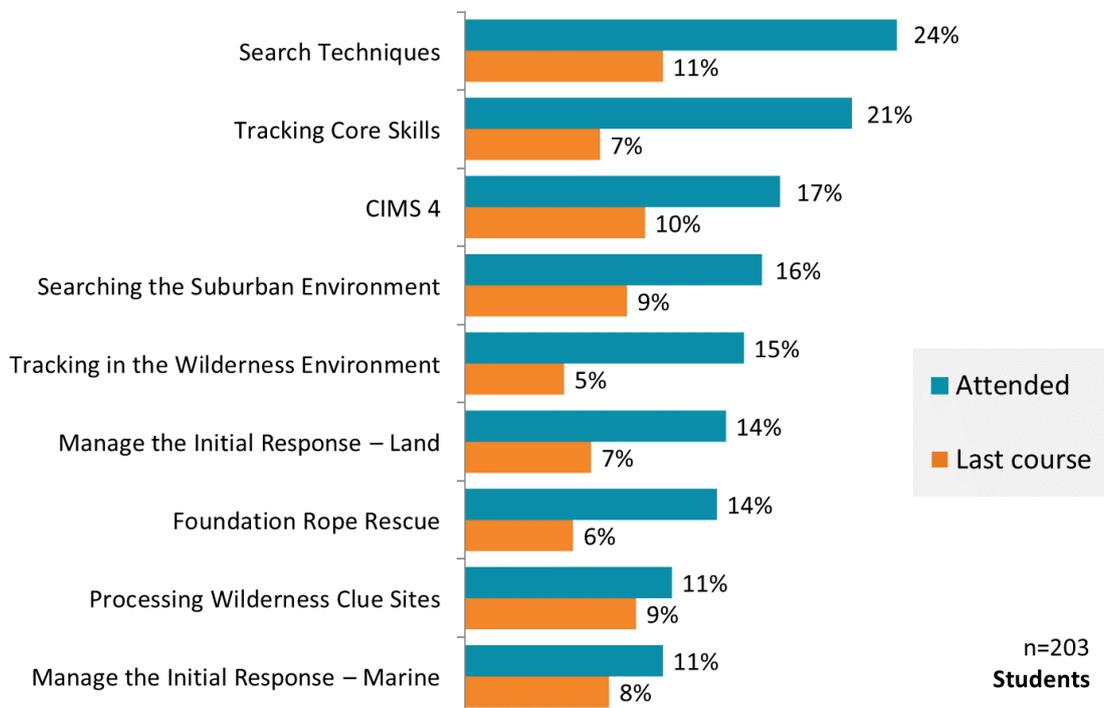
### Which SAR agency nominated you for this course?



### Courses attended

Respondents were asked which Tai Poutini Polytechnic (TPP) Search and Rescue courses they attended during 2015. A quarter had attended Search Techniques, (including a third of LandSAR respondents). Around a fifth did Tracking Core skills, and a similar proportion did CIMS 4 (including half the Coastguard and Surf Life Saving people).

### TPP Search and Rescue courses attended during 2015



The students were asked to think about and rate the last course they attended in 2015. As shown in the chart above, respondents' feedback was spread across a range of courses, with around ten percent commenting on Search Techniques, CIMS 4, Processing Wilderness Site Clues, or Searching the Suburban Environment.

### Course content, skills and competencies

In terms of the relevance and appropriateness of course skills and competencies, and the relevance and applicability of course content to SAR activity, the students' feedback is excellent:

**95%** agreed the last course taught them skills very relevant to the tasks they do for SAR

**93%** agreed they feel confident they can now use those skills in an operation

One percent disagreed with these statements.

The results were also positive regarding skills and **safety practices** for SAR operations:

**97%** agreed team work was encouraged on the last course they attended

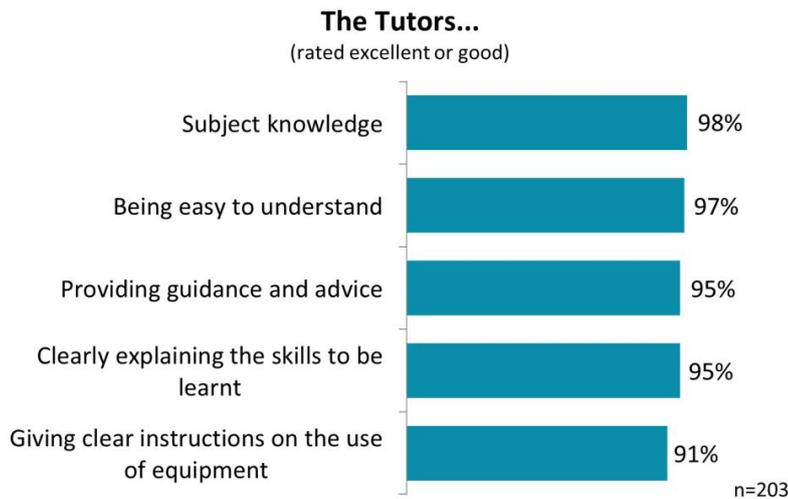
**96%** agreed that tutors ensured Health and Safety practices were followed

Less than one percent disagreed in each case.

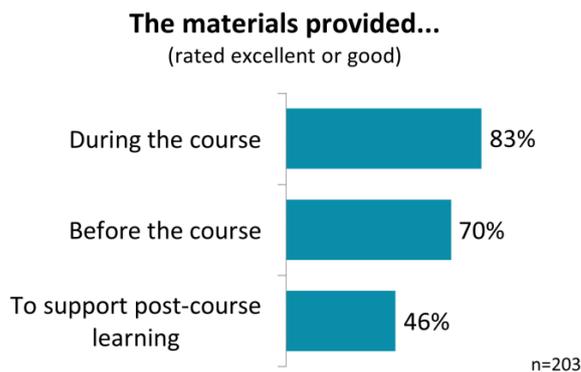
### Quality of tuition programmes

The TPP Search and Rescue courses were rated highly by course participants, especially in terms of the performance of tutors, and assessment. Results for materials were mixed.

The results for **tutors** were outstanding; over ninety percent of the student rated tutors "excellent" or "good" for their subject knowledge, advice, and clear easily understood instructions and explanations. (One percent rated them as "poor" for (not) giving clear instructions on the use of equipment.)



Students rated the learning materials provided during the course higher than those provided to support post-course learning - however 28% indicated this was "not applicable" so possibly they did not receive post course materials.



Almost all the respondents agreed the **assessment** was fair, and tested the right skills:

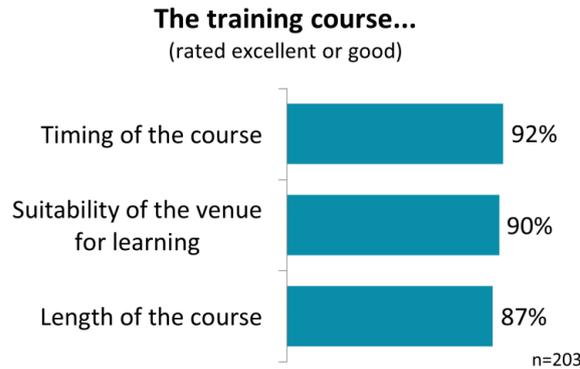
**96%** agreed (or strongly agreed) the assessment was fair

**89%** rated the assessment as excellent or good at testing the right skills

Only 1% rated the assessment as poor.

### Course organisation

The majority of students rated the last course they attended as excellent or good in terms of the length, timing and venue.



Several students gave feedback about weekend courses being too long, and there was some frustration expressed about courses being cancelled at the last minute.

- > *Extended Search Planning, course keeps getting postponed. Very annoying when you apply for leave then cancel then reapply again. (LandSAR)*

The **administration** of the courses was rated more moderately than other aspects:

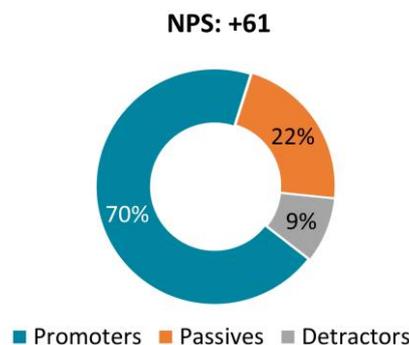
**88%** rated the administration by the SAR agency that nominated them as good or excellent. Only one percent rated it poor (from LandSAR).

**82%** rated the administration by Tai Poutini Polytechnic as good or excellent. Three percent rated it as poor.

In the final comments, six percent raised administration issues including disorganisation.

### Net promoter Score

The Net Promoter Score is a future sustainability indicator that measures loyalty by asking students how likely they would be to recommend the last course they did in 2015 to other SAR people. To calculate the NPS, the percentage of Detractors is subtracted from the percentage of Promoters. The overall NPS for the SAR training courses is a very high score of +61.



The NPS is a volatile measure, and to put it into perspective, our experience working with multiple New Zealand industry training organisations has revealed recent NPS scores ranging from +12 up to +52 for completed trainees.

### Next steps...

Respondents were asked what SAR skills they might need to learn next – 55% commented, and the skills mentioned varied by sector. While overall 11% said they need to learn Tracking skills next, these were people from LandSAR (14%) and NZ Police (5%).

#### What other SAR skills do you need to learn next?



The **LandSAR** group were most interested in Tracking courses, CIMS, rope courses, swift water awareness, and more practical experience:

- > *The hands on stuff is key. Being in the bush and the environment. Highly rate the SAREX.*

Students from Surf Life Saving NZ, and the NZ Police expressed interest in more practical experience and exercises.

- > *There needs to be a currency built into the certification to keep the skill level at a high standard. One off courses don't capture skill regression and cater for those areas that are not as active as others so IMT experience is minimal. A refresher SAR Managers will help this. (Surf Life Saving NZ)*
- > *A practical based Leadership Course would be excellent. Something that puts people under pressure (not necessarily SAR) so that we can learn and grow as leaders. (NZ Police)*

Several Coastguard people mentioned the importance of working with other agencies:

- > *I want to further my expertise and work in conjunction with Coastguard and NZ Police if the pager goes.*

### The best thing about SAR training

Everyone was asked what the best thing is about training in search and rescue. They selected:

- Being ready to assist in operations 88%
- Learning new skills 82%
- Learning from experienced tutors 78%
- Working in a team 74%
- Gaining confidence 67%
- Achieving qualifications 31%

## Conclusion

Overall, these results are very positive about the suitability of SAR(ACE) skills acquisition training (based on feedback from individuals who have undertaken the training in 2015).

**95%** agreed the last course taught them skills very relevant to the tasks they do for SAR

**93%** agreed they feel confident they can now use those skills in an operation

Feedback suggests students would value more opportunities to practice their skills so they are ready and fully prepared to use them.

As one Coastguard person said - the best thing about SAR training is:

- > *Being challenged and prepared so thoroughly that I am prepared to use CIMS in future real-life incidents.*

Overall, there was very little negative feedback from respondents. 203 students completed the online survey and when asked if they think there is anything around SAR training courses that needs to be addressed, 7% mentioned location or timing issues, and 6% commented on administrative issues.

It's reassuring to see the Search and Rescue training rated so highly.

## 2. Background

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### 2.1 Terms of Reference

#### **Background**

There are more than 12,000 people directly involved in the New Zealand search and rescue (SAR) sector. These people come from nearly 20 agencies, with 95% giving their time unpaid.

The New Zealand Search and Rescue (NZSAR) Council provides strategic governance and leadership to the search and rescue sector, and is supported by the NZSAR Secretariat. The Secretariat does not have an operational SAR role, but provides advice and support to the sector.

The Secretariat has responsibility to manage SAR training funded by Tertiary Education Commission (TEC) through Adult Community Education (ACE) funding. The SAR(ACE) funding is to create a sustainable funding arrangement that represents value for money and best meets the training needs of the SAR sector. The Secretariat has responsibility to advise TEC on the suitability of current SAR training provision to enable allocation of funding per the investment plan timeline.

Approximately 1300 students undertake SAR(ACE) courses each year, with nearly 100 courses in total run. The average number of students per course is approximately 15. Courses are run regionally around the country subject to demand from sector agencies. Course attendees come from SAR sector agencies: NZ Police, LandSAR, Coastguard and Surf Life Saving NZ.

Information on the quality of training currently comes from:

- Student course survey: Tai Poutini Polytechnic (TPP)
- Course moderation
- Tutor feedback
- Anecdotal feedback

There is no formal mechanism to obtain feedback on the suitability of training sometime after the training was delivered.

#### **Student Survey**

NZSAR is seeking feedback from SAR(ACE) trainees about their training experience 6-12 months after the training. It is hoped that this survey will provide 'real life' feedback on the training, and the value of the underlying knowledge, skills and attributes provided by the training they received.

#### **Survey Purpose**

The survey is to obtain evidence of the suitability of SAR(ACE) skills acquisition training from individuals who have undertaken training in 2015. The survey needs to be repeatable, and to report on the following areas, based on the collation of all responses: Course(s) undertaken in 2015;

- Quality of tuition programme(s): course materials, tutors, delivery;
- A measure of the relevance and appropriateness of course skills and competencies;
- A measure of the relevance and applicability of course content to SAR activity;
- A measure of the emphasis given to the development of generic attributes, such as teamwork, that are applicable to SAR operations;
- A measure of the importance given to health and safety, during training and its applicability to wider SAR activities;
- Any other matters.

The information provided by the survey will be used to 'triangulate' with the existing feedback on the quality and suitability of SAR(ACE) training.

### **The Contract**

Ministry of Transport appointed **MMResearch™** to conduct the Search and Rescue Training Student Feedback Survey.

## 2.2 Research methodology

**MMResearch™** proposed an online survey for practical and cost purposes. Potential participants were sent an email invitation, containing a survey link that activated an online script (developed by **MMResearch™**), for completion.

### **Questionnaire Development and Scripting**

**MMResearch™** in consultation with NZSAR developed the "line of enquiry" items into an online questionnaire. This questionnaire included additional demographic questions.

### **Sampling**

Given the relatively low number of trainees over the course of a year, **MMResearch™** proposed that **all** training participants in the reference period be invited to complete the survey. The sample size depends upon the email coverage available and so would be less than 1300 trainees overall.

The most practical available source for contacts was the Tai Poutini Polytechnic (TPP). **MMResearch™** understands that TPP agreed to supply a contact list (including email addresses) to NZSAR on the understanding that they would be held in confidence and not supplied to a third part like **MMResearch™**.

### **Sample Distribution and Management**

In order to maintain the confidentiality of the sample frame,

- NZSAR received the sample frame from TPP
- **MMResearch™** provided a hyperlink to the online survey
- NZSAR emailed invitations (incl. hyperlink) to prospective participants
- **MMResearch™** monitored and reported on response levels
- NZSAR sent survey reminders (or a thank you if they have completed) emails, to **ALL** prospective participants.

### **Survey Response**

NZSAR initially sent out 479 email invitations to participate in the survey, followed by reminders. By the time data collection was completed, 218 responses were received representing an overall response rate of 46%.

As this was an online self-completion survey, some respondents did not complete all the questions. There were 23 partial responses. However, 15 respondents did not get as far as rating the last course they did. Feedback suggests they stopped because they were unsure which course was their last one (which they were asked).

These results presented in this report are based on the 203 respondents who rated their last training course.

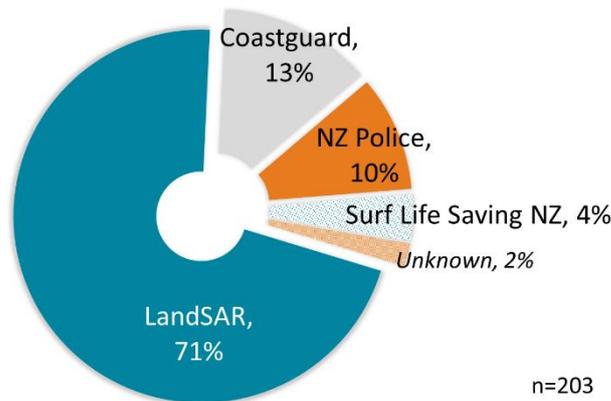
### **Analysis and Reporting**

All data was processed, analysed and reported by **MMResearch™**.

## 2.3 Demographics

Overall, 71% of the respondents come from LandSAR. Just under half (46%) have been operational less than 5 years or are still probational, while a quarter (24%) have been operational more than 10 years.

### Which SAR agency nominated you for this course?



Please note that 2% are shown as a “not stated” group because they did not provide answers to the demographic questions, which were at the end of the online survey. However, their survey responses have been included in the overall “total” results.

