

REANNZ

RESEARCH AND EDUCATION ADVANCED NETWORK NEW ZEALAND LTD 2013 ANNUAL REPORT

04 Who. What. Why.
08 Chairman's Report
12 Chief Executive's Report
16 Strategic Direction
22 A Day in the Network
24 Case Studies

32 Spotlight on eduroam™
34 Service Performance
44 Financial Performance
68 Independent Auditor's Report
71 Governance Statement



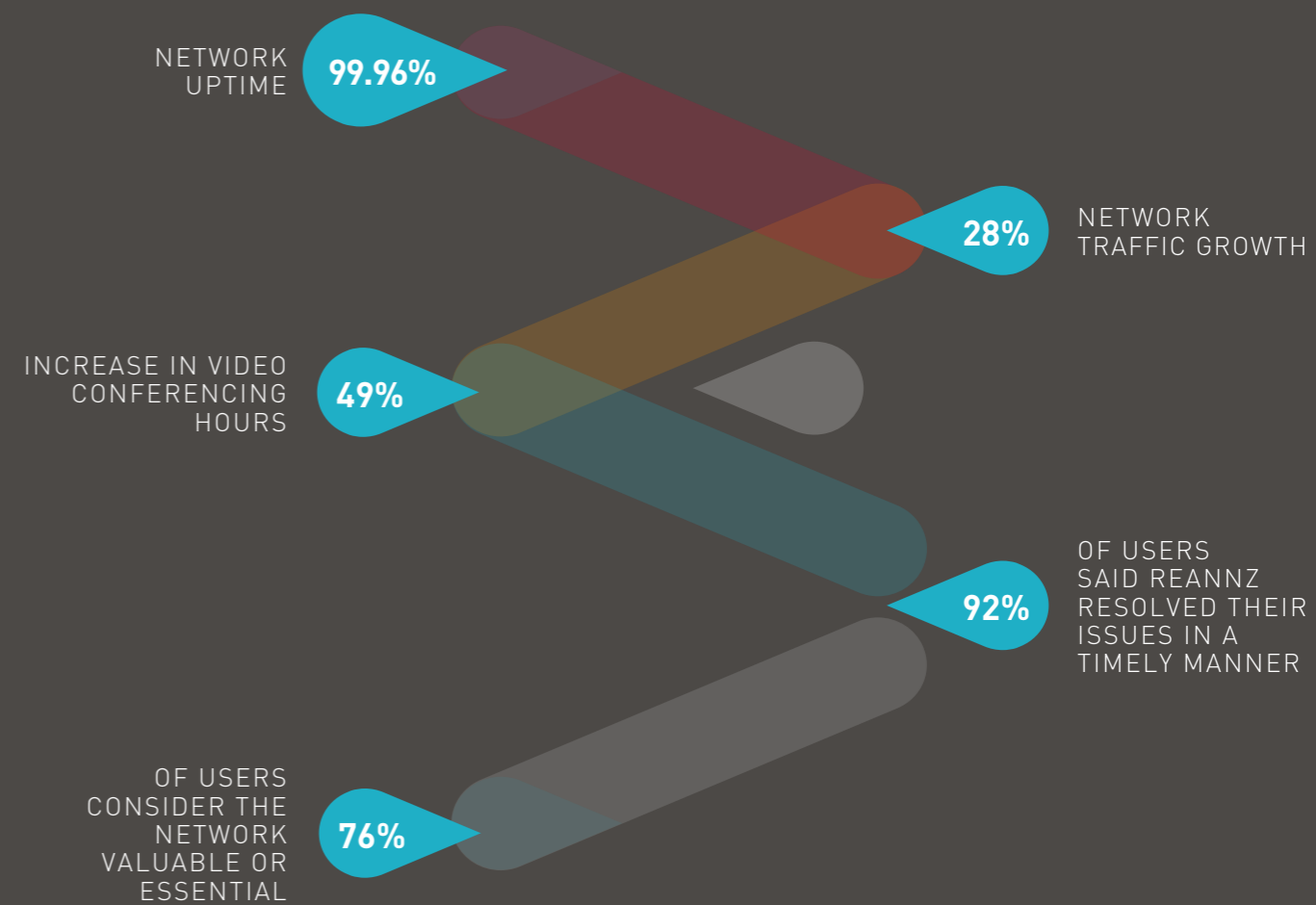
MILLISECONDS AWAY FROM THE REST OF THE WORLD

REANNZ



WHO. WHAT. WHY.

BY PROVIDING A SUPERSIZED, SUPERFAST NETWORK, REANNZ ALLOWS KIWI INNOVATORS TO EXCHANGE DATA QUICKLY ALL AROUND THE GLOBE



WHO WE ARE



WE ARE A CROWN-OWNED COMPANY THAT IS PART OF A GLOBAL COMMUNITY OF NATIONAL RESEARCH AND EDUCATION NETWORKS (NRENS).

Our members include the New Zealand universities, Crown Research Institutes (CRIs), Institutes of Technology and Polytechnics (ITPs), wānanga, government agencies and nearly 130 schools across the country.

Our skilled team of 18 people are based in Wellington, but travel regularly throughout the country to ensure our members are well served, wherever they are.

WHAT WE DO



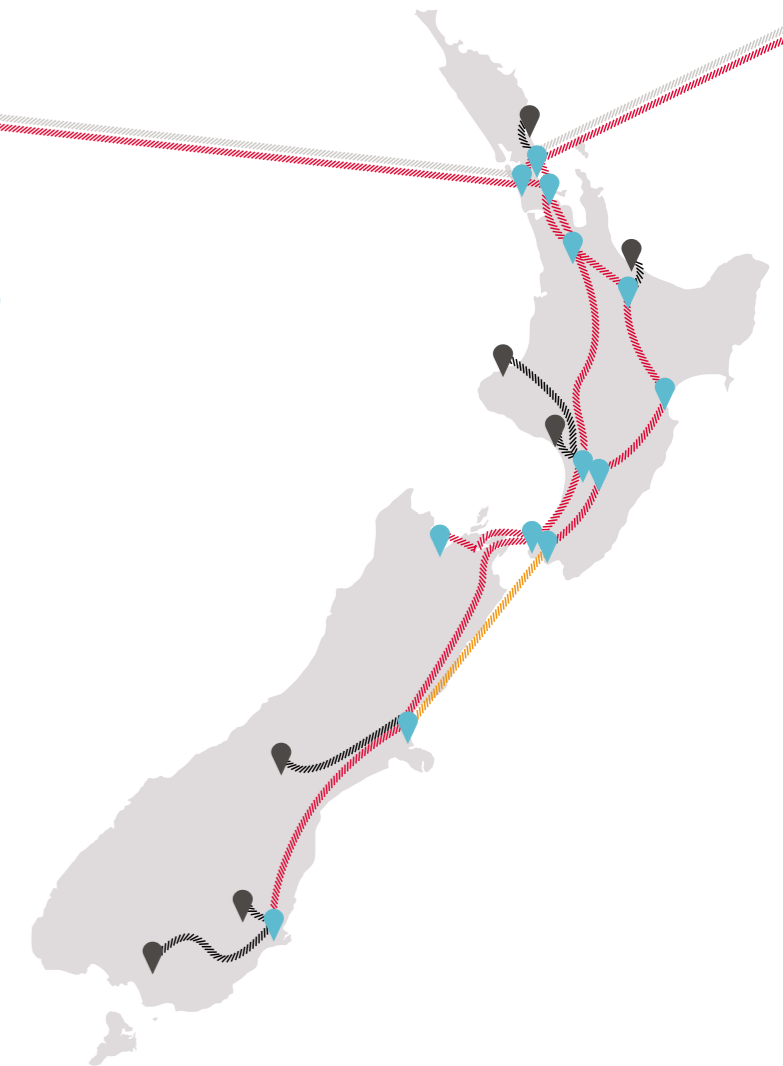
REANNZ IS CHANGING THE WAY RESEARCH IS CONDUCTED IN NEW ZEALAND, PROVIDING NEW ZEALAND'S FINEST MINDS WITH A DEDICATED HIGH PERFORMANCE NETWORK, CUTTING-EDGE TOOLS AND NETWORKING KNOW-HOW.

Enabling Kiwi innovators to exchange data quickly all around New Zealand and the world, we connect nearly 180 member institutions to more than 100 research and commercial networks worldwide. This allows our members to transfer data, access remote instruments, and collaborate across vast distances.

The network we operate is built to be robust and reliable and is specifically tailored to the unique needs of our members.

Research disciplines require different network technology from ordinary Internet users. Time-sensitive science applications need the network to be optimised for minimal latency and guaranteed end-to-end performance. Researchers working with large data sets need finely-tuned hosts for maximum throughput if they are to maintain their productivity and competitiveness.

But REANNZ is more than a network - we help drive innovation by connecting strategic thinkers with scientists and researchers as they develop products. And, our teams work closely with them to understand their needs and deliver leading-edge technology solutions that maximize the capabilities of the network right to the researcher's desk.



With education and scientific research increasingly collaborative and borderless, REANNZ supports New Zealand's ability to stay at the forefront as this trend accelerates.

REANNZ advances New Zealand's economic landscape – creating opportunities that keep the brightest people in New Zealand, while contributing to a knowledge driven economy that is competitive in the global marketplace.

Our network is a strategic foundation for the success of the research, education and innovation sectors.



FROM THE CHAIR

OVER THE PAST YEAR WE HAVE SEEN THE HIGHEST UTILISATION OF REANNZ SERVICES EVER, AS RESEARCHERS AND STUDENTS ACROSS THE COUNTRY EMBRACE DIGITAL TECHNOLOGIES IN THE LABORATORY AND THE CLASSROOM

CHAIRMAN'S REPORT



THE BUSINESS YEAR 2012 - 13 WAS PIVOTAL FOR REANNZ WITH SEVERAL DEVELOPMENTS THAT HIGHLIGHT THE COMPANY'S KEY ROLE IN NEW ZEALAND'S RESEARCH AND EDUCATION INFRASTRUCTURE. THIS WAS UNDERPINNED BY YET ANOTHER SIGNIFICANT CLIMB IN THE UTILISATION OF REANNZ SERVICES, AS RESEARCHERS, EDUCATORS AND STUDENTS IN NEW ZEALAND CONTINUE TO INCREASE THEIR USE OF DIGITAL TECHNOLOGIES IN THE LABORATORY AND THE CLASSROOM.



With the Government seeking greater efficiency from its investments in research there is an increasing focus on shared access to facilities and equipment across research-intensive institutions.

There is also a drive towards inter-institutional expert research groups, for example on the National Science Challenges, and consequently a more virtualised and networked approach to research projects. Combined with growth in data-intensive research and increasing use of networked communications and computing, REANNZ's national and international networks are increasingly essential to our members' operations.

Substantial increases in data flows each year require the network's capacity to stay ahead of demand. In partnership with FX Networks REANNZ has developed an innovative shared-network initiative where the parties co-invest in a new transmission infrastructure. Both organisations will operate and manage their own networks on the common platform. This delivers economies of scale and has increased national network capacity significantly at a lower marginal cost. Importantly, this unique arrangement provides REANNZ with the scope to further increase capacity by a factor of up to 200, future proofing the investment in the medium to longer term. The company is also currently negotiating a new network contract that will lift international capacity by a factor of 40, with potential for a further major upgrade in the next two years.

REANNZ has also continued to upgrade its network and service offering, and members are directly benefiting from a re-architecture of the network and redesign of our service model. The new network architecture is providing greater resiliency (99.96% availability) with members averaging less than two hours unexpected downtime all year.

In addition, the company now provides 24/7 network operations coverage to handle network faults if they do occur. New, value-added services such as settlement-free peering and eduroam™ have been implemented during the year, helping our members connect with communities around the world at no additional cost.

CEO, Steve Cotter, brought extensive international research and education network experience to New Zealand when he joined REANNZ in December 2011. His standing in the international research and education network community has extended the company's global reach and as a result New Zealand is now a recognised member of the global community of specialist advanced networks. In 2013, Google chose to work with REANNZ to deliver their potentially game-changing "Loon" experimental atmospheric balloon-delivered network right here in New Zealand.

Our increased awareness of technical, commercial and organisational norms in the international networking community has facilitated innovative thinking about how we move New Zealand towards these within the resources available. Global contacts have also delivered access to a wider pool of technical talent both domestically and internationally. This has enabled REANNZ to build its technical expertise through strategic staff recruitment,

attracting world-class specialist networking engineers who will deliver expert solutions to the New Zealand research and education community.

Members have commenced their contribution of an additional \$2 million per annum during this financial year. This will be matched by \$4 million from the Crown each year starting in late 2013. These commitments have enabled the company to make essential investments in the REANNZ network. The business model of funding from members and Government means REANNZ will be responsive to both the needs of our users and the Government's policy priorities.

The past year has also seen REANNZ enter into discussions with the National e-Science Infrastructure initiative (NeSI) and New Zealand Genomics Limited, to help develop a more coordinated approach to national e-research infrastructure evolution.

These developments position the company to work in partnership with the Crown in building a stronger innovation and education eco-system.

Over the coming year, REANNZ will continue with its strategy to provide a high performance network to the research and education community, coupled with value-added services, delivering a world-class user experience, and thought-leadership to enable and drive innovation. The company will continue to extend the reach of its services through development of key partnerships with institutions such as Callaghan Innovation and its wider network of business partners.

In closing, I wish to thank REANNZ staff warmly for their commitment, creativity and energy, and our directors for sharing another year of their valued vision and wise counsel. During the year we farewelled Mike Riley who resigned from the board after four years of valuable service. The Board wish him well with his future endeavours. We were pleased to welcome to the Board Phil Norman, the former chairman of Xero. Phil brings another expert business perspective, and extensive experience in early stage innovative company governance and development.

On behalf of the Board, I thank the Government and members for their continued support.



