

KAREN Capability Build Programme Quarterly Oversight Report

Project	KAREN Capability Build Oversight Reporting
Project Purpose	Provide oversight reporting to REANNZ on the projects of the KAREN Capability Build programme.
Owner	Julie Watson, REANNZ
Other recipients	Steve Hoare, Programme Manager MediaLab Peter Chappell, CTO MediaLab
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Period	October - December 2007.

Overview

MediaLab has put in place regular reporting processes with the KAREN Capability Build Fund (CBF) projects, including regular communication with project leaders. This is the third quarterly oversight report on the CBF projects progress.

Eight of the total ten projects have provided reports and have been off to a good start and generating a lot of national/international interest.¹ The HortResearch project; 'who is KAREN and how can she enhance our research collaboration' was completed in September 07. A final report was developed for this. In October, November and December a total of five milestones across those projects have been met.

Many project members have held workshops, presentations and international/national conferences on their research, which also highlights the KAREN capability. More importantly, Wikis and online websites/portals have now been set up to enable greater communication on a regular basis with other collaborators both nationally and internationally.

There are no major time delays, issues or concerns at this stage; however the issues that have been identified are mostly either technical in nature or risks in availability of key personnel, which have impacted on some project timelines.

Further details of each project are summarised below and each report is attached with this document.

NB: Landcare Research have been contacted several times and have not yet submitted their quarterly report. Medialab will ask them to hand this report in soon as possible.

¹ Quarterly reports are not required of the Auckland University of Technology project (AUT626) as they have their own delivery of quarterly reports based on specified dates in the contract.

PROJECT	STATUS	HIGHLIGHTS	ISSUES/CONCERNS
1. AUT - KAREN: A New Window to the Universe. Real-time Trans-Tasman e-VLBI. [626]	<p>Project currently under evaluation by REANNZ for payment milestone.</p> <p>No quarterly report required for this project as it has its own reporting dates. Next report is due on the 31st of January 08.</p>	N/A	N/A
2. University of Auckland - NZ BioGrid - integrated bioinformatics analysis. [601]	<p>Regular project monthly pulse checks have taken place and project is on track. No major roadblocks. Completed 3 Milestones to date.</p> <p>Milestone 1: Implement the Biomirror of bioinformatics databases on BeSTGrid</p> <p>Milestone 2: Design Geneious Grid system – a report will be produced.</p> <p>Milestone 3: Implementation of the Design – Release 1</p>	<p>Completed Version 1 of the Geneious Grid-client and this will be available by 20th December.</p> <p>Scheduled to present the Geneious grid-client at the Otago Genomics workshop on 7-8 February. A news release will be available on the Bioinformatics Institute website (www.bioinformatics.org.nz). Also arranged with Julie Watson to have the news release on the KAREN website.</p>	Possible risks with staff turn-over during the project duration, which may slow down progress, otherwise all is on track.
3. HortResearch - Who is KAREN and how can she enhance our research collaborations? [624]	<p>This project was completed in September 07.</p> <p>All 3 milestones were met successfully.</p> <p>Milestone 1: Contract signed.</p> <p>Milestone 2: Scheduled workshops completed.</p> <p>Milestone 3: Project review completed</p> <p>Overall, the project goals were met and a final report was produced.</p>	N/A	N/A

