



New Zealand Search and Rescue

Search and Rescue Telecommunications Working Group (Land)

Meeting Notes

1 -4 pm Thursday 26 January 2017
Moana Room, RCCNZ
Avalon TV and Film Studios
41 Percy Cameron Street, Lower Hutt

Present:

Duncan Ferner	NZSAR
Rex Aubrey	NZSAR Consultant
Jeff Sayer	AREC
John Yaldwyn	AREC
Tony Hunt	NZ Police
Steve Caldwell	LandSAR
Ian Newman	LandSAR
Pete Corbett	LandSAR
Jo Holden	NZ Police
Paul Craven	RCCNZ from 2.55 pm

Welcome

Duncan opened the meeting and welcomed the attendees.

In 2016 the Caravel Group had been commissioned to undertake a review of current radio communication capabilities and practices available to SAR organisations. Their report "Integrated radio communications framework for New Zealand land-based search and rescue operations" included 14 recommendations, the first being to establish a sector wide technical working group. Rex Aubrey was a member of the team which prepared the Caravel report and has been contracted by NZSAR to work through all the recommendations and as an advisor.

1. Draft STWG(L) Terms of reference

Draft terms of reference had been prepared and circulated to key SAR agencies. The group agreed with the proposed name as well as the purpose and goal.

1.1 Objectives

The Caravel document outlined the factors to be considered as well as the challenges faced in developing the proposed framework. At some point the working group should consider the framework in more detail to ensure that it is comfortable with it and take ownership. This will be the "go to" group for those seeking advice.

1.2 Membership and Composition:

The membership was amended to the following:

Core membership to include representatives from:

- NZSAR Secretariat
- Land Search and Rescue NZ
- Amateur Radio Emergency Communications
- NZ Police

Non-core:

- Surf Life Saving New Zealand
- Coastguard New Zealand
- Rescue Centre Coordination New Zealand
- Department of Conservation
- New Zealand Defence Force
- Civil Defence
- Maritime NZ
- Mountain Radio Service
- Fire and Emergency New Zealand
- Ambulance New Zealand
- Radio Spectrum Management

Technical aspects identified could be discussed by the working group but would be delegated to several people to seek technical support. Technical sub-committees to investigate or provide advice could be established if required.

Noted that some organisations are not focussed on SAR or communications.

ACTION:

Update TOR membership.

1.3 Processes

Meetings to be held two or three times a year. Minutes will be available to all members and non-core members. The group to agree on the priorities and how those will be worked through. There will be overlaps and potential for work and potential synergies.

Duncan indicated he would be happy for someone else to take on the role of chair.

2 Caravel Report – September 2016

Rex said meetings had been arranged with all the organisations on the list. Some highlights included. The writing of new VHF channel plan and the continued use of HF radio were significant issues brought up by most people. Invitations to attend the AREC annual conference in Christchurch over Queens Birthday weekend and LandSAR conference in New Plymouth were also highlights.

During the meeting with Wellingtons Westpac Rescue Helicopters we were told that there was a need to have an extra person to operate the radios because there are so many to operate.

Surf Lifesaving and Coastguard are using VHF marine radio channels and working together.

Rex had only been able to talk with one person at Ministry of Defence on the subject of their HF radio upgrade project.

3. Tasks and dependencies

3.1 Recommendations 2, 3 and 4

Recommendation 2:

Ask Police to continue support (either in house or outsourced) for their analogue VHF radio equipment (handheld radios, desktop radios and repeaters) used for SAR.

Recommendation 3:

Ensure the Police HF radio network capability is retained and users are trained and practiced in its deployment and use.

Recommendation 4:

Confirm accessibility of the Police's VHF digital trunk radio network for non-Police SAR activities.

Recommendations 2, 3 and 4 require a letter to Police. Duncan had met with Police the previous year and now it was necessary to send a formal letter to action these three recommendations. Noted the letter should be addressed to NZ Police Assistant Commissioner Mike Rusbatch.

Tony Hunt (Police) said the transition from the old analogue network to the new whole of government LTE network was scheduled for 2019-2023. Police acknowledge that the HF radio network capability is essential. It may be that Police choose not to own the HF that they have but we cannot not have HF. Police is committed to maintain all they have and there is a need for the SAR community to spell out what the Police should have.