Prof. John Raine
Board Chair

REANNZ BOARD



PROFESSOR JOHN RAINE
CHAIRMAN (TO 2015)

John is Pro Vice-Chancellor (Innovation and Enterprise) and Head of School of Engineering at the Auckland University of Technology. He is a board member of the Committee for Auckland Ltd and AUT Enterprises Ltd.



PROFESSOR GEORGE BENWELL
DEPUTY CHAIR (TO 2014)

Professor Benwell is Pro-Vice-Chancellor (Commerce) and Dean of the Otago Business School at the University of Otago. He led the Information Science Department from 2001-2006 and has served as the School's Dean of Research and the University's Academic Director of Research.



JIM DONOVAN
(TO 2015)

Jim is a professional director with wide experience in the public and private sectors. He holds numerous directorships, including with the Institute of Directors. Jim has also held governance positions with the Tertiary Education Commission and Fronde.



SUSIE JOHNSTONE
(TO 2014)

Susie is the Managing Partner of Shand Thomson Chartered Accountants, and also serves as Deputy Chair of the Otago Polytechnic Council. Past governance roles have included the Otago and Southern District Health Boards, Tourism New Zealand and the New Zealand Blood Service.



PHIL NORMAN
(TO 2015)

Phil is Managing Director of Nortek Management Services Limited. Phil's other roles include the Independent Chairmanship of Loyalty New Zealand Limited and Chair of NZAX listed VMob Group Limited. Phil was the founding Chairman of Xero Limited.



FROM THE CHIEF EXECUTIVE

REANNZ HAS TO BE AGILE AND KEEP AHEAD OF OUR MOST DEMANDING MEMBERS

CEO'S REPORT



AS YOU REFLECT ON THIS PAST YEAR, WHAT STANDS OUT FOR YOU?

IT'S A NEW REANNZ. WE ARE FAR MORE THAN A NETWORK.



“Our overriding passion is to take New Zealand Inc. to the world. We’ve found new and innovative ways to improve research and educational outcomes and seen significant growth in our

international traffic this year. That’s proof of increased collaboration with international partners, and the successful export of Kiwi ‘know-how’.

We can also help with the business side of research and education.

We’re offering new, value-added services: money saving settlement-free peering to directly connect content and service providers like TVNZ, Google, Amazon, and Microsoft. We’re rolling out eduroam™ across the country. And because we are members of the global research and education networking community, we’ll soon offer some critical in-demand cloud services at improved speeds and greatly

reduced pricing. For example, if you’re moving your institution’s document management to the cloud, REANNZ can provide the service over a super-fast connection.

We’ve also been creative with our business model to achieve economies of scale usually reserved for large telecommunications service providers. Our new shared network with FX Networks leverages our strong partnership to reduce operational costs and uses the latest networking technology to bring increased network capabilities and new services to our members.”

ARE THESE CHANGES MEETING THE NEEDS OF YOUR MEMBERS AND SHAREHOLDERS?

“We conduct an annual survey to answer that question and are happy to report increasingly positive results this year. Seventy-six percent of our members now consider REANNZ “essential” or “valuable” to the work they do. In addition, we’ve seen dramatic improvements from our users’ perspectives in all areas of our business.

However, the survey also shows room for improvement. Many members and shareholders continue to have limited knowledge of the value REANNZ has to offer. They want more communication, and more ‘translation’ of our technology and its benefits. We’re listening. This annual report and our new-look newsletters are examples of our improved approach.”

HOW DO YOU DEFINE YOUR CORE BUSINESS TODAY?

“We exist to support the research, education and innovation agenda in New Zealand. We work in concert with the community and our e-research infrastructure partners, NeSI (New Zealand eScience Infrastructure) and NZGL (New Zealand Genomics Limited). Together, we deliver a holistic approach to data-intensive research and science – bringing together data generation, movement, storage and computing into a seamless, efficient process.

For example, researchers at NIWA’s (National Institute of Water and Atmospheric Research) National Climate Centre are providing critical information to the dairy industry by analysing climate change to predict next year’s rainfall. They collect their data from multiple sources (including overseas), analyse it on NIWA’s supercomputer and use our network to distribute data to other scientists and government policy makers. Our network helps this process become more streamlined and efficient, and breaks down silos that have historically existed by connecting disparate communities.”

SO THAT EXPLAINS RESEARCH, WHAT ABOUT WHAT YOU PROVIDE TO THE EDUCATION COMMUNITY?

“We’re seeing a sea change in the business model of education – something I call the democratisation of knowledge. What originally started with distance learning, then evolved into free, interactive global classrooms like the Khan Academy, is now gaining traction as hundreds of thousands sign up for MOOCs (Massive Open Online Courses) such as those from Coursera and Udacity. We could soon see the establishment of ‘world universities’ in New Zealand as Waikato and Massey Universities roll out their own MOOCs.

Fundamental to their success are two things: connectivity and community. That’s where REANNZ comes in. We’re connecting our members both locally and globally. We also help provide a sense of community. We give them the tools to serve the needs of their local students, and help them deliver relevant courses – teaching them the skills that they need to become productive members of their own communities.

It’s all about the ‘network effect’ as more content becomes available and more people are connected to the network, a positive feedback loop is created that increases the value for everyone.

For example, the National Library is connected to REANNZ, and our wānanga members share a lot of cultural content that they’re digitising. Those who are connected can share all of that information. As more content and users are reachable via our network, we’re getting more and more interest from institutions here and abroad that are teaching students about life in New Zealand.”

WHAT ABOUT INNOVATION, ESPECIALLY IMPORTANT TO THE GOVERNMENT’S AGENDA?

“As a research and education network, REANNZ has to be agile and keep ahead of our most demanding members. We have to respond flexibly and quickly to the innovations that our members are driving – moving from big idea to big idea – and disseminate our expertise to industry.

One example of this is REANNZ’s leading role in Software Defined Networking in New Zealand (see Case Studies). The experience we’re building with OpenFlow is a big contribution to our collaborations with Citylink and Google. As a Crown-owned company, we freely share our intellectual property with businesses to spark a multiplier effect in the Kiwi economy. REANNZ provides an environment for innovation, allowing businesses to develop and test their own ideas with us before they take them to the market.”

CAN’T COMMERCIAL NETWORKS PROVIDE THOSE TOOLS FOR INNOVATION TOO?

“Inherent in our culture, and critical to helping Kiwi businesses be more competitive, is our transparency and willingness to try new things. This is where we are different from commercial networks. We’re open about what’s happening on our network and we are willing to share knowledge and data. We believe that’s essential because it’s the free flow of ideas among people with different views, ideas, motivations and perspectives that spurs innovation. And it’s the research and education community’s appetite for experimentation that allows it to lead the commercial space by three to five years in the rollout of new applications and services.

High-definition video conferencing is one example. While it’s been widely used in the academic space for nearly a decade as a facilitator of collaboration it is only now being widely adopted by business as a cost-saving tool and productivity multiplier.”

WHAT MESSAGE DO YOU HAVE FOR YOUR MEMBERS & SHAREHOLDERS AS WE MOVE INTO 2014?

“We’ve had a successful year, but we recognise that there is so much more we can achieve. REANNZ is actively listening to our members, giving them the services they want – services that provide solutions to their problems. And we’re always searching for ways to deliver more value for our member’s money. We expect 2014 to be even more exciting and transformative than 2013.”



Steve Cotter
Chief Executive Officer



STRATEGIC DIRECTION

REANNZ WILL PROVIDE MEMBERS ACCESS TO THE TOOLS AND SERVICES THEY NEED TO NOT ONLY PERFORM THEIR WORK, BUT TO DO IT BETTER AND FASTER THAN THEIR INTERNATIONAL COUNTERPARTS



OUR GOAL



To be the essential networking resource of the research and education community





OUR STRATEGY

WE WANT TO RAISE THE INTERNATIONAL PROFILE OF NEW ZEALAND THROUGH INNOVATION, THOUGHT-LEADERSHIP AND DISRUPTIVE CHANGE.

A HIGH-PERFORMANCE NETWORK IS A STRATEGIC ASSET THAT CAN BE USED TO INCREASE THE ECONOMIC COMPETITIVENESS OF A NATION. TO THAT END, WE ARE COMMITTED TO PROVIDING AN EXCEPTIONAL USER EXPERIENCE AND A PORTFOLIO OF SERVICES THAT FORGES STRONG TIES WITH OUR COMMUNITY AND DELIVERS IMPROVED LEARNING AND RESEARCH OUTCOMES.

OUR OPERATING ENVIRONMENT

In recent years, science has become increasingly distributed and data-intensive. With our large data-transfer capabilities boosting data-mobility and tools that facilitate multi-institutional collaboration, our members have access to the world's unique science facilities and more effective and efficient ways of working. Operating within a landscape without barriers to the exchange and development of ideas and knowledge, researchers can use networks to collect, sort, mine and analyse data quickly. They can be the first to create new technologies in areas like healthcare and manufacturing that will power New Zealand's future economy.

Our network differs from commercial providers of Internet services. Large-scale science and data-intensive disciplines create massive data-flows requiring different network capabilities than smaller flows generated by email, video, and web browsing. These unique capabilities are being driven by the following trends:

Exponential data growth. New instruments and computing systems continue to generate exponentially growing data sets, with data growth in genomics exceeding other areas by a considerable margin. This relentless growth in data will require us to scale our capacity aggressively while maintaining service quality.

Data mobility. Researchers are depending increasingly on networks to support activities such as data replication, data sharing, remote access to storage, and bulk data transfer. Large data sets are being moved among CRIs and universities for analysis; moved again to remote facilities for secondary analysis; and eventually shared with collaborators. The desire to place data where it can be productively analysed is a hallmark of data-intensive science, and this need for efficient data mobility is driving many of our strategic planning activities.

Centrality of computing and networking. Computing is essential in many areas of research in New Zealand. University and CRI supercomputers, as well as the New Zealand eScience Infrastructure initiative (NeSI) and New Zealand Genomics Limited (NZGL), are key components of the nation's research ecosystem. We provide the high-performance connections that make these facilities accessible and productive.

Increasing collaboration. Collaborations within the community are growing in scope and scale. Whether facilitating the teaching of Te Reo Māori in remote South Island secondary schools or enabling NZ’s participation in the GeoPRISMS plate tectonic boundary study, we must be able to support collaborations that comprise hundreds or even thousands of participants. Many of these large-scale projects rely on REANNZ to connect instruments, facilities, and participating institutions.

Cloud-based services. Increasingly, institutions are relying on cloud service providers and cloud-based applications to control costs and achieve their strategic objectives. Whether its connecting universities to their online payroll provider or facilitating scientists’ access to cloud computing resources, networks like REANNZ are becoming critical components of the research and education supply chain used to produce and deliver the community’s products and services.

Lossless networking. When the Internet was launched several decades ago, it employed a variable, best-effort, and ad-hoc service model. Over time, science data flows began to diverge from commodity Internet flows in their scale and service requirements. For those networks that failed to stay ahead of the demand for resources and changing traffic characteristics, the result was significantly degraded performance due to packet loss. A small rate of packet loss in a national scale network causes hugely disproportionate effects on data transfer speeds for large flows. For this reason, our network is designed to be lossless. Commercial networks do not have the same design objectives, because the flows they support have much lower throughput and travel much shorter distances than science flows.

The structure of modern research presumes the availability of reliable, high-performance, feature-rich networks for interconnecting instruments and collaborators globally. In this context, our network serves as a vital “circulatory system” amongst those striving to educate the next generation of scientists or produce disruptive technological innovations. Without such purpose-built networks and tailored services, the community could not function as effectively as it does today.

OUR STRATEGIC OBJECTIVES

We have developed four areas of focus to ensure the business is ready to meet the challenges of the years ahead.

1. An advanced network platform

In pursuit of discovery and innovation, researchers continue to be the earliest adopters of networking technology in the world. For this reason we must build, maintain and operate a robust production-quality network platform with the flexibility that supports both our members’ daily business operations and high-end research needs as well as the development of innovative network technologies.

To achieve this we will:

- Maintain and operate production-quality national and international networks, including the transition to new national and international infrastructures during 2013/14.
- Provide researchers and the private sector with a realistic test-bed environment to experiment with new technologies, protocols and applications.

2. Network-based services and applications for research and education

We are in a unique position to use existing infrastructure to deliver affordable applications and services that are often cost-prohibitive or unavailable in the commercial market. This is essential for New Zealanders to remain competitive and stay at the forefront of their respective fields.

To achieve this we will:

- Lead a cloud-based services deployment program.
- Offer commodity Internet.
- Provide a high-quality video conferencing solution.
- Work closely with NeSI and NZGL to ensure their users have high-speed access to their science instruments.
- Investigate opportunities for enhancing value and efficiency through greater collaboration or integration of education and science e-infrastructure.
- Work with Callaghan Innovation to support their corporate objectives.

3. A world-class user experience

The structure of large-scale science now assumes the availability of high-bandwidth, reliable, feature-rich networks that can interconnect globally-distributed instruments, facilities and collaborators. While this hierarchical, multi-domain, multi-scale model connects research facilities no matter where they are located, it is far from seamless. To help address these and many other challenges, we have adopted a service culture, one that puts users at the centre and supports them end to end.

To achieve this we will:

- Improve the reliability of member connections.
- Improve end-to-end network performance and throughput.
- Improve member awareness and decision making to ensure networking and information technology expenditure is applied strategically in their organisations.