### Respondent demographics

	N=	%
<b>Which SAR agency nominated you for this course?</b>		
LandSAR	144	71%
Coastguard	26	13%
NZ Police	20	10%
Surf Life Saving NZ	8	4%
<i>Not stated</i>	5	2%
<b>Length of involvement with SAR</b>		
Still probational	10	5%
Operational - less than 5 years	84	41%
Operational 5 - 10 years	43	21%
Operational - more than 10 years	48	24%
Non-operational	13	6%
<i>Not stated</i>	5	2%
<b>Total</b>	<b>203</b>	<b>100%</b>

Two of the SAR agencies tended to have older participants:

- LandSAR - 41% aged over 50 years
- Coastguard – 62% aged over 50 years

The other two groups were younger on average:

- Surf Life Saving NZ – 63% aged under 30 years (75% were non-operational or still probational)

- NZ Police – 75% aged under 50 years

Although the Police participants tended to be younger, they were likely to be more experienced; 70% have been operational more than 5 years, and 45% operational more than 10 years.

Respondent demographics	N=	%
<b>Age group</b>		
Under 20 years	1	<1%
20 to 29	18	9%
30 to 39	43	21%
40 to 49	55	27%
50 to 59	49	24%
60 to 69	28	14%
70 to 79	4	2%
<i>Not stated</i>	5	2%
<b>Police District for SAR unit/group/club/squad</b>		
Southern	31	15%
Canterbury	23	11%
Wellington	23	11%
Bay of Plenty	21	10%
Tasman	20	10%
Waikato	18	9%
Central	18	9%
Eastern	17	8%
Northland	16	8%
Auckland	11	5%
<i>Not Stated</i>	5	2%
<b>Active in... during 2015*</b>		
Group training	152	75%
Operation - Land	140	69%
Refresher/continuation training	121	60%
SAREX/Rogaine	87	43%
Operation – Marine / water	49	24%
<b>Total</b>	<b>203</b>	<b>100%</b>

\*NB: Multiple responses

### Notes on reading this report

Maximum Margins of Error (MMoE) have been calculated for the results at the 95% confidence interval. Where comparisons are made in table format, statistical significance testing has been applied at the 95% confidence interval and the results clearly indicated in this report.

- **Red** means the result is significantly below the national average
- **Blue** means the result is significantly above the national average
- Due to rounding, percentages do not always add up to 100%

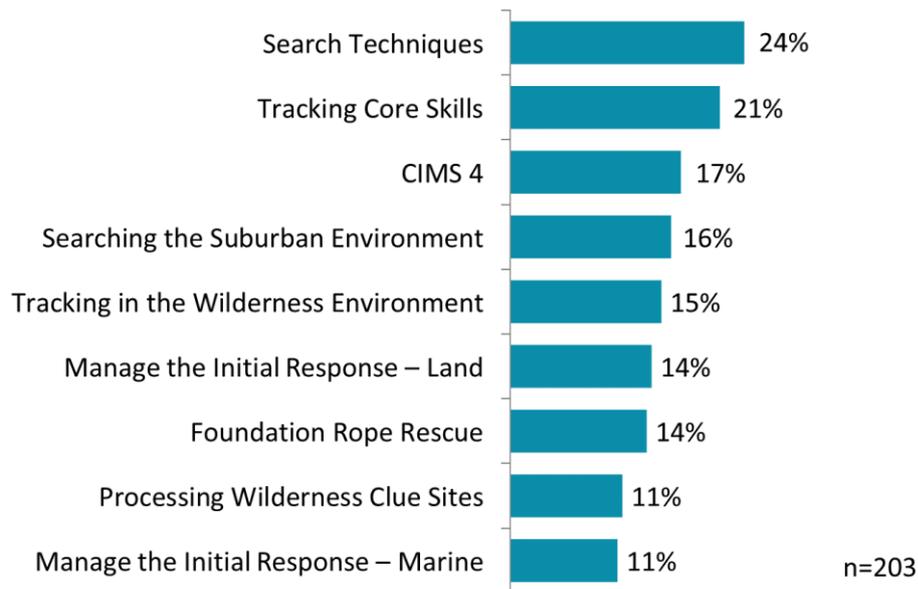
### 3. Courses attended

#### 3.1 Courses attended in 2015

First, respondents were asked to indicate all the Tai Poutini Polytechnic (TPP) Search and Rescue courses they attended during 2015.

Overall, a quarter attended Search Techniques (24%), including a third (31%) of LandSAR respondents. A fifth did Tracking Core skills (21%), and 17% CIMS 4 - including half the Coastguard (54%) and Surf Life Saving (50%) students.

**TPP Search and Rescue courses attended during 2015**



The students from NZ Police were more likely than the national average to have attended:

- Manage the Initial Response – Land 40%
- Manage the Initial Response – Marine 35%
- SAR Managers 20%

Plus, a quarter did CIMS 4 (25%).

The Coastguard students were more likely than others to have done:

- CIMS 4 54%
- Manage the Initial Response – Marine 46%
- SAR Managers 23%

Surf Life Saving students were also more likely to have done the CIMS 4 training (50%), and other (unlisted) courses.

The LandSAR people were less likely to have attended CIMS 4 (8%), Manage the Initial Response – Marine (1%), and SAR Managers (1%).

**Please select all the Tai Poutini Polytechnic (TPP) Search and Rescue courses you attended during 2015.**

	NZ Police	Coast guard	Land SAR	Surf Life Sav. NZ	Not stated	TOTAL
Search Techniques	0%	0%	31%	0%	67%	24%
Tracking Core Skills	10%	0%	26%	0%	50%	21%
CIMS 4	25%	54%	8%	50%		17%
Searching the Suburban Environment	10%	0%	20%	0%	33%	16%
Tracking in the Wilderness Environment	5%	0%	19%	0%	33%	15%
Foundation Rope Rescue	5%	0%	17%	0%	33%	14%
Manage the Initial Response – Land	40%	4%	13%	0%	17%	14%
Processing Wilderness Clue Sites	5%	0%	15%	0%	0%	11%
Manage the Initial Response – Marine	35%	46%	1%	25%	0%	11%
Swift Water Awareness	5%	0%	9%	0%	17%	7%
SAR Managers	20%	23%	1%	13%	0%	6%
SAR Leadership	0%	12%	5%	13%	0%	5%
Outdoor Risk Management	0%	0%	8%	0%	0%	5%
Vertical Rope Rescue	0%	0%	6%	0%	0%	4%
4WD / ATV	0%	0%	6%	0%	0%	4%
Extended Search Planning (ESP)	0%	0%	3%	0%	0%	2%
Train the Trainer	5%	4%	1%	0%	0%	2%
Advanced Rope Rescue	0%	0%	1%	0%	0%	<1%
Personal Rope Rescue	0%	0%	1%	0%	0%	<1%
Boat Masters (Non-Coastguard)	5%	0%	0%	0%	0%	<1%
Avalanche Awareness	0%	0%	1%	0%	0%	<1%
NCEA L4	0%	4%	0%	0%	0%	<1%
Other course	5%	0%	12%	38%	0%	10%
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>5*</b>	<b>203</b>

\*Caution: very small sample sizes.

**Red** means result is significantly below the national average, while **Blue** means above.

### Regional variations

- Students in Northland were more likely than average to have attended Searching the Suburban Environment (44%) and Processing Wilderness Clue Sites (31%).
- Auckland students were more likely to have attended CIMS 4 (45%), Manage the Initial Response – Marine (45%), and Manage the Initial Response – Land (36%).
- Waikato students were more likely to have done Search Techniques (50%), and Tracking Core Skills (44%).
- Eastern were more likely to have done Outdoor Risk Management (35%), and Wellington – CIMS 4 (35%).
- Tasman students were more likely than other regions to have done Vertical Rope Rescue (25%), while in Canterbury it was SAR Leadership (22%).
- Southern students were more likely to have completed Foundation Rope Rescue (32%).

### Regional results: All TPP Search and Rescue courses attended during 2015

	Northland	Auckland	Waikato	Bay of Plenty	Central	Eastern	Wellington	Tasman	Canterbury	Southern	TOTAL
Search Techniques	13%	9%	50%	24%	22%	6%	17%	35%	17%	23%	24%
Tracking Core Skills	19%	9%	44%	24%	22%	12%	22%	25%	13%	13%	21%
CIMS 4	0%	45%	11%	33%	11%	29%	35%	5%	17%	3%	17%
Searching the Suburban Environment	44%	9%	17%	5%	6%	6%	17%	25%	9%	19%	16%
Tracking in the Wilderness Environment	31%	9%	28%	10%	11%	12%	9%	5%	17%	16%	15%
Foundation Rope Rescue	31%	0%	0%	5%	17%	24%	4%	5%	4%	32%	14%
Manage the Initial Response – Land	0%	36%	11%	19%	17%	24%	17%	20%	9%	3%	14%
Processing Wilderness Clue Sites	31%	0%	11%	5%	22%	12%	4%	5%	22%	6%	11%
Manage the Initial Response – Marine	0%	45%	0%	10%	17%	0%	22%	0%	17%	10%	11%
Swift Water Awareness	6%	0%	0%	14%	6%	0%	4%	15%	9%	10%	7%
SAR Managers	0%	18%	17%	14%	0%	0%	9%	0%	9%	3%	6%
SAR Leadership	6%	0%	0%	5%	0%	6%	0%	15%	22%	0%	5%
Outdoor Risk Management	0%	0%	0%	10%	6%	35%	0%	5%	0%	3%	5%
Vertical Rope Rescue	0%	0%	0%	0%	6%	0%	0%	25%	4%	3%	4%
4WD / ATV	0%	0%	0%	0%	0%	12%	0%	5%	4%	16%	4%
Extended Search Planning (ESP)	0%	0%	0%	5%	0%	0%	0%	0%	0%	10%	2%
Train the Trainer	0%	0%	0%	14%	0%	0%	0%	0%	4%	0%	2%
Advanced Rope Rescue	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%
Personal Rope Rescue	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%
Boat Masters (Non-Coastguard)	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Avalanche Awareness	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%
NCEA L4	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Other courses	19%	0%	11%	14%	17%	18%	0%	15%	4%	10%	10%
n=	16	11	18	21	18	17	23	20	23	31	203

Caution: small sample sizes

Red means the result is significantly below the national average, while Blue means above.

The “other” courses students mentioned were:

- Rope Rescue Refresher n=5
- Other refresher courses (Field, IMT, SAR techniques) n=4
- First Aid/PHEC n=4
- CIMS/CIMS 2 n=3
- Bush craft n=2
- Operational Tracking Intro n=2
- CTT n=1

### 3.2 Last course attended

Students were asked to indicate the last course they attended during 2015 - this is the one they were asked to think about and to rate on a number of factors. Respondents' feedback was spread across a range of courses, with around ten percent commenting on Search Techniques, CIMS 4, Processing Wilderness Site Clues, or Searching the Suburban Environment.

**Last TPP Search and Rescue course attended during 2015**



Variations between SAR agencies and regions:

- The students nominated for courses by the Coastguard and NZ Police were more likely than others (especially LandSAR) to have last attended:
  - *Manage the Initial Response – Marine*: 38% of Coastguard and 25% of NZ Police
  - *SAR Managers*: 20% of Police and 15% of Coastguard
- Coastguard students were more likely to have last attended *CIMS 4* (35%)
- LandSAR people attended a wide range of courses. The most common were *Search Techniques* (which 15% last attended), *Processing Wilderness Clue Sites* (13%), and *Searching the Suburban Environment* (11%)
- Students in Northland were more likely than others to have attended *Processing Wilderness Clue Sites* (25%), and *Foundation Rope Rescue* (25%)
- Aucklanders were more likely to have last attended *Manage the Initial Response – Marine* (45%) and *Manage the Initial Response – Land* (27%)
- People in Waikato were more likely to have last attended *SAR Managers* (17%), while for Bay of Plenty it was *Train the Trainer* (10%)
- Wellingtonians last attended *CIMS 4* (26%) and *Manage the Initial Response – Marine* (22%)
- Eastern region students also last attended *CIMS 4* (29%)
- Students in Tasman region were more likely than others to have last attended *Vertical Rope Rescue* (15%) and *Avalanche Awareness* (5%)
- Cantabrians were more likely to have last attended *SAR Leadership* (13%), while for the Southern group it was *Foundation Rope Rescue* (19%), *4WD / ATV* (13%), and *Extended Search Planning* (10%)

### SAR Agency results: Last course attended during 2015

	NZ Police	Coast guard	Land SAR	Surf Life Sav. NZ	Not stated	TOTAL
Search Techniques	0%	0%	15%	0%	0%	<b>11%</b>
CIMS 4	5%	<b>35%</b>	6%	25%	0%	<b>10%</b>
Processing Wilderness Clue Sites	5%	0%	13%	0%	0%	<b>9%</b>
Searching the Suburban Environment	5%	0%	11%	0%	17%	<b>9%</b>
Manage the Initial Response – Marine	<b>25%</b>	<b>38%</b>	<b>0%</b>	13%	0%	<b>8%</b>
Tracking Core Skills	5%	0%	8%	0%	33%	<b>7%</b>
Manage the Initial Response – Land	20%	0%	6%	0%	33%	<b>7%</b>
Foundation Rope Rescue	5%	0%	8%	0%	0%	<b>6%</b>
Tracking in the Wilderness Environment	0%	0%	8%	0%	0%	<b>5%</b>
SAR Managers	<b>20%</b>	<b>15%</b>	<b>1%</b>	13%	0%	<b>5%</b>
SAR Leadership	0%	8%	2%	13%	0%	<b>3%</b>
4WD / ATV	0%	0%	4%	0%	0%	<b>3%</b>
Swift Water Awareness	0%	0%	3%	0%	17%	<b>2%</b>
Vertical Rope Rescue	0%	0%	3%	0%	0%	<b>2%</b>
Outdoor Risk Management	0%	0%	3%	0%	0%	<b>2%</b>
Extended Search Planning (ESP)	0%	0%	2%	0%	0%	<b>1%</b>
Train the Trainer	5%	0%	1%	0%	0%	<b>1%</b>
Advanced Rope Rescue	0%	0%	1%	0%	0%	<b>0%</b>
Personal Rope Rescue	0%	0%	1%	0%	0%	<b>0%</b>
Avalanche Awareness	0%	0%	1%	0%	0%	<b>0%</b>
NCEA L4	0%	4%	0%	0%	0%	<b>0%</b>
Boat Masters (Non-Coastguard)	0%	0%	0%	0%	0%	<b>0%</b>
Other Courses (various mentioned)	5%	0%	5%	38%	0%	<b>5%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>5*</b>	<b>203</b>

\*Caution: very small sample sizes

**Red** means the result is significantly below the national average, while **Blue** means above.

#### Other courses included:

- |                  |     |                            |     |
|------------------|-----|----------------------------|-----|
| – CIMS/2         | n=3 | – SAR techniques refresher | n=1 |
| – First Aid      | n=3 | – CTT workshop             | n=1 |
| – Rope Refresher | n=2 | – Operational Tracking     | n=1 |

### Regional results: Last course attended during 2015

	Northland	Auckland	Waikato	Bay of Plenty	Central	Eastern	Wellington	Tasman	Canterbury	Southern	TOTAL
Search Techniques	13%	9%	17%	10%	11%	6%	9%	15%	13%	10%	<b>11%</b>
CIMS 4	0%	9%	6%	24%	6%	<b>29%</b>	<b>26%</b>	0%	4%	0%	<b>10%</b>
Processing Wilderness Clue Sites	<b>25%</b>	0%	17%	0%	17%	12%	4%	5%	22%	0%	<b>9%</b>
Searching the Suburban Environment	19%	9%	0%	0%	11%	6%	9%	10%	9%	13%	<b>9%</b>
Manage the Initial Response – Marine	0%	<b>45%</b>	0%	5%	11%	0%	<b>22%</b>	0%	4%	6%	<b>8%</b>
Tracking Core Skills	0%	0%	17%	5%	11%	6%	9%	10%	4%	3%	<b>7%</b>
Manage the Initial Response – Land	0%	<b>27%</b>	6%	5%	6%	6%	9%	15%	4%	0%	<b>7%</b>
Foundation Rope Rescue	<b>25%</b>	0%	0%	0%	0%	12%	0%	0%	0%	<b>19%</b>	<b>6%</b>
Tracking in the Wilderness Environment	13%	0%	17%	5%	6%	0%	4%	5%	4%	3%	<b>5%</b>
SAR Managers	0%	0%	<b>17%</b>	10%	0%	0%	9%	0%	9%	3%	<b>5%</b>
SAR Leadership	6%	0%	0%	0%	0%	0%	0%	10%	<b>13%</b>	0%	<b>3%</b>
4WD / ATV	0%	0%	0%	0%	0%	6%	0%	5%	0%	<b>13%</b>	<b>3%</b>
Swift Water Awareness	0%	0%	0%	5%	0%	0%	0%	5%	4%	3%	<b>2%</b>
Vertical Rope Rescue	0%	0%	0%	0%	6%	0%	0%	<b>15%</b>	4%	0%	<b>2%</b>
Outdoor Risk Management	0%	0%	0%	5%	6%	6%	0%	0%	0%	3%	<b>2%</b>
Extended Search Planning (ESP)	0%	0%	0%	0%	0%	0%	0%	0%	0%	<b>10%</b>	<b>1%</b>
Train the Trainer	0%	0%	0%	<b>10%</b>	0%	0%	0%	0%	0%	0%	<b>1%</b>
Advanced Rope Rescue	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	<b>0%</b>
Personal Rope Rescue	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	<b>0%</b>
Avalanche Awareness	0%	0%	0%	0%	0%	0%	0%	<b>5%</b>	0%	0%	<b>0%</b>
NCEA L4	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	<b>0%</b>
Boat Masters (Non- Coastguard)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	<b>0%</b>
Other Courses	0%	0%	6%	<b>19%</b>	11%	12%	0%	0%	0%	6%	<b>5%</b>
<b>n=</b>	<b>16</b>	<b>11</b>	<b>18</b>	<b>21</b>	<b>18</b>	<b>17</b>	<b>23</b>	<b>20</b>	<b>23</b>	<b>31</b>	<b>203</b>