John Yaldwyn (Wgtn AREC) said the monthly checking of HF radio equipment has changed because of a change of physical location from Wellington to Lower Hutt Police stations. There is a risk that HF radio would not be used. He has written to express his concern but he was not sure what the decision was and whether there is any national policy to support HDF. He had raised the issue of regular testing at the IMT help desk. John said he would like to get equipment tested and would be pleased if Police continued to maintain VHF. Duncan suggested keeping this at a low level first and that could initiate response.

Should it no longer be possible for the VHF facility to be maintained and if they are not able to maintain it there should be a period of notice. VHF use varies throughout the country and Auckland does not use it. Jono Sands (Ignition Ltd) was working on a project and would be happy to work with the group to ensure users are trained and capability maintained to meet health and safety requirements.

Pete said LandSAR has some existing training modules and he has been asked to review and revise these (just HF generally) to place on the web site. Pete to report back to the group.

ACTION:

Duncan to draft letter to Police and circulate it for comment.

3.2 Recommendations 5, 6 and 7

Recommendations 3, 4, 5, 6, and 7 related to tasks and dependencies. The diagram on page 7 of the report shows the dependencies between the 14 recommendations where the numbers correspond with each recommendation.

Recommendation 5:

Confirm accessibility to other VHF networks including DOC, Maritime, Civil Defence, AREC DMR and Surf Lifesaving NZ DMR.

To also include Fire and Emergency New Zealand, LandSAR and Ambulance in the recommendation.

Confirming accessibility in these joint LOA arrangements was going to require some negotiation. There needs to be a clear understanding and Duncan was not proposing a letter but one national work plan which works by agreement with these organisations. Ideally a policy be initiated at a national level that all communication LOAs be shared with this group.

This is not a priority but should be included on agendas and in the work programme. Any changes which have LOAs etc should be notified to the working group. John said Hamish Laburn has some LOAs.

Recommendation 6:

Develop a radio asset management database to support digital trunking and GPS tracking.

When it comes to digital radio GPS tracking of radios and or digital trunking every radio has to have a unique ID which is entered on the database. RCCNZ AREC started the database in 2014, repeaters in N/W but analogue ones do not need an ID. Police radios have their own IDs. Police radios currently participating in SAR work in the South Island have IDs (no trunk route). There is a restriction on the ID range to 7 or 8 digit ID. Police range is 8000.

A database currently exists and co-ordination with Police is on-going. LandSAR delegated work on a master plan to Craig Murray in Tauranga.

ACTION:

John, John, Rex and Hamish to address the questions of who uses the database, where it is going to be located, and who will host it.

Priority 3.

3.3 Recommendation 7

Recommendation 7:

Agree a common handheld radio purchase strategy that enables dual mode (analogue and digital) capability as well as built-in GPS for tracking:

Duncan questioned whether SARTrack is the best option for mission management. Noted that John Woolf has become the primary contact about SARTrack by default but Jo reported she is receiving some questions around SARTrack.

LandSAR met recently and has a preferred device they would like to purchase. There is a need for guidelines to be agreed across all agencies to avoid agencies ending up with non-compatible equipment.

Deciding on a purchase strategy is a priority one category because new radios are being purchased and different providers being used.

Priority 1.

ACTION:

John Yaldwyn (Wgtn AREC), John Woolf (LandSAR), Police radio engineers and Rex Aubrey to form a subcommittee to write a specification for the new radios.

Agree on common handheld radio purchase strategy.

3.4 Recommendations 8, 9

Recommendation 8:

Implement a common VHF channel plan for all radios to be programmed with nationally consistent channel names.

Agreed that this action be priority 3 and to be discussed at the next meeting.

Priority 3.

Recommendation 9:

Develop and implement continuous voice recording and instant playback on appropriate VHF channels:

The software involved is often very expensive.

ACTION:

Establish TOR requirements and project.

3.5 Recommendation 10

Recommendation 10:

Update and extend Memorandums of Understanding to use DOC, Civic Defence and Maritime New Zealand's VHF networks as required for SAR activities.

There is still no unified facility for holding joint Memorandums of Understanding (MOUs). A sharing house to actively manage MOUs makes sense and to ensure they are workable. It is important to ensure effective communications are developed and maintained with all the relevant organisations. Duncan believed about five MOUs existed and they should be grouped together. He undertook to develop a record of those.

