NZSAR Data Standard

Master Version: used for Project SARdonyx

Version 4-2
03 December 2018

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1 Introduction

The purpose of this document (the NZSAR Data Standard) is to define a set of data standards for New Zealand Search and Rescue (NZSAR) stakeholders.

1.1 Data Standards

Data standards consist of prescriptions and guidelines that regulate the entry and maintenance of data. They are documented agreements that standardise both the format and meaning of data. Representation, format, definition, use, and management of data are all included in a data standard.

The benefits of data standards include:

- Improved efficiency by making it easier to capture data.
- Improved efficiency by making it easier to share data.
- Reduced misunderstanding about the meaning of data.
- Lower long term costs of storing, managing, sharing, and publishing data.
- They demonstrate professionalism and commitment to quality.
- There is less effort required to perform statistical analysis.
- Data can be quickly aggregated across agencies.
- Data can be more easily compared across jurisdictions.
- It is easier to perform longitudinal analysis which supports trend identification.
- It is easier to improve business processes because performance can be compared.

1.2 Version Control

Version 1.0 – reviewed by Police, RCCNZ, NZSAR management on 14 Jan 2016
Version 1.1 – SAR Coordinators workshop on 7&8 March 2016
Version 2.0 – post the SAR Coordinators workshop
Version 2.1 – Data Dictionary distributed for consultation
Version 2.2 – Updated Data Dictionary
Version 2.3 – NZSAR update 11 April 2017
Version 2.4 – Circulated at initiation of SARdonyx project
Version 2.5 – Updated following meeting at Royal Society 8 August 2017
Version 2.6 – Updated following feedback on version 2.5
Version 2.7 – Updated following workshop at Brentwood Hotel 17 August 2017
Version 2.8 – Consolidation of data dictionary and data rules into one table.
Version 2.9 – Updated by NZSAR after review of version 2.8, and provided to Project SARdonyx solution provider
Version 3.0 – Updated at end of planning stage of Project SARdonyx
Version 3.1 – Updated by solution provider
Version 3.2 – Updated after SAR Coordinators workshop and wireframes 2.3
Version 3.3 – Minor updates after review by Hague
Version 3.4 – Minor updates after NZSAR & Hague review meeting (30 April 2018)
Version 3.5 – Updated resources section and codesets with Beca
Version 4.0 – Version at end of the design stage
Version 4.1 – Updated for typos and missing codeset (HR_2)
Version 4.1.1 – Updated error in definition of 'Lives saved' and 'Lives assisted' (page 34)
Version 4.2 – Updated with change request approved by SARdonyx Governance Group 12 Nov 2018

Current Date: 9 July 2021

2 NZSAR Council Information Objectives

The NZSAR Council has an information pathway – a long term strategy for improving the quality and usefulness of information about search and rescue operations, SAR prevention, and risk mitigation. The preparation of an "all of New Zealand Search and Rescue data standard" is an important step on that pathway.

2.1 Strategic Risk

The NZSAR Council has identified a strategic risk regarding the quality and reliability of existing data about SAR incidents within the NZSRR.

Risk Description
Search and rescue information is inadequate or unreliable for future planning.

Risk Cause
SAR data collection is fragmented, lacks cohesion and is typically collected to meet the requirements of individual organisations. Properly analysed longitudinal information is difficult for decision makers to access. Data gaps and omissions render sound analysis difficult. In some instances, excessive detail is being collected.

Risk Consequences
Without reliable information, NZSAR will be unable to identify strategic changes and opportunities for the SAR community.
Effective decision making is compromised by the lack of reliable, analysed data. Information can also be hard to access as it can reside within silos.

Excerpt from the NZSAR Council Risk Matrix (as at 13 November 2015)

2.2 Risk Treatment

The NZSAR Council has identified the creation of a single national search and rescue data standard as one of the treatments to mitigate the identified risk. The Council gave direction that the data standard will:

a. Provide a clear articulation of the required data, the data format, its required purpose, and the intended users of that data.

b. Support and enable data and information sharing between NZ SAR agencies, with overseas SAR partners, and other selected partners in NZ.

c. Be constructed with reference to standard industry formats.

d. Support other IT professional in the design of databases and data entry systems to support the agreed standard.

e. Document the SAR data standard governance and operating mechanisms/ responsibilities

This document sets out the proposed data standard and includes:

- The objectives and context of the standard

- Details of the governance for the standard and the current version
- A data dictionary containing standard names of data elements providing:
    - An informative name
    - A description and definition
    - The ability to assign unique, consistent names
    - The ability to identify the natural relationships of data
    - The ability to identify all of the uses of a data element
- Rules for transmitting data so that it can be interpreted correctly when received

3 Principles

3.1 New Zealand Data and Information Management Principles

The *New Zealand Data and Information Management Principles* were approved by Cabinet in August 2011[1]. The table below sets out how these principles will be applied to the development of the New Zealand SAR data standard.

Principle	Description	Proposed NZSAR data standard principles
Open	Data and information held by government should be open for public access unless grounds for refusal or limitations exist under the Official Information Act or other government policy. In such cases they should be protected.	Information on NZSAR operations shall be collected, aggregated and analysed with the expectation of publication of all non-identifiable data.
Protected	Personal, confidential and classified data and information are protected.	Personally identifiable information shall be protected from general publication and subject to controlled release only.
Readily Available	Open data and information are released proactively and without discrimination. They are discoverable and accessible and released online.	NZSAR data and information shall be published regularly online in forms that are clear, unambiguous and useful.
Trusted and Authoritative	Data and information support the purposes for which they were collected and are accurate, relevant, timely, consistent and without bias in that context. Where possible there is an identified authoritative single source.	Data and information support the purposes for which they were collected. Data shall only be collected if it can be reasonably validated at source. Data shall be relevant to context. Data collection shall be based on facts not assumptions. Data collection and submission shall be timely to support accuracy, actions by others, policy and planning. The source of all data shall be noted.

[1] Cabinet Minute CAB Min (11) 29/12

Principle	Description	Proposed NZSAR data standard principles
Well Managed	Data and information held and owned by government: • effectively belong to the New Zealand public • are a core strategic asset held by government as a steward on behalf of the public; and • Should only be collected or generated for specified public policy, operational business, or legislative purposes. Agencies are stewards of government-held data and information and must provide and require good practices which manage the data and information over their life-cycle, including catering for technological obsolescence and long-term preservation and access. Good practices also include collaborating with other agencies and the public, facilitating access, strengthening awareness, and supporting international cooperation. Agency custodians must implement these practices on a day-to-day basis.	NZSAR secretariat shall be the steward of nationally aggregated NZSAR data and NZSAR data standards. Police, RCC, Coastguard and LandSAR shall be the stewards of the NZSAR data they collect and shall collect, store and maintain that data in accordance with the NZSAR data standard. Data and information held and owned by government: • effectively belong to the New Zealand public • are a core strategic asset held by government as a steward on behalf of the public; and • Should only be collected or generated for specified public policy, operational business, or legislative purposes. Agencies are stewards of government-held data and information and must provide and require good practices which manage the data and information over their life-cycle, including catering for technological obsolescence and long-term preservation and access. Good practices also include collaborating with other agencies and the public, facilitating access, strengthening awareness, and supporting international cooperation. Agency custodians must implement these practices on a day-to-day basis.

Principle	Description	Proposed NZSAR data standard principles
Reasonably Priced	Use and re-use of government held data and information is expected to be free. Charging for access is discouraged. Pricing to cover the costs of dissemination is only appropriate where it can be clearly demonstrated that this pricing will not act as a barrier to the use or re-use of the data. If a charge is applied for access to data, it should be transparent, consistent, and reasonable and the same cost to all requestors.	NZSAR data shall generally be made available free of charge. Charging for access to data shall only be appropriate for requests that are of a specialised nature and require extensive effort or cost in order to respond.
Reusable	Data and information released can be discovered, shared, used and re-used over time and through technology change. Copyright works are licensed for re-use and open access to and re-use of non-copyright materials is enabled, in accordance with the New Zealand Government Open Access and Licensing framework. Data and information are released: • at source, with the highest possible level of granularity • in re-usable, machine-readable format • with appropriate metadata; and • In aggregate or modified forms if they cannot be released in their original state. Data and information released in proprietary formats are also released in open, non-proprietary formats. Digital rights technologies are not imposed on materials made available for re-use.	Data and information released can be discovered, shared, used and re-used over time and through technology change. Copyright works are licensed for re-use and open access to and re-use of non-copyright materials is enabled, in accordance with the New Zealand Government Open Access and Licensing framework. Data and information are released: • at source, with the highest possible level of granularity • in re-usable, machine-readable format • with appropriate metadata; and • In aggregate or modified forms if they cannot be released in their original state. Data and information released in proprietary formats are also released in open, non-proprietary formats. Digital rights technologies are not imposed on materials made available for re-use.

3.2 Governance of the NZSAR Data Standard

The NZSAR Council shall be the authorising body for the NZSAR data standard, and administration of the standard shall be managed by the NZSAR Secretariat. The application of the standard shall be the responsibility of all New Zealand search and rescue agencies.

Data governance encompasses the people, corporate processes and procedures that ensure data value, data quality improvement, development and maintenance of single shared definitions for all data, and availability of the right data at the right time to the right people in the right format.[2]

There is currently no New Zealand standard for the governance of data, but Standards NZ is currently engaged in developing one. The following principles are contained in the current draft standard for the Collection aspect of data governance:

Value	**Risk**	**Limitations**
Governing bodies should ensure that the data collected can be used for current and future purposes. How the data collection is performed may dictate its current use, context, and quality. The quality of the data collected should be sufficient and appropriate for further use and reuse of the data to meet new requirements for analysis as they arise. If future use of the data is required for general analysis, anonymisation and pseudonymisation techniques should be used to remove PII.	Governing bodies should ensure their organisation has the right to use the data that is collected and that they trust the source of that data. They should also ensure that the data being collected is fit for purpose. Data should be only be collected in compliance with local rules and regulations and with the relevant consent of data owners.	Governing bodies should ensure they understand the inherent limitations of the data that is being collected – and direct policies accordingly. Where personal consent is associated with the data, it should remain associated so that future use can be appropriately directed.

3.3 Use of the NZSAR Data Standard

This Data Standard sets out how data will be captured and stored across the search and rescue sector in New Zealand. This is not the data dictionary for a database nor is it the specification for a

[2] Smith, AM, *Data Governance Best Practices – the Beginning*, http://www.eiminstitute.org/library/eimi-archives/volume-1-issue-1-march-2007-edition/data-governance-best-practices-2013-the-beginning

form. It is expected however that search and rescue forms and databases that are developed or changed subsequent to the publication of this standard will comply with this standard.

- All employees and volunteers of New Zealand search and rescue agencies will be made familiar with the data elements within this standard that apply to their work.
- Before creating a new record for an entity, conduct a search to ensure that the entity in question does not already exist in the systems database. If the entity does exist, do not create a new record because this will create a duplicate record for the same entity.
- Enter and modify data only when authorised to do so.
- Forms and databases that use this standard should, wherever, practical, incorporate field validation and logical validation to support data quality. A summary of general data rules is provided in table 1 (below).