Caution: small sample sizes

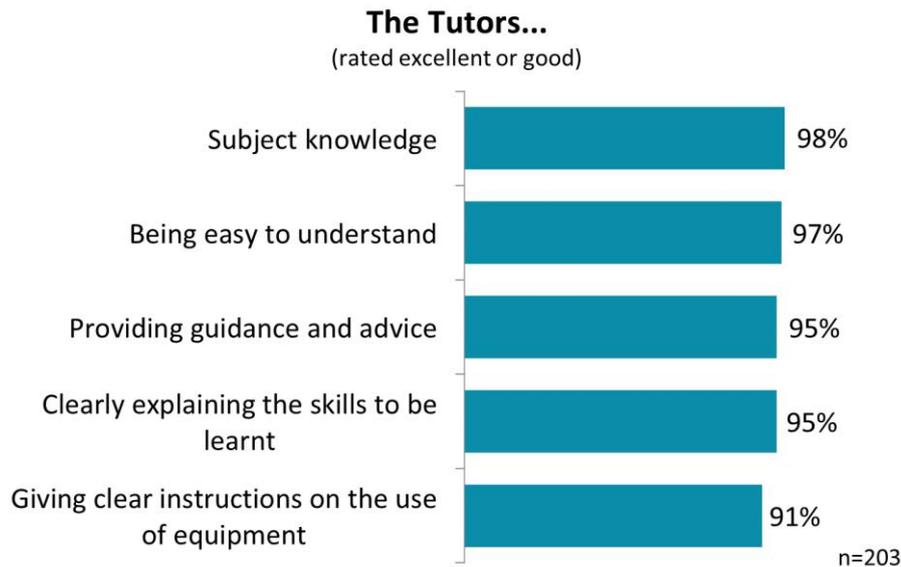
**Red** means the result is significantly below the national average, while **Blue** means above.

## 4. Rating the last course attended

Students were asked to think about the last course they attended and to rate it on a number of factors including course materials, tutors, relevance of course content, and the delivery.

### 4.1 Course tutors

The Search and Rescue course tutors were rated very highly by course participants, especially in terms of their subject knowledge (98% rated them excellent or good), and being easy to understand (97%).



The students nominated for courses by the NZ Police were a little less enthusiastic about the tutors. Although the majority rated tutors as excellent or good, the Police participants were more likely than people from other SAR agencies to rate tutors as only “fair” in terms of:

- Being easy to understand
- Providing guidance and advice
- Clearly explaining the skills to be learnt
- Giving clear instructions on the use of equipment

**How would you rate the Tutors?**

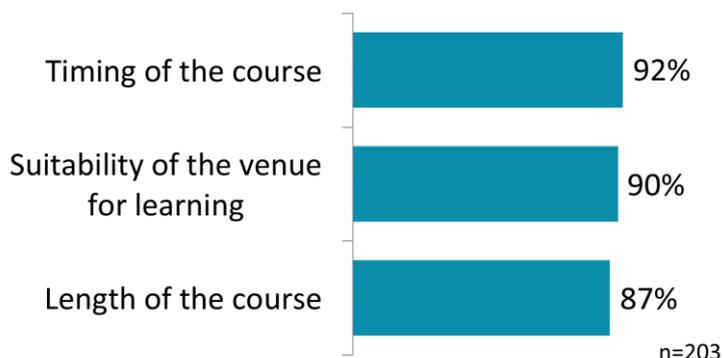
<b>Tutors...</b>	<b>NZ Police</b>	<b>Coast guard</b>	<b>Land SAR</b>	<b>Surf Life Saving NZ</b>	<b>TOTAL</b>
<b>Subject knowledge</b>					
Excellent	70%	92%	82%	100%	<b>83%</b>
Good	25%	8%	15%	0%	<b>15%</b>
Fair	5%	0%	2%	0%	<b>2%</b>
Poor	0%	0%	0%	0%	<b>0%</b>
Very poor	0%	0%	1%	0%	<b>0%</b>
<b>Being easy to understand</b>					
Excellent	50%	77%	69%	100%	<b>70%</b>
Good	30%	23%	28%	0%	<b>27%</b>
Fair	<b>20%</b>	0%	2%	0%	<b>3%</b>
Poor	0%	0%	0%	0%	<b>0%</b>
Very poor	0%	0%	0%	0%	<b>0%</b>
<b>Providing guidance and advice</b>					
Excellent	<b>45%</b>	73%	72%	88%	<b>69%</b>
Good	30%	27%	26%	13%	<b>26%</b>
Fair	<b>25%</b>	0%	3%	0%	<b>5%</b>
Poor	0%	0%	0%	0%	<b>0%</b>
Very poor	0%	0%	0%	0%	<b>0%</b>
<b>Clearly explaining the skills to be learnt</b>					
Excellent	45%	73%	69%	63%	<b>67%</b>
Good	35%	27%	26%	38%	<b>28%</b>
Fair	<b>15%</b>	0%	4%	0%	<b>4%</b>
Poor	<b>5%</b>	0%	0%	0%	<b>0%</b>
Very poor	0%	0%	0%	0%	<b>0%</b>
<b>Giving clear instructions on the use of equipment</b>					
Excellent	<b>35%</b>	62%	66%	50%	<b>61%</b>
Good	25%	31%	28%	50%	<b>30%</b>
Fair	<b>20%</b>	0%	2%	0%	<b>3%</b>
Poor	5%	0%	1%	0%	<b>1%</b>
Very poor	0%	0%	0%	0%	<b>0%</b>
NA	15%	8%	3%	0%	<b>5%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>203</b>

\*Caution: very small sample size for Surf Life Saving NZ, and "not stated" group is included in the Total.  
**Red** means the result is significantly below the national average, while **Blue** means above.

## 4.2 Course management

The majority of students rated the last course they attended as excellent or good in terms of the length, timing and venue. The Police who attended were less likely than others to rate the course timing and venue as excellent.

### The training course... (rated excellent or good)



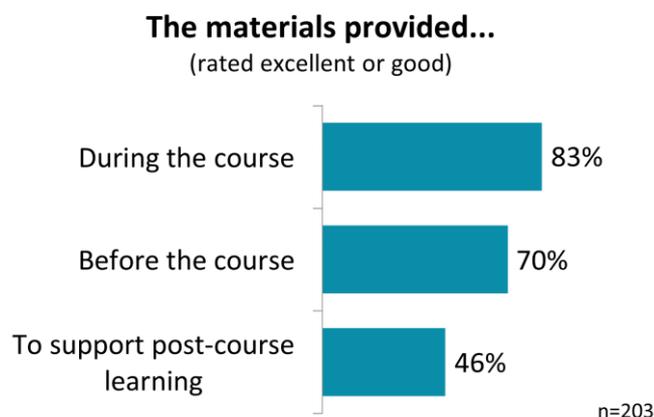
### How would you rate the course?

	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
<b>Length of the course</b>					
Excellent	25%	54%	40%	63%	<b>42%</b>
Good	65%	38%	44%	38%	<b>45%</b>
Fair	10%	8%	12%	0%	<b>10%</b>
Poor	0%	0%	2%	0%	<b>1%</b>
Very poor	0%	0%	1%	0%	<b>1%</b>
<b>Timing of the course</b>					
Excellent	<b>15%</b>	54%	42%	63%	<b>41%</b>
Good	<b>75%</b>	38%	50%	25%	<b>50%</b>
Fair	10%	8%	8%	13%	<b>8%</b>
Poor	0%	0%	0%	0%	<b>0%</b>
Very poor	0%	0%	0%	0%	<b>0%</b>
<b>Suitability of the venue for learning</b>					
Excellent	<b>30%</b>	81%	63%	<b>100%</b>	<b>64%</b>
Good	<b>55%</b>	<b>8%</b>	28%	0%	<b>26%</b>
Fair	15%	8%	6%	0%	<b>7%</b>
Poor	0%	0%	2%	0%	<b>1%</b>
Very poor	0%	4%	0%	0%	<b>0%</b>
NA	0%	0%	1%	0%	<b>1%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>203</b>

\*Caution: very small sample size for Surf Life Saving NZ, and "not stated" group is included in the Total.  
**Red** means the result is significantly below the national average, while **Blue** means above.

### 4.3 Learning materials

Students rated the learning materials provided during the course higher than those provided to support post-course learning, however 28% indicated this was not applicable so possibly they did not receive post course materials. Respondents from NZ Police were more critical of the materials, while the Coastguard appeared most satisfied.



#### Rating of learning materials provided...

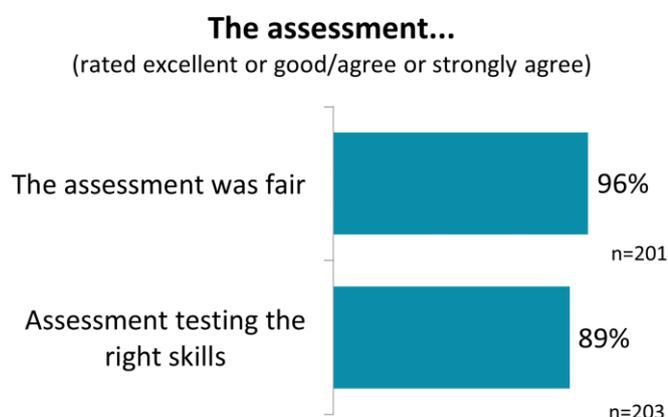
	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
<b>Before the course</b>					
Excellent	25%	35%	26%	25%	<b>27%</b>
Good	30%	58%	44%	13%	<b>43%</b>
Fair	20%	4%	15%	<b>50%</b>	<b>15%</b>
Poor	<b>20%</b>	0%	6%	0%	<b>6%</b>
Very poor	0%	0%	1%	0%	<b>0%</b>
NA	5%	4%	10%	13%	<b>8%</b>
<b>During the course</b>					
Excellent	20%	<b>62%</b>	35%	38%	<b>36%</b>
Good	55%	38%	47%	50%	<b>46%</b>
Fair	<b>25%</b>	0%	9%	13%	<b>10%</b>
Poor	0%	0%	6%	0%	<b>4%</b>
Very poor	0%	0%	0%	0%	<b>0%</b>
NA	0%	0%	4%	0%	<b>3%</b>
<b>To support post-course learning</b>					
Excellent	20%	<b>38%</b>	17%	13%	<b>20%</b>
Good	20%	19%	28%	13%	<b>26%</b>
Fair	25%	15%	13%	38%	<b>15%</b>
Poor	10%	0%	10%	13%	<b>9%</b>
Very poor	0%	4%	1%	0%	<b>1%</b>
NA	25%	23%	30%	25%	<b>28%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>203</b>

\*Caution: very small sample size for Surf Life Saving NZ, and "not stated" group is included in the Total.

**Red** means the result is significantly below the national average, while **Blue** means above.

## 4.4 Assessment

Almost all the respondents agreed the assessment was fair – 96% agreed (or strongly agreed), and 89% rated the assessment as excellent or good at testing the right skills. Only 1% rated the assessment as poor.



Almost all the respondents agreed the assessment was fair – 96% agreed (or strongly agreed). Coastguard respondents were significantly more likely to *strongly agree* the assessment was fair (81%).

### How would you rate the assessment testing the right skills?

	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
Excellent	35%	54%	47%	75%	<b>47%</b>
Good	55%	46%	40%	25%	<b>42%</b>
Fair	10%	0%	8%	0%	<b>6%</b>
Poor	0%	0%	2%	0%	<b>1%</b>
Very poor	0%	0%	0%	0%	<b>0%</b>
NA	0%	0%	4%	0%	<b>3%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>203</b>

\*Caution: very small sample sizes

### Do you agree or disagree that the assessment was fair?

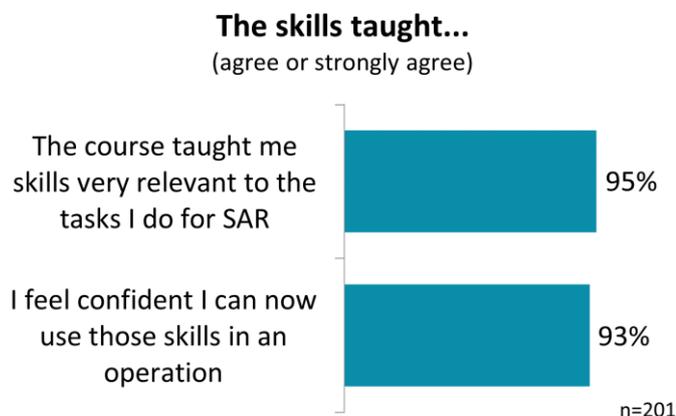
	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
Strongly agree	35%	<b>81%</b>	51%	88%	<b>55%</b>
Agree	60%	<b>19%</b>	44%	13%	<b>41%</b>
Neutral	5%	0%	2%	0%	<b>2%</b>
Disagree	0%	0%	0%	0%	<b>0%</b>
Strongly disagree	0%	0%	0%	0%	<b>0%</b>
NA	0%	0%	3%	0%	<b>2%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>201</b>

\*Caution: very small sample size for Surf Life Saving NZ, and "not stated" group is included in the Total.

**Red** means the result is significantly below the national average, while **Blue** means above.

## 4.5 Relevance of skills taught

Almost all students (95%) agreed the course taught them skills very relevant to the tasks they do for SAR, and 93% agreed they feel confident they can now use those skills in an operation. Only one percent disagreed with these statements. This holds true across the SAR agencies. There were no significant demographic differences.



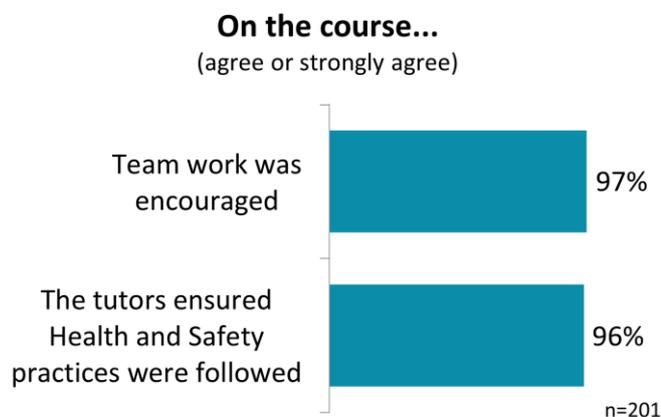
### Do you agree or disagree that...

	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
<b>The course taught me skills very relevant to the tasks I do for SAR</b>					
Strongly agree	45%	69%	60%	75%	<b>60%</b>
Agree	50%	31%	34%	25%	<b>35%</b>
Neutral	5%	0%	4%	0%	<b>3%</b>
Disagree	0%	0%	1%	0%	<b>&lt;1%</b>
Strongly disagree	0%	0%	1%	0%	<b>&lt;1%</b>
NA	0%	0%	1%	0%	<b>&lt;1%</b>
<b>I feel confident I can now use those skills in an operation</b>					
Strongly agree	30%	50%	46%	25%	<b>44%</b>
Agree	55%	38%	49%	63%	<b>48%</b>
Neutral	10%	8%	4%	13%	<b>5%</b>
Disagree	5%	0%	1%	0%	<b>1%</b>
Strongly disagree	0%	0%	1%	0%	<b>&lt;1%</b>
NA	0%	4%	0%	0%	<b>&lt;1%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>201</b>

\*Caution: very small sample size for Surf Life Saving NZ, and "not stated" group is included in the Total. **Red** means the result is significantly below the national average, while **Blue** means above.

