NZSAR
New Zealand Search
and Rescue

NZSAR Guideline for Search and Rescue
Readiness Planning

What is a SAR Readiness Plan?

A SAR readiness plan can also called a pre-plan, contingency plan, or a response plan. It is a documented set of possible actions, contacts, procedures etc for a possible SAR operation. A readiness plan may be defined by a variety of criteria such as area, type of SAROP, high risk locations and frequent SAR operations etc.

How to use these guidelines?

These guidelines are generic in nature and can be used for either land or marine SAR readiness planning. These are simply guidelines or a set of considerations to look at when developing a SAR readiness plan. SAR coordinators and their supporting agencies are expected to integrate them with their own experience, local knowledge and conditions etc and modify them as required to meet your own needs and requirements. Coordinators should expect to add and/or delete aspects for the specific area/ environment involved.

Elements of a SAR Readiness Plan

Purpose and General Description	**Environmental Conditions**
Initial Actions	**Historical Search**
Activation, Coordination and Liaison	**Communications**
Safety	**Medical**
Organisational Structure	**Facilities**
Resources Available	**Appendices**
Access	

Administration

- **Name the Incident Response Plan – by area, district or environment.**
  Should link to the purpose of the readiness plan.

- **Who is the Incident Response Plan for, to be used by – name of organisation to be entered on Plan.**

- **Name of person or group that wrote the Incident Response Plan and the date it was prepared.**

General steps required to plan and write an Incident Response Plan:

Purpose and General Description

- **Purpose.** Brief description to define the purpose of this particular SAR readiness plan.

- **Overview.** Brief description of general area and common activities undertaken. Types of boating etc, i.e. commercial fishing / recreational boating / location of boat ramps / know locations that attract boaties and possible weather safe havens.

- **Geography.** Description of general geography of area, including slips, gorges, scree slopes, cliffs, bluffs, glacier area, avalanche terrain exposure. Type of water (lakes / rivers / sea) / depth / temperature / currents / hazards including Bars / Rocks / Reefs / Sandbanks / Rips / Currents.

- **Vegetation.** Description of general vegetation of the area, including gulleys, ridgelines, suitability for travel, navigation, etc.

- **Currents.** Knowledge of local currents. Ocean currents – upper current (top of water) and underlying current (under 1 metre). Tides (times) – spring and neap. Swell. Enclosed waterways and inshore waterways (within 12 NM of shore).

- **Watercourses.** Description of watercourses of the area, including flow levels and rates, suitability for travel and navigation, hazards, including gorges and waterfalls.

- **Water Hazards.** Culverts, drainage pipes, grates and grills, entry and exit points, locks (incl key holders) etc.

- **Tramping Tracks.** List and description of tramping tracks / walks that are specific to the area. This should include the nature of walk, start finish points and the general time to complete.

Initial Actions

- Deployment locations and tasks for first response / hasty teams. Define initial containment areas.

- SAR assets (and other assets) that may be available, (land and marine) their capability and response time.

- Any common reflex tasking to the area, i.e. checking of boat ramps etc.

- Notify applicable landowners (who may provide containment) and support agencies.

Activation, Coordination and Liaison

- Assess which coordinating agency is most appropriate to coordinate the incident. Reassess as required if the situation changes.

- Details of the agencies that need to be notified about an incident in this area and who have immediate access to keys, transport and extensive knowledge of the area.

- Agency / organisation contact list of key personnel and contact numbers.

- Other deployable SAR agencies that could be deployed, their capabilities, contact details, i.e. Helicopters, Harbour master, Pilot Boats etc.

- Detail any agreements or advisory arrangements with those agency / organisations.

Safety

- **General health and safety considerations for the readiness plan.** Include specifics if appropriate for area – i.e. avalanche, gorges, bar crossings etc.

- **Overview of potential hazards and risks.** List all known hazards of note incl poisons if dogs will be deployed.

- **Risk management / hazard mitigation.** Actions to be considered / taken to manage and mitigate the known or possible risks such as safety briefings, taking specific safety equipment.

- **Personal security.** Sign-in and sign-out procedures.

- **Fatigue and rest management.** Shift lengths, rosters, rest, replacement and demobilisation. Arrangements for overnight accommodation, transport to and from the incident.

Organisational Structure
Based on Co-ordinated Incident Management System – CIMS

- Command (IC) and alternate(s).

- Operations Manager, team and alternate(s). Incl expert marine experience if required.

- Planning and Intelligence Manager team and alternate(s). Incl expert marine experience if required.

- Logistics Manager team and alternate(s).

Resources Available

- **Personnel Requirements.** List predetermined number of field teams such as dog teams, specialist support, requirements for containment, roving patrols, management staff etc.

- Detail possible vehicle, aerial and maritime requirements.

- List likely pre-determined resources required to support the incident, including helicopter, fixed wing air, or marine transport, number of 4 x 4 vehicles required, etc.

- Detail marine assets that are SAR trained and others that could be used, type and number of vessels available. Dedicated Marine SAR resources and vessels of opportunity that could assist with the SAROP, jets boats, IRB etc.

- List predetermined minimum equipment requirements for the incident here, including any necessary tents, whiteboards, computers, radio requirement, porta-loos, etc.

- Describe other possible specialist equipment requirements.