<p>4. University of Canterbury - High Definition & Video Conferencing for New Zealand's High Speed Network. [604]</p>	<p>Regular project monthly pulse checks have taken place and project is on track. No major roadblocks. 3 milestones completed to date.</p> <p>Milestone 1:</p> <ul style="list-style-type: none"> Identify and evaluate high definition video conference and collaboration tools on a commercial and production scale on the KAREN network and purchase capital equipment as outlined in budget. Obtain, test, set up and develop Memetic middleware for AG conferencing. Set up reference group for potential users and early adopters using AG and other KAREN based VC platforms; meet with the group to discuss further development of capabilities for wider implementation of use. <p>Milestone 2:</p> <ul style="list-style-type: none"> Promote the use of High Definition video conferencing over the KAREN network and assist other KAREN partners who are exploring high definition solutions over KAREN. Assign students to work on the various projects included in the contract. Identify the need for new applications to enable the observations of video conferencing sessions; analyse data gathered in observations; further test and develop observation and analysis methods. <p>Milestone 3:</p> <ul style="list-style-type: none"> Provide advice and promote commercial high definition equipment and setups to other KAREN partners. Enable the development of AG use capabilities by: developing a downsized easy to use version of the middleware for use by project managers; running drop- in sessions for extending the circle of AG users and to share technical and methodological knowledge; and sharing experiences with reference group. Commence research with Mobile Medical Services on high quality video conferencing over KAREN. Produce design recommendations for collaborative UI development. 	<p>Continuing to increase awareness about high definition and video conferencing over KAREN by adding content to websites and promoting best practices.</p> <p>Also entering into the 'Mobile Surgical' space for high definition video usage. Organised a meeting with CEO Mark Eager.</p> <p>Almost completed a white paper on "Using Video Conferencing for Remote Collaboration" especially designed for KAREN members and plan to also have this online by end of December 07.</p>	<p>Software and hardware enhancements may need to be done regularly due to technological advancements in this area. This is not a big concern but definitely something to take note of.</p>
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<p>5. University of Waikato - Using High Resolution Satellite Imagery for Spatially Integrated Poverty Mapping. [603]</p>	<p>Regular project monthly pulse checks have taken place and project is on track. No major roadblocks. 3 Milestones completed to date.</p> <p>Milestone 1: Contract signed.</p> <p>Milestone 2: All collaborators will have gained first-hand experience using KAREN in New Zealand. One informal seminar presented to preview the use of KAREN for the research project.</p> <p>Milestone 3: One conference paper and two informal seminars presented on the project.</p>	<p>Completed the collection of spatially referenced data on household and public service locations in one Chinese province, with co-funding from the Chinese Academy of Sciences.</p> <p>Estimated the first stage models for the poverty mapping and have preliminary poverty maps available for that province (without yet dealing with spatial dependencies since the GPS data that have been collected have yet to be integrated into the main databases).</p> <p>Development of the project webpage (initial draft) work is still progressing with slight delays – this will allow dissemination to a wider audience.</p>	<p>Slow uptake of the KAREN campus-wide network has impacted on the timelines for the collaborative web-project. This was anticipated earlier but is not of major concern at this stage.</p>
<p>6. University of Otago - Integrated genomics resources for health and disease. [611]</p>	<p>Regular project monthly pulse checks have taken place and project is on track. No major roadblocks. 1 Milestone completed to date.</p> <p>Milestone 1: Set up systems to automatically link genomic data from multiple sources.</p>	<p>Continued to undertake extensive scoping and raising of awareness of the project and KAREN through conferences in New Zealand and abroad. Completed publication of an international database which uses the KAREN network to provide information on hepatitis B virus (HBVRegDB.otago.ac.nz).</p> <p>These databases link as described in the milestone 1. The data is generated at Otago on a pilot scale (for example the sequence of a HBV genome, AM282986, HBVRegDB)</p> <p>User testing began on the systems that support genomic data from multiple sources.</p>	<p>Resource of staff - currently looking for a software developer to continue the work on the application sharing of genomic data.</p>