## 4.6 Working safely together

Nearly all (97%) agreed that team work was encouraged on the last course they attended, and that tutors ensured Health and Safety practices were followed (96% agreed). Less than one percent disagreed in each case.



### Do you agree or disagree that...

	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
<b>Team work was encouraged</b>					
Strongly agree	45%	81%	65%	75%	<b>66%</b>
Agree	<b>55%</b>	19%	31%	25%	<b>31%</b>
Neutral	0%	0%	3%	0%	<b>2%</b>
Disagree	0%	0%	1%	0%	<b>&lt;1%</b>
Strongly disagree	0%	0%	0%	0%	<b>0%</b>
NA	0%	0%	1%	0%	<b>&lt;1%</b>
<b>The tutors ensured Health and Safety practices were followed</b>					
Strongly agree	45%	73%	57%	88%	<b>60%</b>
Agree	45%	23%	40%	13%	<b>36%</b>
Neutral	0%	0%	3%	0%	<b>2%</b>
Disagree	0%	4%	0%	0%	<b>&lt;1%</b>
Strongly disagree	0%	0%	0%	0%	<b>0%</b>
NA	<b>10%</b>	0%	1%	0%	<b>1%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>201</b>

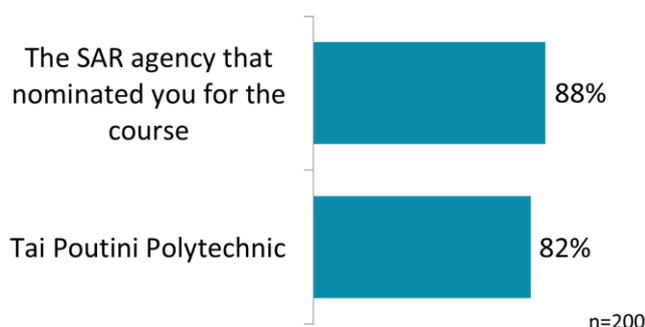
\*Caution: very small sample size for Surf Life Saving NZ, and "not stated" group is included in the Total.  
**Red** means the result is significantly below the national average, while **Blue** means above.

## 4.7 Administration

Overall respondents were positive about the administration of the last course they attended. Almost nine out of ten (88%) rated the administration by the SAR agency that nominated them as good or excellent. Only one percent rated it poor (from LandSAR). There were no significant variations between the SAR agencies.

The administration of the course by Tai Poutini Polytechnic was almost as high with four-fifths rating it good or excellent (82%). Three percent rated it as poor. Again there were no significant variations between the different SAR agencies.

### The administration of the course by... (rated excellent or good)



### How would you rate the administration of your last course by:

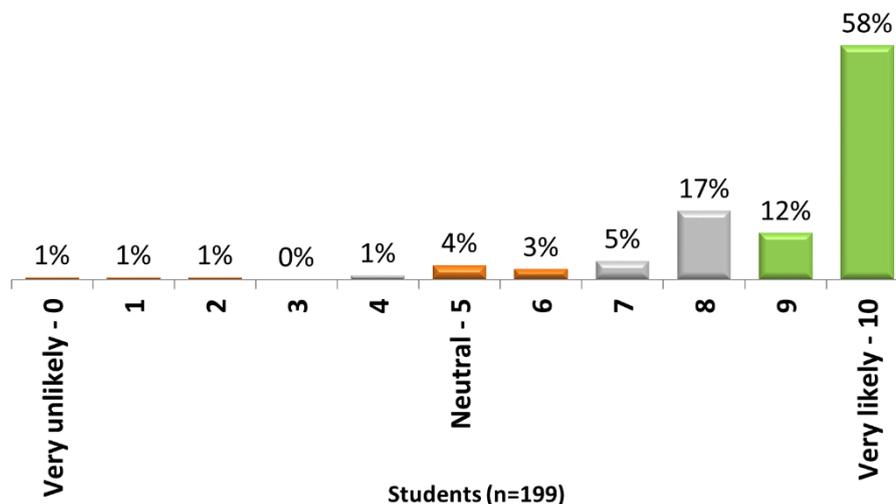
	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
<b>The SAR agency that nominated you for the course?</b>					
Excellent	45%	69%	52%	75%	<b>55%</b>
Good	40%	31%	33%	25%	<b>33%</b>
Fair	10%	0%	7%	0%	<b>6%</b>
Poor	0%	0%	1%	0%	<b>1%</b>
Very poor	0%	0%	0%	0%	<b>0%</b>
NA	5%	0%	8%	0%	<b>6%</b>
<b>Tai Poutini Polytechnic?</b>					
Excellent	30%	54%	41%	38%	<b>42%</b>
Good	50%	31%	40%	63%	<b>41%</b>
Fair	10%	12%	13%	0%	<b>12%</b>
Poor	5%	0%	3%	0%	<b>3%</b>
Very poor	0%	0%	1%	0%	<b>1%</b>
NA	5%	4%	3%	0%	<b>4%</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>200</b>

\*Caution: very small sample size for Surf Life Saving NZ, and "not stated" group is included in the Total. **Red** means the result is significantly below the national average, while **Blue** means above.

## 4.8 Recommendation and NPS

The Net Promoter Score (NPS) is a future sustainability indicator that measures loyalty by asking students how likely they would be to recommend the last course they did in 2015 to other SAR people, on an 11-point Likert scale.

**How likely are you to recommend the last course to other SAR people?**



Students who scored:

- **0 to 6** are labelled **Detractors** - who are somewhat dissatisfied with the course and not likely to recommend it, or may even spread negative comments.
- **7 or 8** are treated as **Passives** – satisfied, but not particularly motivated to offer a referral.
- **9 or 10** are the **Promoters** - who are highly likely to recommend the course to others.

### NPS score

To calculate the Net Promoter Score, the percentage of Detractors is subtracted from the percentage of Promoters. The overall NPS for this Student Survey is a very encouraging **+61**.

Those who attended courses nominated by the NZ Police were less likely than others to recommend their last course to other SAR people. The NPS given by the NZ Police group was slightly lower at **+30**, although this is still a very positive score with 50% regarded as promoters (who gave a 9 or 10 rating).

	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
Promoter	50%	81%	70%	75%	<b>70%</b>
Passive	30%	15%	22%	25%	<b>22%</b>
Detractor	20%	4%	8%	0%	<b>9%</b>
<b>NPS</b>	<b>+30</b>	<b>+77</b>	<b>+62</b>	<b>+75</b>	<b>+61</b>
<b>n=</b>	<b>20</b>	<b>26</b>	<b>143</b>	<b>8*</b>	<b>199</b>

\*Caution: very small sample size for Surf Life Saving NZ, and "not stated" group is included in the Total. **Red** means the result is significantly below the national average, while **Blue** means above.

**Length of involvement with SAR**

Those who have been operational for more than 10 years had a Net Promoter Score of +42, which is significantly lower than the average of +61. However, it is still very positive.

	Non-op.	Still prob.	Op. < 5 years	Op. 5-10 years	Op. 10 years+	TOTAL
Promoter	54%	90%	72%	74%	60%	<b>70%</b>
Passive	<b>46%</b>	10%	22%	19%	21%	<b>22%</b>
Detractor	0%	0%	6%	7%	<b>19%</b>	<b>9%</b>
<b>NPS</b>	<b>+54</b>	<b>+90</b>	<b>+66</b>	<b>+67</b>	<b>+42</b>	<b>+61</b>
<b>n=</b>	<b>13</b>	<b>10</b>	<b>83</b>	<b>43</b>	<b>48</b>	<b>199</b>

**Region**

Although the number responding is small when we look at the results by region, it appears as though the NPS for Waikato (+89) was significantly higher than average, while Eastern (+35) and Southern (+29) were lower.

	Northland	Auckland	Waikato	Bay of Plenty	Central	Eastern	Wellington	Tasman	Canterbury	Southern	TOTAL
Promoter	81%	55%	89%	76%	67%	53%	70%	80%	77%	<b>52%</b>	<b>70%</b>
Passive	19%	36%	11%	24%	17%	29%	22%	15%	23%	26%	<b>22%</b>
Detractor	0%	9%	0%	0%	17%	18%	9%	5%	0%	<b>23%</b>	<b>9%</b>
<b>NPS</b>	<b>+81</b>	<b>+45</b>	<b>+89</b>	<b>+76</b>	<b>+50</b>	<b>+35</b>	<b>+61</b>	<b>+75</b>	<b>+77</b>	<b>+29</b>	<b>+61</b>
<b>n=</b>	<b>16</b>	<b>11</b>	<b>18</b>	<b>21</b>	<b>18</b>	<b>17</b>	<b>23</b>	<b>20</b>	<b>22</b>	<b>31</b>	<b>199</b>

**Specific courses**

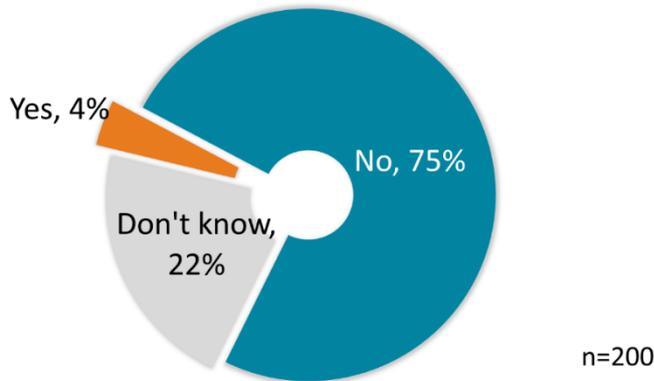
In relation to specific courses, the number answering is fairly low. However, it appears as though the people who last attended *Manage the initial Response – Marine* were less likely to recommend the course to others. Most of this group were Coastguard and tended to be older.

	Search Techniques	CIMS 4	Processing Wilderness Clue Sites	Searching the Suburban Environment	Manage the Initial Response – Marine	Tracking Core Skills	Manage the Initial Response – Land	Foundation Rope Rescue	Tracking in the Wilderness Environment
Promoter	77%	65%	72%	53%	50%	86%	69%	75%	73%
Passive	18%	30%	28%	35%	25%	14%	15%	8%	27%
Detractor	5%	5%	0%	12%	<b>25%</b>	0%	15%	17%	0%
<b>NPS</b>	<b>+73</b>	<b>+60</b>	<b>+72</b>	<b>+41</b>	<b>+25</b>	<b>+86</b>	<b>+54</b>	<b>+58</b>	<b>+73</b>
<b>n=</b>	<b>22</b>	<b>20</b>	<b>18</b>	<b>17</b>	<b>16</b>	<b>14</b>	<b>13</b>	<b>12</b>	<b>11</b>

## 4.9 Anything that wasn't covered?

Respondents were asked if there was anything they expected to learn that wasn't covered in the course. Three-quarters said "no", while a fifth were unsure.

### Was there anything you expected to learn that wasn't covered in the course?



Four percent commented on something they had expected to learn in the last course they did. Their comments are shown below.

#### Comments

Manage the Initial Response – Marine:

- > *Team work. (Coastguard)*
- > *Searching in lakes and rivers compared to the open sea. (Coastguard)*

Searching the Suburban Environment:

- > *Sectorisation skills. (LandSAR)*

SAR Managers:

- > *More Marine technical material. (NZ Police)*

4WD / ATV:

- > *More about recovery techniques. (LandSAR)*
- > *Extrication - only half of the equation taught - good until you get stuck but then most of the class would be in a world of hurt. (LandSAR)*

CIMS 4:

- > *I think that working with Coordinating Authority agencies (mainly Police) would have made the course more realistic from a Coastguard point of view, but overall it was a very good course. (Coastguard)*

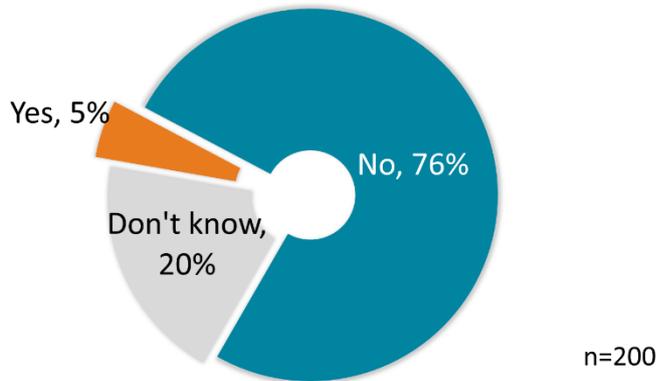
First Aid Refresher:

- > *As a refresher course it was okay but not for those that were doing a first course. (LandSAR)*

## 4.10 Anything that shouldn't be included?

The students were asked if there was anything in the course that should not have been included. Again, three-quarters said "no", and a fifth were unsure. Five percent commented – their comments are shown below. (Some people may have mentioned things they do want included, rather than excluded.)

### Was there anything in the course that should not have been included?



### Comments

4WD / ATV:

- > *Recovery methods, using winch & snatch blocks. (LandSAR)*

CIMS 4:

- > *Real scenarios, well thought through. (Coastguard)*

Foundation Rope Rescue:

- > *The course was over-run both days by several hours. (LandSAR)*

Manage the Initial Response – Marine:

- > *More marine chart plotting exercises. (NZ Police)*

First Aid Refresher:

- > *Keeping your paperwork for auditing and keeping this skill current. (LandSAR)*

Outdoor Risk Management:

- > *Course included SMS components that are not relevant to field teams. (LandSAR)*

SAR Managers:

- > *Visit to RCC building. (Surf Life Saving NZ)*

Searching the Suburban Environment:

- > *How to use a 2-way radio. (LandSAR)*

Searching the Suburban Environment:

- > *Quite a lot of stuff is covered in other courses (LPB, etc.). (LandSAR)*

Vertical Rope Rescue:

- > *Venue for the last day exercise to have more options for a Haul up a pitch. (LandSAR)*

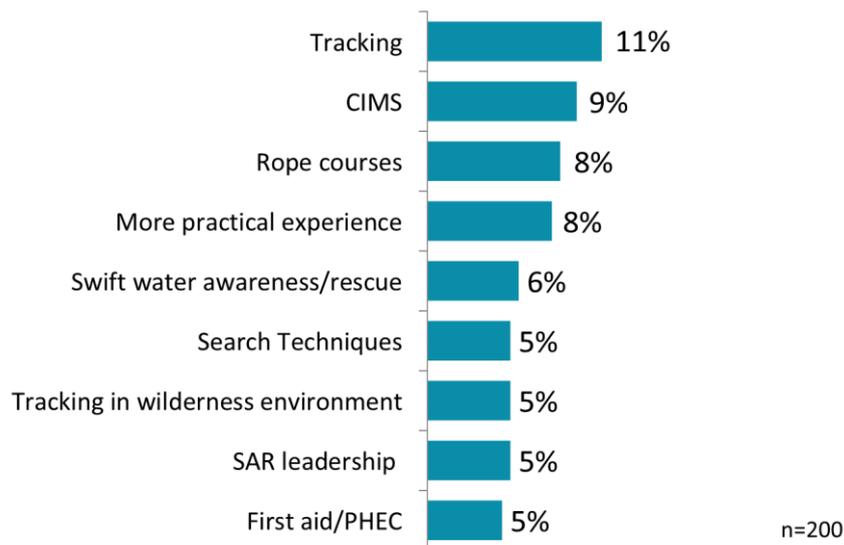
## 5. Next steps

### 5.1 SAR skills to learn next

Respondents were asked what SAR skills they might need to learn next. Just over half commented (55%), and the Coastguard group were less likely to comment (23%).

The comments have been grouped by theme below, and are shown by SAR agency in the next table. While overall 11% said they need to learn Tracking skills next, these were people from LandSAR (14%) and NZ Police (5%).

#### What other SAR skills do you need to learn next?



The **LandSAR** group were most interested in Tracking courses, CIMS, rope courses, swift water awareness, and more practical experience.

- > *Always good to revisit skills formally. Keep skills current. Also search management and use of technology.*
- > *Search and rescue tracking developed - locally they are doing a good job training us in the evenings. Also need GPS skills.*
- > *The hands-on stuff is key. Being in the bush and the environment. Highly rate the SAREX.*
- > *As a member of the operational tracking team for Rotorua I think the P.H.E.C course would be next on my list but apparently it's only available to South Island Alpine and to cave.*
- > *Really need to practice the skills learnt on this course. As so often happens, the rescue skills are a bit specialised, and so in spite of getting out in the field extremely frequently, the rescue skills are still pretty rusty.*
- > *I need SAR First Aid. I have level 2 through St Johns but am unsure if it can cross over. I'll attend any other training near to Gisborne, but the East Coast is a tad neglected of late.*
- > *Extended Search Planning, course keeps getting postponed. Very annoying when you apply for leave then cancel then reapply again.*

- > *More radio comms. Antenna erection, location and how to get the best out of the situation you are in. Repeater training setting up, and general updates on what is new and coming up, revision of the more important aspects of search techniques so as to just keep everyone on the ball.*
- > *Mountain safety, Mountain search, refresher navigation & search practice as an ongoing programme similar to first aid refresher courses.*
- > *Refresh advanced Search Planning - management methods for difficult and sustained operations.*

Several of the LandSAR people mentioned the need for more advanced courses, and advice.