Data Element Type	Rule
Case	All data will be entered using mixed case (standard combination of upper and lower-case letters)
Symbols\Special Characters	Symbols such as the hash sign (#), the percent sign (%), an asterisk (*), etc. shall not be used.
Space	Maintain spaces where there are spaces in a name. Do not use the Enter/Return key within a text field.
Adding New Records	Only add a new record following a search for existing records. This will minimise duplicate information.
Name Standards	Do not attempt to abbreviate names. Do not use titles, prefixes or suffixes in any of the name elements.
Number Standards	Numbers shall be input as per specified formats

Table 1 General Data Rules

3.4 Duplicate Records

If duplicate records are created for a SAR incident, the information contained in the record created by the final Coordinating Authority shall take precedence.

3.5 Scope

The NZSAR Data Standard defines data elements for capturing and sharing data about SAR incidents, and does not replace terminology and definitions that are used as part of SAR operations.

For example: During land operations, location information is often provided as Eastings and Northings. When the information from the operation is captured and stored, the NZSAR Data Standard defines the use of decimal degree latitudes and longitudes.

3.6 Mass Rescue Operations

Information captured from Mass Rescue Operations (MRO) have the potential to significantly alter the analysis of stored data using the NZSAR Data Standard. Decisions will need to be made on a case-by-case basis about the capture of data in the unlikely event of an MRO.

4 NZSAR Data Standard

There are 135 data elements in the NZSAR Data Standard. Each data element has been given a unique identifier to assist in the control of the NZSAR Data Standard in the future.

4.1 Layout

To make the standard usable by SAR sector personnel and IT professionals, it has been divided into two sections.

Data Elements: Data Dictionary
This section defines the data elements, and provides information to guide their use.

Data Elements: Codesets
This section provides the list of options (choices) for data elements if required.

4.2 Categories of Data

The data elements themselves have been grouped into six categories.

4.2.1 General Data

This category of data contains high-level, low detailed, information about SAR incidents. Data in this category shall be collected for each SAR alert the Coordinating Authorities receive.

Data elements in this category have a unique identifier with the prefix Gen_##

4.2.2 Resources Data

This category of data captures all the resources used to resolve the incident. It is divided into three subsections.

4.2.2.1 Organisation Resource Data

This category of data contains information about the organisations that were used by the Coordinating Authorities in responding to a SAR incident.

Data elements in this category have a unique identifier with the prefix Org_##

An Incident can have multiple Organisation Resource Data elements

4.2.2.2 Human Resources Data

This category of data contains information about the resources that were used by the Coordinating Authorities in responding to a SAR incident.

Data elements in this category have a unique identifier with the prefix HR_##

An Incident can have multiple Human Resources Data elements

4.2.2.3 Asset Resources Data

This category of data contains information about the assets that were used by the Coordinating Authorities in responding to a SAR incident.

Data elements in this category have a unique identifier with the prefix Ast_##

An Incident can have multiple Asset Resource Data elements

4.2.3 Operation Data

This category of data contains information when SAR activity is undertaken by the Coordinating Authorities in response to SAR alerts. This activity can range from investigation (but not including investigations conducted by communications means only) through to a full scale SAROP.

Data elements in this category have a unique identifier with the prefix Ops_##

4.2.4 Aircraft & Vessel Data

This category of data contains information about any aircraft or vessel involved in a SAR incident. It is divided into two subsections.

4.2.4.1 Aircraft Data

This category of data contains information about any aircraft or vessel involved in a SAR incident or alert.

Data elements in this category have a unique identifier with the prefix Air_##

An Incident can have multiple Aircraft Data elements

4.2.4.2 Vessel Data

This category of data contains information about any aircraft or vessel involved in a SAR incident or alert.

Data elements in this category have a unique identifier with the prefix Ves_##

An Incident can have multiple Vessel Data elements

4.2.5 Outcome Data

This category of data contains information about the result of the SAR incident when people have been identified as being at risk.

Data elements in this category have a unique identifier with the prefix Out_##

4.2.6 Subject & Medical Data

This category of data contains demographic and medical information about any person(s) involved in the SAR incident. Data in this category shall only be captured for those people who were identified as being at risk during the SAR incident.

Data elements in this category have a unique identifier with the prefix Sub_##

An Incident can have multiple Subject Data elements

4.3 Metadata

The Metadata for the four data sections is provided in table 2 (below).

Meta Data	Value
Data #	The unique identifier for each data element.
Data Element	The name for each data element. This is the nomenclature that must be used for the data elements as new SAR data forms are prepared for the NZSAR sector.
Description/Definition	A simple and unambiguous definition of the data element.
ISRID[3]	Maps the data element to the equivalent data element in the ISRID database, as applicable.
Data Type	The type of data that is to be stored, as defined in section 4.4 of the NZSAR Data Standard.
Codeset	Identifies if the data element has a codeset associated with it. The full codesets are contained in section 7 of the NZSAR Data Standard.
Notes/Rules	Any notes or rules about the use or capture of the data element.

Table 2 Metadata for the NZSAR Data Standard

4.4 Data Types

The type of data that is to be stored. Data Types used in this document are:

Alphabetic (n): Contains alphabetic characters only. The n denotes the maximum number of characters that can be stored.

Alphanumeric (n): Contains both alphabetic and numeric characters. The n denotes the maximum number of characters that can be stored.

Boolean: Unless otherwise specified, Boolean codesets are either 'Yes' or 'No'
Data elements of the Boolean type must be recorded and shared using the codeset associated with the data element.

Date: A date / time field. All dates should be represented as **YYYYMMDD hh:mm:ss.s** where:

- **YYYY** = four-digit year

[3] U.S. Department of Homeland Security, *International Search & Rescue Incident Database Standards 2014* (prepared by Robert J. Koester).

- **MM** = two-digit month (01=January, etc.)
- **DD** = two-digit day of month (01 through 31)
- **hh** = two digits of hour (00 through 23) (am/pm NOT allowed)
- **mm** = two digits of minute (00 through 59)
- **ss** = two digits of second (00 through 59)
- **s** = one or more digits representing a decimal fraction of a second

Free Text: Contains alphabetic and numeric characters. There is no limit to the amount of text that can be entered in this field (although there may be a database limit). All free text entries should be subject to a spell check using New Zealand English (or UK English if NZ English not available). Once saved, free text can be appended to but should not be able to be modified or deleted.

Numeric (n): Contains numeric characters only. The n denotes the maximum number of characters than can be stored.

5 Data Dictionary

This section provides a dictionary of the data elements that are included in the Data Standard, and is formatted as follows:

Data #:
This column provides an identifier for each data element.

Data Element:
This column lists the data elements for each of the six data categories. The data elements are listed alphabetically.

Description / Definition:
This column provides a description/definition for each of the data elements.

Data Type
This column describes the type of data to be captured e.g. Alphabetic, Boolean, Numeric, Free Text, as defined in section 4.4

Codeset?
Does this data element have a codeset of pre-determined values which will be used to populate it?

Notes/Rules
Any explanatory notes or business rules to be applied to this data element.

ISRID column:
This column will be used to map the data elements in the Data Dictionary to the equivalent data elements in the ISRID database (if applicable) – this will be completed once all the Data Dictionary elements are confirmed (a few examples have been provided)

5.1 General data (Gen)

These data elements will be available for all incidents entered into the system

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Gen_1	Environment	What environment relates to this SAR alert?	Alphabetic	Yes		GenEnv
Gen_2	Beacon: activation?	Was a distress beacon activated as part of the incident?	Boolean			
Gen_3	Beacon: country code	The country code associated with the distress beacon	Numeric	Yes	Only if Gen_2 = “yes”	
Gen_4	Beacon: Hex ID	The HEX ID for the distress beacon	Alphanumeric (23 characters)		Only if Gen_2 = “yes”	
Gen_5	Beacon: NZ registered?	Is the distress beacon registered in the NZ registration database?	Boolean	Yes	Only if Gen_2 = “yes”	
Gen_6	Beacon: reason for activation	What was the reason for the activation of the distress beacon	Alphabetic	Yes	Only if Gen_2 = “yes”	
Gen_7	Beacon: registration details correct?	Are the registration details correct and up to date?	Boolean		Only if Gen_2 = “yes”	
Gen_8	Beacon: type	The type of distress beacon that was activated	Alphabetic	Yes	Only if Gen_2 = “yes”	
Gen_9	Brief circumstances	Provide a short synopsis of the incident	Free Text		Can not be left blank	
Gen_10	Completed by	Name of the person who completed the incident form	Free Text		Auto populate from user	
Gen_11	Date and Time – notification	Date and Time SAR Coordinating Authority notified of the incident	Date Time		To be entered in DD/MM/YYYY format using NZST or NZDT time	

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Gen_12	Date and Time – completion	Date and Time the incident is completed	Date Time		To be entered in DD/MM/YYYY format using NZST or NZDT time CAN NOT be earlier than Gen_11	
Gen_13	Response	Was the incident resolved during the *awareness, initial action,* or *planning* stages, or did it require a SAR Operation?	Alphabetic	Yes		
Gen_14	Incident duration	The length of time from the notification of the SAR incident till its conclusion (IMT stood-down). (Note the start time is the incident notification, not when a person got into distress.)	Numeric		Auto calculate the difference between 'Date and Time – notification' and 'Date and Time – completion' Time to be entered in hours to one decimal place.	
Gen_15	Alert method	How was the SAR system notified of the SAR alert? (for when the alert was first raised)	Alphabetic	Yes		
Gen_16	SAR Squad	The Police SAR Squad that is responding to this incident	Alphabetic	Yes	Only visible to Police	
Gen_17	Police Area	The Police Area responding to the incident	Alphabetic	Yes	Only visible to Police	
Gen_18	Police District	The Police District responding to the incident	Alphabetic	Yes	Only visible to Police	
Gen_19	Police event number	The unique event number from Police for this incident	Alphanumeric		Auto-populated if possible	

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Gen_20	RCCNZ incident number	The unique incident number from RCCNZ for this incident	Alphanumeric		Auto-populated if possible	
Gen_21	SAR category OR non-SAR activity type	SAR category at conclusion of the incident; OR, the type of non-SAR response provided	Alphabetic	Yes		
Gen_22	SAR category transferred?	Was there a transfer of SAR category (transfer of coordination) during the incident?	Boolean			
Gen_23	Search and Rescue Region (SRR)	Which Search and Rescue Region did the incident occur in?	Alphabetic	Yes	Only visible to RCCNZ	

5.2 Resources data

These data elements will be available for all incidents entered into the system. They are divided into three sub-sections: Human Resources, Assets, and SLA Partners.

