Resilience Fund Application Form

This form provides the minimum information for the application. A detailed project plan should be developed to inform this application and may be attached.

Project title	A West Coast Resilience project: **Preparing for AF8 #2: Improving alternate (and emergency) communications on the West Coast**
Date of application	28/01/2022

Details on application	
Applicant *[CDEM Group must endorse/sponsor all applications]*	West Coast Civil Defence Emergency Management
Sponsoring CDEM Group	West Coast Civil Defence Emergency Management
Other local authorities, Groups or organisations supporting this proposal	CEG, Emergency services agencies, Lifeline's members, DOC, LandSAR (HF)

Project description

Executive summary *[200 words maximum]*

The West Coast region is vast with challenging terrain with communities that are easily isolated for long periods of time when there is an emergency event.

The cell phone network is poor or non-existent in many parts of the region. VHF networks and communications relying on fibre are vulnerable due to their location being near or on high hazard risk areas, such as the Alpine Fault.

This project extends on from the West Coast Resilience Action Plan project of 2021/22 that identified opportunities for significant improvements to alternate communications capability and resilience for the region.

The project comprises of eight resilience building components, seen as viable short to medium term opportunities that will result in material improvements to West Coast's alternative communications.

The project is about **increasing resilience of existing communications as well as providing further capability across the PACE model (Primary, Alternate, Contingency, Emergency) to ensure that when major events occur, CDEM can function in response and connect to partner agencies and communities** to gain situational awareness and provide much needed support.

Challenge/opportunity *[200 words maximum]*

The West Coast had multiple events that resulted in loss of communications in 2021 which highlighted the region's vulnerability across its communication channels further. The Westport floods (July 2021) and lightning damage to the fibre network near Kumara (September 2021)

demonstrates how vulnerable communications are within the region and the significant challenges this causes when community's communications are cut.

West Coast CDEM has an opportunity to build contingency layers into our alternate communications capability. A significant amount of work has already happened to consider options for making improvements during the West Coast Resilience Action plan project of 2021/22. Longer term projects that require a greater deal of planning, alongside stakeholder support and financial investment, are not included in this application.

This application is about creating improvements over the short to medium term that will have a material impact on our ability to maintain or re-establish communications in an emergency when other means have been lost.

Alignment with priorities and objectives of the National Disaster Resilience Strategy (NDRS) *[200 words maximum]*

This project aligns with priorities and objectives of the NDRS including:

Priority: Managing risks – **Objectives**: 1) Risk scenarios and informed decision making, and **6)** Economic impacts

Priority: Effective response to and recovery from emergencies – **Objective**:10) enable and empower community-level response, and ensure it is connected into wider coordinated responses

Priority: Enabling, empowering, and supporting community resilience – **Objectives**: 13) …build resilience, paying particular attention to those people and groups who may be disproportionately affected by disasters, and **15)** …take a whole of city / district / region approach to resilience

Alignment with Principles and Allocation Preferences *[200 words maximum]*

Principles

This project has a **region wide approach** to alternate communications resilience and is aligned with planning to support communities across the region to be more resilient to significant natural hazard events or communications service outages. This approach also supports our **local iwi** by increasing the ability to utilise existing Iwi / Maori networks and register. **NEMA involvement is required** to support these initiatives, as district and regional councils' with their small rating base, are unable to fund this level of investment.

Allocation Preferences

Other **CDEM Groups have indicated their support to this suite of work** and if successful, are keen to benefit from the project. The HF Network set out in component eight has been an area of particular interest.

This project **supports national consistency** for regions to improve their resilience based on regional risk profiles like those associated with an alpine fault rupture.

Communications support is likely to be limited in the initial period in an event that effects the whole South Island. During this period many communities will be without communications and will limit the ability to assess impact, need and response priority.

Wider funding / resource commitment is being sought from councils' for long-term hardware investment e.g. HF project (hardware and build), where there are ongoing funding of subscriptions/network costs (for hardware included in this proposal).

This project focuses on short to medium-term resilience measures as immediate steps to close gaps identified in recent events and prepare for alpine fault risk.

This **project builds on existing work** completed in the West Coast Resilience Action Plan project currently underway and which has informed some of the next key steps e.g. this current project proposal.

The project contains **Operational expenditure (Opex)** and some capital expenditure.

Application of outcomes/benefits to sector *[200 words maximum]*

This project once executed will ensure CDEM is able to connect with West Coast communities across the region and ensure communities can contact CDEM and emergency services when needed. This will reduce the need for immediate support from NEMA/EMAT/NZDF and allow the West Coast to have much greater resilience in emergency communications by strengthening existing communications and adding redundancy to the current network.

The region currently has a legacy VHF system that while functional, requires work and development. Adding satellite communications within communities (devices/hardware assigned based on risk and vulnerability) will ensure we do not have island communities cut off, as seen recently in Tonga.

Removal of these barriers will make the West Coast more resilient and self-sustainable in the initial weeks following a major interruption to business-as-usual communications – reducing the need for immediate support and increasing the West Coast's ability to 'get thru'.

