



## CDEM Resilience Fund project application form

Application for CDEM Resilience Collaborative fund approval	
Project title	VHF Network Enhancement for Isolated Communities
Date of application	February 2013
Details on application	
Lead local authority	Kaikoura District Council
CDEM Group	Canterbury CDEM Group
Other local authorities or Groups supporting the proposal	Hurunui District Council
Project description	
<p><b>Executive summary</b></p> <p>The resilience fund application is for the installation of three VHF radio repeaters to be installed in the isolated areas of Kaikoura and Hurunui. These areas currently experience limited radio reception and installation of these repeaters would link isolated communities to the local CDEM VHF radio network.</p> <p>Southern Hurunui and Northern Kaikoura Districts are isolated areas with limited communications and transport networks. The area hosts the only alternate route to State Highway One, through the Inland Road and is prone to landslides. This project offers the two Territorial Authorities the opportunity to enhance the current CDEM VHF networks between two councils and provide an alternate and reliable means of communication with isolated communities during emergency events</p>	
<p><b>Problem/opportunity</b></p> <p>Communications in inland Hurunui and Kaikoura are restricted to landline phone and internet. Mobile phone coverage is erratic and doesn't provide a reliable alternate source of communication in an emergency.</p> <p>The topography is mountainous and the area has a number of isolated communities which would be effective cut off from communicating with the outside world if the phone lines went down after an event. The Inland Road through this area provides the main alternate route south of Kaikoura to Christchurch and Lewis Pass and is susceptible to being cut off if affected by slips, snow or flooding.</p> <p>Installation of the three repeaters would fill an identified communications gap in the North Canterbury area by extending the VHF network and filling a crucial communications "blackspot". This will improve the Hurunui and Kaikoura District Councils ability to deliver a coordinated response in an emergency.</p> <p>The addition of the repeaters would also improve the current Kaikoura District's community VHF communications network and allow for inter-district radio communications.</p> <p>This project complements the wider Canterbury CDEM Group VHF network by providing a layer of redundancy should Group repeater sites fail. The ability for the repeaters to have IP linking potentially provides a subsequent backbone for a South Island VHF network utilising IP linking technology.</p>	

<p>Alignment with identified goals and objectives</p> <p>This project addresses one of the key aspects of managing an emergency, being able to communicate in an emergency. It aligns with goal three of the national strategy – enhancing the ability of CDEM Groups to prepare for and manage civil defence emergencies.</p> <p>The project also provides assistance to one of the smallest and most vulnerable councils in New Zealand, because of its topography Kaikoura faces significant challenges if it becomes isolated from the rest of the South Island.</p>		
<p>Dissemination of benefits to sector</p> <p>This project integrates small; vulnerable communities into the wider inter-district VHF network thereby increase their resilience and CDEM's ability to effectively respond.</p>		
<p><b>Project design</b></p>		
Project manager	Don Clark – Kaikoura District Council	
Other project members	Allan Grigg – Hurunui District Council Jessica Petersen – Group Community Resilience Coordinator Andrew Howe – Group Operational Readiness Coordinator	
External providers/contractors	Signals Technology Solutions	
<p><b>Deliverables</b></p>		
Milestone	Date for completion	Cost
Equipment purchases (most likely to be staggered depending on installation plan)	September - October 2013	\$34,300.00
Individual repeater installation	October – December 2013	\$4,200.00
Site & local network testing (including integration testing with CDEM group VHF network)	From December 2013	\$1,800.00
<p><b>Identified risks</b></p>		
Risk	Suggested management	
<p>The risk of not installing the repeaters is that communities in the Hurunui and Kaikoura districts will be isolated in an event with no method of communication.</p> <p>There is a risk that the repeaters will malfunction.</p> <p>There is a risk that the repeaters will become obsolete because of technological developments, or reallocation of bandwidth.</p>	<p>This project is designed to address this risk through establishing radio communications for the communities of inland Hurunui and Kaikoura.</p> <p>As with any radio network there will be routine maintenance/checks of the repeaters and the wider network. This is a part of business as usual for the councils. Backup power (battery &amp; solar) options are included.</p> <p>The repeaters are dual mode (analogue/digital) and meet current and future narrow band analogue requirements and will provide a foundation for future enhancement in the digital space.</p>	

<b>Funding request and use</b>	
CDEM resilience fund contribution	\$40, 300
Local authority contribution	Project Management and on-going maintenance of the radio network
Other sources of funding	Nil
Expenditure	Equipment - \$34, 300 Labour and installation – \$6,000
<b>Application confirmation</b>	
Approval of Chief Executive	
<b>CDEM Group comment</b>	
Comment	The Canterbury CDEM Group endorses this project as it fills a vital communication gap within the region.
Approval of Coordinating Executive Group Chair	