5.2.1 Human Resources data (HR)

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules
HR_1	Organisation Level people (human resource)	The Organisation level of the people (human resource) used for the SAR incident	Alphabetic	Yes	
HR_2	Unit Level people (human resource)	The Unit level of the people (human resource) used for the SAR incident	Alphabetic	Yes	
HR_3	Type of Use	How the unit level people (human resource) was used for the SAR incident	Alphabetic	Yes	If the Unit was used in more than one manner, a separate line for the unit will need to be entered
HR_4	Unit People	The number of people (human resource) used by the unit for the SAR incident	Numeric	No	
HR_5	Unit Hours	The number of people (human resource) hours used by the unit for the SAR incident	Numeric	No	To one decimal place
HR_6	Unit Cost	The cost of the unit people (human resource) for the SAR incident	Numeric	No	Auto-populate and non-editable by the user
HR_7	Total People	The total number of people (human resource) used for the SAR incident	Numeric	No	Auto-sum for each unit level entered
HR_8	Total Hours	The total number of people (human resource) hours used for the SAR incident	Numeric	No	Auto-sum for each unit level entered To one decimal place

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules
HR_9	Total Cost	The total cost of the people (human resource) used for the SAR incident			Auto-populate and non-editable by the user

5.2.2 Asset Resources data (Ast)

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules
Ast_1	Organisation or environment level asset	The organisation or environment level of the asset used for the SAR incident	Alphabetic	Yes	
Ast_2	Unit level asset	The unit level for the asset used	Alphabetic	Yes	This may require up to two levels of cascading granularity
Ast_3	Asset type	The particular type of asset used	Alphabetic	Yes	This may require up to two levels of cascading granularity
Ast_4	Asset Hours	The number of hours for the asset for the SAR incident	Numeric	No	To one decimal place
Ast_5	Asset Cost	The cost for the asset for the SAR incident	Numeric	No	Auto-populate and non-editable by the user
Ast_6	Total Hours	The total number of hours for the assets used for the SAR incident	Numeric	No	Auto-sum for each unit level entered
Ast_7	Total Cost	The total cost for the assets used for the SAR incident	Numeric	No	Auto-sum for each unit level entered

5.2.3 SLA Partner Data (SLA)

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules
SLA_1	SLA Partner	The SLA partner used during the incident	Alphabetic	Yes	
SLA_2	Expected Service Level Met	Did the performance of the SLA partners meet expected service level during this SAROP	Boolean		If selected 'No', this should generate an alert email to NZSAR
SLA_3	Comments	Provide an explanation of any unsatisfactory SLA partners performance during this SAROP	Free text	Only if Org_2 = 'No'	

5.3 Operation data (Ops)

These data elements will only be available if Gen_13 “Response” = ‘SAROP’

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ops_1	Activity: Air	The type of air related activity that was being undertaken	Alphabetic	Yes	Only if Gen_1 = Air	
Ops_2	Activity: Land	The type of land related activity that was being undertaken	Alphabetic	Yes	Only if Gen_1 = Land	
Ops_3	Activity: Wanderer	The type of wanderer involved	Alphabetic	Yes	Only if Gen_1 = Land	
Ops_4	Activity: Water	The type of water related activity that was being undertaken	Alphabetic	Yes	Only if Gen_1 = Water	
Ops_5	Alcohol or drugs suspected?	Was the use of alcohol or drugs suspected to be a contributing factor to the SAR incident	Boolean			
Ops_6	Cause of incident: Land	What, in your opinion, was the main contributing cause of the incident	Alphabetic	Yes	Only if Gen_1 = Land	
Ops_7	Cause of incident: Vessel	What, in your opinion, was the main contributing cause of the incident	Alphabetic	Yes	Only if Ops_4 = ’Recreational boating’ OR ‘Non-recreational boating’	
Ops_8	Health & Safety: incident during SAROP?	Was there a health & safety incident, or near miss, during the SAROP?	Boolean		If selected ‘Yes’, this should generate an alert email to the appropriate manager	
Ops_9	Location: COSPAS-SARSAT confirmed position	The confirmed position provided by COSPAS-SARSAT	Numeric		(WGS84 format)	

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ops_10	Location: COSPAS-SARSAT Initial position	The Initial position provided by COSPAS-SARSAT	Numeric		(WGS84 format)	
Ops_11	Location: Find Location - Altitude	Find location - altitude in meters	Numeric		Zero decimal places Auto-populate from LatLong	
Ops_12	Location: Find Location	Find location - latitude and longitude (The location the subject is actually located at)	Numeric		Decimal degree format DDD.ddddddd to seven decimal places (WGS84 format)	
Ops_13	Location: Incident location	The nearest named geographical location	Free Text			
Ops_14	Location: Initial Point - Altitude	The Initial Planning Point OR Last Known Position location - altitude in meters Use IPP for land incident Use LKP for aviation or water incidents	Numeric		Zero decimal places Auto-populate from LatLong	
Ops_15	Location: IPP OR LKP	The Initial Planning Point OR Last Known Position location - latitude and longitude (The location of the subject used for initial planning. An estimated position is acceptable when the subject is not located, or it is discovered there is no one at risk) Use IPP for land incidents Use LKP for aviation or water incidents	Numeric		Decimal degree format DDD.ddddddd to seven decimal places (WGS84 format)	

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ops_16	Location: SRR		Alphabetic	From shape file	Auto-populate from the find location lat long (Ops_12) OR IPP location (Ops_15) IF Ops_12 is incomplete Use codeset Gen_23 Not required to be shown on the form (is used for reporting)	
Ops_17	Location: Police District		Alphabetic	From shape file Shape file must extend 12nm past the low tide mark	Auto-populate from the find location (Ops_12) OR IPP location (Ops_15) IF Ops_12 is incomplete Not required to be shown on the form (is used for reporting)	
Ops_18	Location: Police Area		Alphabetic	From shape file Shape file must extend 12nm past the low tide mark	Auto-populate from the find location (Ops_12) OR IPP location (Ops_15) IF Ops_12 is incomplete Not required to be shown on the form (is used for reporting)	

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ops_19	Location: Territorial Authority	The Territorial Authority Region the incident occurred in	Alphabetic	From shape file Shape file must extend 12nm past the low tide mark	Auto-populate from the find location (Ops_12) OR IPP location (Ops_15) IF Ops_12 is incomplete Not required to be shown on the form (is used for reporting)	
Ops_20	Location: DOC Land Unit	The DOC Area the incident occurred in	Alphabetic	From shape file	Auto-populate from the find location (Ops_12) OR IPP location (Ops_15) IF Ops_12 is incomplete Not required to be shown on the form (is used for reporting)	
Ops_21	Location: LandSAR Group		Alphabetic	From shape file	Auto-populate from the find location (Ops_12) OR IPP location (Ops_15) IF Ops_12 is incomplete Not required to be shown on the form (is used for reporting)	
Ops_22	Location: Coastguard Region		Alphabetic	From shape file	Auto-populate from the find location (Ops_12) OR IPP location (Ops_15) IF Ops_12 is incomplete Not required to be shown on the form (is used for reporting)	

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ops_23	Location: SLSNZ Region		Alphabetic	From shape file	Auto-populate from the find location (Ops_12) OR IPP location (Ops_15) IF Ops_12 is incomplete Not required to be shown on the form (is used for reporting)	
Ops_24	LPB: Closest linear feature type	What was the closest linear feature to the subject's located position? (if known)	Alphabetic	Yes	Only if Gen_1 = Land	
Ops_25	LPB: Detectability (if lost)	How easy was it to detect the subject when they were located? (if known)	Alphabetic	Yes	Only if Gen_1 = Land	
Ops_26	LPB: distance from closest linear feature	How far away was the subject from the closest linear feature? (if known)	Numeric	No	Only if Gen_1 = Land	
Ops_27	LPB: How long was the subject mobile?	How long was the subject mobile for? (if known)	Numeric	No	Only if Gen_1 = Land	
Ops_28	LPB: Intended Destination	What was the intended destination of the casualty. To be entered as a latitude and longitude.	Numeric	No	Only if Gen_1 = Land Decimal degree format DD.ddddddd (two digits before decimal place, seven digits after)	
Ops_29	LPB: Lost Strategy	The predominant strategy used by the subject.	Alphabetic	Yes	Only if Gen_1 = Land	
Ops_30	LPB: What distance was the subject from LPO	How far away was the subject from their Last Position Orientated (LPO)? (if known)	Numeric	No	Only if Gen_1 = Land	
Ops_31	Reactivated SAR?	Is this SAROP a continuation of a previously suspended SAROP?	Boolean			

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ops_32	Reactivated SAR ID	The Police or RCCNZ incident number for the previously suspended SAROP	Numeric	No		
Ops_33	Root cause	What, in your opinion, was the root cause of the SAR incident?	Alphabetic	Yes		
Ops_34	Search techniques used	What search techniques were used during the SAROP?	Alphabetic	Yes		
Ops_35	Search techniques used - successful	What search technique was successful in locating the distressed persons?	Alphabetic	Yes		
Ops_36	Specialised rescue recovery technique	What specialised recovery techniques were used in the rescue (if applicable)	Alphabetic	Yes		
Ops_37	Terrain Setting	What is the main type of terrain setting in the search area	Alphabetic	Yes	Only if Gen_1 = Land	
Ops_38	Land Cover	Land Cover	Alphabetic	Yes	Auto-populate from LCDB and not displayed on the form	
Ops_39	Trip intentions	Did the subject leave trip intentions that were able to be used by the IMT in planning the SAR operation?	Boolean		Only if Gen_1 = Land	
Ops_40	Valid request for SAR?	Was this a valid request for SAR services?	Alphabetic	Yes		
Ops_41	Date and Time – distress situation	Date and Time the subject(s) got into distress (if known)	Date Time		To be entered in DD/MM/YYYY format using NZST or NZDT time CAN NOT be earlier than Gen_11	IncDate
Ops_42	Search suspended?	Was the SAROP formally suspended?	Boolean			
Ops_43	Suspension Authoriser	Who authorised suspension of SAROP?	Free Text			

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ops_44	Weather	Weather conditions at the time and location of distress			Not visible on the form Obtained from MetService	
Ops_45	Wander pendant	Did the wanderer have a wander pendant?	Boolean		Only if any of the options for Ops_3 are selected	
Ops_46	Wander pendant use successful	Did the pendant provide the location of the wanderer?	Boolean		Only if any of the options for Ops_3 are selected	

5.4 Aircraft & Vessel data

These data elements will only be available if Gen_13 “Response” = ‘SAROP’. They are divided into two sub-sections: Aircraft and Vessels.

