

REANZ

STATEMENT OF PERFORMANCE EXPECTATIONS 2014/15

RESEARCH AND EDUCATION ADVANCED NETWORK NEW ZEALAND LTD STATEMENT OF PERFORMANCE EXPECTATIONS 2014/15 MAY 2014

This work is licensed under the Creative Commons Attribution 3.0 New Zealand License. In essence, you are free to copy, distribute and adapt the work, as long as you attribute the work to REANNZ and abide by the other licence terms.

To view a copy of this license, visit
<http://creativecommons.org/licenses/by/3.0/nz/>



MILLISECONDS
AWAY FROM THE
REST OF THE
WORLD

- 02 Introduction
- 02 Statement of responsibility
- 03 What will REANNZ deliver in 2014/15?
- 04 Our strategic intentions

- 06 Assessing our performance
- 13 Expected Revenues and Proposed Expenses
- 14 Prospective Financial Statements
- 17 Notes to the Prospective Financial Statements

REANNZ

INTRODUCTION



THIS STATEMENT OF PERFORMANCE EXPECTATIONS IS SUBMITTED BY THE BOARD OF DIRECTORS OF RESEARCH AND EDUCATION ADVANCED NETWORK NEW ZEALAND LIMITED (REANNZ), PURSUANT TO THE CROWN ENTITIES ACT 2004. IT SETS OUT THE SERVICE EXPECTATIONS FOR REANNZ FOR THE PERIOD 1 JULY 2014 TO 30 JUNE 2015.

STATEMENT OF RESPONSIBILITY

REANNZ's Board is responsible for the prospective financial statements and statement of performance expectations contained in this document, including the appropriateness of the assumptions underlying them. It is also responsible for internal control systems, which provide reasonable assurance as to the integrity and reliability of financial reporting.

PROF. JOHN RAINE
CHAIR

JIM DONOVAN
ACTING DEPUTY CHAIR

29 May 2014

WHAT WILL REANNZ DELIVER IN 2014/15?



OUR OUTPUT

In 2014/15 REANNZ will receive \$4 million of government funding, through a funding agreement with the Ministry of Business, Innovation and Employment. This funding, along with the \$9.8 million we receive from member fees and additional revenue, will allow us to undertake the sustainable operation of an advanced research, education and innovation network and related tools. The details of the expected revenue and proposed expenses related to this output can be found later in the document, in our forecast financial statements.

We define an advanced research, education and innovation network as follows:

An advanced research, education and innovation network offers researchers, educators, students and innovative businesses access to a cohesive global fabric of advanced networking capabilities that encourage collaboration and enhance the competitiveness of the New Zealand economy. It includes infrastructure and services that meet the unique and evolving needs of the research, education and innovation communities, including:

- a purpose-built national-scale network providing a reliable (99.9% available) high-speed backbone with sufficient burstable bandwidth to handle the most demanding science applications.
- cost-effective high-speed international connections to 100+ other international Research and Education Networks.
- an engineering emphasis on lossless transport and guaranteed end-to-end performance.
- network-based services that leverage the existing infrastructure to deliver affordable applications that encourage collaboration and timely access to data. In the commercial market, these services are often cost-prohibitive, or simply unavailable.
- new and existing last-mile network connections to the campus edge of its members, their collaborators, content providers, exchange points, compute and data storage, and the scientific instruments they use.

OUR STRATEGIC INTENTIONS



AT THE HIGHEST LEVEL, OUR STRATEGIC INTENTION IS TO CONTRIBUTE TO GROWING THE NEW ZEALAND ECONOMY TO DELIVER GREATER PROSPERITY AND OPPORTUNITY FOR ALL NEW ZEALANDERS. THE FOLLOWING DIAGRAM SHOWS OUR OUTPUTS, IMPACTS AND OUTCOMES, AND HOW WE MEASURE OUR ACHIEVEMENT AGAINST THOSE GOALS.

Our network, and the other tools and services we provide to our members, allows data-intensive research to be conducted, enhances collaboration between members and their international peers, and allows users to undertake their work more effectively and efficiently. These are crucial attributes for a high performing and globally competitive research, education and innovation system. In turn, New Zealand's research, education and innovation system

is a key part of improving New Zealand's economic performance. An advanced network is particularly critical for a small, geographically isolated country like New Zealand, as it allows New Zealand-based researchers to participate in global science collaborations and large-scale science initiatives. This plays a key role in attracting and retaining high-level science and research talent for New Zealand.