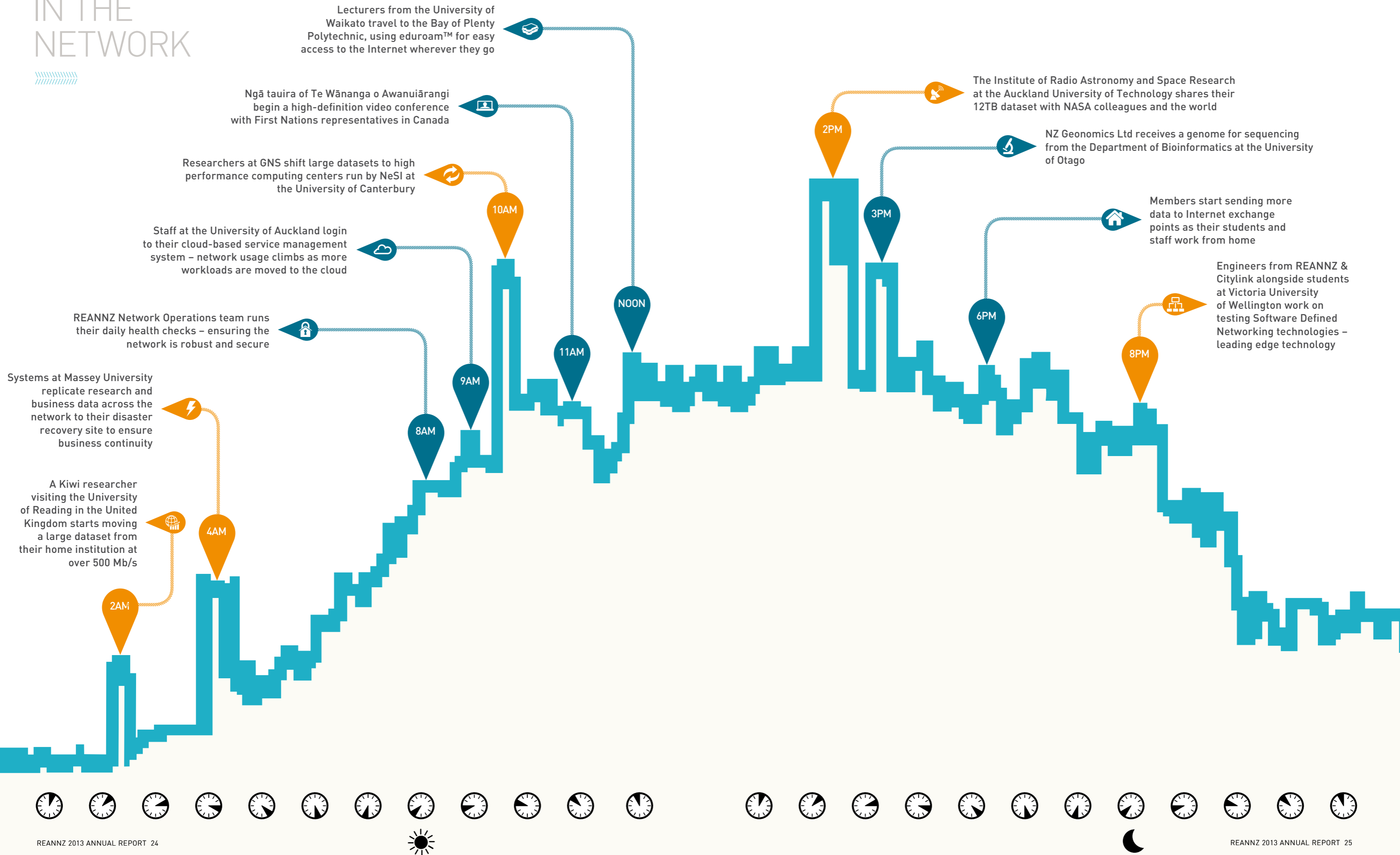
4. Thought leadership and innovation

Looking ahead, REANNZ recognises the oncoming “data deluge” is just the beginning of a long-term, data-intensive trend that will only accelerate as more and more machines become connected to the network and ‘talk’ to one another. To help our members, REANNZ will use its networking expertise to ensure all have access to the best tools and networking technologies available.

To achieve this we will:

- Contribute to the development and deployment of leading edge software defined networking infrastructures.
- Support members’ participation in network technologies research and development by providing a fibre test-bed.
- Lead workshops on advanced networking technologies that educate members and inform purchasing discussions.
- Participate in global forums to build New Zealand’s reputation for innovation and stay informed of international networking developments.

A DAY IN THE NETWORK





WITH YOU
ALL THE WAY

“IT’S NOT JUST
THE PIPE – IT’S
GETTING THE BEST
OUT OF THE PIPE...”

CASE STUDY: AUT – RADIO ASTRONOMY

Radio telescope experts from the Auckland University of Technology (AUT) conduct science that impacts the everyday life of New Zealanders. They provide the information needed to guide GPS systems and observe the movement of tectonic plates, just a couple of things you would probably consider fairly important! So imagine the frustration when those working at the cutting edge of radio astronomy and space research discovered their data exchange with international colleagues was lagging behind the rest of the world.

Stuart Weston, a PhD candidate at AUT, explains they could never move more than 200 Megabits per second (Mb/s). “That’s on par with the fastest UFB speeds you and I would see, but [is] excruciatingly slow to a scientist who has to move huge files on a daily basis.”

What was the problem? REANNZ engineers tested the network and found plenty of capacity to handle the traffic. So the challenge was to find out what was getting in the way.

Working with AUT and their international colleagues the network engineers discovered the problem lay with the computers inside the destination institution.

Data transfer experts at REANNZ recommended a solution – what Weston describes as a small but critical change to the remote computers – that resulted in a dramatic increase in speed. “With the help of REANNZ throughput increased to 800 Mb/s to Western Australia, which is great.” He calls it, “an exceptional improvement in performance.”

With you all the way, REANNZ works with its members and others in the global research and education space by using specialised technical expertise to make sure you get the best from your network connection.

“You’re not just maintaining infrastructure. Someone was able to assist with the tools to use the infrastructure in a more effective manner and that’s the value added...” Weston adds, “It’s not just the pipe – it’s getting the best out of the pipe.”

INTERNET EXPRESS LANE, WITH NO TRAFFIC LIGHTS



CONNECTED COMMUNITIES

CASE STUDY: MOBILE SURGICAL SERVICES

Mobile Surgical Services, needed help – fast. The challenge? Getting uncontested bandwidth for a joint video conference between their mobile surgical bus in Opotiki, Monash University in Melbourne, and the Minister of Health at Parliament in Wellington.

The solution? REANNZ engineers provided a rural connection to the network in record time, and at a speed the member had never experienced before.

The Managing Director of Mobile Surgical Services, Dr. Stuart Gowland, describes the scene at the Opotiki Telehealth launch. “We had one screen with Australians presenting a couple of cases, another screen on our end, and one from the Beehive.”

Dr. Gowland emphasises, “They were all able to talk to each other, all able to see each other, all able to ask questions of each other...” adding, “as we know, making these things work is never simple.”

Mobile Surgical Services provide critical access in rural areas to health care. Health Minister Tony Ryall, who helped launch the initiative believes, “Telemedicine is great for patients and their families. It gives patients better access to medical care with less travel and less inconvenience.”

Dr. Gowland admits he gets frustrated because, “Video is not used in the medical profession as much,” at least as much as he thinks is possible. He’s most excited about seeing high resolution and very low latency, which he believes are the keys to successful telemedicine. “A high quality video service enables far better communication between remote doctors and their patients, and that is critical for successful patient outcomes. It’s the reason why you have to have quality bandwidth.” The kind of bandwidth the REANNZ network provides.

When asked about the most important element the dedicated research and education network offers to REANNZ members Dr. Gowland says, “If I had to pick one thing, it’s the link to Australia.”

Dr. Gowland’s mission is to make sure patients get the benefit of a global collaboration – connected communities of clinicians via telepresence – and he’s happy to say, “...REANNZ provides an opportunity to achieve that.”



STRATEGIC FOUNDATION
FOR YOUR SUCCESS

“THERE WHEN WE NEEDED THEM”

CASE STUDY: EASTERN INSTITUTE OF TECHNOLOGY

When disaster – like a strong earthquake – strikes, it can damage far more than property. Mother Nature can knock out a network, and critical records can be lost forever. For educational institutions like the Eastern Institute of Technology (EIT), that can put data at risk; everything from emails and e-learning content, to critical files like student, financial and corporate records.

EIT reached out to REANNZ for help. They knew that another member, Massey University, had successfully set up a real-time data recovery system and they needed to know how to take advantage of their network connection to do the same.

Steve Bluck, Senior Systems Administrator with EIT, was impressed with the help he found at REANNZ. “The lads were really helpful because we were working from a zero knowledge base.” He adds, “They were quite responsive – they were there when we needed them, including a lot of out-of-hours work.”

Just to make sure it all came together as planned, Bluck says REANNZ even provided them with some networking kit from its lab so EIT could test the service before they went live. EIT is now constantly utilising their high performance connection to the network.

How much and how fast? Here’s a snapshot: it took just ten days for EIT to send 22 terabytes (TB), at an average rate of 200 Mb/s. For those of us using an average 5 Mb/sec connection at home, that same data transfer would take over a year!

Now able to get even more out of their membership, EIT uses the REANNZ high performance network not just for intercampus connections, but also to replicate their data between sites. To say they are satisfied with REANNZ understates it, according to Steve Bluck, “delighted would be more accurate.” He adds, “The culture has changed a lot over the last three years.”

Supporting our members to make the most of their network connection, just one example of how REANNZ is a strategic foundation for your success.



“THEY ARE AT THE LEADING EDGE OF THE NETWORKING INDUSTRY...”

CASE STUDY: SOFTWARE DEFINED NETWORKING

How will networks cope with exponential increases in traffic as we work increasingly online? REANNZ is contributing to finding the solution as part of a team at Victoria University of Wellington (VuW). All eyes are on a cutting-edge technology called Software Defined Networking, or SDN.

As a recent release from the university explained, SDN has the potential to revolutionise the way operators manage their networks. “It has the benefits of being able to simplify interactions between networks, is more easily changed and updated, and also allows people to control and schedule the movement of certain types of data, for example, prioritising media files or streaming online television.”

REANNZ worked alongside VuW, CityLink, CPqD in Brazil, and the University of Waikato to collaborate on a promising project – the first successful SDN network connected to a production Internet exchange. They used a product that’s generating quite a bit of buzz of its own – OpenFlow.

Google has been using OpenFlow between its data centres for some time, attracting significant interest from industry players who are curious about its potential to change networking as we know it. Google employee Josh Bailey says that REANNZ CEO Steve Cotter’s experience with OpenFlow is an asset. Cotter came from the University of California, Berkeley, where OpenFlow originated in collaboration with Stanford University. Bailey is enthusiastic about how Cotter’s background helps, “We’re taking advantage of Steve’s experience – he’s worked with it, so he’s not afraid of it.”

Josh believes this kind of innovation allows collaborators “... to keep pushing the boundaries to see if we can find other benefits.” Benefits for REANNZ members, and potentially for the country as a whole.

“Almost nobody outside Google has been running an SDN network... REANNZ is one of the very few in the world to do that. So apart from being ahead of the curve, they are at the leading edge of the networking industry, helping to position New Zealand as a test-bed for innovation.”

LEADING
FROM THE EDGE



SPOTLIGHT ON: EDUROAM™

THE BUZZ IS BUILDING ABOUT EDUROAM™

It's a free wireless Internet hotspot available at participating campuses and institutions in this country and in more than 66 countries around the world, at over 5,000 locations.

Using eduroam is simple, safe and convenient. Visitors roaming between eduroam™-enabled locations can use their username and password from their home institution to get access to the Internet. It's like having a master key to Wi-Fi wherever students and staff roam around the world.

And it's proving to be pretty popular.

At the newest participating Kiwi campus, the University of Otago, administrators reported instant uptake. Offering eduroam™ is part of Otago's strategic effort to enrich the experiences of their own students and staff, as well as international visitors.

Like other NRENs around the world, REANNZ operates the national eduroam™ service. Sam Sargeant, Business Development Manager at REANNZ sees value in the service, beyond just the clear benefit to the roaming users. He says eduroam™ cuts down on the administrative burden for members because there's no need to spend the time and resources on assigning visitors temporary log-ins and cancelling them as they leave. Sargeant also sees potential for the network service to benefit the wider community. "As New Zealand follows the rest of the world in becoming more interconnected, eduroam™ can help schools, libraries, museums, and cultural institutions become key building blocks of a borderless, educated society."

For more information visit:

www.eduroam.org.nz





STATEMENT OF RESPONSIBILITY

FOR THE
YEAR ENDED
30 JUNE 2013



THE BOARD AND MANAGEMENT OF REANNZ ACCEPT RESPONSIBILITY FOR THE PREPARATION OF THE ANNUAL FINANCIAL STATEMENTS AND STATEMENT OF SERVICE PERFORMANCE AND THE JUDGMENTS USED IN THEM.

In the opinion of the Board and management of REANNZ, the annual financial statements and statement of service performance for the year ended 30 June 2013 fairly reflect the financial position and operations of REANNZ.