ACTION:

Record existing MOUs.

3.6 Recommendation

11

Recommendation 11:

Develop and implement a maintenance program for all radios, especially the non-Police owned fixed VHF stations.

It was suggested that first a database was needed of all the pre-existing radios and then at covering all those that have been maintained. The most common question asked was which repeater should be used for an operation. This question to be included on the next meeting agenda.

ACTION:

John Yaldwyn to provide list and coverage maps of each site.

John Yaldwyn (Wgtn AREC), John Woolf (LSARNZ) Police with Rex Aubrey to form a subcommittee to write a maintenance document for fixed VHF analogue repeater stations.

Category: Priority 1.

3.7 Recommendation

12

Recommendation 12:

Engage with the Whole of Government Radio Network (WGRN) programme to ensure the continued availability of HF and VHF radio networks for ongoing SAR training and operations.

Noted the likely lack of suitability of the government network for SAR work. Tony Hunt (NZ Police) said WGRN would have funding provided of \$2.7M RFI and RFP to out-source radio network probably around 2023. There was some doubt that this would occur.

The LT network is provided by two providers, Spark and Vodafone, and the most problematic areas are rural. He does not believe Spark will roll out to those areas. WGRN was hoping to be in a position to identify a vendor to do this by 2019 and by 2023 have in place all services provided by one service provider. This will be an emergency service network.

Duncan urged the group not to be distracted by the whole radio network as it is urban. He would like to introduce the working group to WGRN so that they are aware of SAR. This could be achieved by inviting a representative from WGRN to one of the meetings.

ACTION.

John, John Yaldwyn, Rex Aubrey and Police TPA to investigate networks used and technical standard for those purchasing a radio for SAR work.
Priority 1.

Category: Priority 1.

Recommendation 13:

Evaluate the cost/benefit of acquisition, implementation and deployment of Codan LRDR.

Ian reported that Westport SAR was using this system and it is working well. Both Jeff and Ian had received a vendor independent report on its use. The group supported the need for an evaluation of Codan LRDR which should be undertaken by an independent radio expert.

Recommendation 14:

Engage with NZDF to plan the future development of their HF radio infrastructure to support SAR operations and training requirements.

Duncan would like NZDF to have a regular unofficial discussion with the group. He had invited Bruce Officer, principal advisor at NZDF, to the meeting but he was unable to attend, so he will be invited to the next meeting.

ACTION:

Invite Bruce Officer to the next meeting.

4. Timelines

One week deadline for letters to be circulated. Deadline mid-March.

5. NZDF HF briefing

Duncan reported there has been no briefing.

6. Other business

Pete mentioned that prior to the Christchurch earthquakes a LandSAR committee advisory group carried out a mapping type exercise across the country building a picture of VHF repeater coverage. Obtaining this information could aid the group to prioritize the work actions. Duncan to write to LandSAR asking if they already have this list could they share the information with the group.

ACTION:

Letter to LandSAR.

There are SAR links on the AREC technical web site and perhaps the attention of their members can be drawn to these links.

Spark has two transportable cellular sites, one is currently opposite the Beehive and there are at least two more.

Jo reported that Police is to talk with LandSAR about replacement of the yellow and green boxes. Work is going on probably about the battery replacements.

Next meeting not before April.

The meeting finished at 4pm.

SAR Telecommunications Working Group (Land) Action and Responsibility Table - Meeting of 26 January 2017

Item	Actions & Decisions	Responsibility
1.2 Membership	Update TOR membership	Secretariat
3. 1 Recommendations 2, 3 and 4	Letter to NZ Police	Secretariat
3. 2 Recommendation 5 and 6	Address database questions re recommendation 6	John S, John Y, Rex A, Hamish
3. 3 Recommendation 7	Agree on common handheld radio purchase strategy.	Working group
3.4 Recommendations 9	Establish TOR requirements and project re recommendation 9	Working group
3.5 Recommendation 10	Record existing MOUs	Duncan
3.6 Recommendation 11	Provide list of radios	John Y
3.7 Recommendation 14	Invite Bruce Officer, NZDF to next meeting	Duncan
6. Other business	Letter to LandSAR	Duncan