- > *I have completed the curriculum for the pathway I am on so really need advice as to where to next.*
- > *I now have all the base modules - so will work on more advanced courses and continuous improvement.*

Surf Life Saving NZ people were interested in more practical experience:

- > *Being able to put the CIMS 2 skills into practice to gain confidence.*
- > *Maybe some swift water rescue.*
- > *Putting theory into practice.*
- > *There needs to be a currency built into the certification to keep the skill level at a high standard. One off courses don't capture skill regression and cater for those areas that are not as active as others so IMT experience is minimal. A refresher SAR Managers will help this.*

NZ Police were also interested in practical exercises:

- > *A practical based Leadership Course would be excellent. Something that puts people under pressure (not necessarily SAR) so that we can learn and grow as leaders.*
- > *Keep that good stuff going.*
- > *Refresher in a range of the new format courses offered.*
- > *SAR core courses, tracking, search techniques, urban search.*
- > *Too many to list.*

A couple of Coastguard people mentioned the importance of working together with other agencies:

- > *I want to further my expertise and work in conjunction with Coastguard and NZ Police if the pager goes.*
- > *Just keeping up to date with the latest marine SAR management best practices/multi agency responses.*

### What other SAR skills do you need to learn next?

	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
Nothing in particular	60%	<b>77%</b>	38%	50%	46%
<b>Please specify (shown below)</b>	<b>40%</b>	<b>23%</b>	<b>63%</b>	<b>50%</b>	<b>55%</b>
<b>Comments:</b>					
Tracking (core/further skills)	5%	-	14%	-	<b>11%</b>
CIMS (IMT/SAR management)	-	4%	10%	25%	<b>9%</b>
Rope courses (Foundation/ Vertical/more advanced)	-	4%	10%	-	<b>8%</b>
Need more experience/ practice	10%	4%	7%	25%	<b>8%</b>
Swift water awareness/rescue	-	-	7%	13%	<b>6%</b>
Search Techniques	5%	-	6%	-	<b>5%</b>
Tracking in wilderness environment	-	-	7%	-	<b>5%</b>
SAR leadership course/Team leader	5%	-	6%	-	<b>5%</b>
First aid/PHEC	5%	-	5%	-	<b>5%</b>
Processing Wilderness Clue Sites	-	-	6%	-	<b>4%</b>
Searching the Suburban Environment/urban rescue	5%	4%	3%	-	<b>4%</b>
Extended search Planning	5%	-	3%	-	<b>3%</b>
Manage the initial response	5%	-	3%	-	<b>3%</b>
Avalanche/snow skills/ mountain safety/alpine	-	-	3%	-	<b>2%</b>
Outdoor risk management/ bush skills	-	-	3%	-	<b>2%</b>
Use of technology/GPS/radio comms	-	-	3%	-	<b>2%</b>
Further advanced training	-	4%	1%	-	<b>2%</b>
4WD	-	-	1%	-	<b>1%</b>
Investigative interviewing	-	1%	-	-	<b>1%</b>
<i>Other (varied)</i>	10%	8%	2%	-	<b>4%</b>
<b>Total</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>200</b>

\*Caution: very small sample size

**Red** means the result is significantly below the national average, while **Blue** means above.

Other varied skills mentioned included:

- > *SAD and SAC. (Coastguard)*
- > *Assessor training. (LandSAR)*
- > *Need to go through assessment for most of the base level competencies. (LandSAR)*
- > *Stretcher carrying in a Cave. More advanced Vertical rope rescue skills. More practice. (LandSAR)*

## 5.2 The best thing about SAR training

Everyone was asked what the best thing is about training in search and rescue. A list of pre-coded options was available as well as the opportunity for respondents to add a comment.

Over four-fifths said the best thing about SAR training is being ready to assist in operations (88%), and learning new skills (82%). Around three-quarters thought the best thing was learning from experienced tutors (78%), or working in a team (74%), while two-thirds said it was gaining confidence (67%).

### What is the best thing about training in search and rescue?



### What is the best thing about training in search and rescue?

	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
Being ready to assist in operations	75%	85%	90%	88%	<b>88%</b>
Learning new skills	80%	85%	82%	88%	<b>82%</b>
Learning from experienced tutors	70%	77%	79%	88%	<b>78%</b>
Working in a team	65%	85%	74%	75%	<b>74%</b>
Gaining confidence	55%	81%	65%	<b>100%</b>	<b>67%</b>
Achieving qualifications	25%	38%	31%	38%	<b>31%</b>
<i>Other comments</i>	0%	12%	8%	0%	<b>7%</b>
Nothing in particular	-	-	-	-	-
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>198</b>

\*Caution: very small sample size

**Red** means the result is significantly below the national average, while **Blue** means above.

Seven percent added comments on the best thing about training in search and rescue.

**LandSAR** comments:

- > *Transferable skills from LandSAR to CaveSAR..*
- > *The tutors on both the courses I've attended have had good stories and scenarios to back up their teaching. They are people who know and use what they teach, are not simply following a curriculum.*
- > *Qualifications are SAR specific only.*
- > *More chance of actually being called out to help.*
- > *Meeting others from around the country and hearing what they have been doing.*
- > *I like the focus on practical rather than theoretical learning.*
- > *Helps with your own personal development and also assists with your role in your place of employment.*
- > *Compact course with lots of new info relevant to search missing.*
- > *Camaraderie.*
- > *Being able to utilize my prior training in a Search and Rescue role.*
- > *Application into life - work outside SAR.*

**Coastguard** comments:

- > *The extension of existing skills to be in a position to apply those skills to multiple situations and understanding better what others in the team have to deal with.*
- > *Making a positive difference to someone's bad day!*
- > *Being challenged and prepared so thoroughly that I am prepared to use CIMS in future real-life incidents.*

## 5.3 Comments and issues

All respondents were asked if they had any comments, or issues around SAR training courses they think need to be addressed. Just under a third made a comment (31%), these are summarised below. There were a variety of issues mentioned including the location and timing of courses, concerns around administration, and suggestions for course content and the need for more practice and refresher courses.

### Do you have any comments or issues around SAR training courses, that you think need to be addressed?

	NZ Police	Coast guard	Land SAR	Surf Life Saving NZ	TOTAL
No - nothing in particular	85%	77%	64%	88%	69%
Yes - specified below	15%	23%	36%	13%	31%
<b>Comments:</b>					
Location/timing issues	-	4%	9%	-	7%
Admin disorganisation/confusion	-	8%	6%	-	6%
Course content	10%	-	5%	-	5%
Courses too slow/long	-	-	3%	-	3%
Standards/assessment too slack	5%	-	3%	-	3%
Communication issues	-	4%	3%	-	3%
Positive feedback	-	-	3%	-	3%
Need practice/refreshers	-	4%	2%	13%	3%
Lack of results/too slow	-	4%	1%	-	2%
<b>n=</b>	<b>20</b>	<b>26</b>	<b>144</b>	<b>8*</b>	<b>198</b>

\*Caution: very small sample size

### LandSAR comments

Nine percent of LandSAR respondents mentioned issues around the location or timing of courses. Some would like to see more courses in their regions.

- > *Would like more of the core courses we require to be hosted by our group - I'm usually too busy and have a family so I can't take weekends away for training. (Waikato)*
- > *More training closer to our region, particularly the core skills for new starters. (Waikato)*
- > *I have struggled to find courses I can attend in the North Island. Most of this year's courses are refreshers and in the South Island so I have done no formal training (outside my group) this year. (Northland)*
- > *Availability of courses. We quite often have to travel long distances to attend courses. (Northland)*
- > *It would be better to hold courses in regions. That way we could get around courses being cancelled for not having the right numbers. It would mean some people*

*having to travel but that's ok and encourages networking. Often courses are cancelled due to low numbers so this approach would help. (Auckland)*

Others also want more frequent courses:

- > *Simply location and frequency of courses. I would participate more, if given more opportunity. (Canterbury)*
- > *Need to run them more often so it is easier to attend them. If you can't go on the date it is run, then you have to wait a long time for the next scheduled event. Yes, I know the problem of getting enough attendees is an issue to run them more often. (Wellington)*
- > *More course dates would be helpful. Often the courses aren't on a day off and there may not be another one until the following year. (Northland)*
- > *Timings of courses in the local areas. The basic courses that need to be completed seem to be spaced to far apart time wise. (Central)*

Six percent of the LandSAR people commented on administrative difficulties.

- > *TPP are very slack in the admin side of things. Have been enrolled in several certificates but TPP cannot tell me what I need to do to complete each one. I'm not the only one have this frustration. (Bay of Plenty)*

Some mentioned confusion around course locations and dates:

- > *1. Directions to the course location need to clear and accurate. 2. The host group needs to get preferential registration for the course they are hosting. 3. The expense reimbursement system needs a significant overhaul. (Bay of Plenty)*
- > *The only reason that I rated administration fair was that there was confusion around dates and even access to the site that caused us to be hours early and somewhat lost. Otherwise I was very impressed with the trainers and the course material and presentation. (Bay of Plenty)*
- > *Turned up to CIMS after travelling from out of town to venue. Stayed on site at venue as accommodation was available. No one to greet us at venue from LANDSAR and only met the tutors on Saturday morning. Was not told that breakfast was provided on the first morning of the course. By the end of the first day the tutors disappeared as rugby was more important than staying and being part of the night's activities as they were staying offsite from where LANDSAR members were staying. (Eastern)*

Several were annoyed by course cancellations and changes.

- > *Concern as part of a training committee with some courses - e.g. the ESP course has been on and off then on which means you book time off but then things change. (Eastern)*
- > *Sometimes courses are postponed or cancelled, which can be annoying as it affects others activities (usually weekends). (Tasman)*
- > *Course availability - courses been cancelled at late notice - need to wait a long time to get a course that you want to complete. (Tasman)*

A couple of paperwork concerns:

- > *ORM course too many forms to fill out that are similar to each other. Need different numbers or colours. (Northland)*

- > *The paperwork supplied by TPP on more than one occasion has not been up to scratch. (Southern)*

Five percent commented on the content of courses, or made suggestions.

- > *Some resources and prerequisites need to be addressed. (Bay of Plenty)*
- > *The courses are fantastic; it would be great to have additional pre and post work for those who are interested in researching further. (Canterbury)*
- > *SSE course should be a requirement for all search members. Lack of experience in a wilderness situation. (Eastern)*
- > *Courses need to be tailored more to individual group needs. (Eastern)*
- > *Smaller numbers and more practical exercises. (Southern)*
- > *The course provider could perhaps provide the hard copy relative to courses to the participants. Not all participants have ready access to printers. If it weren't for the availability/goodness of our police team who do our bulk printing..... (Southern)*

One mentioned a safety concern:

- > *Just the swift water, you're taught to lie back, float down legs up arms up, but this aims tailbone at bottom and at rocks. It's how to do it of course but I hit my tailbone twice, caused three to four months of pain and back pain and strained muscles, should have been made aware of this and told if you're in water deep enough to stand in you need to get up or this injury may occur. (Tasman)*

Some mentioned the courses can be too slow or too long:

- > *Very slow and time consuming for the skills taught. (Tasman)*
- > *The enthusiasm of the staff & volunteers is such that time management is imperative, as a single parent with family responsibilities to have a weekend course take 30+ hours was ridiculous, it should be shortened or staff split to manage learning better. (Southern)*
- > *Sometimes courses are too long for the content - almost like they are extended to 2 days when sometimes 1.5 days would be plenty if not such long breaks etc. Sometimes there is a lot of just waiting around. (Southern)*
- > *Some of the SAR courses are too long and I believe that most I have done could be compressed into one day with more pre-course material. (Northland)*
- > *Some courses don't need to be two days if more pre-course work could be completed. (Waikato)*

Others thought standards or assessment were too slack:

- > *The 2-way radio part of the course was just ticked off as being competent but there was no actual assessment. This is not good enough. (Canterbury)*
- > *Need to be better aligned with actual field work and the competencies. Less of tutors babying people through the assessment forms. (Northland)*
- > *In the nearly 10 yrs I've been involved, the training standards have dropped significantly. To the point I am reluctant to do any unless I know that the course will be worthwhile. (Southern)*

- > *I have attended six TPP SAR courses in the last three years. Some have been good or very good but 1 or 2 have been poor or very poor. Tutor quality is variable and the content seems lightweight at times. I have no allegiance to any training provider but, from what I have experienced, TPP performance is not consistently where it needs to be. (Southern)*

#### Several LandSAR people commented on communication issues

- > *It would be good to have a 12-month calendar rather than an annual calendar. Under the present system we cannot plan next year until the 2017 calendar comes out. In January you can see 11 months ahead but in December you can't even see one month ahead. This makes it very difficult to plan. (Auckland)*
- > *It needs to be made clear at the beginning of the course just what needs to be written down as you go, and to what degree you need to just listen to the lecture. Also just where in the course material you are - at times you are going back and forth in that material. Remember that a lecture situation is foreign to many of us. (Eastern)*
- > *Having to fill out all the paperwork for every course attended. Can they do a brief electronic version prior to commencement of the course? Having an electronic profile that we can update would be great. (Eastern)*

#### Some positive feedback:

- > *I would like to see the SARINZ come to terms with losing the training contract to TPP. I've done both SARINZ and TPP delivered SAR courses and find no issue with quality of delivery under TPP. If anything, there seems to be more time spent on acquiring and demonstrating practical skills. (Tasman)*
- > *Well run and relevant. (Central)*
- > *Tutors are very good. (Tasman)*
- > *Great to see new courses coming along. (Southern)*

#### Several want to see more practice and refreshers:

- > *Yep, regular practice would be an amazing enhancement of the courses. (Tasman)*
- > *Follow up training refreshers are essential. (Southern)*
- > *Continuing refresher courses. (Southern)*

#### A couple mentioned a long wait for results:

- > *Our results need to be sent through to LandSAR NZ National Support Office asap following notification of passing, as this needs to be uploaded onto our profile. At the moment there seems to be a very long wait between getting our results and LandSAR NZ being notified, if at all in some cases. (Central)*
- > *Still haven't received confirmation of pass/not pass. (Wellington)*

## Coastguard comments

- > *You don't know what you don't know and the more exposure you get allows you to anticipate and be alert to possible developments that could eventuate. Appropriate anticipation helps with resourcing, safety and a sound outcome.*

### A few criticisms:

- > *We need to sort out LSAR and their use of multiple trainers. This has caused confusion and at times contradiction.*
- > *Projectors at the Police college were old and very difficult to view...*
- > *I did have a problem receiving my certificates, the first lot apparently got lost in the system and after several follow ups new ones were issued, then the originals arrived about a year later.*

### A couple of suggestions:

- > *Keep us informed of relevant subsequent legal or process changes. Share learnings from recent SAR exercises or real events.*
- > *I don't think the course [MIR – Marine] was long enough, it was far more beneficial to me than the SAR Managers course and only three days. I would have liked two more days or at least one day more to practice what we learnt in detail. I am not a good 'group' learner, all of the activities were group based. It would be good to have a mixture so that we could really practice what we learnt.*

## Surf Life Saving comment

- > *There needs to be a currency built into the certification to keep the skill level at a high standard. One-off courses don't capture skill regression and cater for those areas that are not as active as others so IMT experience is minimal. A refresher in all of the SAR CIMS / IMT related courses will help this*

## NZ Police comments

- > *The marine course was helpful to get a basic knowledge however, prior knowledge of chart plotting would have been good. Having no prior knowledge made this course difficult and retention of the crash course on chart plotting and tide diamonds is near impossible without practising this daily.*
- > *I feel that sometimes Tai Poutini is more concerned about billing NZSAR than providing education.*
- > *I believe when the training is being delivered to a specific team (e.g. Everyone on our course was Police SAR) that the examples given would be beneficial to be of Police incidences as they give a clearer indication as to how we would do something. Not so much in this course but when I attended the CIMS4 course which was taken by two civilians both ex council workers I found a lot of their examples were quite irrelevant to the work that we do. Having had feedback from others who have since done CIMS4 with Police instructors they have found the course far more beneficial. I understand that these courses are about applying a process as opposed to the information of the job itself but it is easier to learn that process when it is something that you can relate to.*

# NZSAR

New Zealand Search  
and Rescue



## NZSAR Consultative Committee Meeting

25 August 2016



# 1. Welcome

- Tinaka Mearns – DOC
- Jonty Mills – WSNZ

# 2. Apologies

- Paul Turner – NZFS
- Jeff Sayer – AREC
- James Lamb – MOC
- David Waters – Ambulance NZ

*Please fill out the attendance register*

# 3. Minutes

Minutes of the meeting 24 May 2016 to be approved



## 4. Matters Arising (10 April)

### Item 7

**Risk Matrix.** The Consultative Committee **referred** the paper to the NZSAR Council for consideration, and asked the Council to **note** the Consultative Committee's comments on the paper.