Prof John Raine
Board Chair
31 October 2013

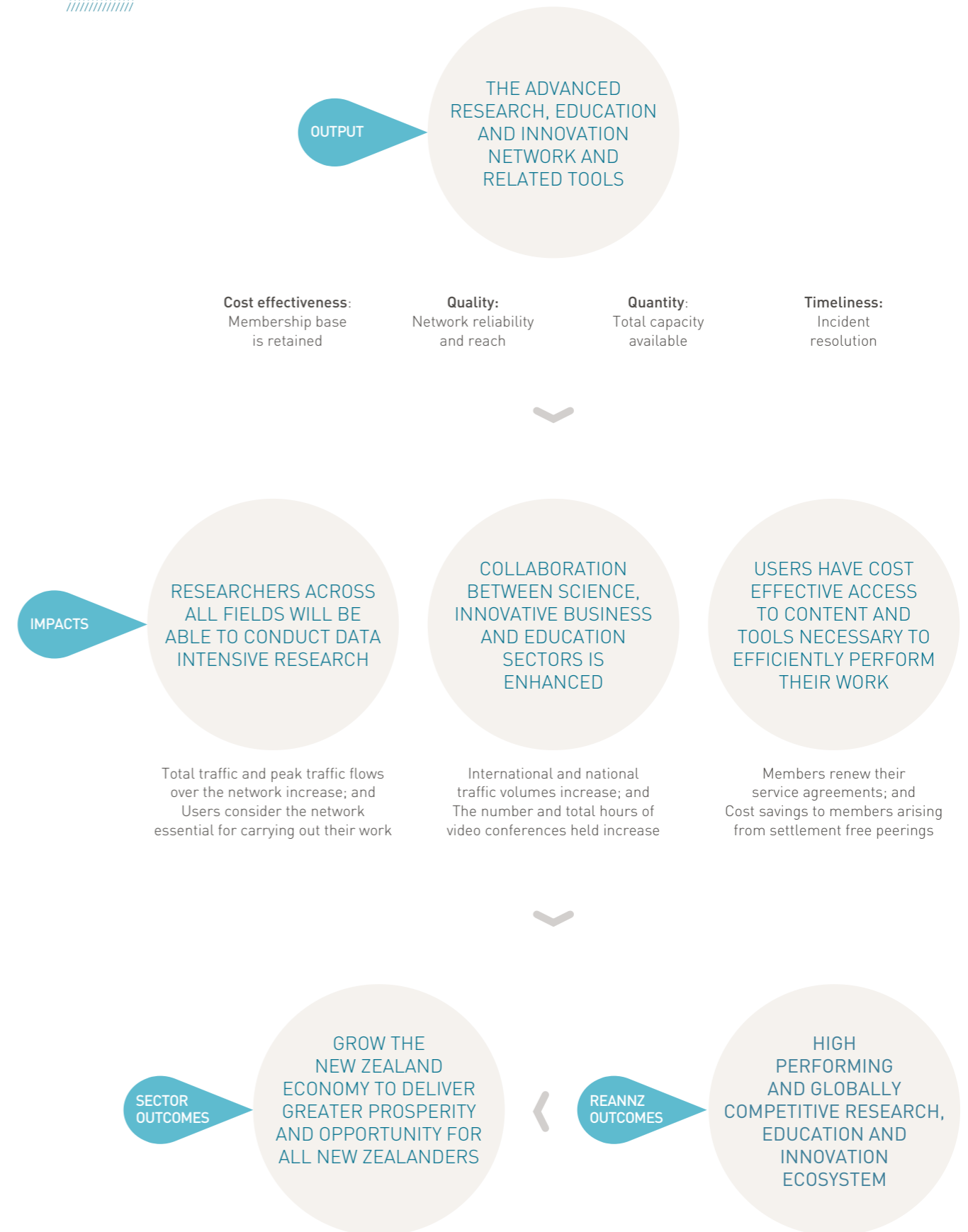
Susie Johnstone
Audit Committee Chair



SERVICE PERFORMANCE

SUPPORTING A HIGH PERFORMING AND GLOBALLY COMPETITIVE RESEARCH, EDUCATION AND INNOVATION ECOSYSTEM

PERFORMANCE FRAMEWORK



STATEMENT OF SERVICE PERFORMANCE



FOR THE YEAR ENDED 30 JUNE 2013

OUTPUT: THE ADVANCED RESEARCH, EDUCATION AND INNOVATION NETWORK AND RELATED TOOLS.

THE MEASURES BELOW PROVIDE AN OVERVIEW OF THE NATURE AND PERFORMANCE OF THE SERVICES REANNZ HAS PROVIDED TO ITS MEMBERSHIP OVER THE PAST YEAR.

QUALITY

The quality of our service can be measured by the reliability of the network and its reach.

MEASURE	RESULT JUNE 2012	TARGET JUNE 2013	RESULT JUNE 2013
National network availability	99.99%	99.90% 12 month rolling average	99.96%
International network availability	99.65%	99.90% 12 month rolling average	99.87%

National and international network availability measures the reliability of the network. Downtime includes faults and other connectivity or hardware outages, but excludes planned maintenance. 99.90% network availability is the international target for research and education networks.

Network availability is crucial for our users to be able to perform their work when they need to. Network design helps to maintain availability, even during an outage, by the use of alternative paths, fail-over hardware and resilient circuits.

National network availability was above target for the year, however unplanned outages in Sydney and Los Angeles meant that international availability was marginally less than targeted. REANNZ is working to ensure availability is maintained should a similar event occur in the future.

MEASURE	RESULT JUNE 2012	TARGET JUNE 2013	RESULT JUNE 2013
Routes available to REANNZ members compared to those available to Internet2 members (US based NREN)	IPv4 105% of Internet2 routes available to REANNZ members	IPv4 ≥100% of Internet2 routes available to REANNZ members	IPv4 103% of Internet2 routes available to REANNZ members
	IPv6 102% of Internet2 routes available to REANNZ members	IPv6 ≥100% of Internet2 routes available to REANNZ members	IPv6 ≥104% of Internet2 routes available to REANNZ members

This measures the reach (or connectedness) of the REANNZ network. Each route represents a different Internet destination. IPv4 and IPv6 are different Internet addressing protocols, both of which are supported on the REANNZ network. Domestic and international route availability reflects how “well connected” our membership base is.

We compare route availability on the REANNZ network to that of Internet2, the US network with a membership of over 200 US based universities. Internet2 is a large, well connected network. We aim to have at least as many routes available to

REANNZ members as are available to Internet2 members, which is why we can have more than 100% of the Internet2 routes available.

Our members remain well connected globally, with over 100% of the research and education destinations accessible by US scientists available to our users. This ensures that New Zealand researchers have access to the same locations as their international peers, so that they remain competitive and able to participate in world-class science.

QUANTITY

The quantity of the services we provide is demonstrated by the amount of network capacity we provide our members.

MEASURE	RESULT JUNE 2012	TARGET JUNE 2013	RESULT JUNE 2013
Core network capacity available	10 Gb/s National	10 Gb/s National	10 Gb/s National
	1 Gb/s International	1 Gb/s International	1 Gb/s International

The REANNZ core network provided connectivity of 10 Gb/s nationally, and 1 Gb/s internationally during the year, in line with contracted expectations.

In the next financial year, national traffic capacity will increase with the development of a shared national network (in collaboration with FX Networks Limited).

However, global participation is limited by the size of our international connectivity at 1 Gb/s. For New Zealand to be able to fully participate in international collaborations, researchers are often required to have access to minimum infrastructure, which includes international bandwidth essential for the transport of datasets and information.

An international connection at 10 Gb/s is the global standard and with current international bandwidth of 1Gb/s, New Zealand cannot currently meet those entry level infrastructure minimums.

REANNZ is working to secure additional capacity, on our international network, starting with 40Gb/s, to address the growing demand for international bandwidth. This is crucial to ensure New Zealand is not digitally isolated, unable to participate in global science and collaborations.

COST EFFECTIVENESS

The cost effectiveness of the REANNZ network platform is best demonstrated by our ability to retain our core membership base. If we were not cost effective and providing valuable networking solutions, alternative suppliers would enter the market, and we would lose our members. During the year we retained our core membership base.

MEASURE	RESULT JUNE 2012	TARGET JUNE 2013	RESULT JUNE 2013
REANNZ maintains its core membership base	8/8 Universities 8/8 Crown Research Institutes 13/20 Institutes of Technology and Polytechnics 2/3 wānanga	8/8 Universities 8/8 Crown Research Institutes 13/20 Institutes of Technology and Polytechnics 2/3 wānanga	8/8 Universities 8/8 Crown Research Institutes 12/18 Institutes of Technology and Polytechnics* 2/3 wānanga

* Total number of ITPs has decreased due to mergers

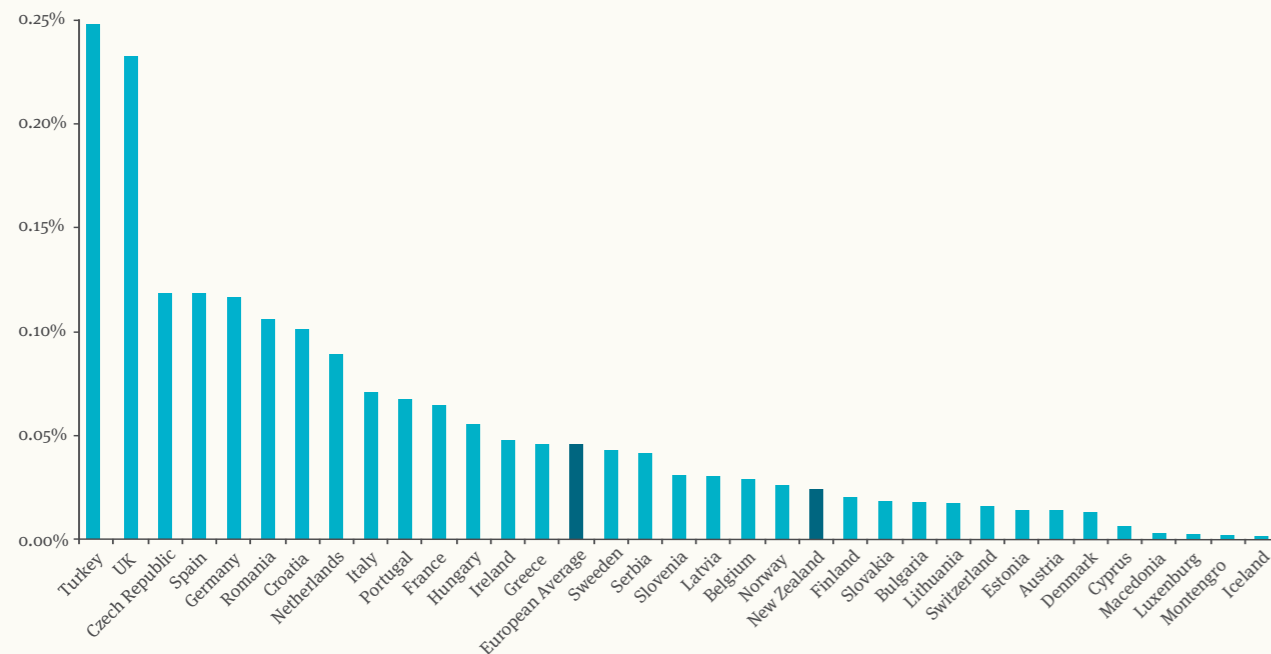
REANNZ addresses a niche market that commercial networks cannot – the provisioning of the unique services that meet science, research and education needs. Comparisons of cost with commercial telecommunications providers are misleading, as not only is our network designed to support time sensitive and bursty traffic flows, the network has other attributes, such as low latency and jitter, which commercial networks cannot economically provide. Performance is more valuable to our members than maximising utilisation.

We are one of many research networks internationally. While it is difficult to directly compare costs with our international counterparts, as each network operates within different geographical constraints and supply

markets and are at different stages of maturity with regards to its service offerings, we can provide an indicative comparison of REANNZ's budget compared with similar networks who are members of the European networking association, TERENA.

The average budget of the European NREN between 2009 and 2012 was EUR 12.8 million. In comparison, REANNZ's budget over the same period was the equivalent of EUR 6.1 million. As demonstrated below, New Zealand is spending less per citizen on research networking than most other European countries, despite the relatively high cost to New Zealand of international connectivity to access the rest of the world.

BUDGET AS A PERCENTAGE OF GDP, PER CAPITA



TIMELINESS

MEASURE	RESULT JUNE 2012	TARGET JUNE 2013	RESULT JUNE 2013
Users consider reported issues to be resolved in a timely manner (based on Member Survey).	74%	75%	92%

The speed at which we identify and resolve faults and other network performance issues is a measure of the timeliness of our network management activity. The REANNZ helpdesk logs incident reports from users, and actively monitors the network for performance issues. Although we have target resolution times agreed with our suppliers, the true test of our timeliness is our members' perception of our responsiveness to their issues.

We asked our members, in our annual membership survey, what they thought of our helpdesk and the speed of incident resolution. The number of respondents to this question decreased to 27 in 2013 (2012: 117). This suggests our members had fewer issues with our network. Of those that did encounter issues, 92% received timely resolution to their problem. This is a significant improvement on our 2012 performance, and reflects our focus on providing our members with optimal service.

IMPACT: ABLE TO CONDUCT DATA INTENSIVE SCIENCE AND RESEARCH

A number of science initiatives with large data requirements are being conducted that could not occur without the reach, reliability and speed of an advanced network. Examples include NeSI (National eScience Infrastructure which supports supercomputing), NZGL (New Zealand Genomics Limited which performs genome sequencing), and radio astronomy. All of these projects involve instrumentation that generates massive datasets. These datasets need to be transported quickly and accurately from the instruments to hosting or processing centres, and to the scientists using the datasets to perform research.

MEASURE	RESULT JUNE 2012	TARGET JUNE 2013	RESULT JUNE 2013
Total traffic flows over the national network	60.2 PB	56.0 PB	77.2 PB (28% growth)
Peak traffic flows over the network increase	3.7 Gb/s	4.5 Gb/s	6.5 Gb/s
Members consider the REANNZ network valuable or essential for carrying out their work	75% (43% essential; 32% valuable)	75%	76% (44% essential; 32% valuable)

Our members are increasingly finding the network essential to carrying out their work. In addition to this, peak and total traffic flows are increasing as we help members remove bottlenecks in the last mile and on campus, and continually work to improve monitoring and performance of the network.

These two trends suggest that network performance and, therefore, usage is improving. The network allows our members to participate in projects that require data intensive applications, helping them to achieve their work, study or research goals.

IMPACT: ENHANCED COLLABORATION BETWEEN SCIENCE, INNOVATIVE BUSINESS AND EDUCATION SECTORS

Advanced networks provide a platform on which collaboration can take place. They provide connectivity that allows collaboration between institutions, between sectors, and between countries. The REANNZ network platform provides our researchers with the ability to participate in global science, research and innovation initiatives. The better connected our members are, the more opportunities are created for collaboration, participation and innovation.