5.4.1 Aircraft data (Air)

Only available if Gen_1 = ‘Air’

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Air_1	Aircraft type	Type of aircraft involved in the incident	Alphabetic	Yes		
Air_2	Tracking/alerting device available?	Did the aircraft or vessel have an alerting or tracking device?	Boolean			
Air_3	Tracking/alerting device supported the SAROP?	Did the alerting/tracking device provide information for the SAROP?	Boolean			
Air_4	Aircraft registration	The registration number of the aircraft if applicable	Alphanumeric			

5.4.2 Vessel data (Ves)

Only available if Gen_1 = ‘Water’

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ves_1	Recreational vessels	The number of recreational vessels involved in the distress situation	Numeric			
Ves_2	Non-recreational vessels	The number of non-recreational vessels involved in the distress situation	Numeric			
Ves_3	Recreational vessel: vessel type	Type and size of recreational vessel involved in the incident	Alphanumeric	Yes	Only if Ves_1 > 0	

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ves_4	Non-recreational vessel type	Type of non-recreational vessel involved in the incident	Alphabetic	Yes		
Ves_5	Communications carried	Did the recreational vessel have two forms of communications on board	Alphabetic	Yes	Only if Ves_1 > 0	
Ves_6	Lifejackets available?	Were there enough correctly fitting lifejackets available for all people on the vessel	Alphabetic	Yes	Only if Ves_1 > 0	
Ves_7	Lifejackets worn?	Were the lifejackets worn before the vessel became distressed, and/or in accordance with local by-laws	Alphabetic	Yes	Only if Ves_1 > 0	
Ves_8	Subject preparedness of the recreational vessel	In your opinion, how prepared was the subject in terms of the suitability and maintenance of the vessel	Alphabetic	Yes	Only if Ves_1 > 0	
Ves_9	Subject preparedness of the skipper and crew	In your opinion, how prepared was the subject in terms of their own, and their crew's ability	Alphabetic	Yes	Only if Ves_1 > 0	
Ves_10	Hired recreational vessel?	Was it a hired recreational vessel?	Boolean		Only if Ves_1 > 0	
Ves_11	Vessel master profile	Training level or experience of the skipper	Alphabetic	Yes	Only if Ves_1 > 0	
Ves_12	MNZ number	The MNZ number for the vessel (if known)	Alphanumeric			
Ves_13	MMSI number	The MMSI number for the vessel (if known)	Alphanumeric			
Ves_14	Tracking/alerting device available?	Did the aircraft or vessel have an alerting or tracking device?	Boolean			

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Ves_15	Tracking/alerting device supported the SAROP?	Did the alerting/tracking device provide information for the SAROP?	Boolean			
Ves_16	Vessel name	The name of the vessel, if known	Free text			
Ves_17	Vessel Flag	The flag state of the non-recreational vessel	Alphabetic	Yes		

5.5 Outcome data (Out)

These data elements will only be available if Gen_13 “Response” = ‘SAROP’

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Out_1	Lives Saved	Where, if SAR agencies had not intervened, life would definitely have been lost	Numeric			
Out_2	Lives Rescued	Where SAR agencies locate and rescue a person or people at risk, and return them to a safe location	Numeric			
Out_3	Lives Assisted	Where SAR agencies aid a person or people at low risk, but who, if left, would be at risk	Numeric			
Out_4	Not Located	Where an individual is known to be at risk, and has not been located after a SAROP has been conducted and formally suspended	Numeric		CAN NOT be greater than Med_10 Can only be entered if Ops_43 = ‘Yes’	
Out_5	Number not recoverable	Where an individual is known to have perished, or assumed to have perished, and their body is unrecoverable (e.g. fallen into a crevasse or drowned)	Numeric		CAN NOT be greater than Med_10	
Out_6	Number Perished or Assumed Perished	Number of people who perished, or assumed to have perished	Numeric			
Out_7	Self Assisted	Where a person or people were at risk, but managed to reach a safe location without assistance from SAR agencies	Numeric			
Out_8	Number at Risk	The number of people in the party who required help (do not include members	Numeric		This is the SUM of: Out_1 Out_2	

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
		of the party who stay to assist a person in distress)			Out_3 Out_6 Out_7	
Out_9	Number in the party	Total number of people in the party	Numeric			
Out_10	Fatality: after SAR alerted?	Did the fatality occur after the SAR system was alerted?	Alphabetic	Yes	Only if Out_6 > 0	

5.6 Subject & Medical data (Sub)

These data elements will only be available if Gen_13 “Response” = ‘SAROP’
This data is required for the number of people at risk (Out_8).

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Sub_1	Address: Town or City	The home town or city of the individual (not applicable for international tourist)	Free text			
Sub_2	Age	Age (in years) of the individual	Numeric (3)		Only to be entered if known.	(Age)
Sub_3	Ethnicity	Ethnicity of the individual	Alphabetic	Yes		
Sub_4	Sex	Sex of the individual	Boolean	Yes	‘male’ OR ‘female’	(Sex)
Sub_5	Residency status	Residency status of the individual	Alphabetic	Yes		
Sub_6	Nationality	Nationality of the migrant or international tourist	Alphabetic	Yes	Only if Sub_5 = ‘migrant’ OR ‘international tourist’	
Sub_7	Migrant: Time in New Zealand	How long has the migrant lived in New Zealand	Numeric		In years	
Sub_8	Name	Name of the individual	Free text			
Sub_9	Subject preparedness: clothing, equipment, supplies	In your opinion, how prepared was the subject in terms of all their equipment	Alphabetic	Yes		
Sub_10	Subject preparedness: experience, fitness, knowledge	In your opinion, how prepared was the subject in terms of their own ability	Alphabetic	Yes		
Sub_11	Subject: email	Email address of the subject (if obtainable)	Alphanumeric			

Data #	Data Element	Description / Definition	Data Type	Codeset?	Notes/ Rules	ISRID
Sub_12	Subject: phone	Phone number of the subject (if obtainable)	Numeric		Use '00' instead of '+' to indicate international number	
Sub_13	Reasons (if injury)	What was the cause of the injury sustained by the individual	Alphabetic	Yes		
Sub_14	Type of injury or illness	What type of injury or illness did the individual sustain	Alphabetic	Yes		
Sub_15	Extent of injury / illness	What level of medical treatment did the individual require for their injury or illness	Alphabetic	Yes		
Sub_16	Fatality: contributing factor	In your opinion, what was the contributing factor for the fatality?	Alphabetic	Yes		

6 Codesets

This section only includes data elements for which values are specified in codesets. These codesets usually appear as drop down lists in a form or database but can also be represented by radio buttons in a graphical user interface. Data elements that allow open data entry such as *incident number* and *location* do not appear in this section.

Each Data Category is listed as a major heading. Within each Data Category those data elements that have associated codesets are listed as sub-headings. Under each of those data element subheadings there is a table containing the codeset values for each data element. Each codeset value has been assigned a sequential number for reference purposes: 01, 02 etc.

6.1 General data (Gen)

Incident data contains data that will be used for high-level reporting.

Data #: Gen_1
Data Element: Environment
Data type: Alphabetic
Rules:

Codeset value	Notes
Air	
Land	
Wanderer	Not visible as a separate option, but will be able to be used for reporting. Use layout as shown in wireframe 2.3
Water	
Not Determined	

Data #: Gen_3
Data Element: Beacon: Country Code
Data type: Numeric (3)
Rules: Only if Gen_2 = "Yes"
Default selection is codeset 512 "New Zealand"
Source: COSPAS-SARSAT

Codeset Value	Description
201	Albania (Republic of)
202	Andorra (Principality of)
203	Austria

Codeset Value	Description
204	Azores - Portugal
205	Belgium
206	Belarus (Republic of)
207	Bulgaria (Republic of)
208	Vatican City State
209, 210	Cyprus (Republic of)
211	Germany (Federal Republic of)
212	Cyprus (Republic of)
213	Georgia
214	Moldova (Republic of)
215	Malta
216	Armenia (Republic of)
218	Germany (Federal Republic of)
219, 220	Denmark
224, 225	Spain
226, 227, 228	France
229	Malta
230	Finland
231	Faroe Islands - Denmark
232, 233, 234, 235	United Kingdom of Great Britain and Northern Ireland
236	Gibraltar - United Kingdom of Great Britain and Northern Ireland
237	Greece
238	Croatia (Republic of)
239, 240, 241	Greece
242	Morocco (Kingdom of)
243	Hungary
244, 245, 246	Netherlands (Kingdom of the)
247	Italy
248, 249	Malta
250	Ireland
251	Iceland
252	Liechtenstein (Principality of)
253	Luxembourg

Codeset Value	Description
254	Monaco (Principality of)
255	Madeira - Portugal
256	Malta
257, 258, 259	Norway
261	Poland (Republic of)
262	Montenegro
263	Portugal
264	Romania
265, 266	Sweden
267	Slovak Republic
268	San Marino (Republic of)
269	Switzerland (Confederation of)
270	Czech Republic
271	Turkey
272	Ukraine
273	Russian Federation
274	The Former Yugoslav Republic of Macedonia
275	Latvia (Republic of)
276	Estonia (Republic of)
277	Lithuania (Republic of)
278	Slovenia (Republic of)
279	Serbia (Republic of)
301	Anguilla - United Kingdom of Great Britain and Northern Ireland
303	Alaska (State of) - United States of America
304, 305	Antigua and Barbuda
306	Sint Maarten (Dutch part) - Netherlands (Kingdom of the)
306	Bonaire, Sint Eustatius and Saba - Netherlands (Kingdom of the)
306	Curaçao - Netherlands (Kingdom of the)
307	Aruba - Netherlands (Kingdom of the)
308, 309	Bahamas (Commonwealth of the)
310	Bermuda - United Kingdom of Great Britain and Northern Ireland
311	Bahamas (Commonwealth of the)
312	Belize

Codeset Value	Description
314	Barbados
316	Canada
319	Cayman Islands - United Kingdom of Great Britain and Northern Ireland
321	Costa Rica
323	Cuba
325	Dominica (Commonwealth of)
327	Dominican Republic
329	Guadeloupe (French Department of) - France
330	Grenada
331	Greenland - Denmark
332	Guatemala (Republic of)
334	Honduras (Republic of)
336	Haiti (Republic of)
338	United States of America
339	Jamaica
341	Saint Kitts and Nevis (Federation of)
343	Saint Lucia
345	Mexico
347	Martinique (French Department of) - France
348	Montserrat - United Kingdom of Great Britain and Northern Ireland
350	Nicaragua
351, 352, 353, 354	Panama (Republic of)
355,356, 357	-
358	Puerto Rico - United States of America
359	El Salvador (Republic of)
361	Saint Pierre and Miquelon (Territorial Collectivity of) - France
362	Trinidad and Tobago
364	Turks and Caicos Islands - United Kingdom of Great Britain and Northern Ireland
366, 367, 368, 369	United States of America
370, 371, 372, 373	Panama (Republic of)

Codeset Value	Description
374	-
375, 376, 377	Saint Vincent and the Grenadines
378	British Virgin Islands - United Kingdom of Great Britain and Northern Ireland
379	United States Virgin Islands - United States of America
401	Afghanistan
403	Saudi Arabia (Kingdom of)
405	Bangladesh (People's Republic of)
408	Bahrain (Kingdom of)
410	Bhutan (Kingdom of)
412, 413, 414	China (People's Republic of)
416	Taiwan (Province of China) - China (People's Republic of)
417	Sri Lanka (Democratic Socialist Republic of)
419	India (Republic of)
422	Iran (Islamic Republic of)
423	Azerbaijan (Republic of)
425	Iraq (Republic of)
428	Israel (State of)
431, 432	Japan
434	Turkmenistan
436	Kazakhstan (Republic of)
437	Uzbekistan (Republic of)
438	Jordan (Hashemite Kingdom of)
440, 441	Korea (Republic of)
443	State of Palestine (In accordance with Resolution 99 Rev. Guadalajara, 2010)
445	Democratic People's Republic of Korea
447	Kuwait (State of)
450	Lebanon
451	Kyrgyz Republic
453	Macao (Special Administrative Region of China) - China (People's Republic of)
455	Maldives (Republic of)
457	Mongolia