*Secretariat*

*Complete*

### Item 8

**Coronial Investigation – Fiona Wills.** The Consultative Committee **endorsed** the proposed method to review the issues of concern identified by Mr Gordon, and **referred** this to the NZSAR Council for approval.

The Secretariat will keep the Wills family apprised of the review.

*Secretariat*

*Agenda item 9*



# 4. Matters Arising (10 April)

## Item 12

**Arrangements for the 2017-2020 cycle.** The Committee **supported** the proposed funding bids, with caveats about the establishment of a contestable fund.

*Secretariat*

*Agenda item 8*

# 5. SLA Monitoring Report

Outputs	Coastguard	LandSAR	AREC	SLSNZ
Provision of expert services to CA				
Provision of expert advice to CA				
Provision of IM Team Members				
Summary of non-SAR activity				
Up to date details available for CA				
Participation in joint SAREX				
Attendance at Forums				
Nominations for NZSAR Awards				



# 5. SLA Monitoring Report

Summary for the 1 April – 30 June 2016 Quarter, as extracted from the SAR Data Store.

Measures	Police	RCCNZ	Totals
<b>SAROPs</b>	332	248	580
<b>Lives Saved</b>	22	9	<b>31</b>
<b>People Rescued</b>	120	51	171
<b>People Assisted</b>	151	45	196
<b>LandSAR Taskings</b>	97	8	112
<b>Coastguard Taskings</b>	47	1	48
<b>SLSNZ Taskings</b>	11	0	11
<b>AREC Taskings</b>	7	1	8
<b>Performance of SLA Partners</b>	<b>Satisfactory</b>	<b>Satisfactory</b>	<b>Satisfactory</b>



# 5. SLA Monitoring Report

## Summary for the 1 April - 30 June 2016 Quarter

Reporting requirements for the Quarter have been met by all of the SLA partners

Outputs	Coastguard	LandSAR	AREC	SLSNZ	Totals
SAROPs Attended	67	108	14	6	--
Volunteers Involved	356	956	30	21	<b>1,363</b>
Volunteer Hours	726	6,991	144	189	<b>8,050</b>

2,212 Coastguard volunteers responded to 334 non-SAR related calls for assistance during the quarter.



# 5. SLA Monitoring Report

## AREC

- Have no issues or updates to report for the quarter.

## SLSNZ

- Work is progressing on the various communications projects – details can be found in the sector update.
- The Clubs' emergency after hours call out squads (ECOS) have stepped up their training over the winter months, along with training for new IRB crews. SLS have been involved in inter-agency exercises in Napier, Western Bay of Plenty, and Waikato.
- SLSNZ is undertaking quantitative research on a number of prominent rips around the country – agenda item 7a.
- SLSNZ is rolling out small scale trials for Water Rescue Craft (WRC), most likely in Wellington, Christchurch, and Tauranga.



# 5. SLA Monitoring Report

## LandSAR

- During the quarter LandSAR has focussed on:
  - Completion and audit of annual accounts; production of 2015/16 Annual Report.
  - Producing the 2016/17 Business Plan and Budget; reviewing the LandSAR Strategic Roadmap.
  - Continued the development and refinement of the LandSAR Safety Management System, and workshops to accredit more LandSAR Competency Assessors.
  - The LandSAR Conference and AGM was held at the end of July.

## Coastguard

- Planning for the VHF change project is progressing well, with the project being ahead of schedule and significantly under budget.
- Coastguard has made a submission for the SLA funding review.
- The Coastguard Annual Conference is scheduled for 15-16 October at Wairakei.
- The new Coastguard Rescue Vessel for Whangaroa is nearing completion and due to start seas trials.

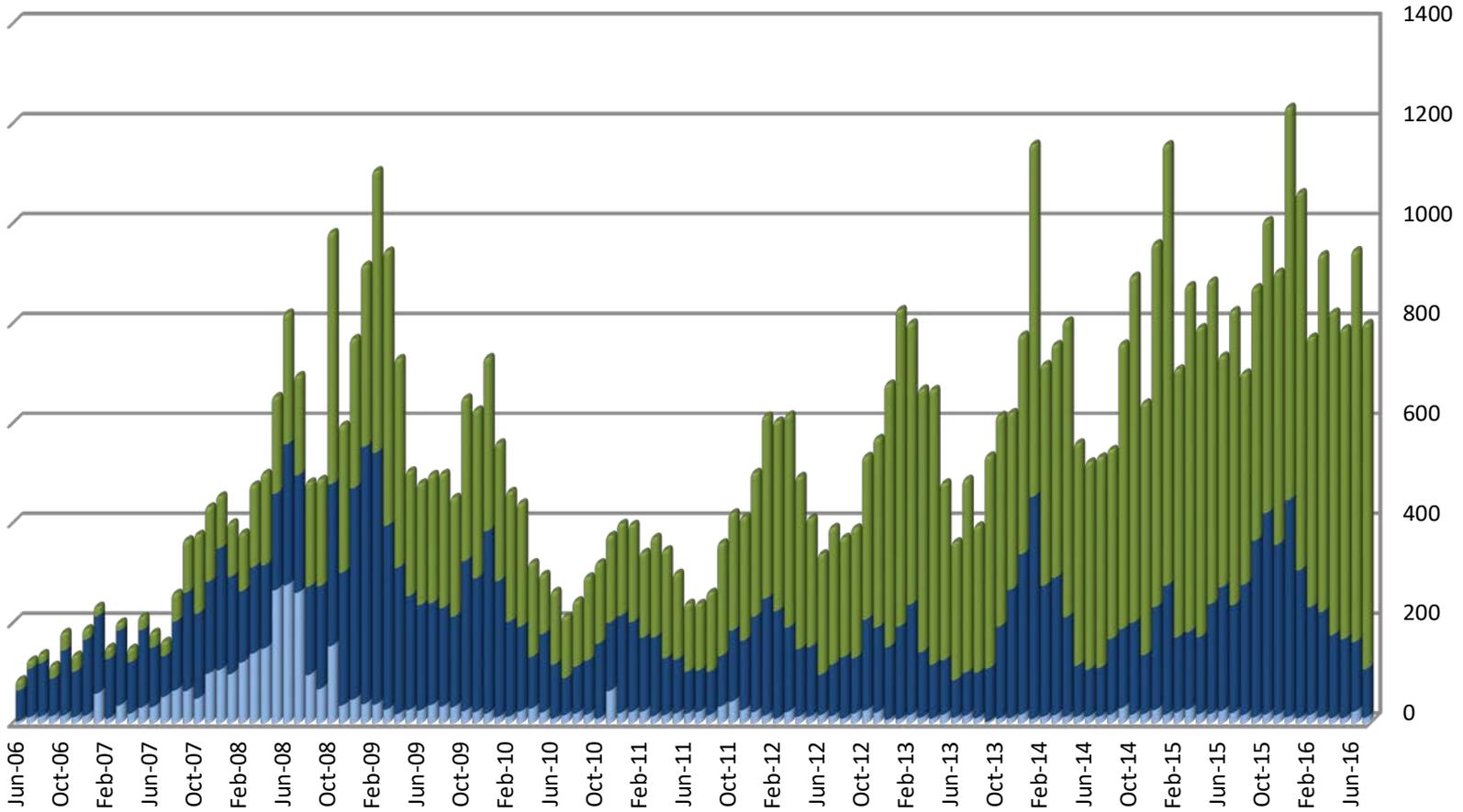


# 5. SLA Monitoring Report

## MSC (Avalanche Advisory) – reports for June & July 2016

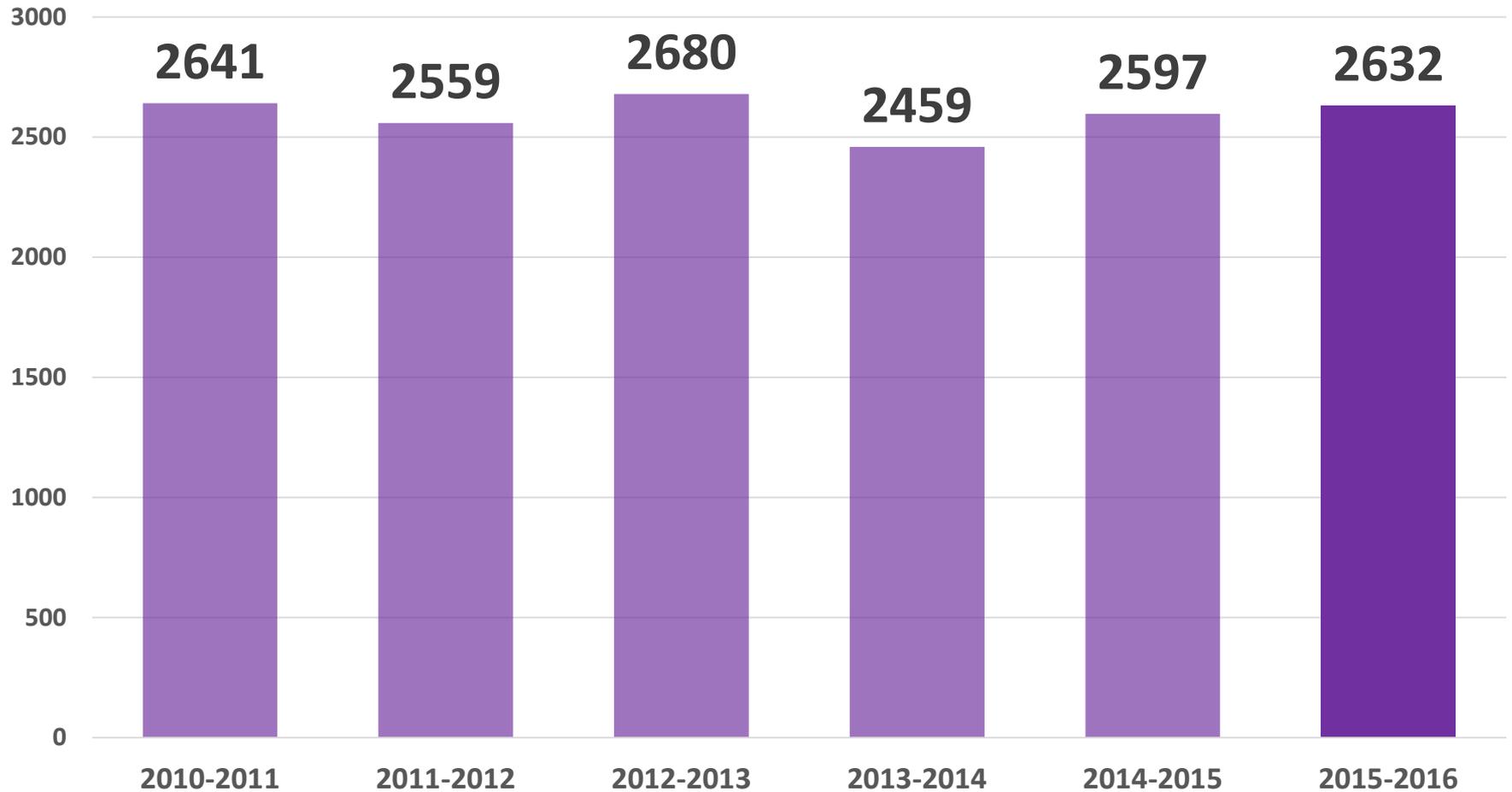
- 79 avalanche advisories posted in June
- 303 avalanche advisories posted in July
- MSC Avalanche Forecasters workshop was held 22-23 June in Methven
- There were three reported avalanche incidents in July, all in out of bounds areas of ski fields.
- Mountain Safety Council has not yet provided details for the public information signage that the avalanche advisory is supported by NZSAR and DOC.

# 5. Beacon Registrations (63,516)



# 6. SAR Activity 2015/16

## SAR Incidents



## 6. SAR Activity 2015/16

# 195 Lives Saved

*36 lives were saved in the rescue of the crew from the F/V Pacific Glory on 8 October 2015*

# 730 People Rescued

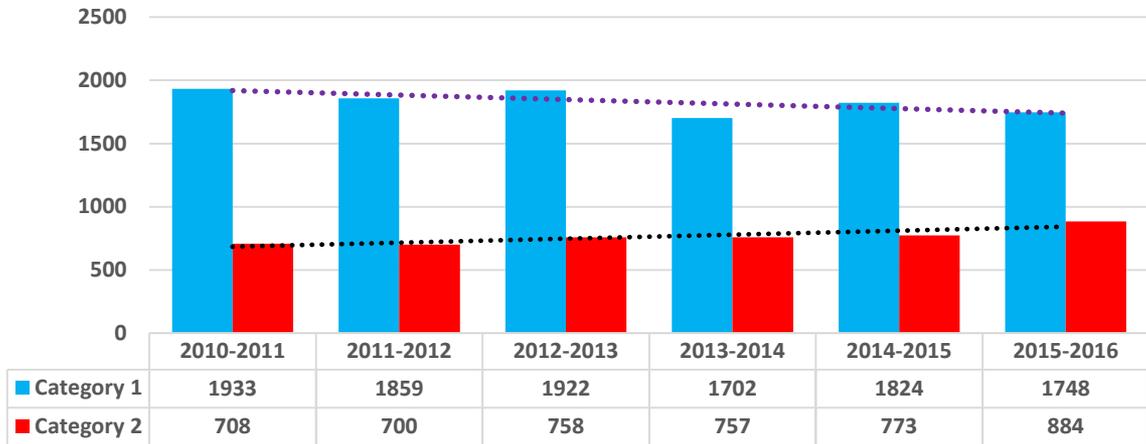
# 1,014 People Assisted

*125 people were assisted after the Waimarie got into difficulty on the Whanganui River on 26 Nov 2015*