MEASURE	RESULT JUNE 2012	TARGET JUNE 2013	RESULT JUNE 2013
Traffic volume through the international network	New measure	0.96 PB	1.29 PB
Traffic volume through the national network	New measure	55.04 PB	75.91 PB
Number of video conferences held	New measure	19,000	21,780
Number of person hours video conferencing	New measure	22,400	31,203

Increasing traffic flows over our networks indicate that REANNZ has enabled collaborations both nationally and internationally. We are investing in a new shared national network and are working towards increasing capacity on the international network to further increase collaboration between peers.

The REANNZ video conferencing service also provided members with a tool for direct collaboration with other parties.

IMPACT: COST EFFECTIVE ACCESS

Many of the services required by the REANNZ community are cost-prohibitive (or simply unavailable) on the commercial market. As a not for profit company that acts in the best interests of its community, REANNZ is able to provide these services that would otherwise be unavailable to our members.

MEASURE	RESULT JUNE 2012	TARGET JUNE 2013	RESULT JUNE 2013
Members renew their service agreements	New measure	Core members 100% Other members 90%	Core members 107% Other members 142%
Cost savings to members from settlement free peering	New measure	\$120,000	\$184,000

Members would not renew or enter into their service agreements if they were not receiving a cost effective range of services. Over the past year, our members maintained their subscriptions to our value-added services, and other members have signed up to those services, resulting in a > 100% result.

REANNZ provides a commodity internet service for its membership. By participating in the marketplace REANNZ became a market maker, forcing ISPs to drop their prices to keep their market share. Even for those not subscribing to REANNZ's internet service, the price of commodity internet has decreased dramatically as a result of our involvement.

REANNZ has also worked to increase the number of service providers it peers with (such as Google, Microsoft and Amazon). This means that traffic to these providers travels over users REANNZ connection, rather than their commodity internet connection, delivering savings by reducing the amount of commodity internet our members need to purchase. REANNZ members are charged a fixed fee for traffic so any increases to traffic on the REANNZ network does not result in additional cost, rather, it makes the cost of membership more value for money.

OUTPUT INCOME AND EXPENDITURE SUMMARY

Output: The Advanced Research, Education and Innovation Network and Related Tools

	ACTUAL \$'000	BUDGET \$'000
REVENUES		
Grant Income*	–	–
Network Income	8,206	8,260
Other Income	2,201	2,554
Interest Income	658	578
TOTAL INCOME	11,065	11,392
EXPENSES		
Amortisation and Depreciation	713	794
Network Expenses	7,680	7,683
Operating Expenses	3,417	3,293
TOTAL EXPENDITURE	11,810	11,770
SURPLUS / (DEFICIT)	(745)	(378)

*The budget has been reclassified as Other Income (see note 1 to the Financial Statements).



STATEMENT OF COMPREHENSIVE INCOME



FOR THE YEAR ENDED 30 JUNE 2013

FINANCIAL PERFORMANCE

	ACTUAL 2012 \$000	NOTES	ACTUAL 2013 \$000	BUDGET 2013 \$000
REVENUE				
-		1	-	-
6,229			8,206	8,260
1,925		2	2,201	2,554
583			658	578
10		3	-	-
8,747			11,065	11,392
NETWORK EXPENSES				
970		11, 12	624	669
7,423		6	7,680	7,683
8,393			8,304	8,352
354			2,761	3,040
OPERATING EXPENSES				
30		4	36	35
76		11, 12	89	125
105		5	114	143
1,866			1,954	2,003
-		3	50	-
334			413	523
144			440	359
106			305	110
94			105	120
2,755			3,506	3,418
(2,401)			(745)	(378)
-			-	-
(2,401)			(745)	(378)

* The 2013 budget and 2012 comparative amounts for Grant Revenue have been reclassified as Other Income (see Notes to the Financial Statements (Note 1)).

The Statement of Accounting Policies and Notes to the financial statements form part of and are to be read in conjunction with these financial statements

STATEMENT OF FINANCIAL POSITION



AS AT 30 JUNE 2013

ACTUAL 2012 \$000	NOTES	ACTUAL 2013 \$000	BUDGET 2013 \$000
CURRENT ASSETS			
1,835	Cash and cash equivalents 7	14,893	3,640
2,492	Funds held in Escrow	-	-
2,552	Receivables and debtors 8	2,573	2,457
	GST-receivable	1,354	-
13,172	Investments 9	4,036	16,500
517	Prepayments	459	616
4,864	Prepaid network expenses 10	3,583	3,646
25,432	TOTAL CURRENT ASSETS	26,898	26,859
NON-CURRENT ASSETS			
2,363	Property, plant and equipment 11	12,491	1,339
27	Intangible assets 12	8	7
3,760	Prepaid network expenses 10	829	754
6,150	TOTAL NON-CURRENT ASSETS	13,328	2,100
CURRENT LIABILITIES			
419	Accounts payable and accrued expenses 13	12,794	429
204	GST Payable	-	175
151	Employee entitlements 14	168	200
2,695	Income in advance 15	2,771	2,006
3,196	Deferred Income 16	704	540
-	Provisions 17	156	-
6,665	TOTAL CURRENT LIABILITIES	16,593	3,350
NON-CURRENT LIABILITIES			
1,006	Deferred Income 16	467	630
1,006	TOTAL NON-CURRENT LIABILITIES	467	630
23,911	NET ASSETS	23,166	24,979
PUBLIC EQUITY			
16,001	Share capital 18	16,001	16,001
7,910	Accumulated surplus	7,165	8,978
23,911	TOTAL PUBLIC EQUITY	23,166	24,979

The Statement of Accounting Policies and Notes to the financial statements form part of and are to be read in conjunction with these financial statements

STATEMENT OF CHANGES IN EQUITY



FOR THE YEAR ENDED 30 JUNE 2013

ACTUAL 2012 \$000	NOTES	ACTUAL 2013 \$000	BUDGET 2013 \$000
26,312	Public Equity at beginning of year	23,911	25,357
-	Share Capital introduced	-	-
COMPREHENSIVE INCOME			
(2,401)	Surplus (deficit) for the year	(745)	(378)
(2,401)	TOTAL COMPREHENSIVE INCOME / (LOSS)	(745)	(378)
23,911	PUBLIC EQUITY AT END OF YEAR	23,166	24,979

The Directors of REANNZ authorise these financial statements for issue.

On behalf of the Board:

Prof. John Raine
Board Chair

31 October 2013

Susie Johnstone
Audit Committee Chair

The Statement of Accounting Policies and Notes to the financial statements form part of and are to be read in conjunction with these financial statements

STATEMENT OF CASH FLOWS



FOR THE YEAR ENDED 30 JUNE 2013

ACTUAL 2012 \$000	NOTES	ACTUAL 2013 \$000	BUDGET 2013 \$000
CASH FLOWS FROM OPERATING ACTIVITIES			
Cash was provided from (applied to)			
2,412	Crown revenue (repayment)	(2,492)	–
–	Other Government Department funding*	–	–
5,742	Network Income	8,390	8,260
462	Interest received	760	578
1,526	Other Income	1,567	1,823
(127)	Net GST	2	11
(5,410)	Payments to suppliers and employees	(5,415)	(6,051)
–	Prepayment for network connectivity	(652)	(652)
4,605	NET CASH FLOW FROM OPERATING ACTIVITIES	2,160	3,969
CASH FLOWS FROM INVESTING ACTIVITIES			
Cash was provided from (applied to)			
(234)	Purchase of plant and equipment	(594)	(300)
(2,492)	Funds deposited in Escrow	2,492	–
(4,500)	Term deposit investments	9,000	(3,900)
(7,226)	NET CASH FLOW FROM INVESTING ACTIVITIES	10,898	(4,200)
CASH FLOWS FROM FINANCING ACTIVITIES			
Cash was provided from (applied to)			
–	Issue of equity share capital	–	–
–	NET CASH FLOW FROM FINANCING ACTIVITIES	–	–
(2,621)	NET (DECREASE) / INCREASE IN CASH HELD	13,058	(231)
4,456	Cash at beginning of year	1,835	3,871
1,835	CASH AT END OF YEAR	14,893	3,640
<i>Represented by:</i>			
1,835	CASH AT BANK	14,893	3,640

* The 2013 budget and 2012 comparatives for Other Government Department Funding have been reclassified as Other Income (see Notes to the Financial Statements (Note 1)).

The Statement of Accounting Policies and Notes to the financial statements form part of and are to be read in conjunction with these financial statements

STATEMENT OF ACCOUNTING POLICIES



The reporting entity is Research and Education Advanced Network New Zealand Limited (“REANNZ”), a Crown-owned company, listed under schedule 4 of the Public Finance Act 1989 and incorporated under the Companies Act 1993. As a Crown-owned company, REANNZ’s ultimate parent is the New Zealand Crown.

REANNZ’s primary objective is to establish, own and operate a high speed communications network for the research and education sector. As such, REANNZ’s aim is to provide services to the public, rather than make a financial return.

Accordingly, REANNZ has designated itself as a public benefit entity for the purposes of New Zealand Equivalents to International Financial Reporting Standards.

The financial statements for REANNZ are for the year ended 30 June 2013 and were approved by the board on 31 October 2013.

BASIS FOR PREPARATION

Statement of compliance

The financial statements have been prepared in accordance with the Crown Entities Act 2004, which includes the requirement to comply with New Zealand generally accepted accounting practice (‘NZ GAAP’).

The financial statements comply with the New Zealand Equivalents to International Financial Reporting Standards (‘NZ IFRS’) and other applicable financial reporting standards as appropriate for public benefit entities.

Measurement base

The financial statements have been prepared on the basis of historical cost, except where modified by the revaluation of certain items of Property Plant and Equipment, and the measurement of derivative financial instruments at fair value. The accounting policies for these items are stated below.

Functional currency

The financial statements are presented in New Zealand dollars, rounded to the nearest thousand (\$000). The functional currency of REANNZ is New Zealand dollars.

Changes in accounting policies

There have been no changes in accounting policies during the financial year.

Standards, amendments and interpretations issued that are not yet effective and have not been early adopted

Standards, amendments and interpretations issued but not yet effective that have not been early adopted, and which are relevant to REANNZ are:

- NZ IFRS 9 Financial Instruments will eventually replace NZ IAS 39 Financial Instruments: Recognition and Measurement. NZIAS 39 is being replaced in three main phases: Phase 1 Classification and Measurement, Phase 2 Impairment Methodology, Phase 3 Hedge Accounting. Phase 1 has been completed and has been published to the new financial instrument standard NZ IFRS 9. NZ IFRS 9 uses a single approach to determine whether a financial asset is measured at amortised cost or fair value, replacing the many different rules in NZ IAS 39. The approach in NZ IFRS 9 is based on how an entity manages its financial instruments (its business model) and the contractual cash flow characteristics of the financial assets. The financial liability requirements are the same as NZ IAS 39, except for when an entity elects to designate a financial liability at fair value through profit and loss. The new standard is required to be adopted for the year ended 30 June 2016. However, as a new Accounting Standards Framework will apply before this date, there is no certainty when an equivalent standard to NZ IAS 9 will be applied by public benefit entities.

SIGNIFICANT ACCOUNTING POLICIES



The Minister of Commerce has approved a new Accounting Standards Framework (incorporating a tier strategy). Under this framework, REANNZ is classified as a Tier 2 reporting entity and will be required to apply Public Benefit Entity Accounting Standards (PAS) with reduced disclosure requirements. These standards are currently being developed by the External Reporting Board (XRB), based on current International Public Sector Accounting Standards. The effective date for the new standards for public sector entities is expected to be for reporting periods beginning on or after 1 July 2014. REANNZ expects to implement the new standards in preparing its 30 June 2015 financial statements. REANNZ will continually assess the implications of the new Accounting Standards Framework as it continues to develop.

Due to the change in the Accounting Standards Framework for public benefit entities, the XRB has effectively frozen the financial reporting requirements for public benefit entities up until the new Accounting Standards Framework is effective. Accordingly, no disclosure has been made about new or amended NZ IFRS that exclude public benefit entities from their scope.

Accounting policies are selected and applied in a manner that ensures that the resulting financial information satisfies the concepts of relevance and reliability. REANNZ accounting policies, therefore, are designed to report the substance of the underlying transactions undertaken by the entity.

The following significant accounting policies have been adopted in the preparation and presentation of the financial statements:

REVENUE RECOGNITION

Revenue is measured at the fair value of the consideration received or receivable.

Grant income is recognised by REANNZ as it is received or receivable from the Crown, when the conditions relating to the grant are met. Where there are no conditions attached to the grant, other than the requirement for REANNZ to own and operate a high speed communication network for the research and education sector, grant income is also recognised as it is received or receivable. Where grant income has been received but the conditions of the grant are not yet satisfied, grant income is recognised as deferred income in the Statement of Financial Position.

Interest revenue is recognised using the effective interest method.

PROPERTY, PLANT AND EQUIPMENT

Property plant and equipment asset classes consist of office equipment, ICT equipment, PoP equipment, leasehold improvements, network services equipment and fibre.

Property, plant and equipment are stated at cost or valuation less accumulated depreciation and any impairment losses.

Cost includes consideration given to acquire or create the asset and any directly attributable costs of bringing the asset to working condition for its intended use.

The cost of an item of property, plant and equipment is only recognised as an asset when it is probable that future economic benefits or service potential associated with the item will flow to REANNZ and the cost of the item can be measured reliably.

Where an asset is acquired at no cost, or for a nominal cost, the asset will be recorded at fair value at the date when control of the asset is obtained.

Gains and losses on disposals are determined by comparing the proceeds of disposal with the carrying amount of the asset. Gains and losses on disposal are included in the Statement of Comprehensive Income.

Assets under construction are held in work in progress until they are completed, at which point they are transferred to the appropriate category of property, plant and equipment.

Costs incurred subsequent to initial acquisition are capitalised only when it is probable that future economic benefits or service potential associated with the item will flow to REANNZ and the cost of the item can be measured reliably.

The costs of servicing property, plant and equipment are recognised in the Statement of Comprehensive Income as they are incurred.

