

**NZ LAND SAR (Inc)**  
**Standards**

**COMMUNICATIONS UNIT LEADER**  
**Operational Role**

**Introduction**

This document specifies the standards of performance required for the operational role of a Land SAR Communications Unit Leader.

A high level of management, planning and technical skills are necessary to fulfill the role as technology and systems advance. Operational efficiency is enhanced when an integrated team is developed over a period of time (during operations and exercises).

**Communications Unit:**

The Communications Unit is responsible for: -

Developing plans for the use of incident communications equipment and facilities; installing and testing of communications equipment, and the distribution and maintenance of communication equipment.

Major Responsibilities of the Communications Unit:

- ❖ Advising on communication capabilities / limitations.
- ❖ Preparing and implementing the Incident Radio Communications Plan.
- ❖ Establishing and supervising the Communication Unit and Message handling.
- ❖ Establishing telephone, computer links, and public address systems.
- ❖ Establishing communication equipment distribution and maintenance locations.
- ❖ Installing and commissioning all communication equipment.
- ❖ Source additional equipment that may be required
- ❖ Overseeing the distribution, maintenance and recovery of communication equipment, e.g. portable radios.
- ❖ Maintaining a register of equipment issued and received.
- ❖ Providing technical advice on:
  - ❖ Communication systems.
  - ❖ Equipment capabilities
  - ❖ Geographical limitations
  - ❖ Propagation
  - ❖ Likely availability of communications
  - ❖ Amount and types of equipment available
- ❖ Maintaining a Unit Log of other activities.
- ❖ New technologies will likely expand the role of the communications unit

The Land SAR Communications Unit Leader is responsible for the supervision of the Incident Communications Unit, determines and recommends to the Operations Manager the most appropriate communications network for each specific operation as defined by the Incident Management Team (IMT).

The Communications Unit Leader is responsible to the Logistics Manager of the Incident Management Team (IMT) during a Search and Rescue operation.

This role, for the purpose of the standards, has been divided into four parts:

1. **Needs Analysis and Callout**
2. **Operation and Maintenance of Field Communications Network**
3. **Conclusion**
4. **Background Knowledge**

The criteria should each fit into one of three categories:

- 1 Tasks, which the Unit Leader must attend too personally.
- 2 Tasks which can be delegated but which the Unit Leader needs to ensure are properly carried out.
- 3 Tasks, which are carried out by a third, party, such as field operators, but in which the Unit Leader needs to make input or be a catalyst.

## **Part 1**

**Liaise with the Logistics Manager to develop a needs analysis, and then undertake callout systems as appropriate for the incident.**

## **Criteria**

- 1.1 Accurate details of circumstances are obtained to provide background information.
- 1.2 Time of deployment is determined and likely requirements for equipment and personnel discussed. An initial communications action plan is determined in conjunction with IMT. The following may be considered: -
  - The extent of the operation
  - Number of operators
  - Equipment type and extent of network
  - Consult people with local knowledge
  - Make decision on type of equipment
  - Decide on quantity of equipment
  - Participate in discussions to select location of Advanced Base

- 1.3 Deadlines for reporting times are agreed.
  - Time and place.
  - Advance team may be required.
- 1.4 Systems are activated for assembly of appropriate equipment and resources at the stipulated locations within the appointed time frame.

Equipment may include:

- Hand-portable radios
- Repeaters (portable or cross-band)
- Base radios
- Ground to Air radios
- Marine equipment
- Michie phones
- Poles and aerials.
- Headsets, audio mixers, lighting, heating, furniture, etc.
- Power supplies, generators and batteries
- Aerial and power cables
- Cellphones
- Fax, computers & accessories, printers, GPS, etc.
- Stationery, message forms, pens etc.

- 1.5 System for assembly of qualified operators is activated. Ensure that they are prepared for involvement.

The Communications team requirement may include:

- Operators and technical support personnel, Log keepers, relief operators.
- Skills, experience, equipment, food, self-sufficiency for 24 hours, local knowledge.

- 1.6 Communications for personnel while mobile is arranged.
  - Contact with advance team in event of accident or cancellation.
  - Mobile radio/cell phone
- 1.7 Town Base or Relay stations are established.
  - Suitable location (low noise, skip zones)
  - Experienced operator
  - Access to telephone
- 1.8 Adequate transport arrangements are arranged for personnel and equipment.

- 1.9 A second team of communicators and equipment is alerted and placed on standby. Reasons may include:
- An extended/expanded search
  - Another search operation
  - Cooperate with neighboring communications teams.

## **Part 2**

**Provide planning and communications for the Operation leading up to and during Search and/or Rescue Phases.**

### **Criteria**

2.1 The Logistics Manager is consulted to establish the Base callsign.

Points to consider may include:

- Callsign should be that of a major, well-known city, town or feature for clear on-air identification by other emergency services.
- Should be a single word with not more than 2 syllables.

2.2 The best location of Communications Unit is arranged with the Logistics Manager.

- Could be established within the Incident Control Point (ICP) or at a site nearby to reduce noise levels.
- Consider ease of access and check for hazards and obstructions such as overhead power or telephone lines and tall trees.
- There should be a clear access way between the ICP and the Communications Unit.

2.3 The Base Communications Unit is established.

Main points to consider could include:

- Adequate shelter from the elements
- All leads, cables and wires left tidy to avoid accidents.
- Power supplies, batteries left in a safe condition.
- Safety equipment, eg earth leakage breakers, lightning arrestors, earthing
- Adequate supply of forms and stationery.
- All equipment checked for optimum performance.