Codeset Value	Description
459	Nepal (Federal Democratic Republic of)
461	Oman (Sultanate of)
463	Pakistan (Islamic Republic of)
466	Qatar (State of)
468	Syrian Arab Republic
470	United Arab Emirates
472	Tajikistan (Republic of)
473, 475	Yemen (Republic of)
477	Hong Kong (Special Administrative Region of China) - China (People's Republic of)
478	Bosnia and Herzegovina
501	Adelie Land - France
503	Australia
506	Myanmar (Union of)
508	Brunei Darussalam
510	Micronesia (Federated States of)
511	Palau (Republic of)
512	New Zealand
514, 515	Cambodia (Kingdom of)
516	Christmas Island (Indian Ocean) - Australia
518	Cook Islands - New Zealand
520	Fiji (Republic of)
523	Cocos (Keeling) Islands - Australia
525	Indonesia (Republic of)
529	Kiribati (Republic of)
531	Lao People's Democratic Republic
533	Malaysia
536	Northern Mariana Islands (Commonwealth of the) - United States of America
538	Marshall Islands (Republic of the)
540	New Caledonia - France
542	Niue - New Zealand
544	Nauru (Republic of)
546	French Polynesia - France

Codeset Value	Description
548	Philippines (Republic of the)
553	Papua New Guinea
555	Pitcairn Island - United Kingdom of Great Britain and Northern Ireland
557	Solomon Islands
559	American Samoa - United States of America
561	Samoa (Independent State of)
563, 564, 565, 566	Singapore (Republic of)
567	Thailand
570	Tonga (Kingdom of)
572	Tuvalu
574	Viet Nam (Socialist Republic of)
576, 577	Vanuatu (Republic of)
578	Wallis and Futuna Islands - France
601	South Africa (Republic of)
603	Angola (Republic of)
605	Algeria (People's Democratic Republic of)
607	Saint Paul and Amsterdam Islands - France
608	Ascension Island - United Kingdom of Great Britain and Northern Ireland
609	Burundi (Republic of)
610	Benin (Republic of)
611	Botswana (Republic of)
612	Central African Republic
613	Cameroon (Republic of)
615	Congo (Republic of the)
616	Comoros (Union of the)
617	Cabo Verde (Republic of)
618	Crozet Archipelago - France
619	Côte d'Ivoire (Republic of)
620	Comoros (Union of the)
621	Djibouti (Republic of)
622	Egypt (Arab Republic of)

Codeset Value	Description
624	Ethiopia (Federal Democratic Republic of)
625	Eritrea
626	Gabonese Republic
627	Ghana
629	Gambia (Republic of the)
630	Guinea-Bissau (Republic of)
631	Equatorial Guinea (Republic of)
632	Guinea (Republic of)
633	Burkina Faso
634	Kenya (Republic of)
635	Kerguelen Islands - France
636, 637	Liberia (Republic of)
638	South Sudan (Republic of)
642	Libya
644	Lesotho (Kingdom of)
645	Mauritius (Republic of)
647	Madagascar (Republic of)
649	Mali (Republic of)
650	Mozambique (Republic of)
654	Mauritania (Islamic Republic of)
655	Malawi
656	Niger (Republic of the)
657	Nigeria (Federal Republic of)
659	Namibia (Republic of)
660	Reunion (French Department of) - France
661	Rwanda (Republic of)
662	Sudan (Republic of the)
663	Senegal (Republic of)
664	Seychelles (Republic of)
665	Saint Helena - United Kingdom of Great Britain and Northern Ireland
666	Somalia (Federal Republic of)
667	Sierra Leone
668	Sao Tome and Principe (Democratic Republic of)

Codeset Value	Description
669	Swaziland (Kingdom of)
670	Chad (Republic of)
671	Togolese Republic
672	Tunisia
674	Tanzania (United Republic of)
675	Uganda (Republic of)
676	Democratic Republic of the Congo
677	Tanzania (United Republic of)
678	Zambia (Republic of)
679	Zimbabwe (Republic of)
701	Argentine Republic
710	Brazil (Federative Republic of)
720	Bolivia (Plurinational State of)
725	Chile
730	Colombia (Republic of)
735	Ecuador
740	Falkland Islands (Malvinas) - United Kingdom of Great Britain and Northern Ireland
745	Guiana (French Department of) - France
750	Guyana
755	Paraguay (Republic of)
760	Peru
765	Suriname (Republic of)
770	Uruguay (Eastern Republic of)
775	Venezuela (Bolivarian Republic of)

Data #: Gen_6
Data Element: Beacon: Reason for activation
Data type: Alphabetic
Rules: Only if Gen_2 = “yes”
Options selected must align with Ops_40 valid request for SAR

Codeset value	Notes
Real distress	

Codeset value	Notes
Deliberate but questionable need for SAROP	
Mishandling / inadvertent	Includes incorrectly disposed
Malicious / hoax	
Malfunction	
Outside NZSRR	Used if another RCC will coordinate the response
Undetermined	

Data #: Gen_8
Data Element: Beacon: type
Data type: Alphabetic
Rules: Only if Gen_2 = "yes"

Codeset value	Notes
ELT	
EPIRB	
PLB	
Indeterminable	

Data #: Gen_13
Data Element: Response
Data type: Alphabetic
Rules:

Codeset value	Notes
Communications or initial investigation only	When information is received during the *awareness*, *initial action* (defined as preliminary action taken to alert SAR facilities and obtain more information), or *planning* stages that there is no one in distress (or are no longer in distress).
SAROP conducted	When SAR resources are dispatched to conduct searches, rescue survivors, provide emergency care, and deliver casualties to medical facilities.
Unresolved alert with no SAR action required	Brief COSPAS-SARSAT alerts received that have no clear position or contact details and therefore aren't able to be actioned. Only visible to RCCNZ

Data #: Gen_15
Data Element: Alert method
Data type: Alphabetic
Rules:

Codeset value	Notes
COSPAS SARSAT distress beacon	
Phone call to Police 111	
Transfer from Ambulance or FENZ 111	
SEND notification	(includes SPOT, inReach etc)
Flight Tracking Device	
Airways (ATS)	
Marine VHF via MOC	
Marine HF via MOC	
Marine VHF via Coastguard	
Other marine radio provider	
Other RCC	
Phone call to RCCNZ	From the distressed party or their trusted contact
Direct phone call or in person to Police SAR / Station (without using 111)	From the distressed party or their trusted contact

Data #: Gen_16
Data Element: SAR Squad
Data type: Alphabetic
Rules:

Codeset value	Notes
Whangārei	
Auckland	
Hamilton	
Rotorua	
Taupo	
Tauranga	
Gisborne	
Hawkes Bay	
New Plymouth	
Wanganui	

Codeset value	Notes
Manawatu	
Masterton	
Wellington	
Nelson	
Marlborough	
West Coast	
Christchurch	
Timaru	
Dunedin	
Invercargill	
Queenstown	
Wanaka	

Data #: Gen_17
Data Element: Police Area
Data type: Alphabetic
Rules:

Codeset value	Notes
Far North Area	Only if Gen_17 = “Northland”
Whangarei Area	Only if Gen_17 = “Northland”
Rodney Area	Only if Gen_17 = “Waitematā”
North Shore Area	Only if Gen_17 = “Waitematā”
Waitakere Area	Only if Gen_17 = “Waitematā”
Auckland West Area	Only if Gen_17 = “Auckland City”
Auckland Central Area	Only if Gen_17 = “Auckland City”
Auckland East Area	Only if Gen_17 = “Auckland City”
Counties/Manukau West Area	Only if Gen_17 = “Counties Manukau”
Counties/Manukau East Area	Only if Gen_17 = “Counties Manukau”
Counties/Manukau Central Area	Only if Gen_17 = “Counties Manukau”
Counties/Manukau South Area	Only if Gen_17 = “Counties Manukau”
Waikato East Area	Only if Gen_17 = “Waikato”
Waikato West Area	Only if Gen_17 = “Waikato”
Hamilton City Area	Only if Gen_17 = “Waikato”
Western Bay of Plenty Area	Only if Gen_17 = “Bay of Plenty”

Codeset value	Notes
Eastern Bay of Plenty Area	Only if Gen_17 = “Bay of Plenty”
Rotorua Area	Only if Gen_17 = “Bay of Plenty”
Taupo Area	Only if Gen_17 = “Bay of Plenty”
Tairawhiti Area	Only if Gen_17 = “Eastern”
Hawkes Bay Area	Only if Gen_17 = “Eastern”
Taranaki Area	Only if Gen_17 = “Central”
Whanganui Area	Only if Gen_17 = “Central”
Manawatu Area	Only if Gen_17 = “Central”
Kapiti-Mana Area	Only if Gen_17 = “Wellington”
Wairarapa Area	Only if Gen_17 = “Wellington”
Hutt Valley Area	Only if Gen_17 = “Wellington”
Wellington City Area	Only if Gen_17 = “Wellington”
Marlborough Area	Only if Gen_17 = “Tasman”
Nelson Bays Area	Only if Gen_17 = “Tasman”
West Coast Area	Only if Gen_17 = “Tasman”
Canterbury Metro Area	Only if Gen_17 = “Canterbury”
Mid-South Canterbury Area	Only if Gen_17 = “Canterbury”
Otago Coastal Area	Only if Gen_17 = “Southern”
Otago Lakes Central Area	Only if Gen_17 = “Southern”
Southland Area	Only if Gen_17 = “Southern”
Outside NZ 12nm limits	Automatically selected if Gen_17 = “Outside NZ 12nm limits”
Undetermined	Automatically selected if Gen_17 = “Undetermined”

Data #: Gen_18
Data Element: Police District
Data type: Alphabetic
Rules:

Codeset value	Notes
Northland District	
Waitematā District	
Auckland City District	
Counties Manukau District	

Codeset value	Notes
Waikato District	
Bay of Plenty District	
Eastern District	
Central District	
Wellington District	
Tasman District	
Canterbury District	
Southern District	
Outside NZ 12nm limits	
Undetermined	

Data #: Gen_21
Data Element: SAR Category OR non-SAR activity type
Data type: Alphabetic
Rules:

Codeset value	Notes
Category 1 SAR	
Category 2 SAR	
Body Recovery	Only visible to Police
Exercise	Visible to Police and RCCNZ
Maritime Security	Only visible to RCCNZ
Maritime Assistance Services (MAS)	Only visible to RCCNZ
Medevac	Only visible to RCCNZ
RCCNZ Ops Log	Only visible to RCCNZ
Ambulance coordinated	Visible to Police and RCCNZ

Data #: Gen_23
Data Element: Search and Rescue Region (SRR)
Data type: Alphabetic
Rules: If there is a SAROP, then this must align with the find location