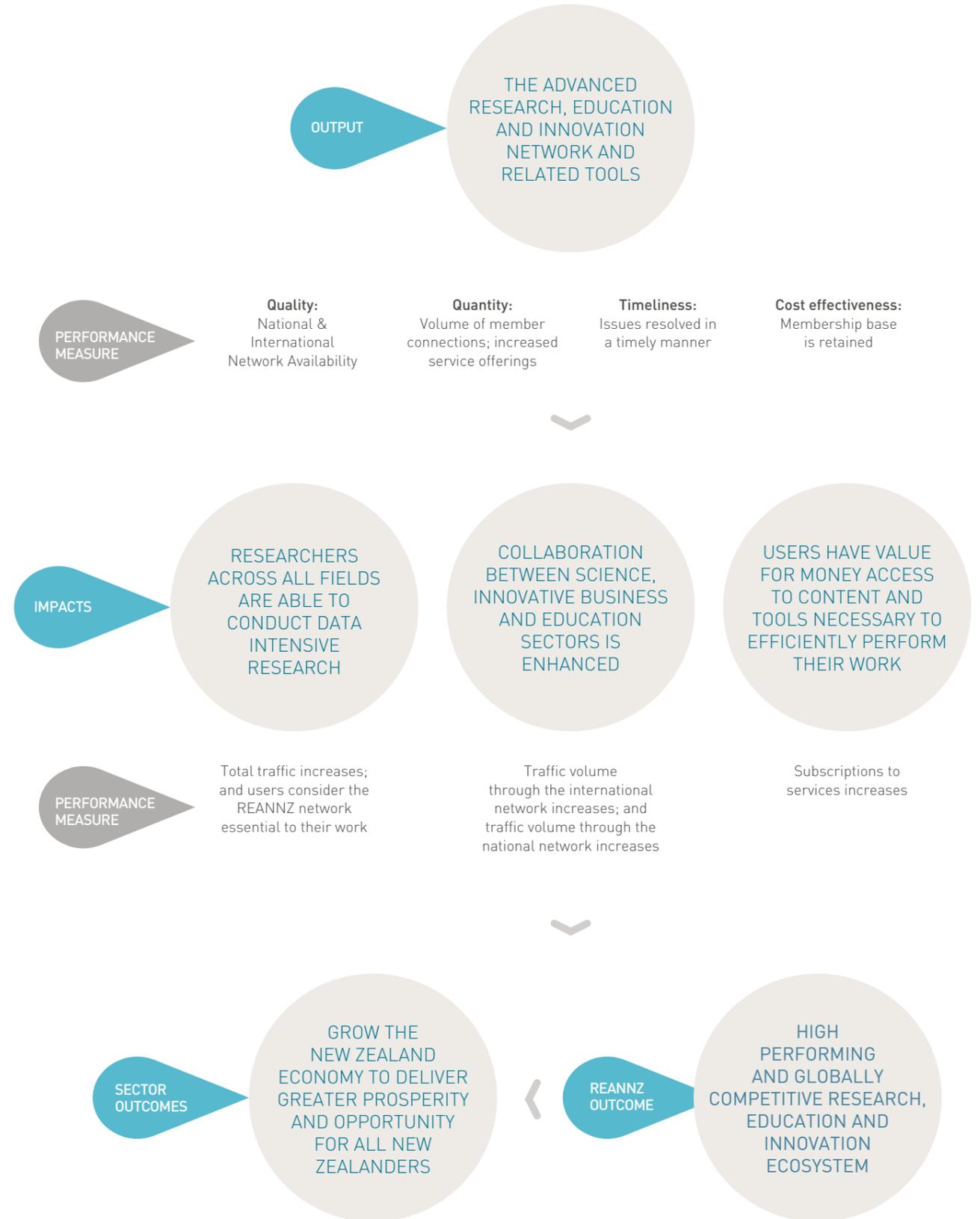
To be the essential networking resource of the Research and Education community



A New Zealand where transformative ideas flourish and the exchange of knowledge is completely unconstrained by physical location, ensuring our nation's prosperity and wellbeing



To provide cutting edge network services, unparalleled infrastructure and ground-breaking tools that enable collaboration and accelerate education, science and innovation



ASSESSING OUR PERFORMANCE



Our suite of performance indicators tracks trends in our high-level outcome of a high performing and globally competitive research, education and innovation system, and has indicators that measure the impacts we are making, and the quality, quantity, timeliness and cost-effectiveness of our output, the advanced research, education and innovation network and related tools.

