

# IMPROVED ALTERNATE COMMUNICATIONS ACTION PLAN

## ABOUT THIS ACTION PLAN

Plan date: 19 April 2022 Version: 0.2

This Action Plan accompanies the West Coast CDEM Communications & Alternate Communications Plan, one of the deliverables of the West Coast Resilience Action Plan project of 2021/22, and is a live document based on opportunities identified for improvements in Alternate Communications capability.

The document is intended to be used as planning tool for ongoing work activities for staff within the West Coast CDEM team and to be edited and modified as they see fit as part of the ongoing work programme. Activities have been rated by 'priority' however this is a guide only (refer 'Key' below). Items in the action plan have been categorized as: Action; Project; or Recommendation. Recommendations are highlighted in yellow.

Important notes are found at the end of this document. All prices should be finalised with hardware/service providers prior to commitment.

Key: **1** Highest priority / Do asap      **2** Medium priority / Do soon      **3** Lowest priority / Do when higher priorities completed

Ref#	Type	Category	Action/Description	Priority	Notes	Date/Frequency	Cost*
	<b>Prioritised work</b>						
1	Recommendation	WCCDEM Portfolio	<b>Make 'improved alternate communications' a work plan priority for R&amp;R EMO</b> Consider establishing a 'Communications Portfolio' to ensure a person is responsible for oversight of all WC CDEM communications including liaising with suppliers/providers, ongoing testing and training, capability development, including building tests into exercises, maintaining currency of CDEM Asset Register (GIS), supporting the RF project, maintaining up-to-date communications related information and hard copy documentation in EOC/ECC etc.	1	Communications are complex. Ideally the person appointed to the role of Readiness & Response EMO comes with Comms (including radio/sat) experience and can manage all comms assets, records and capability development.	Asap	
	<b>RF Project</b>		<b>NEMA Resilience Fund (RF) application activities</b>				
2	Project	Project management and liaison	Coordination of all RF Fund project activities, liaison with suppliers/service providers, reporting to WCCDEM and NEMA reporting requirements.	1	Included in the 2022 Resilience Fund application. Should proceed by alternate funding if required. WCCDEM to allocate resource.	Asap (once funding allocated)	\$20,000 <sup>1</sup>
3	Project	DOC Analog VHF Network (backup)	Fill South Westland gap in DOC radio network as a backup analog network giving WC CDEM a comparable network backup if all or part of WCCDEM analog network is lost.  Add additional DOC repeater site at Mt Bonar etc. to provide better coverage in South Westland and provide a close alternate VHF network. Includes design, specification and build.	1	Included in the 2022 Resilience Fund application. Should proceed by alternate funding if required.  Partner/Provider: DOC		\$29,000 <sup>2</sup>