<p>7. University of Auckland - storage Network Planning for KAREN / BeSTGRID. [627]</p>	<p>The project contract was signed at the start of September. On going pulse checks have been held with the project lead. Project on track to meet the milestone the first milestone next year.</p> <p>The first milestone is due in June 08.</p>	<p>Building on the work done in the previous quarter, the programme of work is making strong progress across the areas of building capability, analysis and construction of the research models, and setup of support systems.</p> <p>The following specific activities have been completed or are making good progress:</p> <ul style="list-style-type: none"> • Relationships have been reinforced with central IT Services at Auckland to ensure alignment of project goals and support from this critical group. • The project team are meeting regularly to discuss progress and ensure contributions are scheduled and viable. • Initial data has been acquired from central IT Services at Auckland, allowing initial modelling to be discussed. This has led to a refinement in the definition of the data to be captured, and further discussions are ongoing with systems people at ITS to setup the necessary data capture mechanisms to access this refined dataset. • Equipment has been purchased (from a complementary research budget) to setup a test bed environment. • Education is underway on various tools, with attendance at a workshop scheduled for January. • All findings are being documented on the project wiki. 	<p>Possible risk in availability of project personnel during the next few months due to teaching and sabbatical commitments.</p>
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<p>8. University of Auckland - Earthquake Engineering on KAREN. [621]</p>	<p>Regular project monthly pulse checks have taken place and project is on track. No major roadblocks. 2 milestones completed to date.</p> <p>Milestone 1: Recruitment of a PhD student for the Self-centering structural system project. Submit research proposal.</p> <p>Milestone 2: Report produced on the state of the art of Hybrid testing equipment.</p>	<p>Steady progress has been made in the installation of hybrid testing equipment at the University of Auckland, one of the show pieces of the Earthquake Engineering on KAREN project.</p> <p>A detailed site survey document was completed and sent to the manufacturers in the United States to facilitate the fabrication of the hydraulic equipment.</p> <p>NZNEES@Auckland has continued to work closely with the San Diego Supercomputing Centre in developing updates on the NEES experiment viewing software, Real-time Data Viewer (RDV) to utilise compressed video streams.</p> <p>PHD student has been sent on an exchange programme to the National Centre for Research Earthquake Engineering, Taiwan, where he is conducting half-scaled pseudo-static and dynamic loading tests on an innovative seismic resistant wall system.</p> <p>Beta version of the wireless data acquisition software has been created in-house using MATLAB</p>	<p>Bandwidth restrictions of satellite data being transferred through KAREN.</p>
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<p>9. Institute of Environmental Science and Research Ltd - New Zealand microbiology research and education network. [615]</p>	<p>Regular project monthly pulse checks have taken place and project is on track. No major roadblocks. No milestone achieved to date apart from signing of the contracts for project initiation.</p>	<p>The ESR website has now been brought in-house and will allow Sharepoint functionality for www.microbiology.net.nz.</p> <p>A VBulletin facility has been established for Asia-Pacific PulseNet and now in the process of establishing a website for the domestic microbiology network.</p> <p>Further capability has been built through the following areas:</p> <ul style="list-style-type: none"> • REANNZ is mentioned in all presentations on the NCBID development and/or research at ESR. • Brent Gilpin and Lisa McCallum presented a poster and demonstration of KAREN at the recent NZ Microbiology Society Conference in Wellington. • Ongoing mini road shows around the capital feature KAREN and REANNZ. 	<p>Potential lack of buy in by some NZ microbiology research laboratories. There is some difficulty conveying the benefits of KAREN access to those unfamiliar with the technology and its applications so uptake may take some time.</p> <p>Continuing to work on the establishment and growth of KAREN access internally. This may impact on activities planned such as video conferences and effective data transfers etc.</p> <p>This is a greater challenge than initially realised but ESR is gaining momentum now that the KAREN link is established and embedded at the organisational level.</p>
<p>10. Landcare Research - GeoSciences Network – New Zealand Establishment. [616]</p>	<p>NB: The quarterly report for the October-December 07 periods have not been received even though efforts to obtain the report from Landcare Research have been made. This summary is from the last report. MLL will chase up Landcare Research for this report.</p>	<p>Workshops in Auckland and presentations in Palmerston held.</p> <p>Extra co-funding received for other parts of the project, which also will be partly used for the KAREN CBF (i.e. CONC-11382-SRU-LCR PGSF bid has been successful (announced July 18) and will receive funding of \$1.15M per year from Oct 2007 for 5yrs 9mths).</p> <p>Article written in the next issue of the Landcare 'Discovery' news letter on the project, which will further raise the profile of KAREN.</p>	<p>None.</p>

***NB:** Upon recent discussions with Julie Watson from REANNZ it was confirmed that there will be no monthly reporting for the project leads to submit. Instead, only an audio 'pulse check' will take place at the end of every month now and the quarterly reports will be submitted as per usual. Below is the updated Milestones Schedule.

Project	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April
1. University of Akld (601)		MS1, 30 th June [PM assessment design etc]	MS2, 31st July MS3 1st July MS1, 20th July [PM assessment design etc]	MS3, 1 st August	MS4, 30 th September			- MS5.1, 31st December - MS5.2, 31st December			- MS6.1, 31st March - MS6.2, 31st March	
2. University of Canterbury. (604)			MS1, 1 st July		MS2, 30 th September			MS3, 31 st December			MS4, 31 st March	
3. University of Akld. (627)		MS1, 30 th June, signing										MS2, 30 th June
4. University of Akld (621)		MS1, 1 st June	MS2, 1 st July	MS3, 1 st August MS2 — now in August	MS3 — now in Sep					MS3 — now in Feb		- MS4.1, 1 st April - MS4.2, 1st April - MS4.3, 1st of April
5. Akld University of Tec (626)	MS1, 7 th May				MS2, 1 st September (Julie to confirm)				MS3, 31 st January			
6. Hort Research. (624)	MS1, 14 th May			MS2, 20 th 8 th August	MS3, 17 th September							
7. University of Waikato. (603)	MS1, May signing	MS2, 30 th June			MS3, 30 September			MS4, 31 December			MS5, 31st March	
8. University of Otago (611)			MS1, 1 st July						MS2, 1 st August			
9. ESR. (615)			MS1, 30 th July	MS1, moved to August.	MS2, 30 th September		MS2, 30 th November.		MS2, 30 th November. MS3, 30 th Jan		MS4, 30 th March	
10. LandCare Research. (616)					MS1, 30 th September							MS2, 30 th April
Total MS Due/Month	3	3[4]	5	5[4]	7[8]	-	-	3	2	-	4	3