Codeset value	Notes
NZSRR	Default selection
Fiji SRR	
New Caledonia SRR	

Codeset value	Notes
Australia SRR	
Chile SRR	
USA SRR Honolulu	
Tahiti SRR	
Other SRR	

6.2 Resources data (HR, Ast, SLA)

Data #: HR_1
Data Element: Organisation level people (human resource)
Data type: Alphabetic

Codeset value	Notes
AREC Sections	
Coastguard Units	
LandSAR Groups	
Specialist Land Teams (LandSAR/DOC)	
Surf Life Saving Clubs	
NZDF Personnel	
NZ Police	
FENZ personnel	Does not cascade
Civil Defence personnel	Does not cascade
NZ Response Teams	Does not cascade
Department of Conservation	Does not cascade
Spontaneous volunteers	Does not cascade
Other marine rescue groups	
Other land rescue groups	
Other	

Data #: HR_3
Data Element: Type of Use
Data type: Alphabetic

Codeset value	Notes
On Standby Only	
Deployed	
Enquiry	
Incident Management Team	

Data #: HR_2
Data Element: AREC Sections
Rules: As a codeset for HR_1 = 'AREC Sections'

Codeset value	Notes
Ashburton	
Auckland	
Auckland VHF Group	
Balclutha	
Central Otago	
Christchurch	
E. Southland	
Eastern B.O.P	
Franklin	
Gisborne	
Hamilton	
Hastings-Havelock North	
Hibiscus Coast	
Kapiti	
Manawatu	
Marlborough	
Marton	
Motueka	
Nelson	
New Plymouth	
North Otago (Oamaru)	
North Shore	
Northland	
Nth Canterbury	
Otago	
Papakura	
Rotorua	
Southland	
South Canterbury	
Tararua District	
Tauranga ECG	

Codeset value	Notes
Thames	
Upper Hutt	
Wairarapa	
Wellington VHF Group	
Western Suburbs	
Westland	

Data #: HR_2, Ast_2
Data Element: Coastguard Units
Data type: Alphabetic
Rules: As a codeset for HR_1 OR Ast_1 = 'Coastguard Units'

Codeset value	Notes
Auckland Coastguard Inc	Coastguard Rescue Vessel
Bay of Islands Coastguard Inc	Coastguard Rescue Vessel
Bluff Coastguard	Coastguard Rescue Vessel
Canterbury Coastguard Inc	Coastguard Rescue Vessel
Clyde Coastguard Inc	Coastguard Rescue Vessel
CNR Communications	Can only be used as a cascade for HR_2, NOT for Ast_2
Coastguard Dunedin	Coastguard Rescue Vessel
Coastguard Far North	Coastguard Rescue Vessel
Coastguard Hibiscus Inc	Coastguard Rescue Vessel
Coastguard Kaipara	Coastguard Rescue Vessel
Coastguard Kapiti Coast - Kapiti	Coastguard Rescue Vessel
Coastguard Lake Taupo Inc	Coastguard Rescue Vessel
Coastguard Maketu	Coastguard Rescue Vessel
Coastguard Maraetai Inc	Coastguard Rescue Vessel
Coastguard North Shore	Coastguard Rescue Vessel
Coastguard Northern Region - Auckland Air Patrol	Coastguard Air Patrol
Coastguard Queenstown	Coastguard Rescue Vessel
Coastguard Whangaroa Inc	Coastguard Rescue Vessel
East Cape Volunteer Coastguard Inc	Coastguard Rescue Vessel
Gisborne Volunteer Coastguard	Coastguard Rescue Vessel

Codeset value	Notes
Great Barrier Coastguard	Coastguard Rescue Vessel
Hawke's Bay Volunteer Coastguard Inc	Coastguard Rescue Vessel
Hokianga Volunteer Coastguard	Coastguard Rescue Vessel
Howick Volunteer Coastguard Inc	Coastguard Rescue Vessel
Kaikoura Volunteer Coastguard	Coastguard Rescue Vessel
Kawau Volunteer Coastguard Inc	Coastguard Rescue Vessel
Lake Brunner Coastguard Inc	Coastguard Rescue Vessel
Mana Volunteer Coastguard	Coastguard Rescue Vessel
Manawatu Volunteer Coastguard Inc	Coastguard Rescue Vessel
Manukau Volunteer Coastguard	Coastguard Rescue Vessel
Marlborough Volunteer Coastguard	Coastguard Rescue Vessel
Nelson Volunteer Coastguard Inc	Coastguard Rescue Vessel
North Kaipara Volunteer Coastguard Air Sea Rescue	Coastguard Rescue Vessel
Northland Coastguard Air Patrol Inc	Coastguard Air Patrol
Opotiki Volunteer Coastguard	Coastguard Rescue Vessel
Papakura Volunteer Coastguard Inc	Coastguard Rescue Vessel
Raglan Volunteer Coastguard	Coastguard Rescue Vessel
Riverton Coastguard	Coastguard Rescue Vessel
Rotorua Lakes Volunteer Coastguard Inc	Coastguard Rescue Vessel
South Canterbury Volunteer Coastguard Inc	Coastguard Rescue Vessel
South Taranaki Volunteer Coastguard	Coastguard Rescue Vessel
Sumner Lifeboat Institution	Coastguard Rescue Vessel
Tairua-Pauanui Volunteer SAR & Coastguard	Coastguard Rescue Vessel
Taranaki Volunteer Coastguard Service Inc	Coastguard Rescue Vessel
Tauranga Volunteer Coastguard Association	Coastguard Rescue Vessel
Thames Volunteer Coastguard Inc	Coastguard Rescue Vessel
Turangi Volunteer Coastguard Inc	Coastguard Rescue Vessel
Tutukaka Coastguard	Coastguard Rescue Vessel
Waihau Bay Volunteer Coastguard	Coastguard Rescue Vessel
Waiheke Volunteer Coastguard Inc	Coastguard Rescue Vessel
Waihi Beach Volunteer Coastguard Inc	Coastguard Rescue Vessel

Codeset value	Notes
Waimakariri-Ashley Lifeboat Institute Inc	Coastguard Rescue Vessel
Waiuku Search & Rescue Association Inc	Coastguard Rescue Vessel
Wanganui Volunteer Coastguard	Coastguard Rescue Vessel
Wellington Volunteer Coastguard	Coastguard Rescue Vessel
West Coast Coastguard	Coastguard Rescue Vessel
Whakatane Coastguard Association Inc	Coastguard Rescue Vessel
Whangamata Volunteer Coastguard	Coastguard Rescue Vessel
Whangarei Volunteer Coastguard	Coastguard Rescue Vessel
Whangaruru Volunteer Coastguard Inc	Coastguard Rescue Vessel
Whitianga Volunteer Coastguard Inc	Coastguard Rescue Vessel

Data #: HR_2
Data Element: LandSAR Groups
Data type: Alphabetic
Rules: As a codeset for HR_1 = 'LandSAR Groups'

Codeset value	Notes
Auckland	
Catlins	
Central Otago	
Christchurch	
Clutha District	
Dunedin	
Eastern Southland	
Ellesmere	
Far North (Kerikeri)	
Fiordland	
Gisborne	
Golden Bay	
Greymouth	
Haast	
Hamilton	
Hanmer Springs	
Hawke's Bay	

Codeset value	Notes
Hokitika	
Horowhenua	
Hurunui	
Kaikoura	
Karamea	
Kuaotunu	
Marlborough	
McKenzie	
Methven	
Motueka	
Murchison	
Nelson	
North Otago	
Northland (Whangarei)	
Oxford	
Paeroa	
Palmerston North	
Rakaia	
Reefton	
Rotorua	
Ruapehu	
South Canterbury	
South Westland	
Southland	
Stewart Island	
Taihape	
Tairua/Pauanui	
Taranaki	
Tararua	
Taupō	
Tauranga	
Thames	
Turangi	

Codeset value	Notes
Waihi	
Wairarapa	
Wairoa	
Waitomo	
Wakatipu	
Wanaka	
Wanganui	
Wellington	
Westport	
Whakatane	

Data #: HR_2
Data Element: Specialist Land Teams
Data type: Alphabetic
Rules: As a codeset for HR_1 = 'Specialist Land Teams'

Codeset value	Notes
Aoraki/Mt Cook ACR (DOC)	
Christchurch ACR	
RARO ACR	
Taranaki ACR	
Tasman / West Coast ACR	
Wakatipu ACR	
Wanaka ACR	
Avalanche Dogs	
Wilderness Dogs	
Cave SAR	
Tasman Swift Water	
Wanaka River SAR	

Data #: HR_2
Data Element: NZDF Personnel
Data type: Alphabetic
Rules: As a codeset for HR_1 = 'NZDF Personnel'

Codeset value	Notes
Army personnel	
Air Force personnel	
Navy personnel	

Data #: HR_2
Data Element: NZ Police
Data type: Alphabetic
Rules: Used as a codeset for HR_1 = 'NZ Police'

Codeset value	Notes
Whangārei SAR Squad	
Auckland SAR Squad	
Hamilton SAR Squad	
Rotorua SAR Squad	
Taupo SAR Squad	
Tauranga SAR Squad	
Gisborne SAR Squad	
Hawkes Bay SAR Squad	
New Plymouth SAR Squad	
Wanganui SAR Squad	
Manawatu SAR Squad	
Masterton SAR Squad	
Wellington SAR Squad	
Nelson SAR Squad	
Marlborough SAR Squad	
West Coast SAR Squad	
Christchurch SAR Squad	
Timaru SAR Squad	
Dunedin SAR Squad	
Invercargill SAR Squad	
Queenstown SAR Squad	

Codeset value	Notes
Wanaka SAR Squad	
Auckland Police Maritime Unit	
Wellington Police Maritime Unit	
Police Dog Handler	
Dive Squad	
General Duties Police staff	

Data #: HR_2, Ast_2
Data Element: Surf Life Saving Clubs
Data type: Alphabetic
Rules: Used as a codeset for HR_1 OR Ast_1 = 'Surf Life Saving Clubs'

Codeset value	Notes
Bethells	
Brighton	
Buller	
Castlecliff	
East End	
Far North	
Fitzroy	
Foxton	
Himatangi	
Hot Water Beach	
Kaka Point	
Karekare	
Kariaotahi	
Kotuku	
Levin Waitarere	
Lyall Bay	
Mairangi Bay	
Maketu	
Mangawhai Heads	
Maranui	
Midway	
Mt Maunganui	

Codeset value	Notes
Muriwai	
Nelson	
New Brighton	
New Plymouth Old Boys	
Ngati Porou	
North Beach	
North Piha	
Ocean Beach Kiwi	
Omaha	
Omanu Beach	
Onemana	
Opotiki	
Opunake	
Oreti	
Orewa	
Otaki	
Pacific	
Paekakariki	
Pakiri Beach	
Papamoa	
Pauanui	
Piha	
Pukehina Beach	
Raglan	
Rarangi	
Red Beach	
Riversdale	
Ruakaka Beach	
South Brighton	
Spencer Park	
St Clair	
St Kilda	
Sumner	

Codeset value	Notes
Sunset Beach	
Tairua	
Taylors Mistake	
Thornton	
Titahi Bay	
Tolaga Bay	
Waihi	
Waikanae	
Waikuku Beach	
Waimairi	
Waimarama	
Wainui	
Waipu Cove	
Waitara	
Warrington	
WestShore	
Whakatane	
Whangamata	
Whangarei Heads	
Whiritoa	
Worser Bay	

Data #: HR_2
Data Element: FENZ personnel, Civil Defence personnel, NZ Response Teams, Department of Conservation, Spontaneous volunteers, Other marine rescue groups, Other land rescue groups, Other
Data type: Alphabetic
Rules: As a codeset for HR_1 = 'FENZ personnel, Civil Defence personnel, NZ Response Teams, Department of Conservation, Spontaneous volunteers, Other marine rescue groups, Other land rescue groups, Other

Codeset value	Notes
People	

Data #: Ast_1
Data Element: Organisation or environment level asset
Data type: Alphabetic

Codeset value	Notes
Coastguard Assets	Does not cascade further but auto-populates from the codeset for Coastguard Units
Surf Life Saving Assets	
Other Marine Rescue Asset	
EMS Helicopter (Air Ambulance)	Cascades to a third level
Aviation Assets	Cascades to a third level (Not Coastguard, NZDF, NZ Police, EMS)
NZDF Assets	
NZ Police Assets	
Marine Non-Rescue Assets	
Other	Cascades to a short free text field?