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4	Project	VHF radio asset provisioning and programming review	<p>Full radio provisioning and programming review including:</p> <ul style="list-style-type: none"> <li>Detailed stock-take of all (hardware), providing detailed register across WCCDEM Network [Related to Item 29]</li> <li>Radio and aerial tests (site only)</li> <li>Visits to key West Coast Contractors and businesses to request permission to use channels and seek information for programming list (additional channels)</li> <li>Report making recommendation for radio provisioning and programming requirements</li> </ul>	1	<p>Included in the 2022 Resilience Fund application. Should proceed by alternate funding if required.</p> <p>Partner/Provider: Nelspecs/ChatR</p>	Asap	\$15,480
5	Project	Re-programming of radios across additional networks by radio specialist (external)	<p>Re-programme all WCCDEM radio assets (including all community response groups) with full list of channels (Including channels provided for emergency use e.g. DOC, other partners) across all CDEM radios at CDEM locations.</p> <p>[Related to Items 30, 31]</p>	2	<p>Included in the 2022 Resilience Fund application. Should proceed by alternate funding if required.</p> <p>Partner/Provider: Nelspecs/ChatR</p>		\$10,320
6	Project	Enable deployable capability for satellite (voice/data) communications	<p>Purchase BGAN units enabling (voice/data) capability that can be deployed in affected areas, paired with pre-programmed cellphone.</p>	2	<p>Included in the 2022 Resilience Fund application. Should proceed by alternate funding if required.</p> <p>Partner/Provider: Pivotel</p>		\$11,800 <sup>3</sup>
7	Project	ECC Satellite installation	<p>Install ECC Satellite/Voice vSat service (hardware plus 5 line VOIP)</p> <p>ECC facility (Westland Aquatic Centre) – currently no satellite backup in place. Review and consider installation of satellite backup unit with urgency.</p> <p>Note: Decision needs to be made about permanency of lease in building - ECC (upstairs, currently not leased or set-up) and EOC (downstairs in current leased space). Each location used as an ECC/EOC should have backup satellite services.</p>	1	<p>Included in the 2022 Resilience Fund application. Should proceed by alternate funding if required.</p> <p>Provider: Wireless Nation</p>	Asap	\$5,500 <sup>4</sup>
8	Project	Community satellite connections (based on community need/potential isolation)	<p>Community satellite connections (based on community need/potential isolation). Includes satellite phones for CRGs and 6 x fixed satellite installations at key sites to be decided by WCCDEM.</p>	1	<p>Included in the 2022 Resilience Fund application. Should proceed by alternate funding if required.</p> <p>Provider: Wireless Nation</p>	Asap	<p>Satellite Phones \$42,720<sup>5</sup></p> <p>Fixed installations (KA Band) \$25,200.00<sup>6</sup></p>
9	Project	Define HF capability and design	<p>An exploration and design project: Design HF network to complement LandSAR HF Network<sup>7</sup> capability to provide coverage across the whole of NZ and enable LandSAR, CDEM and partner agencies to communicate well on and off the Coast. Other CDEM Groups could develop the network and capability leveraging the 'West Coast pilot' design (build and hardware not included).</p>	1	<p>Included in the 2022 Resilience Fund application. Should proceed by alternate funding if required.</p> <p>Provider/Partners: Ignition Networks/Landsar/local experts e.g. Malcom Langley</p>		\$30,000

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10	Project	Generator backup	Get Greymouth ECC Facility generator ready. Currently no generator backup at ECC/Grey EOC. Communication systems will be limited if power is cut.	1	Included in the 2022 Resilience Fund application (Fuel storage application). Should proceed by alternate funding if required. Provider: Wireless Nation	ASAP	Refer RF fuel storage application
11	Action	Communications Asset Register	Further develop the CDEM Asset application (GIS tool) to capture all detail around WCCDEM communications assets across the West Coast (following VHF radio asset provisioning and programming review). Update the GIS layer with detailed information from the review.	2	'Communications portfolio' activity/s. Requires: GIS support	Following review.	
<b>Radio networks</b>							
12	Action	ChatR Digital VHF Network	Finalise the agreement for free and unrestricted use of the ChatR digital VHF network during emergencies. Formally accept the offer and consider publicity around the arrangement. (Access to network requires digital compatible radios. Optional encryption \$80 per radio)	2	Draft agreement has been provided to WCCDEM. Partner/Provider: ChatR		No cost
13	Action	DOC Network	Continue working with Colin Hopkinson at DOC to complete access to DOC network, including updates channel usage agreement, supporting the additional South Westland repeater site (part of the RF project) and maintaining the relationship.	2	'Communications portfolio' activity/s. Partner/Provider: DOC		
14	Action	WCCDEM Network maps	Get coverage maps made for the WCCDEM Network to understand coverage areas (simulation). Conduct testing as required to identify any weak spots (reality). Some testing plans drafts have been created as part of this project.	2	'Communications portfolio' activity/s. Partner/Provider: Electronet or Nelspecs		Approximately \$280 per site
15	Action	WCCEM Network enhancement	Work with Electronet to explore potential for a new repeater site on Kelly's Ridge (near Arthurs Pass), or similar location, to get VHF coverage into Otira, and how that would provide VHF coverage to WCCDEM and Canterbury. Also ask Chatr Communications about current digital coverage to Otira. Electronet have also indicated an additional repeater on Westpower's Mt St Patrick would improve Coast Road coverage. Explore this with Electronet.	2	'Communications portfolio' activity/s. Partner/Provider: Electronet		\$30K plus
<b>Radio assets</b>							