2.4 The communications briefing of field teams is provided as appropriate.

- Callsigns
- Likely Communication difficulties/limitations
- Care of radios (protection/waterproofing)
- Channels to be used
- Locations of repeaters
- All radios to be tested before leaving Incident Control Point. (ICP)
- Schedules
- Special codes (genuine messages during exercises)

- 2.5 Equipment is issued to field teams as appropriate to the operation.
- Record details of equipment issued and to whom.
  - Further training given if required.
  - Ensure that spare equipment is on site within (6 hours of an operation commencing) to minimize disruption if essential equipment fails.
- 2.6 Justification is given to requests for additional resources.
- Reason for request.
  - Availability of additional resources.
  - Availability of spare equipment in a reasonable time frame
- 2.7 Radio links with other services are arranged where necessary and after consultation with the Logistics and Planning Intell sections.  
Other links may include:
- Aircraft
  - Police
  - Department of Conservation
  - Forestry
  - Mountain Radio Service
  - Ambulance
  - Amateur Radio Service
  - Other specialist services
  - Specialist advice (medical, etc)
- 2.8 Radios are attended in a manner appropriate to the occasion.
- Continuous monitoring (including overnight monitoring).
  - Communications available whilst teams remain in the field
  - Competent operator on hand at all times.
  - Achieve a 5 second (max.) response time.
- 2.9 All messages are processed and passed promptly to their intended recipient.  
Some items to consider would be:
- Presentation – neatly written
  - Message form fully complete – Grid Reference, time of receipt, use of plain language, obvious errors checked and corrected, etc.
  - Care with spelling, particularly personal and place names.
  - Speedily processed and passed to the intended recipient.
  - Stations on standby are noted and kept in touch. Follow-up with the Planning Intell or Operations Managers where necessary.

- 2.10 All radio calls are logged.
- Formal & informal messages.
  - Show time, Team No., Grid Reference and brief notes.
  - Back up and support for the Incident Management log of events.
  - Evidence at Police enquiry or inquest.
  - Quick reference if a written message is mislaid.
  - Ready reconstruction of events if required.
- 2.11 The safety and welfare of the Communications Team is considered.  
Items considered could include:
- Adequate tea breaks and rest periods.
  - Appropriate clothing for the prevailing conditions.
  - A prepared roster for planned shift changes.
  - Individuals monitored for signs of fatigue or stress.
  - Check for likely hazards - power lines, unsafe areas or equipment.
- 2.12 Operational requirements are reviewed with the Logistics Manager at appropriate times to discuss strategies and to ensure adequacy of communications.  
Items for consideration may be:
- The possibility of long term escalation
  - Best available systems and technology appropriate to the operation.
  - Best available personnel appropriate to the operation.
  - Review staff and equipment levels at Communications Unit and at remote relay sites.
  - Replacement or recharging of batteries at the ICP.
  - Replacement of faulty field radios or their batteries.
  - Attention to field repeater or relay sites.
- 2.13 Operation of the Communication Unit is reviewed with the Logistics Manager periodically during the event.  
Some items for consideration:
- Observance of correct operating procedures.
  - Maintenance of an accurate log of all traffic.
  - Smooth flow of traffic between the IMT and the Communications Unit.
  - Stations on standby are identified and kept in touch.
  - Equipment and power supplies checked for efficiency and reliability.
  - The working areas kept tidy and orderly.
  - Good teamwork.

Any shortcomings are corrected quietly, but firmly. Details of shortcomings are recorded for future discussion, further training or for the Management Team review.

- 2.14 Legal, regulatory and safety requirements are met and maintained.
- Radio regulations are observed at all times.
  - Appropriate batteries, etc. are used (rating; gel-cell for aircraft, etc.)
  - Equipment, aerials are placed for safe use
- 2.15 The recommendations of an independent audit should be implemented where applicable.
- 2.16 The closedown of communications is carried out in a safe and orderly manner.
- Communications must be maintained until all teams have returned to the ICP.
  - Review closedown procedures with the Logistics Manager.
  - Any repeaters are retrieved.
  - All equipment issued has been correctly returned.
  - Equipment faults noted and recorded, repair followed up

## **Part 3**

### **Manage the conclusion of the SAR communications operation.**

#### **Criteria**

3.1 All personnel and equipment have appropriate transport to return home.

3.2 All equipment is returned to source promptly and ready for redeployment.

Checklist could include:

- Aerials checked for faults or potential faults.
- Cables checked and carefully wound.
- Power supplies checked and batteries recharged.
- Faulty radios checked and repaired if possible.
- Faults noted with nature of fault before return.
- Caravans and trailers checked for maintenance, registration or warrant of fitness before being returned to storage.
- Alternators or generators cleaned and refuelled ready for next operation.

3.3 Logs and appropriate paperwork are completed and filed for future reference.

Paperwork may include:

- Activity report completed and sent.
- Copy of log sheets to Police
- A report on the operation is prepared as required.
- Debrief attended.

A Communications plan must be prepared for the Incident Action Plan. (IAP)

3.4 Ensure that the SAR Debrief/Review is attended and notes taken.

Points to note:

- Information sharing and review provides an overview of the whole operation.
- Identification and investigation of key points and shortcomings.
- Changes may be required to systems, procedures, training, and resources.
- Notes are taken for future reference to ensure debrief/review recommendations are implemented as soon, as is practical.

3.5 Ensure that periodic operational peer reviews are held to ensure standards of performance are maintained and training needs identified.

## **Part 4**

**Has demonstrated a thorough knowledge of SAR operations.**

### **Criteria**

- 4.1 Has a good understanding of operational SAR CIMS structure, hierarchy and levels of operation.
- 4.2 Has a good understanding of the roles of the Incident Controller, Operations Manager, Planning and Intelligence Manager, Logistics Manager, Land SAR Adviser, and Communications Unit Leader.
- 4.3 Has a good understanding of commonly used SAR and CIMS terms.