TRACKING OUR OUTCOMES

REANNZ is one of many contributors to the outcome of a high performing and globally competitive research, education and innovation system. For this reason we track trends in this outcome using external, publicly available indicators of the performance of New Zealand's research education and innovation system, but we do not forecast specific changes in the trend indicators.

OUTCOME	TREND INDICATORS
High performing and globally competitive research, education and innovation system	Progress in the OECD's "Comparative performance of national science and innovation systems", OECD Science, Technology and Industry Outlook, published every two years.
	New Zealand's ranking for university-industry collaboration in R&D in the World Economic Forum global competitiveness index is maintained.
	New Zealand's ranking for capacity for innovation in the World Economic Forum global competitiveness index is improved.

FORECASTING AND MEASURING OUR IMPACTS

IMPACT: RESEARCHERS ACROSS ALL FIELDS ARE ABLE TO CONDUCT DATA-INTENSIVE 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 (supercomputing), NZGL (which performs genome sequencing), and radio astronomy. All of these projects involve scientific instruments that generate massive datasets. These datasets need to be transported quickly and accurately from the instruments to hosting or processing centres, and to collaborating scientists performing the research.

Indications of the amount of data intensive science occurring are represented by the amount of data flowing over the network, as well as our users assessment of the need for the network.

ABLE TO CONDUCT DATA INTENSIVE SCIENCE & RESEARCH	ACTUAL 2011/12	ACTUAL 2012/13	ESTIMATE 2013/14	FORECAST 2014/15
Total traffic flows increase	Not available	6.75 PB ¹	8.8 PB (30% growth)	26% growth

Increases in the total amount of traffic flowing over the network indicate more science is being conducted. This suggests REANNZ is enabling more and more scientific applications.

Globally NREN traffic growth is still impressive. REANNZ expects total growth in traffic of 26% over the next year, above global averages², as initiatives such as NeSI and NZGL gain momentum and as we move to improved national and international infrastructure that will help to realise suppressed demand.

REANNZ has changed the way traffic flows are measured. We now measure traffic to and from members' connections, rather than all traffic flowing around the backbone network, and exclude performance measurement traffic. We have adjusted the 2012/13 actual result to align with the new measurement approach.

	ACTUAL 2011/12	ACTUAL 2012/13	ESTIMATE 2013/14	FORECAST 2014/15
Users consider the REANNZ network essential to their work	75%	76%	75%	75%

This indicator suggests users could not perform their work without the network platform REANNZ provides.

¹ Petabytes (PB). One petabyte is equal to 1,000 terabytes or 1,000,000 gigabytes.

² Cisco Visual Networking Index predicts: 'Overall, IP traffic will grow at a compound annual growth rate (CAGR) of 23 percent from 2012 to 2017.'

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

Collaboration takes many forms: it can be as simple as having a conversation over videoconference, or as complex as the multistep process of turning one scientist's research project into a commercial product. REANNZ enables these collaborations by providing connectivity and the tools to make collaboration easier and more effective.

International and national traffic is an indirect measure of the amount of collaboration enabled by REANNZ. In 2013/14, REANNZ upgraded the national and international networks, increasing our available capacity and our ability to scale that capacity cost effectively to meet the increasing demand from our members.

ENHANCED COLLABORATION	ACTUAL 2012/13	ESTIMATE 2013/14	FORECAST 2014/15
International traffic volume	1.23 PB	1.9 PB (55% growth)	30% growth
National traffic volume	5.52 PB	6.9 PB (25% growth)	25% growth

Increasing amounts of traffic flowing through our network most likely indicate that more collaboration with both national and international participants is taking place. REANNZ has experienced exceptional growth over the last few years as the network matures. At some point we expect this to moderate to nearer to 25–30% annual growth, in line with mature networks internationally.