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Ref#	Type	Category	Action/Description	Priority	Notes	Date/Frequency	Cost*
16	Recommendation	VHF radio asset purchase/upgrade	Following on from the 'VHF radio asset provisioning and programming review' (as part of the 2022 RF project) develop budget for purchase of new radios for further provision or upgrade of existing.  New assets to support dual operation (analog/digital) to be able to utilise alternate digital networks.	1	This will require budgeting following the "VHF radio asset provisioning and programming review".  'Communications portfolio' activity/s.		Unknown until survey completed.
	<b>Capability</b>						
17	Recommendation	Capability	Consider establishing a <u>volunteer</u> Communications Team sub-group, engaging and supporting volunteers across the region with capability in <u>radio and satellite</u> at a <u>technical</u> level that can support the WC CDEM Group in testing, exercising and deploying (temporary) communications across the region to develop local capability.	2	'Communications portfolio' activity/s.		
18	Action	Testing record tool	Design and develop an online/GIS testing tool that can be filled in following each monthly comms test (radios and satellite phones).	3	'Communications portfolio' activity/s.  Requires: GIS support		
19	Action	Monthly communications testing	Conduct monthly comms tests (all comms channels – radio, satellite etc.) with each CRG, EOC and ECC.	1	'Communications portfolio' activity/s.	Monthly	
20	Action	Radio training	As new radios are rolled out additional training on usage e.g. switching between digital/analog and usage protocols to be developed and rolled out to all CRGs.	2	'Communications portfolio' activity/s.	As new hardware/programming provided.	
	<b>Satellite</b>						
21	Action	Hardware/Subscription	WCRC Building – currently no satellite backup in place. Review and consider installation of satellite backup unit. To be brought to the attention of WCRC. Particularly relevant if WCRC building is an alternate ECC/EOC.  [Outside of the 2022 WCCDEM RF application. To be discussed with WCRC as part of their ongoing BCP activity.]	2	Escalated to Director WCCDEM for discussion with WCRC.  Provider: Wireless Nation	ASAP	
22	Action	Upgrade KU Band satellite installations	Current KU band satellite installations on the West Coast need to be upgraded before equipment becomes obsolete. While not required immediately this will need to be considered and budgeted for. Wireless Nation can provide information around this.  [Outside of the 2022 WCCDEM RF application. To be discussed with Wireless Nation]	2	Previously escalated to Director WCCDEM.  Provider: Wireless Nation	Discussion asap.	
	<b>NEMA engagement</b>						

