



CDEM Resilience Fund project application form

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

Project title		Track and Trace system for logistics in emergencies
Date of application		29 September 2017
Details on application		
Applicant		Question4
CDEM Group/s affected		All CDEM Groups
Other local authorities, Groups or organisations supporting this proposal		
Project description		
Executive summary [200 words maximum description.]		
<p>Goods and their delivery are the most expensive part of an emergency response and the tracking and tracing of these goods directly affects the effectiveness and efficiency of the response. There is currently no Track and Trace or Warehouse Management Software (WMS) that can be said to work effectively in emergencies where temporary supply chains are established to meet the demands of affected communities.</p> <p>A large market analysis and extensive experience of working in emergencies indicates there is currently no simple, easy to use Track and Trace system which is applicable to emergencies and we propose to close this gap. We propose to build a simple, intuitive app based Track & Trace system using existing mobile app technology that allows local responders to track and trace goods by using smart phones or tablets.</p> <p>Specifications have been written and preliminary discussions started with programmers (NashTech). It is proposed to refine the current specifications, through a review workshop with users prior to the start of programming. Following this a trial would be conducted with a CDEM Group before release. When released the app would be free to use.</p>		
Challenge/opportunity [200 words maximum description.]		
<p>There is currently no Track and Trace or Warehouse Management Software (WMS) that can meet the needs of emergency response organisations to track goods in new or rapidly expanded supply chains established to support the delivery of relief supplies to affected populations. WMS used by commercial organisations are overly complicated and require significant training and staffing.</p> <p>Currently emergency warehousing and track and trace is done through ad hoc excel spreadsheets and paper. This is ineffective, inefficient and prone to multiple errors. It often results in time and money being wasted and in delays to meeting the needs of affected populations.</p> <p>We propose to develop a simple, intuitive, smart phone app based Track & Trace system that allows responders to track and trace goods in and out of storage facilities to their final delivery point. It will not be a logistics planning tool and will not advise on stock outs, re-ordering or despatch planning. It will be a simple system that requires only minimal training enabling it to be used by everyone from a single person in a simple shed or up to 10 people in a temporary storage facility run by a government agency, NGO or community group.</p> <p>Future developments could include development of an interface to connect all users to provide a comprehensive overview of emergency stocks and deliveries.</p>		

Alignment with identified goals and objectives identified in the CDEM sector *[200 words maximum description.]*

Managing the distribution of goods to affected communities in a timely, efficient and cost effective manner is a critical element of emergency response and early recovery. Providing a simple to use platform to track and trace goods from initial receipt to distribution to the end user will enable all agencies and community groups involved in CDEM managed emergencies to more efficiently support affected communities.

This proposal aligns closely with 3 of the 4 goals in the CDEM Strategy.

1. Enhancing New Zealand's capability to manage civil defence emergencies, and
2. Enhancing New Zealand's capability to recover from civil defence emergencies.
3. Increasing community awareness, understanding, preparedness and participation in civil defence emergency management

Dissemination of benefits to sector *[200 words maximum description.]*

The system would be available for free to any users required to manage the receipt, warehousing and issue of supplies in support of emergency response activities, from national level agencies to community groups. It will enable supply chain data to be collected in a consistent manner across the CDEM sector

It will improve the visibility and efficiency of response and early recovery supply chains improving the cost effectiveness of response and ensuring maximum use is made of available resources. It will reduce the money and time lost due to stock losses that occur when inefficient manual stock management systems are used. It will also enable full records of all delivered stocks to be maintained and will allow near real time tracking of deliveries.

By requiring very little training it will be easy to quickly enable unfamiliar people to use the system if required to do so in a response. This would enable it also to be quickly used by newly formed spontaneous volunteer organisations to manage their stocks and equipment.

Project design

Project manager	Clive Phillips, Question4 Ltd
Other project members	David Neville, Entropy Consulting
External providers/contractors	NashTech

Deliverables

Milestones	Date for completion	Cost
Refinement of Requirements/Specifications	Quarter 3 2018	
Programming Phase 1 – Initial Build & Office Testing	Quarter 4 2018	
Programming Phase 2 – Refinement of platform build	Quarter 1 2019	\$155,000
Field Testing of platform	Quarter 2 2019	
Platform Roll Out – Training and technical support	Quarter 2 2019	\$60,000

Identified risks

Risks	Suggested management
Platform cannot be developed within budget	A well established ICT developer has been consulted following the development of draft specifications. The

Platform does not deliver meet the requirement	<p>developer has identified available freeware that will be able to be used to develop the platform. This lessens the likelihood of additional programming being required above that quoted for.</p> <p>Initial specifications have been developed by experts in emergency logistics with extensive field experience. Requirements will be refined through consultation with logistics experts in the sector.</p>		
Funding request and use			
CDEM resilience fund contribution	100%		
Local authority/organisation contribution			
Other sources of funding or support			
Budget <i>[Please supply spreadsheet]</i>	\$215,000		
Applies if application exceeds \$100,000 over the life of the project	Do you wish to attend a hearing in support of this application?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Application confirmation			
Approval of Chief Executive			
CDEM Group comment			
Comment			