- Locations of ICP's that might be used in the area.

Access
Travel routes, launching points, landing zones, risks – Operations

- **Access to area.** Road, track and river access to the area. Include travel times on tracks, 4 x 4 roads, waterways / rivers, river mouths / lakes / open sea. Also Boat ramps, wharfs, jetties etc.

- **Landing Zones / Pickup Zones.** List useful access points for landing (fixed and rotary) aircraft, winch and hover load points, etc.

- **Known travel routes.** Tracks / walkways, routes, survey tracks, possum lines, often-used ridges and spurs, rivers in area.

- **Waterways.** Rivers, canals, river mouths, lakes and open water.

Environmental Conditions
Weather, river, bar crossing and Avalanche Terrain Exposure Information – Planning and Intelligence

- Available / appropriate weather forecasts / information sources.

- List 'best' forecasts for area (including datum points for custom forecasts if applicable).

- Where best Marine forecasts for the area can be obtained.

- Weather and river information

- List details of any specific weather or river gauges / flow information available for the area.

- Bar crossing conditions. Specific bar crossing information / considerations

- Avalanche Terrain Exposure Scale – (only as required – high alpine)

- If applicable for area, contact DOC or develop avalanche risk forecasts for area using the ATES system. See also www.avalanche.net.nz.

Historical Search
Data, Decision Points and Attractants – Planning and Intelligence

- **Previous searches in area.** Brief overview of the history of searches in the area, including patterns and emerging trends. Consider inclusion of P130 number in case a look-up of previous searches is required.

  – Details of any contemporary or historic reference material, such as guide books, brochures, signage, maps, charts, nautical almanac etc that may give an indication of decision points or intended activity in the area.

- **Historical decision point errors.** List the common errors at key decision points in area from previous searches to include land, waterways, sea as applicable.

  – Huts, shelters and attraction. Lists huts, shelters and known attractions in the area for different subject profiles (example: well known un-marked hut).

  – Bays, coves, mooring points, popular attractions.

  – Attach maps / charts as appendixes as necessary.

Communications – Logistics

- **Phone Numbers.** Phone numbers of facilities identified in facilities plan, Police special ops room (if applicable), etc.

- **VHF Communications.** VHF channels, fixed repeater coverage, etc, include locations for installing portable repeaters and procedures for accessing fixed repeaters of other agencies.

- Marine channels and coverage.

- HF Communications.

- Day / Night frequency change times, sched times, remote stations for relay, etc.

- Single Side Band receiving stations.

- **Cell phone Coverage of Area.** Details of cell phone coverage of area, including ICP locations, road ends, ridge systems etc. Include all phone networks – Telecom, Vodafone and 2 Degrees.

- **Internet.** Use as coverage is available.

Medical – Logistics

- **Nearest Accident and Emergency Facility and Transit Times.** List the location of the nearest A&E facility to the area, and transit times by vehicle and air.

- **Marine Safe haven to land.** Where marine assets can come to shore for safety.

- **Medical Advisor on Standby.** List contact numbers of medical specialist required to provide advice for the incident i.e. medical advisor, on-call psychologist, paramedics, etc.

- **Actions on Injury / Incident.** Details of how, when and where to record details of any injuries or incidents (i.e. notify IC, etc).

- **Evacuation.** Include actions-on medical emergency, location for helicopter landing near ICP, options for land-evac and marine evac, etc.

Facilities – Logistics

- **Incident Control Point.** Details of designed Incident Control Point for area, including size, telephone and internet access, radio coverage. Similar details for.

- **Staging and Assembly Areas.** Details of available locations for Staging or Assembly areas, room to brief teams, any specific issues of note.

- **Catering Facilities.** Details of catering facilities available, including electricity, ovens, hot water, fridges etc.

- **Parking.** Parking and vehicle areas, access control etc.

- **Heli Pad / Landing Zones.** Suitable locations to land aircraft, conduct refuelling etc. NB include size and number of aircraft spots, access for heavy vehicles (fuel tankers etc).

- **Marine facilities.** Wharf, jetties, boat ramps, Local Marine communications establishment.

- **Facilities Map.** As they come to hand or provided by facilities managers.

Appendices

- **Appendix 1: Key contact people.**

  Additional contact details beyond that listed in the activation and liaison section.

- **Appendix 2: Maps / Charts**

  If you are in a district that has developed or will develop several Incident Response Plans, you could consider the Response Plans being attached as appendices to a Resource Plan (contact list / resource list). This would allow changes to be made (i.e. a contact person and phone number) to be made on one document as opposed to several times throughout your incident response plans.

  - A Response Plan could be sectionalised as follows:

  - Key Personnel and contact numbers.

  - Supporting emergency services.

  - Air Assets and capabilities.

  - Marine Assets.

  - List of any other capabilities or assets as deemed necessary to support the plan.

- **Appendix 3: Plan Maintenance**

  For the Incident Response Plan to remain effective and up to date there must be a regular Maintenance Plan. Actions of a maintenance plan could be as follows:

  - Review Period (as warranted by environment / group – potentially every 12 months.

  - Contact list (checked as part of review or known changes in personnel)

  - Resources / assets list (checked as part of review or known changes of resources)

  - Major environment changes

  - Updated Maps and or Charts.

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