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Ref#	Type	Category	Action/Description	Priority	Notes	Date/Frequency	Cost*
23	Action	NEMA alternate communications engagement	<p>Continue to seek guidance on alternate communications from NEMA i.e. an 'all-CDEM' strategy, and communications strategic support.</p> <p>Seek and follow the progress of the 'Next Generation Critical Communications' project.</p> <p>Establish a close relationship with the NEMA AF8 Planner when role has been filled.</p>	3	'Communications portfolio' activity/s.	Ongoing	
<b>Documentation</b>							
24	Action	Alternate Communications Use Protocol	<p>Introduce the <b>Alternate Communications Use Protocol</b> document to the Emergency Operational Sub-Committee group to work through and edit to final version. This document contains protocols that set out how alternate communications could be used in the initial phase of any emergency when communications are interrupted.</p> <p>Draft document provided as part of the alternate communications deliverables.</p>	1	'Communications portfolio' activity/s in conjunction with Operational Sub-Committee (local emergency services and key agencies).	Asap	
25	Action	Hard copy plans	Maintain a hard copy of the <b>AF8 Safer Framework</b> (Emergency Management Southland, 2018) in all ECC/EOC's.	3	'Communications portfolio' activity/s.	At all times.	
26	Action	Hard copy plans	Hold multiple hard copies of West Coast <b>Communications Plan &amp; Alternate Communications</b> plan/s and attachments in ECC/EOC's.	2	'Communications portfolio' activity/s.	On date of authorisation (and following any updates)	
27	Action	Plan appendices	<p>Update the Appendices and Attachments named in the <b>West Coast Communications/Alternate Communications Plans</b> <u>at least annually</u>, particularly:</p> <ul style="list-style-type: none"> <li>• Key Contacts</li> <li>• Satellite Phone directories</li> </ul>	2	'Communications portfolio' activity/s.	Annually	
28	Action	Continue collecting local communications information	Use the GIS <b>WCCDEM Alternate Communications survey tool</b> that has been developed to keep filling in gaps in information on key contacts. Update collected information in (tele)Communication Plan/Alternate communication plans and on GIS layer (using survey tool). As gathered collate into the ' <b>Alternative Communications Plan Appendix B: Communications Capabilities &amp; Call Directory</b> ' (template provided by NEMA November 2021, Matt Kerr)	2	'Communications portfolio' activity/s. Needs to be an assigned task for ongoing work.	Ongoing	
29	Action	Regional Planning documentation	<p>Work with CDEM Groups (particularly South Island) to complete the '<b>Alternative Communications Plan Appendix B: Communications Capabilities &amp; Call Directory</b>' (template provided by NEMA November 2021, Matt Kerr)</p> <p>Note: Will require coordination. Establishing a Working Group with 'Communications portfolio' holders from each Group recommended to progress this. See item 34.</p>	2	'Communications portfolio' activity/s. Needs to be an assigned task for ongoing work.	Ongoing	

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Ref#	Type	Category	Action/Description	Priority	Notes	Date/Frequency	Cost*
30	Action	Documentation	Add information into gaps within the <b>West Coast Communications/Alternate Communications Plan</b> as numbers, email addresses etc. are standardised/assigned and any additional information (e.g. may want to include information on TEAM setup or D4H Live once implemented).	2	'Communications portfolio' activity/s.	Ongoing	
31	Action	VHF Radio Asset Register	Establish and maintain a <b>WCCDEM Radio Asset Register</b> for WCCDEM Radios. This should capture information on all CDEM radio assets.  This should be completed as part of the 2022 Resilience Project work above, as the contractor works through the sites to build an understanding around age, condition and capability of existing assets – and be added to as new assets are purchased and assigned.  [Template has been provided as part of this project] Related to Item 4	2	'Communications portfolio' activity/s.	Asap	
32	Action	Create WCCDEM VHF Channel Plan	Create a <b>WCCDEM VHF Channel Plan</b> for WCCDEM Radios. One channel plan for ECC/EOC radios and another for community-based radios.  This should be completed prior to radio reprogramming – refer to 2022 Resilience Project work above.  [Template has been provided as part of this project] Related to Item 4	2	'Communications portfolio' activity/s.	Once Item 4 complete	
33	Action	Create WCCDEM VHF Radio Frequency record	Create a <b>WCCDEM VHF Radio Frequency record</b> for WCCDEM Radios. This list programming information for programming WCCDEM (including community-based radios) and contains the technical information required for the radio specialist.  This should be completed prior to radio reprogramming – refer to 2022 Resilience Project work above.  [Template has been provided as part of this project] Related to Item 4	2	'Communications portfolio' activity/s.	Once Item 4 complete	
34	Recommendation	Establish an Alternate Communications working group	Establish and coordinate a 'South Island Alternate Communications working group' to keep working through communications pathways for neighbouring groups as part of AF8 planning around communications. The West Coast could show leadership around this. This group can help each complete the AF8 comms planning (previously led by NEMA) and to conduct testing inter-region testing of communications including radio and satellite comms.  Note: This may be handed over for NEMA facilitation at some later stage if appropriate.	2	'Communications portfolio' activity/s.	Asap, ongoing	
<b>Online Systems</b>							
35	Action	D4H Live (Incident Management)	Load all contact information including Lifelines contacts, Regional and National BAU and satellite phone numbers into D4H (pre-loaded according to event type).  Review and update annually.	1	'Communications portfolio' activity/s.	Once D4H Live subscription commences	