Ongoing costs (post-project) and how it will be funded *[200 words maximum]*

HF Radio hardware and build – Councils' Long Term Plans

Satellite subscriptions/radio network costs – Councils' operational funding

Project design

Project manager	Claire Brown, Director Natural Hazards & Emergency Management, West Coast CDEM
Other project members	West Coast CDEM team, external project coordination (included in proposal), CEG Chair
External providers/contractors	Project support contractor – to be confirmed Radio specialists (contractor/s), satellite equipment suppliers
NEMA resource (if needed)	-

Deliverables *[Note: payments will be made after successful completion of milestones identified]*

Key milestones	Date for completion	Cost (invoice amount)
Project coordination	Progress reports September 2022, December 2022, March 2023, Final report June 2023	$ 20,000

Purchase/installation of equipment and completion of professional services	31 May 2022	$ 170,020.00

Identified risks

Risks	Suggested mitigation / management
Shortage of hardware/supplies	Order early once application approved to avoid supply chain delays
Resourcing	External project resource factored into application to provide coordination and support.
Training requirements	WCCDEM staff trained by equipment providers and then train their community groups in use as part of ongoing CRG engagement.
Ongoing costs (subscriptions etc)	Supported by TAs. Benefits in a crisis outweigh costs.
Support from WCCDEM team	Supporting project tasks built into team work plan. Ensure comms expertise is hired into the WCCDEM team for ongoing comms management and support.

Funding request and use

CDEM Resilience Fund contribution	$ 190,020.00		
Local authority / organisation contribution	WCCDEM/TAs pay ongoing monthly subscriptions for all satellite connections, radio network fees and data costs (considerable) Purchase of HF hardware/build in TA long term plans.		
Other sources of funding or support	Some in kind support from DOC across VHF work.		
Budget [please supply spreadsheet]	$ 190,020.00 - **See end of this application (page 8)**		
Applies if application exceeds $100,000 over the life of the project	Are you prepared to attend an interview in support of this application (if needed)?	Yes ☒	No ☐

Application confirmation

Is this application from an individual or other organisation		Yes ☐	No ☒
Does the CDEM Group support this application? [sign off below confirms support]		Yes ☒	No ☐
Approval of Chief Executive [Chief Executive or Head of the organisation receiving the funding]	*[signature]* Name: Heather Mabin		

Approval of CEG Chair	
	Name: Simon Bastion

All communications regarding the application, including approval decisions will be addressed to the Chief Executive and CEG Chair

CDEM Group comment

Note: Only complete forms will be considered for assessment. All completed forms and supporting documents must be emailed to NEMA at resilience.fund@nema.govt.nz

NEMA Assessment [internal use only]

Principles	**Yes**	**No**
Local / regional focus	☐	☐
Values the role of Māori in the Emergency Management System	☐	☐
NEMA involvement required	☐	☐
Allocation Preferences		
Alignment with NDRS	☐	☐
Achieves equity of outcomes for Māori communities, marae, hapū, iwi and Māori organisations	☐	☐
Outcome focused	☐	☐
Applicable in other regions / CDEM Groups	☐	☐
Supports national consistency	☐	☐
Wider funding / resource commitment	☐	☐
Build on existing work	☐	☐
Operational expenditure (Opex)	☐	☐
Capital expenditure (Capex)	☐	☐
Other		
Application from individuals or other organisations endorsed/sponsored by CDEM Group		

NEMA Subject Matter Expert Comment	Supported ☐	Not supported ☐

NEMA Regional Emergency Management Advisor Comment	Supported ☐	Not supported ☐

NEMA Review Panel Comment	Supported ☐	Not supported ☐

NEMA Director Decision Sign-off	Approved ☐	Declined ☐
Director of Civil Defence Emergency Management		

Budget

#	Component	Description	Detail	Qty	Price (ex-GST)	Total (ex-GST)
1	Project coordination	Project management and liaison	Coordination of all project activities, liaison with suppliers/service providers, reporting to WCCDEM and NEMA reporting requirements.	1	$ 20,000.00	$ 20,000.00
2	DOC VHF Network (as back up to WC CDEM network)	Strengthen radio network as a backup network giving WC CDEM a comparable network backup if all or part of WCCDEM network is lost.	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	$ 29,000.00	$ 29,000.00
3	WCCDEM radio network	Provisioning and programming assessment and full stocktake by radio specialist (external)	Full radio provisioning and programming review including: Detailed stocktake of all (hardware), providing detailed register across WCCDEM Network Radio and aerial tests Visits to key West Coast Contractors and businesses to request permission to use channels and seek information for programming list (additional channels) Report making recommendation for radio provisioning and programming requirements	3	$ 5,160.00	$ 15,480.00
4		Re-programming of radios across additional networks by radio specialist (external)	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.	2	$ 5,160.00	$ 10,320.00
5	Deployable Satellite assets	Enable deployable capability for satellite (voice/data) communications	BGAN units enabling (voice/data) capability that can be deployed in affected areas, paired with pre-programmed cellphone.	2	$ 5,900.00	$ 11,800.00

#	Component	Description	Detail	Qty	Price (ex-GST)	Total (ex-GST)
6	CDEM/Community connectedness	Purchase of satellite communications with voice or voice/data capability (dependant on potential isolation of community), including plans and installation costs for rural communities	ECC Satellite/Voice vSat service (hardware plus 5 line VOIP)	1	$ 5,500.00	$ 5,500.00
7		Community satellite connections (based on community need/potential isolation)	Isatphone 2 - portable sat phones	5	$ 1,236.00	$ 6,180.00
			Iridium 9555 - portable sat phones	20	$ 1,827.00	$ 36,540.00
			Fixed installation (KA Band installation)	6	$ 4,200.00	$ 25,200.00
8	Design HF network	Work through HF network design supporting work already completed by LandSAR's LRDR project (design by HF specialist) Note: HF would be designed to interface with existing VHF network, but provide ongoing, reliable communications if VHF network/s (and all other communications) are lost.	Design HF network to complement LandSAR HF Network 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).	1	$ 30,000.00	$ 30,000.00
			Project total ex-GST			$ 190,020.00