# 6. SAR Activity 2015/16

SAR by Category

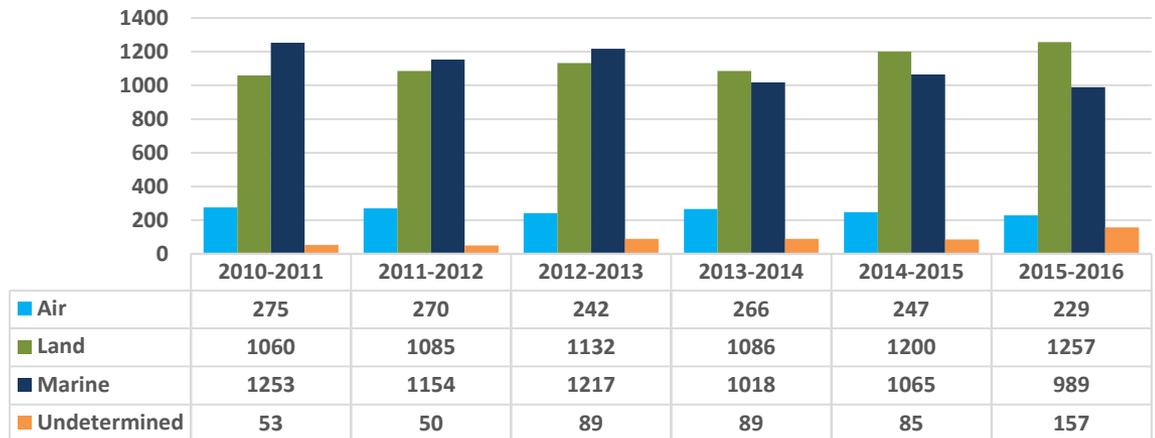


66% of incidents were Cat 1

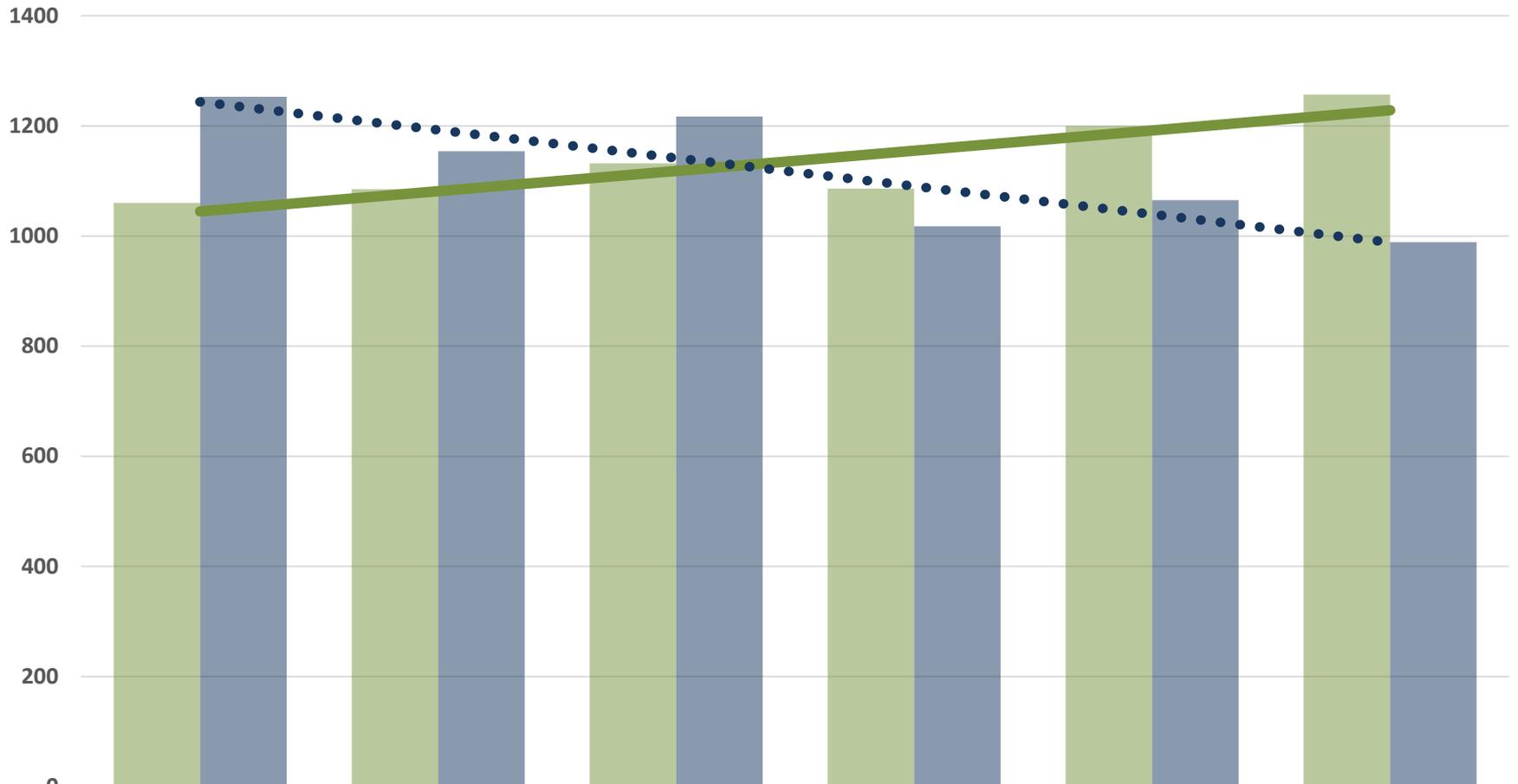
Slight trend of increasing Cat 2, and decreasing Cat 1 over the last 6 years

There was an 85% increase in undetermined alerts last year – likely from the MEOSAR system being used in test mode.

SAR Incidents by Environment



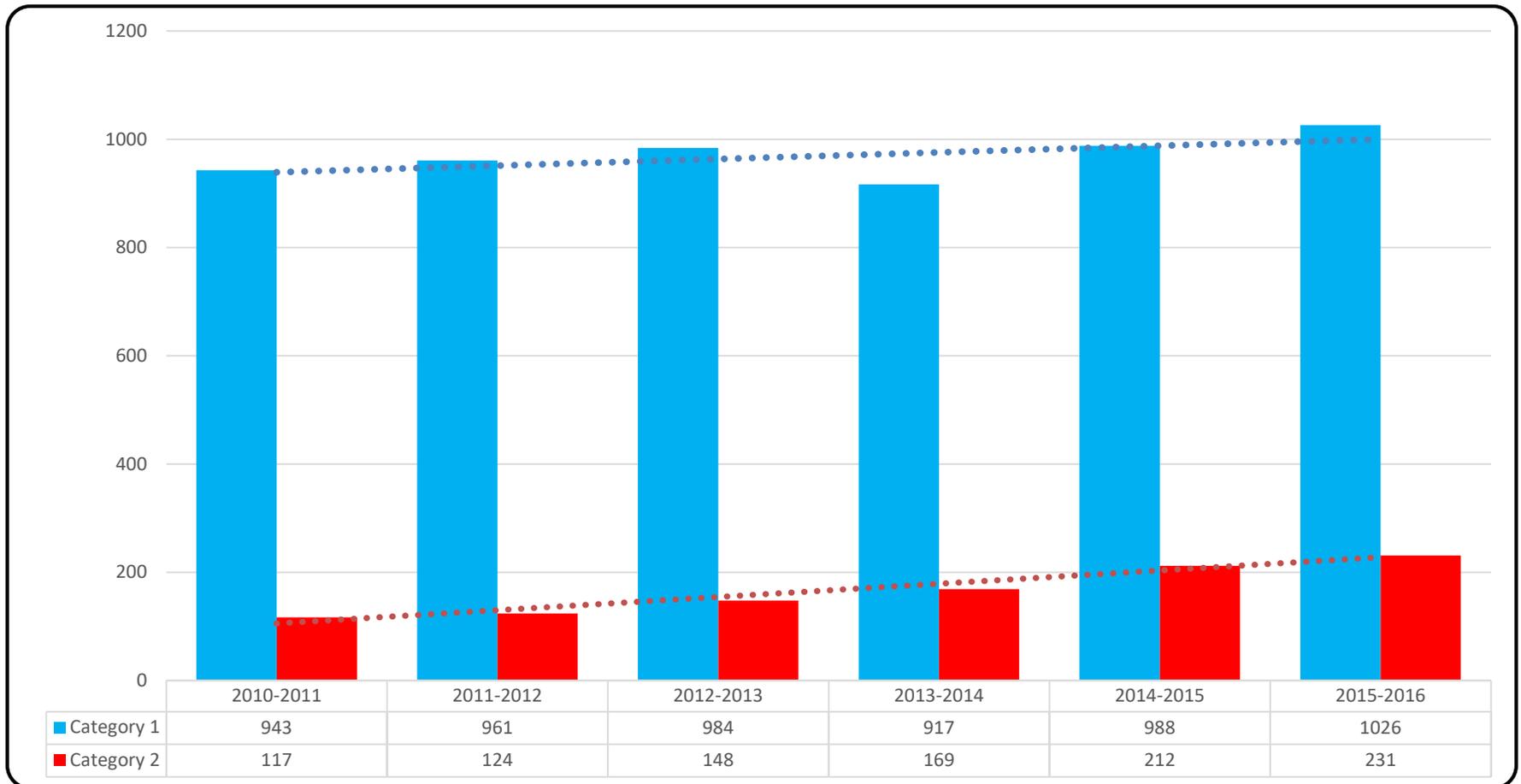
# Trends in Land & Marine Incidents



	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Land	1060	1085	1132	1086	1200	1257
Marine	1253	1154	1217	1018	1065	989

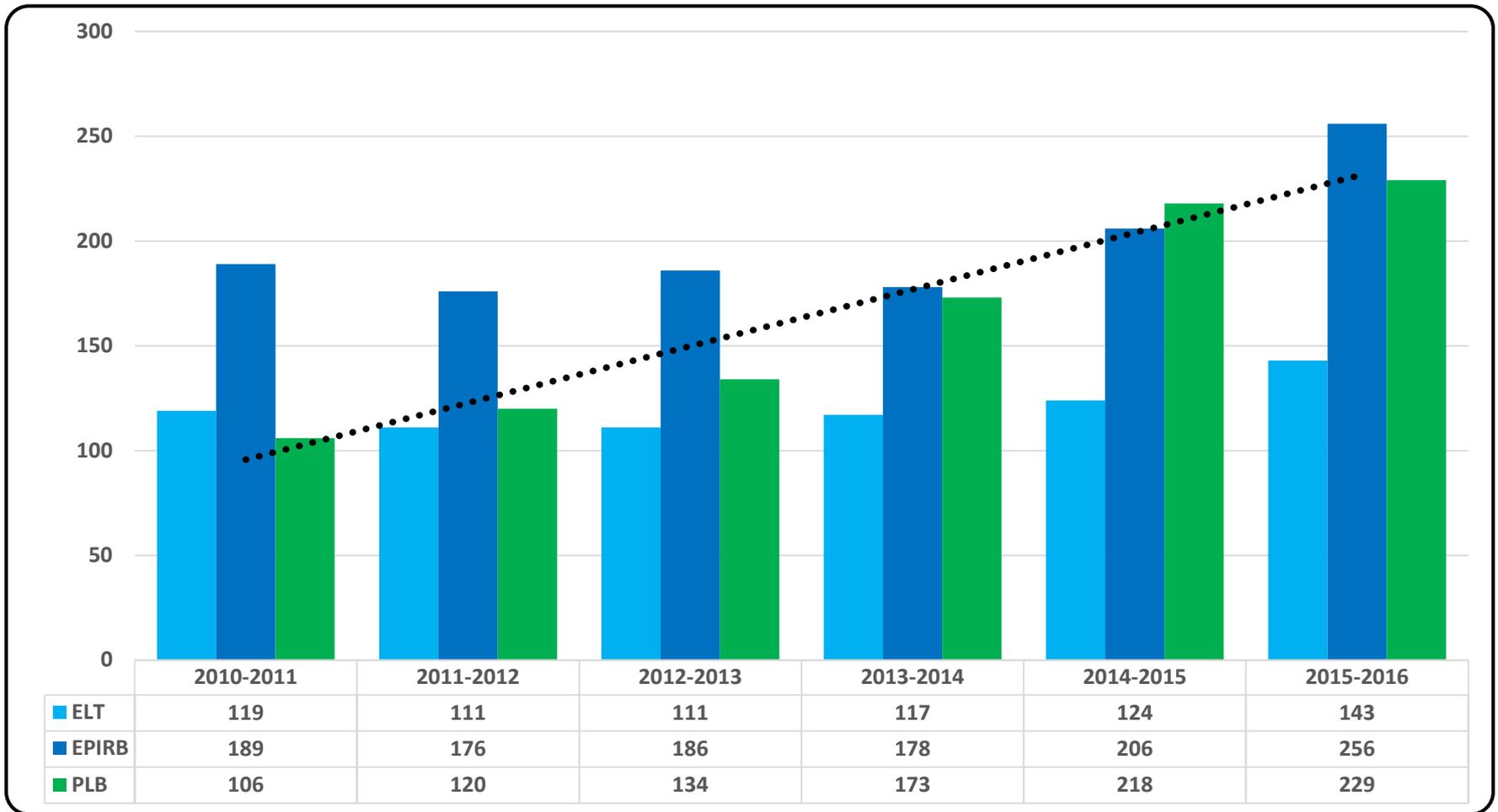


# Land Incidents – by Category



Both Cat 1 & Cat 2 have increasing trend lines for land incidents – so not just PLBs only...

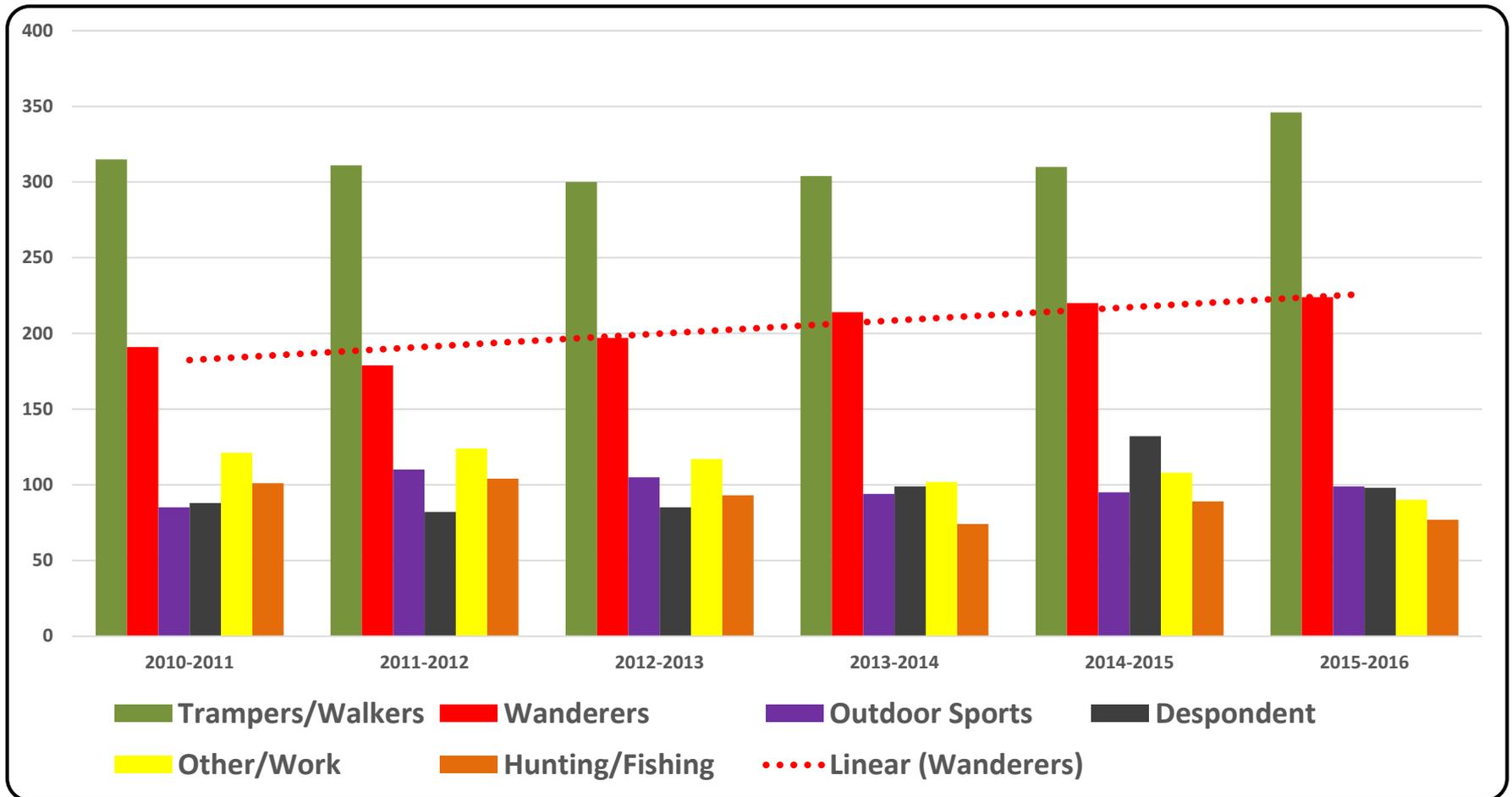
# Beacon Types



The trend line shows the increase in PLB alerts over the last six years



# Cat 1 Land Incidents – by Subject Behaviour



For Category 1 land incidents there is an upward trend in the number of incidents involving wanderers (dementia, intellectually impaired, missing child)



# 7. Sector Update



Paper distributed



# 7a. SLSNZ work on rips

Placeholder for slides from SLSNZ to be inserted.



## 8 a. SAR Doctrine (Manual?)

- Funding requested to establish agreed New Zealand SAR doctrine (manual?)
- Will require deep engagement
- 2 yr project to establish
- Is a great opportunity
- Need to get it right
- Be with us 4eva – Will need processes to update/change etc.



# 8 b. SAR System Assessment

- Intent - system level assurance / verification
- SAR assessments
  - SAR Need / SAR Requirements
  - Capacity (in all senses)
  - Prevention
  - Linkages/relationships
  - Feedback loop
- Multi agency H&S integration / performance



# 8 b. SAR System Assessment

- SAREXs
  - Improved support to Police led exercises
  - Possible IMTEX programme/assessment
  - Mass Rescue Exercises
  - Major Mass Rescue Exercise 2019
- Evaluation



## 8c. SAR Sector Data Store

- Stage 1 – Establish unified data store (current data)
- Stage 2 – Data standard (nearing completion)
- Stage 3 – Scope, requirement, & RFP
- Stage 4 – Let contract & Build:
  - NEW unified data store
  - Data entry systems
  - Business Intelligence system
  - Public interface
- Police/RCCNZ/NZSAR + CG? / LSAR? / SLSNZ? / AREC? / DOC? / Helo? / etc?