Depreciation on property, plant and equipment (excluding work in progress) is calculated on a straight line basis, from the time the asset is in the location and condition necessary for its intended use. This basis allocates the cost or value of the asset, less its residual value, over its estimated useful life.

The depreciation method, estimated useful lives and residual values of property, plant and equipment are reviewed annually to assess appropriateness.

The following estimated useful lives are used in the calculation of depreciation:

Leasehold improvements	6 years
Routers and switches	5 years
Information technology equipment	3 years
Office equipment	5 years
PoP Equipment	8 years
Fibre	20 years

Leasehold improvements are depreciated on the basis of estimated useful life or the remaining lease term, whichever is shorter.

INTANGIBLE ASSETS

Software is a finite life intangible and is recorded at cost less accumulated amortisation and impairment. Amortisation is charged on a straight line basis over the estimated useful life of the intangible asset.

The following amortisation rates are used in the calculation of amortisation:

Software	3 years
----------	---------

IMPAIRMENT

At each reporting date, assets are reviewed by the Directors to determine whether there are any events or changes in circumstances that indicate that carrying amounts may not be recoverable. An impairment loss is recognised as the amount by which the asset's carrying amount exceeds its estimated recoverable amount.

If the carrying amount of an asset exceeds its recoverable amount, the asset is impaired and the carrying amount is written down to the recoverable amount. The impairment loss is then recognised as an expense in the Statement of Comprehensive Income.

Where an item of property, plant or equipment has been re-valued, any impairment loss is recognised against the revaluation reserve for that class of asset. Where this results in a debit balance in the revaluation reserve, the balance is recognised in the Statement of Comprehensive Income.

Any reversal of an impairment loss is recognised in the Statement of Comprehensive Income. Impairment losses can only be reversed to the extent that the carrying amount of the asset matches the carrying amount as calculated under the cost less accumulated depreciation method.

For items of property, plant or equipment which have been revalued, any reversal of impairment loss is credited back to the revaluation reserve. However, to the extent that an impairment loss for that class of asset was previously recognised in the Statement of Comprehensive Income, a reversal of impairment loss is also recognised in the Statement of Comprehensive Income.

BORROWING COSTS

Borrowing costs are recognised as an expense in the period in which they are incurred.

INVENTORIES

Inventories held for sale or use in the provision of services on a commercial basis is valued at the lower of cost and net realisable value. The cost of purchased inventory is determined using the first-in first-out method.

The write down from cost to net realisable value is recognised in the Statement of Comprehensive Income, in the period when the write-down occurs.

OPERATING LEASES

Operating lease payments, where the lessors effectively retain substantially all the risks and benefits of ownership of the leased items, are included in the Statement of Comprehensive Income. Where the leased items are in use, operating lease payments are allocated in equal installments over the lease term.

Where the leased items are not in use, the operating lease payments will be treated as a prepayment in the Statement of Financial Position. Once the items begin to be used in deriving income, these prepayments are released to the Statement of Comprehensive Income on a straight line basis over the period of the remaining operating lease term.

FINANCIAL ASSETS

Investments

For investments under a contract where the terms require delivery within a specified timeframe, the investment is recognised on the date of trade at fair value, net of transaction costs.

Other financial assets are classified into “cash and cash equivalents” and “receivables”. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand; cash held in banks, other short-term highly liquid investments with original maturities of less than three months.

Receivables

Accounts receivable are recognised at fair value. A provision for impairment of accounts receivable is made where there is objective evidence that REANNZ will not collect all amounts due according to the original terms of the receivable. When this occurs, the receivable is recorded at amortised cost, less provision for impairment. When the receivable is uncollectible, it is expensed in the Statement of Comprehensive Income.

FINANCIAL LIABILITIES

Payables

Accounts payable, comprising trade payables and other accounts payable, are recognised when REANNZ becomes obliged to make future payments resulting from the purchase of goods and services. Payables are initially measured at fair value and subsequently measured at amortised cost using the effective interest method.

DERIVATIVES

REANNZ enters into derivative financial instruments, including forward foreign exchange contracts, as part of its normal operations to manage its exposure to foreign exchange rate risk. REANNZ does not hold these financial instruments for trading purposes.

Financial instruments that constitute hedges, including forward foreign exchange contracts, are valued at the prevailing exchange rate at year end. Any unrealised gains or losses are recognised in the Statement of Comprehensive Income.

Financial instruments that do not constitute hedges are stated at fair value and any resulting gain or loss is recognised in the Statement of Comprehensive Income.

FOREIGN CURRENCY TRANSACTIONS

Transactions in foreign currencies are translated to New Zealand dollars at the rate applying at the date of transaction.

At balance date foreign currency monetary assets and liabilities are translated at the closing rate and exchange variations arising from these translations are recognised in the Statement of Comprehensive Income.

EMPLOYEE ENTITLEMENTS

Provision for accrued annual leave is made when it is probable that settlement will be required and the provision is capable of being measured reliably.

Provisions made for employee benefits expected to be settled within 12 months of the reporting date are measured using the best estimate of the amount required to settle the obligation, based on the remuneration rate expected.

Provisions made in respect of employee benefits which are not expected to be settled within 12 months of the reporting date are measured at the present value of the estimated future cash outflows to be made in respect of services provided by employees up to reporting date.

CASH FLOW STATEMENT

The Cash Flow Statement is prepared exclusive of GST, which is consistent with the method used in the Statement of Comprehensive Income.

Definitions of the terms used in the cash flow statement are:

“Cash” includes coins and notes, demand deposits and other highly liquid investments readily convertible into cash used by REANNZ as part of its day to day cash management.

“Investing activities” are those activities relating to the acquisition and disposal of current and non-current investments and any other non-current assets.

“Financing activities” are those activities relating to changes in equity of REANNZ.

“Operating activities” include all transactions and other events that are not investing or financing activities.

GOODS AND SERVICES TAX (GST)

These financial statements have been prepared on a GST exclusive basis except for accounts receivable, accounts payable, deferred income and income in advance, which are stated inclusive of GST.

The net GST paid to, or received from, the Inland Revenue Department, including the GST relating to investing and financing activities, is classified as an operating cash flow in the Statement of Cash Flows.

Commitments and contingencies are disclosed exclusive of GST.

INCOME TAX

As a public entity under section CW 38(2) of the Income Tax Act 2007, the company is exempt from income tax.

Accordingly, no provision has been made for income tax.

BUDGET FIGURES

The budget figures are those that form part of the REANNZ 2012–2015 Statement of Intent, dated May 2012.

The budget figures have been prepared in accordance with generally accepted accounting practice and are consistent with the accounting policies adopted by REANNZ for the preparation of the financial statements.

ACCOUNTING ESTIMATES AND JUDGMENTS

There are no accounting estimates in these financial statements that have had a significant effect on the amounts recognised in the financial statements.

NOTES TO THE FINANCIAL STATEMENTS



1. GRANT INCOME

	2013 \$000	2012 \$000
National Education Network per 2012 Annual Report	–	910
Less: reclassified as Other Income	–	(910)
TOTAL GRANT INCOME	–	–

REANNZ has a contract with the Ministry of Education for the purpose of maintaining a National Education Network trial. This is a contract for services rather than grant monies.

Accordingly, we have classified this revenue and restated the 2013 budget for this item as Other Income, as well as restated the 2012 comparative result.

2. OTHER INCOME

	2013 \$000	2012 \$000
IIP Connection Fees	539	539
National Education Network Trial		
National Education Network Trial per 2012 Annual Report	–	–
Plus: Reclassified from Grant Income	921	910
REANNZ Internet	302	113
Video Conferencing Service	354	353
Other	85	10
TOTAL OTHER INCOME	2,201	1,925

3. FOREIGN CURRENCY GAINS (LOSSES)

	2013 \$000	2012 \$000
Realised foreign currency gains (losses)	(14)	(49)
Unrealised foreign currency gains (losses)	(36)	59
TOTAL FOREIGN CURRENCY GAINS (LOSSES)	(50)	10

4. AUDITORS REMUNERATION

	2013 \$000	2012 \$000
Audit of the financial statements	36	30
TOTAL REMUNERATION TO AUDITORS	36	30

5. DIRECTORS FEES

	2013 \$000	2012 \$000
Directors fees paid during the year were:		
J Raine (Chair)	38	38
G Benwell (Deputy Chair)	24	24
S Johnstone	19	19
J Donovan (appointed 1 July 2012)	19	–
P Norman (appointed 10 December 2012)	11	–
M Riley (retired 31 August 2012)	3	19
G Heald (retired 30 September 2011)	–	5
TOTAL DIRECTORS FEES	114	105

There have been no payments made to committee members appointed to the Board who are not Directors during the year.

REANNZ has provided a deed of indemnity to directors for certain activities undertaken in performance of REANNZ's functions.

REANNZ has effected Directors and Officers liability and Professional Indemnity insurance cover during the financial year in respect of the liability of Board members and employees.

6. NETWORK EXPENSES

	2013 \$000	2012 \$000
NATIONAL NETWORK		
Connectivity	2,415	2,493
Circuits and PoP Accommodation	315	354
Other Network Expenses	2,046	1,631
Asset Disposals	374	419
TOTAL NATIONAL NETWORK EXPENSES	5,150	4,897
INTERNATIONAL NETWORK		
Connectivity	2,449	2,449
Circuits and PoP Accommodation	66	68
Other Network Expenses	15	9
TOTAL INTERNATIONAL NETWORK EXPENSES	2,530	2,526
TOTAL NETWORK EXPENSES	7,680	7,423

Network expenses include \$398,000 relating to operating lease expenses recognised during the year (2012: \$436,000).

7. CASH AND CASH EQUIVALENTS

	2013 \$000	2012 \$000
Cash at bank and on hand	14,893	1,835
Term deposits with maturities less than 3 months	–	–
	14,893	1,835

8. RECEIVABLES AND DEBTORS

	2013 \$000	2012 \$000
Trade Receivables	2,531	2,536
Sundry Debtors	42	16
	2,573	2,552

In line with member contracts, membership fees are due quarterly in advance. Of the amount of receivables and debtors above, \$2,294,000 including GST (2012: \$2,361,000 including GST) relate to membership fees for services to be provided by REANNZ during the coming financial year.

These fees are shown as income received in advance until the service period begins, at which time the fees are recognised as revenue in the Statement of Comprehensive Income. The ageing profile of receivables at year end is detailed below:

	2013 \$000	2012 \$000
Not past due	2,459	2,469
Past due 31–60 days	113	83
Past due 61–90 days	–	–
Past due > 90 days	1	–
	2,573	2,552

The carrying value of debtors and other receivables approximates their fair value. REANNZ expects to recover all outstanding receivables and debtors. REANNZ holds

no collateral as security or other credit enhancements over receivables that are past due or impaired.

9. INVESTMENTS

	2013 \$000	2012 \$000
Term Deposit (maturity within 12 months)	4,036	13,172
	4,036	13,172

The term deposit of \$4,036,000 has a maturity of less than 12 months, and is due to mature in July 2013. No collateral is held on the above amount. The carrying amount of the term

deposit approximates its fair value. The average interest on the term deposit during the year was 4.1% (2012: 4.58%).

10. PREPAID NETWORK EXPENSES

Prepaid network expenses relate to core PoP connectivity and network service operation and management. These prepayments will be expensed to the Statement of Comprehensive Income on a straight-line basis over the contract term.

	NOTE	2013 \$000	2012 \$000
Balance at beginning of year		8,624	12,914
Prepayment expensed during year	19	(4,864)	(4,942)
Payments made during the year		652	652
NET BOOK VALUE		4,412	8,624
CURRENT / NON CURRENT SPLIT			
Current		3,583	4,864
Non current		829	3,760
NET BOOK VALUE		4,412	8,624

11. PROPERTY, PLANT AND EQUIPMENT

2013	OFFICE EQUIPMENT \$000	ICT EQUIPMENT \$000	NATIONAL POP EQUIPMENT \$000	INTERNATIONAL POP EQUIPMENT \$000	LEASEHOLD IMPROVEMENTS \$000	NETWORK SERVICES \$000	FIBRE \$000	WORK IN PROGRESS \$000	2013 TOTAL \$000
GROSS CARRYING AMOUNT									
Balance at beginning of year	66	242	4,099	123	19	522	-	-	5,071
Additions/transfers	8	228	3,742	-	151	-	7,065	16	11,210
Sales/write offs	-	(25)	(1,572)	-	(18)	-	-	-	(1,615)
BALANCE AT END OF YEAR	74	445	6,269	123	152	522	7,065	16	14,666
ACCUMULATED DEPRECIATION									
Balance at beginning of year	41	202	2,017	27	5	416	-	-	2,708
Depreciation expense	9	72	482	21	9	101	-	-	694
Disposals charged to the Statement of Comprehensive Income	-	(23)	(1,199)	-	(5)	-	-	-	(1,227)
BALANCE AT END OF YEAR	50	251	1,300	48	9	517	-	-	2,175
NET BOOK VALUE	24	194	4,969	75	143	5	7,065	16	12,491

The net amount of Fibre held under finance leases is \$2.2 million (2012: nil).