Data #: Ast_2
Data Element: EMS Helicopter
Data type: Alphabetic
Rules: Used as a codeset for Ast_1 = 'EMS Helicopters'
THIS CODESET WILL CHANGE IN NOVEMBER 2018

Codeset value	Notes
Auckland Rescue Helicopter Trust	
Bay Trust Rescue Helicopter	
Eastland Rescue Trust	
Garden City Helicopter Nelson	
Garden City Helicopters Christchurch	
Garden City Helicopters Greymouth	
Greenlea Rescue Helicopter (Philips Search and Rescue Trust) Taupo	
Hawkes Bay Helicopter Rescue Trust	
Helicopter Services Bay of Plenty Ltd	
Helicopters Otago Ltd.	
Heliworks	
LifeFlight Trust	
Northland Emergency Services Trust	
Palmerston North Rescue Helicopter	
Southern Lakes Helicopters Ltd.	
Taranaki Rescue Helicopter Trust (TRHT)	

Codeset value	Notes
Trustpower Rescue Helicopter (TECT)	
Waikato Westpac Rescue Helicopter	

Data #: Ast_2
Data Element: Aviation assets
Data type: Alphabetic
Rules: Used as a codeset for Ast_1 = 'Aviation Assets'
Source: NZSAR Resources Database

Codeset Value	Notes
Aero Work Ltd	
Action Helicopters	
Advanced Flight Ltd	
Alpine Helicopters Ltd	
Amalgamated Helicopters Wairarapa Ltd	
Amuri Helicopters Ltd	
Anderson Helicopters Ltd.	
Aspiring Helicopters	
Beck Helicopters	
Central Helicopters 2014	
Central South Island Helicopters	
Christchurch Helicopters 2001 LTD	
Coast to Coast Helicopters (Alan Brown)	
Coastwide Helicopters Ltd (Mount Hutt Helicopters)	
Command Aviation	
East Kaweka Helicopters	
FARAM AVIATION GROUP	
Fox Franz Heliservices	
Frontier Helicopters	
Garden City Helicopters Christchurch	
Gisborne Helicopters Ltd.	
Glacier Southern Lakes Helicopters Ltd	
Greenstone Helicopters	
Heli A1 Ltd	
HeliCharter Nelson	
Helicopter Services Bay of Plenty Ltd	
Helicopters Hawkes Bay	
Helicopters NZ Ltd (Nelson)	

Codeset Value	Notes
Helicopters NZ Ltd (New Plymouth)	
Helicopters Otago Ltd	
HELICORP	
HeliHire	
Heliska Ltd	
Helitranz	
Heliventures NZ Ltd	
Heliworx Aoteroa Ltd	
Helliview	
Hill Country Helicopters	
Inflite Charters Auckland	
Inflite Charters Mt COOK	
Inflite Charters Taupo	
ISLAND HOPPERS	
Kaikoura Helicopters	
Marlborough Helicopters	
Milford Helicopters	
Mount Hutt Helicopters 2013 Ltd	
North Shore Helicopters Ltd	
Oceania Helicopters NZ Ltd	
Outback Helicopters	
Over the Top helicopters	
Pacific Island Air	
Precision Helicopters - Blenheim	
Precision Helicopters - Urenui	
Precision Helicopters Hamilton	
Precision Helicopters Whangarei	
Rangitikei Helicopters Ltd	
REID HELICOPTERS NELSON Ltd	
Rimutaka Helicopter Services	
Salt Air Ltd.	
Skywork Helicopters Ltd.	
Southern Lakes Helicopters Ltd.	
Tararua Heliwork	
TeAnau Helicopter Services	
The Helicopter Line - FRANZ JOSEF / FOX	
The Helicopter Line - MT COOK	

Codeset Value	Notes
The Helicopter Line - QUEENSTOWN	
Twincoast Helicopters	
Volcanic Air	
Wairarapa Helicopters Ltd	
Wanaka Helicopters Ltd	
Wellington Helicopters	
Other Defence/Police Aircraft (non-NZ)	
Other	

Data #: Ast_3
Data Element: Aviation Asset type
Data type: Alphabetic
Rules: Used if Ast_1 = 'EMS Helicopter' OR 'Aviation Asset'

Codeset value	Notes
Augusta	
Bell	
BK 117	
Cabri	
Airbus/Eurocopter	
Hughes/MD	
Robinson	
Sikorsky	
Squirrel	
Other helicopter	
RPAS/UAS/Drone	
Fixed wing aircraft	Not NZDF or Coastguard Air Patrol

Data #: Ast_2
Data Element: Surf Life Saving Assets
Data type: Alphabetic
Rule: Used as a codeset for Ast_1 = 'Surf Life Saving Assets'

Codeset value	Notes
IRB	
RWC (jetski)	

Data #: Ast_2
Data Element: Other Marine Rescue Assets
Data type: Alphabetic
Rule: Used as a codeset for Ast_1 = 'Other Marine Rescue Assets'

Codeset value	Notes
Auckland Airport Hovercraft	
Wellington Airport Rescue Boat	
Cape Egmont Sea Rescue Trust	
Harbour Master	
Other	Can this cascade to a short free text field?

Data #: Ast_2
Data Element: Marine assets
Data type: Alphabetic
Rules: Used as a codeset for Ast_1 = 'Marine Non-Rescue Assets'

Codeset value	Notes
Recreational vessel	
Passenger Vessel	
Cargo/Container Vessel	
Fishing/Trawling Vessel	
Other Commercial Vessel	
Other Defence/Police Vessel (non-NZ)	

Data #: Ast_2
Data Element: NZDF Assets
Data type: Alphabetic
Rules: Used as a codeset for Ast_1 = 'NZDF Assets'

Codeset value	Notes
A109 Helicopter	
C130 Hercules	
NH90 Helicopter	
SH-2G Seasprite Helicopter	
P-3K2 Orion	
Navy Dive/Sonar Support	

Codeset value	Notes
Inshore Patrol Vessel	
Offshore Patrol Vessel	
Frigate	
Other Naval Vessel	
Other Air Force Aircraft	

Data #: Ast_2
Data Element: Police Assets
Data type: Alphabetic
Rules: Used as a codeset for Ast_1 = 'NZ Police Assets'

Codeset value	Notes
APMU Deodar III	
APMU Police 5	
APMU Police 9	
WPMU Lady Liz IV	
WPMU Police 8	
WPMU Police Alpha	
Hamilton Police Boat	
Police Dog	
Police Eagle Helicopter	
Other Police Asset	

Data #: SLA_1
Data Element: SLA Partners
Data type: Alphabetic
Rules: More than one option can be selected

Codeset value	Notes
AREC	
Coastguard	
LandSAR	
Surf Life Saving	

6.3 Operation data (Ops)

Data #: Ops_1
Data Element: Activity: Air
Data type: Alphabetic
Rules: Only if Gen_1 = "Air"

Codeset value	Notes
Rotary - Commercial	
Rotary - Private	
Fixed wing - Commercial	
Fixed wing - Private	
Ballooning	
Gliding	
Adventure activities (Paragliding, Hand gliding, etc)	

Data #: Ops_2
Data Element: Activity: Land
Data type: Alphabetic
Rules: Only if Gen_1 = "Land"

Codeset value	Notes
Climber (alpine)	
Day walker	
Tramper	Someone going into the outdoors with the intention of staying overnight
Hunter	All types
Mountain biker	
Outdoor sports	Includes: running, land-based fishing, caver, canyoning, snow-sports,
Off road vehicle user	trail bikers, quad bikers, ATV, 4WD vehicles
Work	
Despondent / psychotic	Includes suicide
Evader / fugitive	When a SAROP is required for an individual who is evading Police
Missing person	Lost or missing person does not fit in any other category
Other	
Wanderer	Use the codeset of the 'land wanderer' as a subset to this codeset

Data #: Ops_3
Data Element: Activity: Wanderer
Data type: Alphabetic
Rules: Only if Gen_1 = "Land" This table is a subset of the 'Land' table

Codeset value	Notes
Autism	
Brain injury	
Dementia	
Intellectual disability	
Mental illness	
Other cognitive disability	

Data #: Ops_4
Data Element: Activity: Water
Data type: Alphabetic
Rules: Only if Gen_1 = "Water"

Codeset value	Notes
Recreational Boating	Includes Kayaks, Jet-skis, Inflatables, paddleboards etc.
Non-Recreational Boating	
Canyoning	
Diving (including from a vessel)	
Fishing (including from a vessel)	Includes inland waterways fishing
Surfing	
Swimming (including from a vessel)	
Towed Activity (including from a vessel)	

Data #: Ops_6
Data Element: Cause of incident: Land
Data type: Alphabetic
Rules: Only if Gen_11 = "Land"
Source: ISRID

Codeset value	Notes
Avalanche	
Darkness	

Codeset value	Notes
Decision Point	
Despondent/self-inflicted	
Drowning	
Environment	
Fitness	
Medical	
Overdue	
Poor supervision	
Poor trails	
Poor/inadequate equipment	
Poor/no map	
Runaway	
Separation – Accidental	
Separation – Intentional	
Short cut	
Substance intoxication	
Trauma/injury	
Violence/abduction	
Wandered away	

Data #: Ops_7
Data Element: Cause of incident: Vessel
Data type: Alphabetic
Rules: Only if

Codeset value	Notes
Alcohol or drug impairment	
Capsize	
Collision or grounding	
Fire	
Man over-board	
Mechanical or equipment failure	
Medical incident or injury	
Weather or water conditions	
Vessel was not in distress	

Data #: Ops_24
Data Element: LPB: Closest linear feature type to Find Position
Data type: Alphabetic
Rules: Only if Gen_1 = "Land" AND Gen_13 = SAROP

Codeset value	Notes
Fence line / power lines / pipeline	
River / stream / canal / drainage	
Road	
Ridge line	
Track	
Railway line	
Vegetation / terrain interface	Includes firebreaks, bush line, coastline
Other	

Data #: Ops_25
Data Element: LPB: Detectability (if lost)
Data type: Alphabetic
Rules: Only if Gen_1 = "Land"

Codeset value	Notes
Excellent	
Good	
Fair	
Poor	

Data #: Ops_29
Data Element: LPB: Lost Strategy
Data type: Alphabetic
Rules: Only if Gen_1 = "Land"
Source: ISRID

Codeset value	Notes
Back tracking	Subject turns around and attempts to retrace steps until they find a location they are once again familiar with.
Contouring	Subject roughly follows a contour interval (neither going up or down) to move in a mountainous area.