# 9. Coronial Investigation – Fiona Wills

**Coroner:** *I direct that a copy of my findings be forwarded to both the NZSAR Council and the NZSAR Consultative Committee for them to review the issues of concern identified by Mr Gordon and consider whether changes to policies and procedures are necessary.*

- *Have Coronial findings and file*
- **ALSO** received a separate document from SARINZ following the coronial inquiry including similar material + recommendations etc.
- No other submitter had second opportunity.
- In scope?





# 9. Coronial Investigation – Fiona Wills

## Process to date:

1. Document collation. Undertaken by an independent person. ID'ed and collated issues. Correlated issues against other evidence. Presented material in organised way for technical comment.
2. Consideration of identified issues by person with SAR expertise. Identification of existing documentation relevant to each issue.





# 9. Coronial Investigation – Fiona Wills

## SAR Specialist Summary of the Issues:

Documentation, processes, and training exist for most of the raised issues.

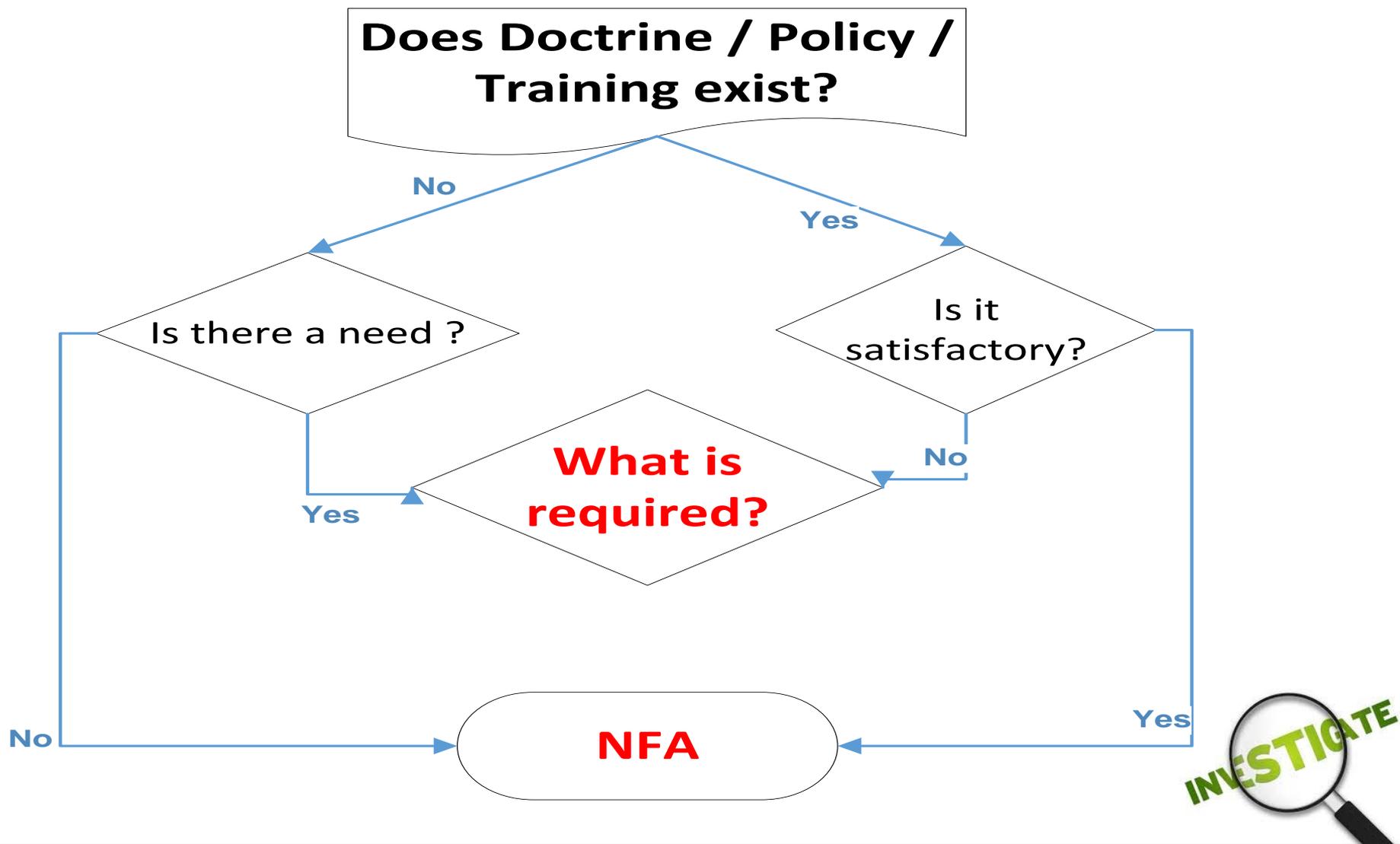
Two areas identified where no (or inadequate)

Documentation, processes, and training exist :

1. File Management. Collation and compilation of operation documents.
2. Family Liaison Role. Inclusion of this in courses below SAR Managers.



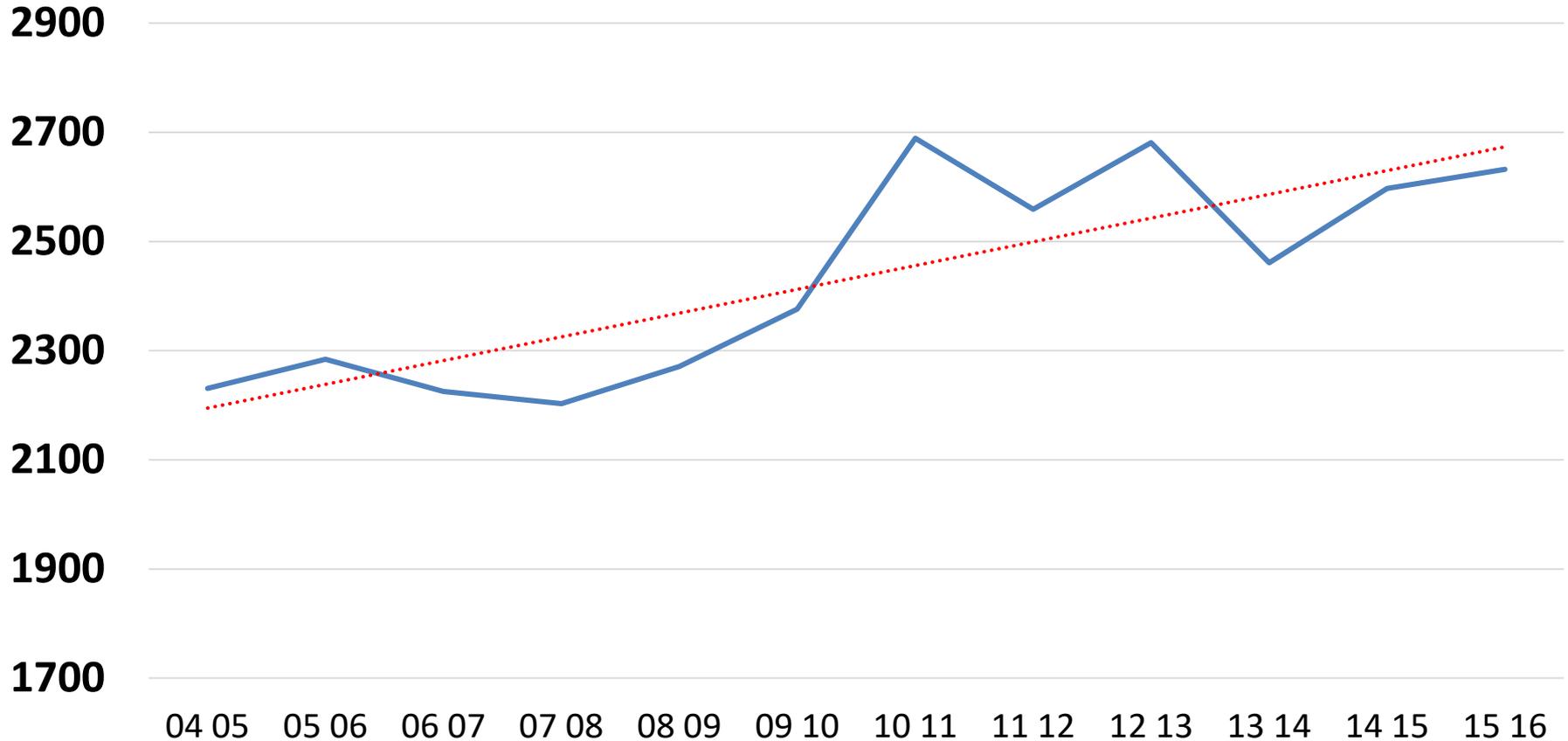
# NZSAR Consultative Committee Consideration for each of the nine issues:





# 10. NZ Inc Recreation Framework

## SAR Incidents (All Types). 11 Year Trend



# 10. NZ Inc Recreation Framework

If resources are made available, intend to play a role with SAR prevention system support

- Support inter-agency collaboration
- Provide SAR Information / Intelligence to create better prevention programmes.
- Measurement of prevention effect
- Fill gaps



# 11. Aviation Engagement Framework

Martin Jenkins initial thinking...

- Three core issues:
  - Inconsistent approaches to SAROPs
  - Gaps in Assurance
  - Areas where relationships are ineffective



# 11. Aviation Engagement Framework

Key elements of the framework will include:

- Consistent **guidelines for coordinating authorities on their roles, responsibilities and approaches to SAROPs** (including for collaboration, decision-making, relationship and contract management) – – i.e. statement of ‘what good looks like’ for the coordinating authorities
- Consistent **guidelines for aviation providers for safe and effective SAR operation** – to achieve harmonisation of safe, effective practices – i.e. statement of ‘what good looks like’ for providers
- **Coordination and support from NZSAR** for implementing guidelines
- **Competency framework for SAR aviation providers** that outlines expected competencies for effective and safe SAR responses
- **Training framework** for ensuring capability is developed and maintained



# 11. Aviation Engagement Framework

- **Database of SAR capability** throughout New Zealand (providers, capabilities, equipment, knowledge)
- Consistently applied **agreements/ memoranda of understanding between all commissioning and provider organisations**
- **Enhanced reporting** from coordinating authorities to NZSAR on state of preparedness and activity
- Mechanisms for **monitoring and evaluating the performance of coordinating authorities and aviation providers**, and responding to feedback



# 11. Aviation Engagement Framework

- **Collaborative working arrangements between the key bodies** of NZSAR, Coordinating Authorities and Aviation Providers. This means clearly defined roles for each in the framework, and arrangements for working together for the sustainable and safe delivery of SAR services wherever these are needed in New Zealand.
- ***Coordination of focus and activity amongst NZSAR, and the two regulators with an interest in health and safety – WorkSafe NZ and the Civil Aviation Authority***



# 11. Aviation Engagement Framework

## Roles:

- **NZSAR** – Stewardship, oversight, strategy and support.
- **Coord Authority** – Coord SAROPs, task most appropriate assets. Monitor and evaluate performance.
- **Aviation Provider** – provide timely, effective and safe response. Inform, advise and report



# 12. Land Communications Framework

- Establish a technical working group with participants from key SAR agencies.
- Implement a common VHF channel plan for all radios to be programmed with nationally consistent channel names.
- Agree a common handheld radio purchase strategy that encourages dual mode (analogue and digital) capability.
- Agree the use of the Police's VHF network where it is available, and arrange the purchase of new digital radios for SAR agency access.



# 12. Land Communications Framework

- Investigate use of the AREC DMR network where VHF becomes available and the Police's digital network is unavailable.
- Develop and implement a maintenance program for all radios, especially the non-Police owned fixed VHF radio stations.
- Engage with the All of Government Radio Network (WGRN) programme to ensure the continued availability of HF and VHF radio networks for ongoing SAR training and operations.
- Engage with NZDF to plan the future development of their HF radio infrastructure to support SAR operations and training requirements.



# 13. 2016/17 NSSP

Workshops & Seminars	SAR Training
<ul style="list-style-type: none"> <li>Health &amp; Safety Seminar</li> </ul>	<ul style="list-style-type: none"> <li>Training Support and Advice</li> </ul>
<ul style="list-style-type: none"> <li>SAR Case Study Seminar / Police Planning mtg</li> </ul>	<ul style="list-style-type: none"> <li>Air Observer Training &amp; Training material</li> </ul>
<ul style="list-style-type: none"> <li>SPC SAR Meeting support</li> </ul>	<ul style="list-style-type: none"> <li>SAR(ACE) Training Survey</li> </ul>
SAR Information and IT	<ul style="list-style-type: none"> <li>Evaluation Training</li> </ul>
<ul style="list-style-type: none"> <li>Maintain SARNET, Website, START, RDB etc</li> </ul>	Prevention
<ul style="list-style-type: none"> <li>Update existing SAR Data Store</li> </ul>	<ul style="list-style-type: none"> <li>AdventureSmart Communications</li> </ul>
<ul style="list-style-type: none"> <li>Data Store maintenance and operation</li> </ul>	<ul style="list-style-type: none"> <li>Recreational Safety Partnership</li> </ul>
<ul style="list-style-type: none"> <li>SAR Data Standard (Continues)</li> </ul>	<ul style="list-style-type: none"> <li>Visitor Intentions</li> </ul>
SAR Documentation	<ul style="list-style-type: none"> <li>Safety Codes, printing and advertising</li> </ul>
<ul style="list-style-type: none"> <li>SAR Forms and Guidelines</li> </ul>	SAR Research
<ul style="list-style-type: none"> <li>Operational Framework</li> </ul>	<ul style="list-style-type: none"> <li>Fatality Analysis</li> </ul>
<ul style="list-style-type: none"> <li>NZSAR Strategy</li> </ul>	<ul style="list-style-type: none"> <li>Wills Inquest</li> </ul>
Exercises	<ul style="list-style-type: none"> <li>SAR Demand and Supply Study – Marine</li> </ul>
<ul style="list-style-type: none"> <li>Support Police SAREXs</li> </ul>	<ul style="list-style-type: none"> <li>SAR Demand and Supply study – Land</li> </ul>
<ul style="list-style-type: none"> <li>MRO SAREXs</li> </ul>	<ul style="list-style-type: none"> <li>Mass Rescue Study</li> </ul>
Secretariat	<ul style="list-style-type: none"> <li>SAR Communications – Land</li> </ul>
<ul style="list-style-type: none"> <li>Communications and publications</li> </ul>	<ul style="list-style-type: none"> <li>SAR Performance Measurement</li> </ul>
<ul style="list-style-type: none"> <li>NZSAR Awards</li> </ul>	<ul style="list-style-type: none"> <li>SAR Aviation Engagement Framework</li> </ul>
<ul style="list-style-type: none"> <li>Travel, meetings, advice, administration etc</li> </ul>	
<ul style="list-style-type: none"> <li>Advice</li> </ul>	

## 13. NSSP 2016/17

- a. SAR Case Study Workshop
- b. Health & Safety Seminar
  - 17-18 September, WGTN
- c. Rauora II MRO Exercises
  - 5 October, Northland
  - 28 October, Bay of Plenty
  - 14/15 Feb, Tasman
  - 15/22 March, Southern
- d. SAR Data Standard



# 14. Technology in SAR

## a. IMT IT Project

Consultative Committee guidance on the scope and direction for Objectives 4b. and 4c. Options:

1. Limit the analysis to SARTrack only
2. Identification of other systems, with a high level analysis of other systems, and focus on SARTrack.
3. Identification of other systems and equal in-depth analysis of all systems.

## b. Mobile Phone Locating

Quite complex. Will need to undertake a detailed study



# 15. SAR (ACE) Training Update

As at 30 April	2015	2016
Number of courses planned for year	99	101
Number of courses to date	64	53
Number of courses cancelled (YTD)	19	16
Total number participants attending	881	709
Average number attending per course	13.7	13.4
Total EFTs used to date (max 155)	107.3	80.22



# 15. SAR(ACE) Training



## a. Student Survey

- 43% response rate overall (n=203)
- 97% rated subject knowledge of tutors as Excellent or Good
- 95% agreed that the course taught skills relevant to SAR tasks
- Very strong score to recommend the course (NPS score 64)
- Learning materials provided and rated Excellent or Good:
  - Before the course 70%
  - During the course 83%
  - To support Post-course 46%
- 65% rated the suitability of the venue as Excellent
- 97% considered that Teamwork was encouraged



# 16. General Business

## a. Next Meeting – Combined workshop

Aim to workshop:

- Agreed SAR Sector Strategy
- Agreed Values
- Agreed Roadmap



# NZSAR

New Zealand Search  
and Rescue



## Next Meeting:

- Tuesday 22 November – **Combined Workshop**

**NZSAR – 1 The Boulevard, Harbour Quays**

**ENDS**