IMPACT: USERS HAVE VALUE FOR MONEY ACCESS TO CONTENT AND TOOLS NECESSARY TO EFFICIENTLY PERFORM THEIR WORK

Many of the services required by the REANNZ community are cost-prohibitive (or simply unavailable) on the commercial market. Today, such services include schedule-able bandwidth, on-demand multi-domain circuits, flexible traffic engineering, IPv6³ service and performance parity, and active multi-domain performance monitoring. These are networking features that are required by members on top of core network bandwidth. As a not-for-profit company that acts in the best interests of its community, REANNZ is able to provide those services that would otherwise be unavailable or unaffordable on the commercial market.

Members subscribing to REANNZ services indicate that our services are better value for money than others available in the market, as otherwise members would buy elsewhere.

COST EFFECTIVE ACCESS TO CONTENT AND TOOLS	ACTUAL 2012/13	ESTIMATE 2013/14	FORECAST 2014/15
Subscriptions to services increase	+21%	+100%	+55%

This measure demonstrates REANNZ ability to take cost out of the sector and deliver services that are relevant to our members. This measure compares the number of members subscribed to REANNZ services at the start of the year, with the number of members subscribed to REANNZ services at the end of the year. New services, or additional members subscribing to existing services will produce a positive result.

³ IPv6 is an internet addressing protocol that is becoming more prevalent as IPv4 addresses run out.

MONITORING OUR OUTPUT

REANNZ benchmarks and monitors the performance of our network on the dimensions of quality, quantity, timeliness and cost effectiveness.

QUALITY

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

NATIONAL AVAILABILITY	ACTUAL 2011/12	ACTUAL 2012/13	ESTIMATE 2013/14	TARGET 2014/15
National network availability	99.99% 12 month rolling average	99.96% 12 month rolling average	99.9% 12 month rolling average	99.9% 12 month rolling average

INTERNATIONAL AVAILABILITY	ACTUAL 2011/12	ACTUAL 2012/13	ESTIMATE 2013/14	TARGET 2014/15
International network availability	99.65% ⁴ 12 month rolling average	99.87% 12 month rolling average	99.9% 12 month rolling average	99.9% 12 month rolling average

National and international network availability measures the reliability of the network. Downtime includes faults and other connectivity or hardware outages, but excludes planned maintenance outages. 99.9% network availability is standard for research and education networks internationally. Our goal is to maintain this high level of reliability. REANNZ aims for network reliability to be as high as reasonably possible, given the need to balance the costs associated with each magnitude increase in network reliability.

The REANNZ network is monitored with a suite of real-time, operational performance monitoring tools. These tools include perfSONAR (Performance focused Service Oriented Network monitoring ARchitecture), developed specifically for monitoring high-throughput, high-performance networks, and AMP (Active Measurement Project), developed by the WAND network research group at the University of Waikato. We currently use these tools diagnostically and operationally, to pick up quality issues in real time. As the perfSONAR deployments are just now nearing completion, we do not yet have the robust recording and reporting systems that would enable us to provide reliable reporting of network quality using these tools. Over the coming year we will mature our use of these systems. Next year we expect to be in a position to incorporate a network quality measure that reflects aspects such as latency and packet loss.

⁴ During 2011/12 some hardware in our Los Angeles PoP suffered an unplanned outage.

QUANTITY

The number and size of our member network connections demonstrates the quantity of the services we provide. Adding new services is another measure of providing an increasing quantity of services to our members.

VOLUME	ACTUAL 2012/13	ESTIMATE 2013/14	TARGET 2014/15
Volume of member connections	178 Gb	300 Gb (69% increase)	345 Gb (15% increase)

The volume of member connections is a combination of the number of member connections to the network and their size. The more members, and the larger the size of their connection, the more use our network supports. The quantity of service we provide will grow as our members increase the size of their connections to meet increased demand, as they implement second connections to our network for resiliency, and as we add new members and connect new sites to the network.

Growth volume in 2013/14 is expected to be significant as REANNZ undertakes a one-off project to connect new sites to the network. Growth for the coming year is expected to still be impressive, but a more typical rate of 15% is expected.