2012	OFFICE EQUIPMENT \$000	ICT EQUIPMENT \$000	NATIONAL POP EQUIPMENT \$000	INTERNATIONAL POP EQUIPMENT \$000	LEASEHOLD IMPROVEMENTS \$000	NETWORK SERVICES \$000	FIBRE \$000	WORK IN PROGRESS \$000	2012 TOTAL \$000
GROSS CARRYING AMOUNT									
Balance at beginning of year	59	250	4,820	74	19	522	-	-	5,744
Additions/transfers	7	8	230	49	-	-	-	-	294
Sales/write offs	-	(16)	(951)	-	-	-	-	-	(967)
BALANCE AT END OF YEAR	66	242	4,099	123	19	522	-	-	5,071
ACCUMULATED DEPRECIATION									
Balance at beginning of year	32	159	1,786	12	2	244	-	-	2,235
Depreciation expense	9	54	763	15	3	172	-	-	1,016
Disposals charged to the Statement of Comprehensive Income	-	(11)	(532)	-	-	-	-	-	(543)
BALANCE AT END OF YEAR	41	202	2,017	27	5	416	-	-	2,708
NET BOOK VALUE	25	40	2,082	96	14	106	-	-	2,363

12. INTANGIBLE ASSETS

	NOTE	2013 SOFTWARE \$000	2012 SOFTWARE \$000
GROSS CARRYING AMOUNT			
Balance at beginning of year		103	102
Additions/transfers		2	1
Sales/transfers		(43)	-
BALANCE AT END OF YEAR		62	103
ACCUMULATED AMORTISATION			
Balance at beginning of year		76	46
Amortisation expense	19	20	30
Disposals		(42)	-
BALANCE AT END OF YEAR		54	76
NET BOOK VALUE		8	27

13. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

	2013 \$000	2012 \$000
Creditors	12,296	336
Accrued expenses	498	83
Other payables	–	–
TOTAL ACCOUNTS PAYABLE AND ACCRUED EXPENSES	12,794	419

Creditors and other payables are non-interest bearing and are normally settled on 30-day terms.

Therefore, the carrying value of creditors and other payables approximates their fair values.

14. EMPLOYEE ENTITLEMENTS

	2013 \$000	2012 \$000
Accrued Wages	92	71
PAYE due to Inland Revenue	–	–
Annual leave entitlements	76	80
TOTAL EMPLOYEE ENTITLEMENTS	168	151

All employee entitlements are expected to be settled within 12 months of balance date.

15. INCOME IN ADVANCE

	2013 \$000	2012 \$000
Fees received in advance	776	642
Fees invoiced but not yet received	1,995	2,053
TOTAL INCOME IN ADVANCE	2,771	2,695

In line with member contracts, membership fees are due quarterly in advance. Membership fees invoiced but not yet received of \$1,995,000 (excluding GST) relate to fees for services to be provided by REANNZ in the coming financial

year (2012: \$2,053,000). These fees are shown as income received in advance until the service period begins, at which time the fees will be recognised as revenue in the Statement of Comprehensive Income.

16. DEFERRED INCOME

	2013 \$000	2012 \$000
CURRENT PORTION		
Ministry of Science and Innovation Hardship Fund	166	166
Ministry of Economic Development Cable Grant	–	2,492
ITP Connection Fees	538	538
TOTAL CURRENT PORTION	704	3,196
NON CURRENT PORTION		
ITP Connection Fees	467	1,006
TOTAL NON CURRENT PORTION	467	1,006
TOTAL DEFERRED INCOME	1,171	4,202

In June 2009 REANNZ received a \$900,000 grant from the Ministry of Business, Innovation and Employment (formerly Ministry for Research, Science and Technology) for the purpose of connecting remote locations to the REANNZ Network. Grant monies relating to these connections have been recognised in the Statement of Comprehensive Income in line with the related expenditure incurred. The remainder of the grant monies are being held as deferred income until the remaining locations have been connected.

The Grant from the Ministry of Economic Development was for the purpose of establishing an anchor tenancy on a new international cable. The monies were repaid to the Ministry when the project did not go ahead in August 2012.

ITP Connection Fees are fees to connect seven Institutes of Technology and Polytechnics to the REANNZ network. Connection fees are recognised as income periodically over the 55-month term of the membership contracts, from the date they were connected to the network.

17. PROVISIONS

	2013 \$000	2012 \$000
CURRENT PORTION		
Onerous Contract	156	–
TOTAL CURRENT PORTION	156	–

	2013 \$000	2012 \$000
MOVEMENTS IN PROVISIONS FOR THE YEAR		
Balance as at 1 July 2012	–	–
Additional provision made for Onerous Contract	156	–
Amount used	–	–
BALANCE AS AT 30 JUNE 2013	156	–

REANNZ has a non-cancellable lease for Level 5, 126 Lambton Quay. The office space is not being used due to the earthquake risks associated with the building, as it has a 22% earthquake strength rating. The right to

terminate the lease can be exercised from November 2013, with early termination penalties applicable. A provision has been recognised for the obligation, with the cash outflow expected in the next financial year.

18. PUBLIC EQUITY

Capital Management

REANNZ's capital is its equity, which comprises accumulated funds and share capital. Equity is represented by net assets.

REANNZ is subject to the financial management and accountability provisions of the Crown Entities Act 2004, which impose restrictions in relation to borrowings, acquisition of securities, issuing guarantees and indemnities and the use of derivatives.

REANNZ manages its equity as a by-product of prudently managing revenues, expenses, assets, liabilities, investments, and general financial dealings to ensure REANNZ effectively achieves its objectives and purpose, whilst remaining a going concern.

Share Capital

At 30 June 2013, share capital comprised 1,816 ordinary shares (2012: 1,816). All issued shares are fully paid and have no par value.

The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company, and rank equally with regard to the Company's residual assets.

19. NET CASH FLOW FROM OPERATING ACTIVITIES

	NOTE	2013 \$000	2012 \$000
NET SURPLUS / (DEFICIT) AFTER TAXATION FOR THE YEAR		(745)	(2,401)
NON CASH ITEMS			
Amortisation	12	20	30
Depreciation	11	694	1,016
Disposal of assets		390	424
Realised prepaid network expenses	10	4,864	4,942
Accrued interest		135	(121)
		5,358	3,890
MOVEMENTS IN WORKING CAPITAL			
Decrease (Increase) in accounts receivable		(21)	(967)
Decrease (Increase) in prepayments		58	99
Decrease (Increase) in inventory		-	-
Decrease (Increase) in property, plant and equipment included in accounts payable		(10,619)	(61)
Decrease (Increase) in prepaid network expenses	10	(652)	(652)
Increase (Decrease) in accounts payable and accrued expenses		12,533	(193)
Increase (Decrease) in income received in advance and deferred income		(2,955)	2,451
Increase (Decrease) in employee entitlements		17	18
Increase (Decrease) in GST payable		(1,559)	20
		(3,198)	715
NET CASH INFLOW / (OUTFLOW) FROM OPERATING ACTIVITIES		2,160	4,605

20. CAPITAL COMMITMENTS AND OPERATING LEASES

i) Capital Commitments

There were no capital commitments at balance date.

ii) Operating Lease Commitments

Operating leases relate to the following activities:

- Office premises at QualIT House, The Terrace, Wellington
- Office premises at Intergen House, Lambton Quay, Wellington;
- Network PoP accommodation and associated support facilities; and
- Network Equipment leases

The minimum future lease payments payable under non-cancellable operating leases are as follows:

	2013 \$000	2012 \$000
Less than one year	441	407
Between one and two years	152	391
Between two and five years	103	293
Later than five years	-	-
TOTAL OPERATING LEASE COMMITMENTS	696	1,091

iii) Connectivity and Managed Service Commitments

Connectivity and managed service commitments relate to:

- Payments to suppliers for core national and international connectivity services
- Payments to suppliers for service management of the national network

	2013 \$000	2012 \$000
Less than one year	682	1,400
Between one and two years	292	410
Between two and five years	29	321
Later than five years	-	-
TOTAL CONNECTIVITY AND MANAGED SERVICE COMMITMENTS	1,003	2,131

iv) Finance Leases

Indefeasible Rights of Use (IRUs) have been granted to REANNZ over specific Fibre Pairs, and have been accounted for as finance leases as the risks and rewards of ownership have transferred to REANNZ. The net carrying amount of the leased assets are shown in Note 11.

The finance lease term is for the expected economic life of the asset, and has been prepaid. As such, there are no future finance lease payments payable.

REANNZ does not hold an option to purchase the asset at the end of the lease term.

21. CONTINGENCIES

There were no contingent assets or liabilities at balance date for which disclosure is required (2012: nil).

22. RELATED PARTY TRANSACTIONS

All related party transactions have been entered into on an arms' length basis.

REANNZ is a wholly owned entity of the Crown.

Significant transactions with government related entities

During the 2012 financial year, REANNZ was provided with NZ\$2.4 million funding from the Ministry of Economic Development for the purpose of supporting a new international cable. When the project did not go ahead in July 2012, the \$2.4 million grant was returned to the Crown.

REANNZ also entered into a contract for services with the Ministry of Education for maintaining the National Education Network trial (see note 2). During the year, revenue of \$921,000 was received (2012: \$910,000).

At balance date \$211,000 including GST was receivable (2012: \$189,000 including GST).

Collectively, but not individually, significant transactions with government related entities

In conducting its activities, REANNZ is required to pay various taxes and levies (such as GST, FBT, PAYE and ACC levies) to the Crown and entities related to the Crown. The payment of these taxes and levies are based on the standard terms and conditions that apply to all tax and levy payers. REANNZ is exempt from paying income tax.

REANNZ's membership base is largely made up of entities controlled, significantly influenced, or jointly controlled by the Crown. Membership fees and other income from these government-related entities, for the year ended 30 June 2013, totalled \$8.8 million (2012: \$9.4 million, or \$6.8 million excluding the funding for supporting a new international cable). At balance date, \$2.3 million including GST was receivable (2012: \$2.3 million including GST), and \$2.5 million relates to income in advance (2012: \$2.5 million). This membership base includes Universities, Crown Research Institutes, Schools, Polytechs and other Government Departments and Agencies.

REANNZ also purchases goods and services from entities controlled, significantly influenced, or jointly controlled by the Crown. Purchases from these government-related entities, for the year ended 30 June 2013, totalled \$582,000 (2012: \$517,000). At balance date \$48,000 including GST was payable (2012: \$12,000 including GST). These purchases included, amongst other things, the purchase of air travel from Air New Zealand and audit services from Audit New Zealand.

Key Management Personnel

The following transactions were entered into during the year with key management personnel:

- REANNZ invoiced Auckland University of Technology for membership fees of \$544,000 (2012: \$412,000). At balance date \$157,000 including GST was receivable (2012: \$156,000). John Raine, Chair of the Board of Directors, is also the Pro Vice Chancellor of Innovation and Enterprise and the Head of the School of Engineering at Auckland University of Technology.
- REANNZ invoiced Otago Polytech for membership fees of \$64,000 (2012: \$58,000). At balance date \$18,000 including GST was receivable (2012: \$19,000). Susie Johnstone, Director, is also the Deputy Chair of the Otago Polytech Council.
- REANNZ invoiced University of Otago for membership fees of \$848,000 (2012: \$699,000). There were no amounts outstanding at balance date (2012: nil). George Benwell, Deputy Chair of the Board of Directors, is also the Pro Vice Chancellor of Commerce, and the Dean of the Business School at the University of Otago.

Key Management Personnel Compensation

The compensation of Directors, the Chief Executive and Senior Management, being the key management personnel of REANNZ, is set out on the following page:

	2013 \$000	2012 \$000
Short-term employee benefits*	905	869
Post-employment benefits	5	5
Other long-term employee benefits	–	–
Termination benefits	–	–
Share-based payment	–	–
TOTAL COMPENSATION	910	874

*includes redundancy payments to Senior Management of \$133,544.

23. EMPLOYEE REMUNERATION

Remuneration and other benefits of \$100,000 per annum or more paid or payable to employees in their capacity as employees were:

	2013	2012
\$100,000–\$109,999	2*	2
\$110,000–\$119,999	–	–
\$120,000–\$129,999	1*	1
\$130,000–\$139,999	1	1
\$140,000–\$149,999	1	2
\$150,000–\$159,999	1	–
\$160,000–\$169,999	–	1
\$170,000–\$179,999	–	–
\$180,000–\$189,999	–	–
\$190,000–\$199,999	–	–
\$200,000–\$209,999	–	2**
\$210,000–\$219,999	–	–
\$220,000–\$229,999	1*	–
\$230,000–\$239,999	–	–
\$240,000–\$249,999	–	–
\$250,000–\$259,999	–	–
\$260,000–\$269,999	–	–
\$270,000–\$279,999	–	–
\$280,000–\$289,999	1	–

* includes a redundancy payment.

** includes Chief Executive Officer for part year.

REANNZ made three redundancy payments totalling \$172,148 during the 2012/13 financial year (2012: \$52,256).

24. EVENTS AFTER BALANCE DATE

There are no events subsequent to reporting date, of which the Directors are aware, that would have a material impact on the financial statements for the period ended 30 June 2013.

25. FINANCIAL INSTRUMENTS

Financial instrument categories

	2013 \$000	2012 \$000
FINANCIAL ASSETS		
Cash and cash equivalents	14,893	1,835
Debtors and other receivables	2,573	2,552
Investments – term deposits	4,036	13,172
Funds held in Escrow	–	2,492
TOTAL FINANCIAL ASSETS	21,502	20,051
FINANCIAL LIABILITIES MEASURED AT AMORTISED COST		
Accounts payable and accrued expenses	12,378	419
TOTAL FINANCIAL LIABILITIES MEASURED AT AMORTISED COST	12,378	419

Financial instrument risks

REANNZ's activities expose it to a variety of financial instrument risks, including market risk, credit risk and liquidity risk. REANNZ has a series of policies to manage the risks associated with financial instruments. These policies do not allow any transactions that are speculative in nature to be entered into.

Market Risk – Fair value interest rate risk

Fair value interest rate risk is the risk that the fair value of a financial instrument will fluctuate due to changes in market interest rates. REANNZ's exposure to fair value interest rate risk is limited to bank deposits which are held at fixed rates of interest to maturity.

Market Risk – Cash flow interest rate risk

Cash flow interest rate risk is the risk that the cash flows from a financial instrument will fluctuate because of changes in market interest rates. Cash and cash equivalents held at variable interest rates expose REANNZ to cash flow interest rate risk. REANNZ's cash management policies require surplus cash to be invested in term deposits with a spread of investment maturity dates to limit exposure to short term interest rate movements.

Sensitivity analysis – Cash flow interest rate risk

At 30 June 2013 it is estimated that a general decrease of one percentage point in interest rates would decrease interest received on bank balances for the year, and therefore REANNZ's profit, by approximately \$167,000 (2012: \$136,000). This movement is attributed to decreases in interest received on cash and term deposit investments. The variance is larger in 2013 than 2012 as REANNZ held higher cash and investment balances during the year.