Codeset value	Notes
Direction Sampling	Subject with go several different directions to see if they find anything familiar. After sampling several different directions, they will then typically choose what appears to be the best route.
Direction Traveling	Subject selects one fixed direction and then continues that direction until they are unlost or find another feature to follow. While the subject might actually be wandering in circles, the goal is to travel in one fixed direction.
Downhill	Subject chooses to travel downhill to become unlost.
Evasive	Evasive is not a strategy per se for becoming unlost. Instead it is the behaviour while they are lost. The subject is actively trying to avoid searchers or being detected.
Folk Wisdom	Subject is following some form of folk wisdom.
Followed travel aid	Subject followed some type of linear features. This might have been a trail, game trail, water feature, road, powerline, cut line, railroad, border between open and forested land, etc.
Landmark	Subject headed towards a landmark.
Panicked	Subject had no strategy and moved around or even ran with no discernible goal.
Nothing	Subject gave up, stayed in one place, but took no action to increase chance of being found or survival.
Route sampling	Subject located multiple routes and travelled on each route before deciding upon which route to take.
Stayed put	Subject decided to stay in one place to wait for rescue. In addition, they took action to increase survivability or detectability.
View enhancing/cell phone signal	Subject decided to move upwards either to get a better view in a search for landmarks or in pursuit of a cell phone signal.
Other	Subject attempts something not listed. Please specify in comment section.

Data #: Ops_33
Data Element: Root cause
Data type: Alphabetic
Rules: Only if Gen_13 = SAROP
Source: Framework for Recreational Safety in New Zealand

Codeset value	Notes
Ignorance	Ignorance, disregard or misunderstanding of recreational activity hazards
Lack of Information	Lack of information and awareness about the activity, environment and safety implications
Lack of ability	Inability to cope once in an uncertain situation or when exposed to recreational hazards
Inadequate supervision	Lack of effective monitoring, supervision or surveillance while exposed to recreational activity hazards
Inappropriate/failed equipment	Inappropriate equipment selection or equipment failure
Not ascertained	

Data #: Ops_34 AND Ops_35
Data Element: Search techniques used
Data type: Alphabetic
Rules: Only if Gen_1 = "Land"
Can select more than one option

Codeset value	Notes
Area canvas	Looking for witnesses
Attraction	Roving patrols, red and blues, gun shots
Combined Search Team (dogs and trackers)	
Containment	
Electro-optics / RADAR / LIDAR	
Fixed wing – air observers	
Grid – close contact	
Helicopter – air observers	
Homing signal from distress beacon – aerial DF tracking	
Homing signal from distress beacon – ground DF tracking	
House to house search	Physical house to house searching in suburbia
Mobile locate / PCL	
Operational tracking	
Other	

Codeset value	Notes
Purposeful wandering	
RPAS (UAV or drone)	
Search Dogs – area	Air scenting
Search Dogs – avalanche	
Search dogs – HRD	Cadaver
Search Dogs – tracking	
Sound light line	
Sound light sweep	
Sound line	
Sound sweep	
Thermal imaging	
WanderSAR technology – DF tracking	WanderSearch

Data #: Ops_36
Data Element: Specialised rescue recovery technique
Data type: Alphabetic
Rules: Only if Gen_1 = "Land"
More than one option can be seleceted
Can be left blank

Codeset value	Notes
Technical rope rescue	
Stretcher carrier	
Long line	
Winching	
Other	
Rescue swimmer	

Data #: Ops_37
Data Element: Terrain setting
Data type: Alphabetic
Rules: Only if Gen_1 = "Land"
Multiple options can be selected

Codeset value	Notes
Cave	
Coastal	
Cliff	
Farmland	

Codeset value	Notes
Town/City	
Alpine	
Sub-Alpine	
Bush	
Other	

Data #: Ops_38
Data Element: Land Cover
Data type: Alphabetic
Rules: Only if Gen_1 = "Land"
Auto-populate using the LCDB dataset available from LandCare Research based on the LatLong

Data #: Ops_40
Data Element: Valid request for SAR
Data type: Alphabetic
Rules: If a distress beacon was used (Gen_2) then this option must align with Gen_6

Codeset value	Notes
Valid request – normal SAROP	
False SAROP	Where a SAR operation has been conducted, and then it is discovered that there is no one in distress / potential distress
Valid request – questionable need for a SAROP	Use when there is serious doubt about the perceived level of distress a person was in (i.e. they are running late and need to be at work tomorrow)
Valid request – inadequate preparation or capability	Use when there is a distress situation, and this has been caused or exacerbated by a serious failing of the persons involved in either their preparation or capability
HOAX / malicious SAROP	

6.4 Aircraft & Vessel data (Air, Ves)

Data #: Air_1
Data Element: Aircraft type
Data type: Alphabetic
Rules: Only if Gen_1 = "Air"

Codeset value	Notes
Heavy	
Military	
Other	
Glider	
Helicopter	
Micro-light	
Light	
Balloon	

Data #: Ves_3
Data Element: Recreational vessel: Vessel type
Data type: Numeric
Rules:
Source: MNZ & Safer Boating Forum

Codeset value	Notes
Kayak	
Dinghy	
Power Boat less than or equal to 6m	
Power Boat over 6m	
Sailboat less than or equal to 6m	
Sailboat over 6m	
Jetski	
Other	SUPs, canoe, windsurfing boards etc

Data #: Ves_4
Data Element: Non-recreational vessel type
Data type: Alphabetic
Rules:

Codeset value	Notes
Passenger Vessel	
Cargo/Container Vessel	
Fishing/Trawling Vessel	
Other Commercial Vessel	
NZDF Vessel	
Other Defence/Police Vessel (non-NZ)	

Data #: Ves_5
Data Element: communications carried?
Data type: Alphabetic
Rules: Only if Ops_4 = 'recreational boating'

Codeset value	Notes
No	
Yes	
Not known	

Data #: Ves_6
Data Element: Lifejackets available?
Data type: Alphabetic
Rules: Only if Ops_4 = 'recreational boating'

Codeset value	Notes
No	
Yes	
Not known	

Data #: Ves_7
Data Element: Lifejackets worn?
Data type: Alphabetic
Rules: Only if Ops_4 = 'recreational boating'

Codeset value	Notes
No	
Yes	
Not known	

Data #: Ves_8
Data Element: Subject preparedness of the recreational vessel
Data type: Alphabetic
Rules: Only if Ops_4 = 'recreational boating'

Codeset value	Notes
Excellent	
Good	
Fair	
Poor	
Not known	

Data #: Ves_9
Data Element: Subject preparedness of the skipper and crew
Data type: Alphabetic
Rules: Only if Ops_4 = 'recreational boating'

Codeset value	Notes
Excellent	
Good	
Fair	
Poor	
Not known	

Data #: Ves_11
Data Element: Vessel master profile
Data type: Alphabetic
Rules: Only if Ops_4 = 'recreational boating'

Codeset value	Notes
No Qualification	
Day Skipper (or equivalent)	
Boatmaster (or equivalent)	
Other non-commercial qualification	
Claimed experience in years	
Commercial qualification	Try and ascertain the certifying State
Not ascertained	

Data #: Ves_17
Data Element: Vessel flag
Data type: Alphabetic

Rules: Only if Ops_4 = 'Non-recreational boating'
Use codeset from IMO – may have to obtain this from RCCNZ

6.5 Outcome data (Out)

Data #: Sub_16
Data Element: Fatality: after SAR alerted?
Data type: Alphabetic
Rules: Only if Out_6 > 0

Codeset value	Notes
Before SAR alerted	
After SAR alerted	If selected, this should generate an alert email to the appropriate manager
Unknown	

6.6 Subject & Medical data (Sub)

Data #: Sub_3
Data Element: Ethnicity
Data type: Alphabetic
Source: Ethnicity New Zealand Standard Classification 2005 – Statistics NZ

Codeset value	Notes
European	
Maori	
Pacific Peoples	
Asian	
Middle Eastern/Latin American/African	
Other Ethnicity	
Not Known / Not Stated	

Data #: Sub_5
Data Element: Residency status
Data type: Alphabetic
Source: Framework to achieve safer recreation in New Zealand

Codeset value	Notes
Local	
Domestic tourist	
Migrant	
International tourist	

Data #: Sub_6
Data Element: Nationality
Data type: Alphabetic
Rules: To use the UN codeset https://unstats.un.org/unsd/methodology/m49/

Data #: Sub_9
Data Element: Subject preparedness: clothing, equipment, supplies
Data type: Alphabetic
Rules:

Codeset value	Notes
Excellent	

Codeset value	Notes
Good	
Fair	
Poor	
Not known	

Data #: Sub_10
Data Element: Subject preparedness: experience, fitness, knowledge
Data type: Alphabetic
Rules:

Codeset value	Notes
Excellent	
Good	
Fair	
Poor	
Not known	

Data #: Sub_13
Data Element: Reasons (if injury)
Data type: Alphabetic
Rules:

Codeset value	Notes
Unknown	
Fall or Slip	
Anchor failure	
Other	
Haste	
Inadequate equipment	
Belay failure	
Fatigue	
Misuse of equipment	
Shot	

Data #: Sub_14
Data Element: Type of injury or illness
Data type: Alphabetic
Rules:

Codeset value	Notes
Burns	
Circulatory system (laceration)	
Drowning	
Frost bite	
Heart attack / cardiac related	
Hyperthermia (hot)	
Hypoglycaemia / hyperglycaemia	Low or high blood sugar
Hypothermia (cold)	
Illness (including sea sickness)	
Internal organs / appendicitis	
Nervous system / stroke	
Not ascertained	
Other	
Poisons / Drugs (including alcohol)	
Respiratory system / asthma	
Shock	
Skeletal system (fractures)	
Soft tissue / sprain	

Data #: Sub_15
Data Element: Extent of injury/illness
Data type: Alphabetic
Rules:

Codeset value	Notes
None/Uninjured	
Slightly/First Aid	
Moderate/Doctor	
Severe/Hospitalised	
Deceased	
Unable to Ascertain	

Data #: Sub_16
Data Element: Fatality: contributing factor
Data type: Alphabetic
Rules:

Codeset value	Notes
Fall or slip	
Exposure to elements	
Self-inflicted	
Drowning	
Medical event	
Accidental shooting	
Trauma	From an aircraft or car crash, or an avalanche
Other	Includes victim of crime
Not ascertained	