This measure reflects the capability that REANNZ supports, rather than actual usage or traffic growth. Traffic or usage is expected to grow at 26% per annum, as our members better utilise their current connections to the network. As this growth is realised, the size and/or number of connections members need to perform their science will increase and this measure will grow, albeit more slowly over time as members have well established second connections.

NEW SERVICES ADDED	TARGET 2014/15
Service Offerings increase	2 new cloud service offerings available to members

REANNZ is participating in a global programme that will result in cloud applications, specifically for the R&E sector, being made available to its members. These additional service offerings help ensure our members have the tools and resources necessary for New Zealand to remain competitive in the global marketplace.

TIMELINESS

MEMBER SURVEY OF HELPDESK USERS	ACTUAL 2012/13	ESTIMATE 2013/14	TARGET 2014/15
% of users considering issues to be resolved in a timely manner	92%	80%	80% ⁵

The speed at which we identify and resolve faults and other network performance issues is not only a measure of the quality of our customer service, but also a measure of the timeliness of our network management activity. The REANNZ helpdesk logs incident reports from users, and our service manager 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' opinion of our responsiveness to their issues.

COST EFFECTIVENESS

REANNZ assesses the cost effectiveness of our network for our members, and for New Zealand as a whole.

The cost effectiveness of the REANNZ network for our members is best demonstrated by retaining 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 members.

COST-EFFECTIVENESS FOR MEMBERS	ACTUAL 2012/13	ESTIMATE 2013/14	TARGET 2014/15
REANNZ maintains its core membership base	8/8 Universities	8/8 Universities	8/8 Universities
	8/8 CRIs	7/7 CRIs	7/7 CRIs
	12/18 ITPs	1/1 ATI	1/1 ATIs ⁶
	2/3 Wānanga	12/18 ITPs 1/3 Wānanga	13/18 ITPs 3/3 Wānanga

⁵ Our target of 80% of responses resolved in a timely manner represents an appropriate balance between responsiveness and the cost of resourcing to increase responsiveness. Falling below this target would indicate that we had not adequately resourced the helpdesk facility.

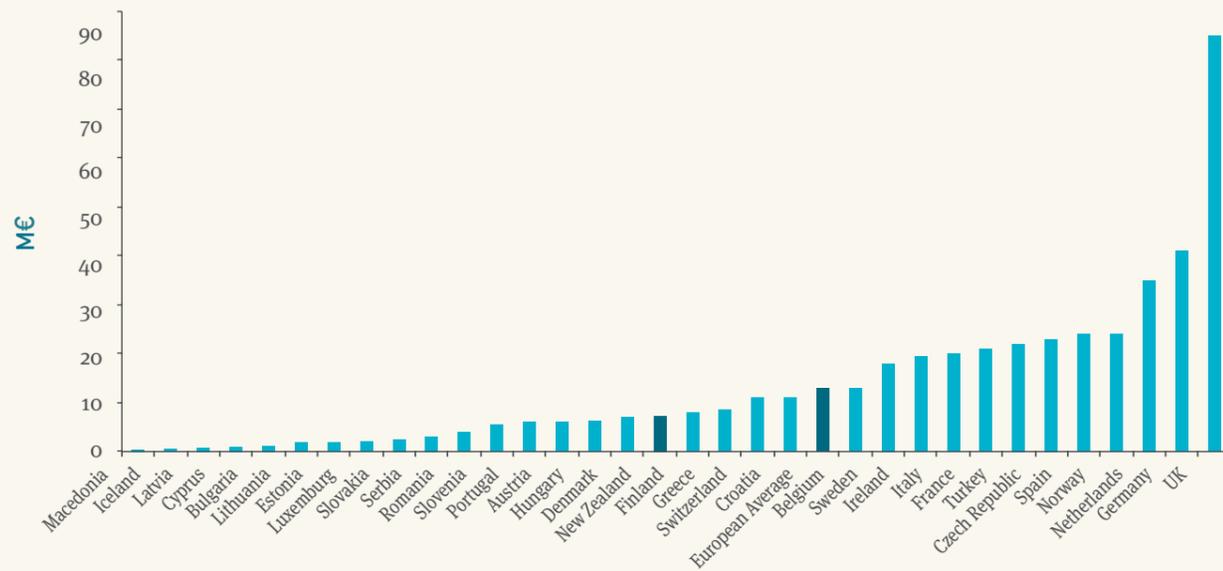
⁶ Callaghan Innovation, a REANNZ member, is an Advanced Technology Institute (ATI).