Currency risk

Currency risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate due to changes in foreign exchange rates.

REANNZ purchases goods and services in foreign currencies. As a result of these activities, foreign currency risk arises.

REANNZ's policy is to manage foreign currency risks arising from contractual commitments and liabilities by entering into foreign exchange forward contracts to manage foreign currency risk exposure, where that exposure exceeds pre-defined monetary thresholds. At balance date REANNZ held no foreign exchange forward contracts (2012: nil).

Sensitivity analysis – currency risk

At 30 June 2013, if the NZ dollar had weakened/strengthened by 5% against the US dollar with all other variables held constant, the surplus for the year would have been \$52,338 (2012: \$143,284) lower or higher.

This movement is attributable to foreign exchange gains/losses on translation of US dollar denominated creditors and bank balances.

Credit risk

Credit risk is the risk that a third party will default on its obligation to REANNZ, causing REANNZ to incur a loss. Due to the timing of its cash inflows and outflows, REANNZ invests surplus cash with registered banks.

In the normal course of business, REANNZ is exposed to credit risk from cash and term deposits with banks, debtors and other receivables. For each of these, the maximum credit exposure is best represented by the carrying amount in the Statement of Financial Position.

REANNZ invests funds with registered banks that have a Standards and Poor's credit rating of at least A+ for short term and AA- for long term investments. REANNZ has experienced no defaults of interest or principal payments for term deposits.

REANNZ holds no collateral or other credit enhancements for financial instruments that give rise to credit risk.

Liquidity risk

Liquidity risk is the risk that REANNZ will encounter difficulty raising liquid funds to meet commitments as they fall due. Prudent liquidity management implies maintaining sufficient cash and the ability to close out market positions. REANNZ manages liquidity risk by continuously monitoring forecast and actual cash flow requirements.

At balance date, REANNZ held financial liabilities relating to accounts payable and accrued expenses of \$12,378,000 (2012: \$419,000). All are payable within two months of balance date. REANNZ held no derivative financial liabilities at balance date (2012: nil).

26. EXPLANATION OF MAJOR VARIANCES AGAINST BUDGET

Statement of Comprehensive Income

Revenue

Income was 2% less than expected, primarily due to less of the optional elements of the National Education Network Trial work occurring during the financial year.

Operating Expenses

Operating expenses were very close to budget with the only exception being the cost of exiting earthquake prone premises in Lambton Quay. The run out of the lease has been recognised as an onerous lease provision in the current financial year and this inflated expenditure by \$156,000.

Statement of Financial Position

The cost of the new Shared national network was expected early in the 2013/14 year. With this being contracted just prior to balance date, Property, Plant and Equipment is \$11.1 million more than budgeted, and payables are \$12.3 million more than planned.

Other lesser variances involve the provision for the onerous lease, and additional income in advance due to more members paying annually rather than quarterly, and the continued connection of the National Educational Network Trial schools.

Statement of Cash Flows

The Pacific Fibre international cable project did not go ahead. As a result, the funds in escrow were returned to REANNZ and subsequently to the Crown.

Term investments were placed at call prior to balance date in anticipation of the need to finance the substantial payables for the shared national network in July 2013.

INDEPENDENT AUDITOR'S REPORT

AUDIT NEW ZEALAND
Mana Arotake Aotearoa



TO THE READERS OF RESEARCH AND EDUCATION ADVANCED NETWORK NEW ZEALAND LIMITED'S FINANCIAL STATEMENTS AND NON FINANCIAL PERFORMANCE INFORMATION

FOR THE YEAR ENDED 30 JUNE 2013

The Auditor General is the auditor of Research and Education Advanced Network New Zealand Limited (the company). The Auditor General has appointed me, Clint Ramoo, using the staff and resources of Audit New Zealand, to carry out the audit of the financial statements and non financial performance information of the company on her behalf.

We have audited:

- the financial statements of the company on pages 45 to 67, that comprise the statement of financial position as at 30 June 2013, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year ended on that date and notes to the financial statements that include accounting policies and other explanatory information; and
- the non financial performance information of the company that comprises the statement of service performance on pages 37 to 43.

OPINION

Financial statements and non-financial performance information

In our opinion:

- the financial statements of the company on pages 45 to 67:
 - comply with generally accepted accounting practice in New Zealand; and
 - give a true and fair view of the company's:
- financial position as at 30 June 2013; and
- financial performance and cash flows for the year ended on that date.
- the non financial performance information of the company on pages 37 to 43:
 - complies with generally accepted accounting practice in New Zealand; and

- gives a true and fair view of the company's service performance and outcomes for the year ended 30 June 2013, including for each class of outputs:
- its service performance compared with forecasts in the statement of forecast service performance at the start of the financial year; and
- its actual revenue and output expenses compared with the forecasts in the statement of forecast service performance at the start of the financial year.

OTHER LEGAL REQUIREMENTS

In accordance with the Financial Reporting Act 1993 we report that, in our opinion, proper accounting records have been kept by the company as far as appears from an examination of those records.

Our audit was completed on 31 October 2013. This is the date at which our opinion is expressed.

The basis of our opinion is explained below. In addition, we outline the responsibilities of the Board of Directors and our responsibilities, and we explain our independence.

BASIS OF OPINION

We carried out our audit in accordance with the Auditor General's Auditing Standards, which incorporate the International Standards on Auditing (New Zealand). Those standards require that we comply with ethical requirements and plan and carry out our audit to obtain reasonable assurance about whether the financial statements and non financial performance information are free from material misstatement.

Material misstatements are differences or omissions of amounts and disclosures that, in our judgement, are likely to influence readers' overall understanding of the financial statements and non financial performance information.

If we had found material misstatements that were not corrected, we would have referred to them in our opinion.

An audit involves carrying out procedures to obtain audit evidence about the amounts and disclosures in the financial statements and non financial performance information. The procedures selected depend on our judgement, including our assessment of risks of material misstatement of the financial statements and non financial performance information, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the preparation of the company's financial statements and non financial performance information that give a true and fair view of the matters to which they relate. We consider internal control in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.

An audit also involves evaluating:

- the appropriateness of accounting policies used and whether they have been consistently applied;
- the reasonableness of the significant accounting estimates and judgements made by the Board of Directors;
- the appropriateness of the reported service performance within the company's framework for reporting performance;
- the adequacy of all disclosures in the financial statements and non financial performance information; and
- the overall presentation of the financial statements and non financial performance information.

We did not examine every transaction, nor do we guarantee complete accuracy of the financial statements and non financial performance information. Also we did not evaluate the security and controls over the electronic publication of the financial statements and non financial performance information.

In accordance with the Financial Reporting Act 1993 we report that we have obtained all the information and explanations we have required. We believe we have obtained sufficient and appropriate audit evidence to provide a basis for our audit opinion.

RESPONSIBILITIES OF THE BOARD OF DIRECTORS

The Board of Directors is responsible for preparing financial statements and non financial performance information that:

- comply with generally accepted accounting practice in New Zealand;

- give a true and fair view of the company's financial position, financial performance and cash flows; and
- give a true and fair view of its service performance and outcomes.

The Board of Directors is also responsible for such internal control as is determined necessary to enable the preparation of financial statements and non financial performance information that are free from material misstatement, whether due to fraud or error. The Board of Directors is also responsible for the publication of the financial statements and non financial performance information, whether in printed or electronic form.

The Board of Directors' responsibilities arise from the Crown Entities Act 2004, the Financial Reporting Act 1993, the Companies Act 1993 and the Public Finance Act 1989.

RESPONSIBILITIES OF THE AUDITOR

We are responsible for expressing an independent opinion on the financial statements and non financial performance information and reporting that opinion to you based on our audit. Our responsibility arises from section 15 of the Public Audit Act 2001 and the Crown Entities Act 2004.

INDEPENDENCE

When carrying out the audit, we followed the independence requirements of the Auditor General, which incorporate the independence requirements of the External Reporting Board.

In addition to the audit of the annual financial statements, we carried out an assurance engagement with respect to the information provided in Templates 1 to 3 in accordance with the "Instructions for Preparing Specified Information Under Section 83 to Identify a Qualifying Liable Person's Qualified Revenue for the Purposes of the Telecommunications Development Levy" dated 1 July 2013 for the year ended 30 June 2013.

Other than the annual audit and the above engagement, we have no relationship with or interests in the company.

Clint Ramoo
Audit New Zealand, On behalf of the Auditor General
Wellington, New Zealand

APPENDIX: STATEMENT OF COMPREHENSIVE INCOME



FOR THE YEAR ENDED 30 JUNE 2013

RESTATED TO STATEMENT OF INTENT 2012/15

ACTUAL 2012 \$000		NOTES	ACTUAL 2013 \$000	BUDGET 2013 \$000
REVENUE				
910	Grant Income	1	0	1,179
6,229	Network Income		8,206	8,260
1,015	Other Income	2	2,201	1,375
583	Interest Income		658	578
10	Foreign currency gains	3	–	–
8,747	TOTAL REVENUE		11,065	11,392
EXPENSES				
30	Audit fee	4	36	35
1,046	Depreciation and amortisation	12, 13	896	794
105	Directors fees	5	114	143
1,866	Employment expenses		1,954	2,003
–	Foreign currency losses	3	50	–
7,005	Network expenses	6	7,306	7,683
752	Other operating expenses		604	523
144	Professional services	7	440	359
106	Rental and lease expenses		305	110
94	Travel and vehicle expenses		105	120
11,148	TOTAL EXPENSES		11,810	11,770
(2,401)	SURPLUS / (DEFICIT)		(745)	(378)
–	Other Comprehensive Income		–	–
(2,401)	TOTAL COMPREHENSIVE INCOME / (LOSS)		(745)	(378)

A revised format was used for the 2013 Annual Report to improve the understanding of the financial performance of REANNZ, particularly Network and Operating costs.

GOVERNANCE STATEMENT



ORGANISATIONAL FORM

REANNZ is a Company under the Companies Act 1993, and is listed under schedule four of the Public Finance Act 1989. Its shareholders are the Minister of Finance, and the Minister of Science and Innovation. At balance date, each shareholder held 908 shares on behalf of the New Zealand public.

REANNZ is not a Crown Entity listed under the Crown Entities Act. However, it is the intent of shareholders that REANNZ act in a manner consistent with the Crown Entities Act. REANNZ is subject to the Official Information Act.

ROLE OF THE BOARD

REANNZ's Shareholding Ministers appoint a governing board of directors. The company's constitution sets the size of the Board at a minimum of two and a maximum of nine directors. There were five directors appointed for the year to 30 June 2013.

The Board is responsible under the company's constitution to manage, direct and supervise the company's business affairs. In practice, day to day management of the company is delegated to the Chief Executive.

The Board establishes the company's strategic and business plans, approves annual budgets and monitors management's performance against established goals. The Board also considers and approves new policies and business initiatives, authorises transactions outside prescribed delegated authorities of management and appoints the Chief Executive. Procedures are in place at Board, corporate and operational levels to safeguard the company's assets and its wider commercial interests. A well-established regime of regular reporting is designed to maintain a high standard of internal communication and to ensure the Board remains appropriately informed of all aspects of the company's business and activities. Board fees are set by the Shareholding Ministers each year.

RISK MANAGEMENT

The Board is also responsible for ensuring that the Company has effective policies in place to manage its risks. The Board decides the level and nature of the risks that are acceptable to the Company. The Chief Executive is delegated responsibility for managing normal business risks. As part of managing its broader risk profile, the Board maintains and regularly reviews a risk register, and approves and reviews all company policies.

LEGISLATIVE COMPLIANCE

The Board acknowledges its responsibility to ensure the organisation complies with all legislation. The Board has delegated responsibility to the Chief Executive for the development and operation of a programme to systematically identify compliance issues and ensure staff are aware of relevant legislative requirements.

BOARD MEETINGS

The Board of Directors meets monthly, and these meetings are supplemented with additional meetings as required for strategic planning purposes and to progress specific decisions. The Board met on 11 scheduled occasions during the year and convened for five special meetings (three Audit Committee meetings, two HR Committee meetings and two special meetings).

BOARD COMMITTEES

The Board has formally constituted an Audit Committee to focus on audit and risk management issues. Three members of the Board are on this committee, and the committee met three times during the year. The Board also has an HR Committee to advise on remuneration, performance and other employment related issues. Three Board members served on this committee and it met twice during the year.

BOARD CHANGES

Jim Donovan was appointed to the Board on 1 July 2012.
Phil Norman was appointed to the Board, effective 10 December 2012, following the resignation of Mike Riley in August 2012.

INTEREST PROCEDURES

The REANNZ Board has a documented conflict of interest policy that sets out procedures for identifying and addressing potential conflict of interests. This policy applies to the directors and staff of REANNZ.

The key determination when considering whether an interest might create a conflict is whether the interest creates an incentive for the director or staff member to act in a way that may not be in the interests of REANNZ.

In deciding whether a conflict is present in any given situation it is appropriate that the determination be whether a reasonably informed objective observer would infer from the circumstances that the board or staff member's judgement is likely to be influenced to the detriment of REANNZ's best interest.

An 'interests register' is maintained of director's interests and updated regularly.

AUDITOR

Audit New Zealand, acting on behalf of the Controller and Auditor-General, is the auditor of REANNZ in accordance with section 32 of the Public Audit Act 2001.

REGISTERED OFFICE

Research and Education Advanced Network
New Zealand Limited

Level 1, QualIT House
22 The Terrace
Wellington 6011

MEMBERS



UNIVERSITIES



CROWN RESEARCH INSTITUTES



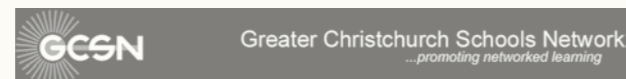
POLYTECHNICS



WĀNANGA



SCHOOLS





REANNZ