

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	January- March 2008.

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 4th quarterly oversight report on the CBF projects progress.

Seven of the total ten projects have provided reports and have been generating a lot of national/international interest¹. One project (HortResearch) is completed. In January, Feb and March a total of three milestones across those projects have been completed. AUT have yet to hand in their report (originally due in February 08) – however it is suspected that this project is currently 'on hold' as their second milestone is being evaluated for acceptance by REANNZ. Canterbury's HIT Lab have re-scoped and developed a new set of milestones schedule, which is currently being reviewed by REANNZ.

Many project members have held further workshops, presentations, attended seminars (and Webinars) and international/national conferences on their research, which also highlights the KAREN capability extending beyond New Zealand. More importantly, Wikis and online websites/portals have now been set up to enable greater communication on a regular basis with other collaborators.

Apart from the AUT project, there are no major time delays, issues or concerns at this stage. 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: ESR Quarterly report is yet to be received due to re-location of offices – estimated to be received by mid-April 08 (this has been approved REANNZ)

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. Second quarterly report was received by REANNZ in February.</p> <p>1/5 Milestones completed</p>	N/A	<p>Project is currently on hold due to technical constraints in the bandwidth connection. MS2 is being evaluated for acceptance by REANNZ.</p>
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.</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>3 Milestones completed to date</p>	<p>The Grid computing platform is now running and being tested. Now working towards presenting this platform at the Genome Informatics workshop in Brisbane in December 2008.</p>	<p>All on track apart from slight delays in producing a report on best practice workflow management (now due in May08).</p>
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> <p>3/3 Milestones completed</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.</p> <p><i>NB: extra revisions have been made to the original milestones by Canterbury; this has been accepted by REANNZ. Below are highlights noted in their quarterly report</i></p> <ul style="list-style-type: none"> • Design of social presence experiments with relation to spatial sound in appropriate technologies. • Initiate designs for comparative experimentation between AG and HD with specific reference to: A) Remote music teaching and playing of musical instruments will be monitored for informing the design of spatial sound; B) BRCCS research reference group is observed and provide feedback on comparative experiences. • Draft a set of recommendations and support material to enable improved user experience and capability building in using KAREN supported technologies. • Conference abstracts submitted. • Contribute redesign of AVCC website for multiple user groups. <p><i>4 Milestones completed to date from original Milestones schedule.</i></p>	<p>Completed a white paper on "Using Video Conferencing for Remote Collaboration".</p> <p>Progress with recruiting two interns to work on development of Access Grid software, 3D remote collaboration software, and an intuitive user interface for teleconferencing.</p> <p>Establish a high definition connection between HIT Lab NZ and University of Washington via KAREN network.</p>	<p>Waiting on REANNZ to approve the new milestones revisions proposed by HIT Lab. This could cause delays in timeframe.</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.</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>Milestone 4: One conference paper and preliminary version of project website created. First-stage models of household consumption in China's Household Survey finalised for selected Provinces and spatial dependencies analysed.</p> <p>Milestone 5: Two formal seminars on project presented in New Zealand with one overseas collaborator. Internet map serving capability created for research team to use.</p> <p>4/9 Milestones completed</p>	<p>Submitted proposals for a research poster and a research paper to an international conference and to a regional (Australasian) workshop.</p> <p>The project webpage is live now at url: www.chinapovmap.org and will soon be displaying maps and conference and seminar papers from the project on that site.</p>	<p>Risk due to administrative and budgetary barriers as they seek to extend the range of provinces where they have the required census and survey data so as to construct draft poverty maps for more provinces in China.</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.</p> <p>Milestone 1: Set up systems to automatically link genomic data from multiple sources.</p> <p>1/4 Milestones completed</p>	<p>Established a NZ Data Management system for gene profiling data and made it available via KAREN to initial users.</p> <p>Series of workshops and seminars conducted, which include:</p> <ol style="list-style-type: none"> 1. High Throughput Sequencing workshop. Link up via EVO/KAREN between Auckland and Otago Universities of for a national one day meeting (8.2.08). Researchers from Massey and Canterbury, AgResearch and IT Industry participated at Otago. 2. Otago Genomics Facility Meeting (7.2.08), Mik Black presented results of the previous meeting. 	<p>None.</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.</p> <p>The first milestone is due in June 08.</p> <p>0/3 Milestones completed</p>	<p>BestGrid Wiki now up and running for dissemination of Storage Networks information.</p> <ul style="list-style-type: none"> • Expertise in modelling of network and storage data sets for analysis of use and prediction of growth in the context of use of KAREN and related services • Interdisciplinary approaches to both of the above, incorporating statisticians, network and storage engineering experts, and experts in network modelling and simulation. • Infrastructure to support Network research, with a particular focus on Storage Area Networks. • Engagement with industry around storage networking technology - Contact has been made with additional technology groups and providers, including Endace, to discuss use of their hardware and software in support of the project. It is unknown yet what impact this will have on the project, but potentially it is quite positive. 	<p>Availability of key staff members may impact on project deliverables due to busy teaching and leave schedules.</p>
<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.</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>Milestone 3: Report on Wireless data transfer strategy for the MFL</p> <p>Milestone 4: Progress report by the PhD student working in the self-centring structural system work stream.</p> <p>4/10 Milestones completed</p>	<p>Webinar (Web Seminar) hosted in March. This was a first time collaboration where broadcasts made from Taiwan where sent to NZ live while experiments were being conducted on Earthquake structures. The 1.5hr seminar presented findings from USA, Taiwan and NZ findings on the performance of innovative seismic resistant wall systems (refer to report for more). More importantly this large scale collaborative seminar was observed by the National Centre for Research Earthquake Engineering (Taiwan), Iowa State, Minnesota, San Diego Universities (USA) and Auckland University (NZ).</p>	<p>Delays in finding the right skilled staff to supervise activities and developments of the mobile field laboratory.</p> <p>Ways to increase the bandwidth on the current KAREN network via satellite.</p>

<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.</p> <p><i>2/5 Milestones completed</i></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>
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<p>10. Landcare Research - GeoSciences Network – New Zealand Establishment. [616]</p>	<p>The project is on track; however some minor changes to milestones 2 and 3. No major impediments to the original project timeline.</p> <p>Milestone 1: contract signed and project initiated.</p> <p>1/4 Milestones completed</p>	<p>At the invitation of the NZ Geospatial Office, Robert Gibb attended the NEDF (National Elevation Data Framework) Workshop in Canberra on 18th March, hosted by ANZLIC and the Australian Academy of Science.</p> <p>Future collaboration work with Australian researchers (via Australian high speed network) is plausible based on the presentations given.</p> <p>SCENZ is planning a 2 day workshop at with Auckland University’s eResearch facility.</p>	<p>Landcare Research is attached to KAREN at Lincoln and Palmerston North and is using it for all network traffic between those two sites. Contracts have been signed to establish KAREN connections in Hamilton, Dunedin and Auckland (Tamaki), but the solution will involve significant monthly charges for the use of 1Gb/s connections through the Telecom exchanges to the nearest KAREN PoPs, particularly in Hamilton and Tamaki, where (the author understands) they have not been able to negotiate access through existing dark fibre available to the respective universities and are therefore having to use new commercially installed fibre. Karen connection is expected to be available at each of these sites by May.</p>
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***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.