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36	Recommendation	D4H Personnel & Equipment	Consider licensing the D4H personnel and equipment module for managing teams, staff, volunteer capability (training records), event participation, availability (text/email functions), and equipment available within each group. Particularly helpful for scheduling resources, training events and keeping a record of engagement with groups. Multiple applications of how this would be beneficial for WCCDEM.	2	'Communications portfolio' activity/s.		Refer D4H
	Other						
37	Action	Lifeline status notifications	Continue building on the Lifeline status notification email concept developed and tested with Spark notifications (refer to M Gillman for more detail)	2	'Communications portfolio' activity/s - in conjunction with Lifelines portfolio holder.		No cost
38	Action	Standardise email addresses	Standardise all response email addresses across Councils and include in the communications plan.	3	'Communications portfolio' activity/s - in conjunction with WC4.		
39	Recommendation	Cloud PABX	Consider working with Wireless Nation to develop a cloud PABX that allows WCCDEM to have 'ready' 03 numbers that can be published for certain emergency functions. These numbers can be redirected as required from the online PABZ to any landline, cellphone number or satellite phone as required. Would require a person to administrate this during response but would enable remote work/shift changes etc. while maintaining constancy of emergency contact numbers.	2	'Communications portfolio' activity/s. Provider: Wireless Nation		Minimal setup costs, ongoing minor monthly costs <sup>8</sup>
40	Recommendation	EMO Engagement with CRGs	Consider a metric for each District EMO regarding in-person engagement with CRGs within their district within 3 months and then every six months after that on any resilience matters e.g. comms, water, generators/fuel etc.  This would support the work of the resources/service providers who will be helping with 2022 RF project activity.	1	EMO Support required.	Asap, Ongoing	
41	Recommendation	Community Response Plans	Consider reviewing the Community Response Plan format and content with a view to including all resilience measures.  Once new format agreed consider setting a metric to have these completed for all CRGs within a certain period.	2	R & R EMO (format) EMOs (completion)		

## Important Notes:

<sup>1</sup> Project Management: Allowed \$20,000 over life of 2022 Resilience Fund (RF) project

<sup>2</sup> DOC analog network: Work with Colin Hopkinson of DOC

<sup>3</sup> BGAN Units: Ongoing plan subscription costs to be negotiated with Pivotal

<sup>4</sup> ECC Satellite installation: Requires monthly satellite plan subscription. Allow \$200 per month put refer to Wireless Nation for details. Additional phone lines (VOIP) tend to be around \$20/month each. Wireless Nation can shape this a little as it may just be extensions that are needed, which are cheaper.

<sup>5</sup> Satellite Phones: Ongoing plan subscription costs to be negotiated with Wireless Nation (quoted 23/03/2022: 10 minutes of calling each month is \$80 + GST / month)



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WEST COAST  
EMERGENCY MANAGEMENT

GROUP

<sup>6</sup> Community satellite installations: For the Fixed KA Band VSAT service, Wireless Nation would do a low use plan sub \$100 per month. Should there be an emergency that requires it to be used heavily, it can be upgraded to higher service levels. This keeps the OPEX costs down, while having the connection online at all times which aids preparedness.

<sup>7</sup> HF project: There is no current agreement or arrangement between WCCDEM and LandSar. Identifying if there is a way to work together to build capability/capacity together is part of the work intended to be completed in the project. It would make sense to work closely with a partner agency who has worked in this area and build any solution ensuring that it is compatible and complementary so that gains are useful to each agency and that there is no duplication of effort. It is expected that meetings and correspondence to develop the Landsar relationship are an important part of the work ahead. RF project does not include hardware or implementation. Those costs will need to be identified during the design work.

<sup>8</sup> Cloud PABX: Initial set up and ongoing costs to be negotiated with Wireless Nation