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, but the network has other performance attributes, such as low latency and jitter, which commercial networks cannot provide economically. 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 is at a different stage of maturity with regard 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 2011 and 2013 was EUR13 million. In comparison, REANNZ’s budget over the same period was the equivalent of EUR7.3 million⁷.

NREN BUDGETS 2011-2013



EXPECTED REVENUES AND PROPOSED EXPENSES



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

	2015 \$ 000
REVENUES	
Crown Income	4,000
Network Income	7,952
Other	2,205
TOTAL INCOME	14,157
EXPENSES	
Amortisation & Depreciation	2,089
Network Expenses	7,006
Operating Expenses	3,574
TOTAL EXPENDITURE	12,669
SURPLUS/(DEFICIT)	1,488

⁷ Using exchange rate as of March 2014. REANNZ’s budget has remained stable at around NZD12 million per annum over this period, but the value in Euros has increased due to exchange rate changes.

PROSPECTIVE FINANCIAL STATEMENTS



RESEARCH & EDUCATION ADVANCED NETWORK NEW ZEALAND LIMITED PROSPECTIVE STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDING 30 JUNE

	FORECAST 2014 \$000	2015 \$000	2016 \$000	2017 \$000
REVENUE				
4,000	Crown Operating Grant	4,000	4,000	4,000
–	Other Crown Grant	–	–	15,000
8,073	Network Income	7,952	8,179	8,406
2,138	Other Income	1,862	854	712
318	Interest Income	343	407	275
14,530	TOTAL REVENUE	14,157	13,440	28,393
NETWORK EXPENSES				
1,038	Depreciation & Amortisation	1,884	1,744	2,102
867	Employment Expenses	1,222	1,380	1,422
6,644	Network Operating Expenses	5,784	5,955	8,980
8,549	TOTAL NETWORK EXPENSES	8,891	9,080	12,504
5,981	GROSS SURPLUS	5,267	4,360	15,889
LESS:				
OPERATING EXPENSES				
35	Audit	36	37	38
152	Depreciation & Amortisation	205	220	200
118	Directors Fees	122	126	130
1,356	Employment Expenses	1,896	2,076	2,138
(14)	Foreign Exchange Gain/Loss	–	–	–
574	Other Operating Expenses	742	728	749
603	Professional Services	383	394	351
134	Operating Leases	140	144	148
181	Travel Expenses	254	262	270
3,140	TOTAL OPERATING EXPENSES	3,779	3,986	4,024
2,841	NET SURPLUS (DEFICIT)	1,488	374	11,865
–	Other Comprehensive Income	–	–	–
2,841	TOTAL COMPREHENSIVE INCOME (LOSS)	1,488	374	11,865

RESEARCH & EDUCATION ADVANCED NETWORK NEW ZEALAND PROSPECTIVE STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE

	FORECAST 2014 \$000	2015 \$000	2016 \$000	2017 \$000
CURRENT ASSETS				
4,335	Cash and Cash Equivalents	2,704	2,762	2,119
–	Funds held in Escrow	15,000	15,000	–
2,953	Receivables and Debtors	2,890	2,931	2,946
4,011	Investments	10,000	11,000	6,000
561	Prepayments	410	314	510
912	Prepaid Network Expenses	430	430	1,301
12,773	TOTAL CURRENT ASSETS	31,434	32,437	12,876
NON-CURRENT ASSETS				
15,142	Property, Plant and Equipment	13,833	13,572	14,455
74	Intangibles	59	30	2
1,898	Prepaid Network Expenses	1,466	1,035	16,573
17,114	TOTAL NON-CURRENT ASSETS	15,358	14,637	31,031
CURRENT LIABILITIES				
345	Accounts Payable and Accrued Expenses	1,084	997	999
189	Employee Entitlements	189	189	189
2,948	Income in Advance	2,841	2,828	2,794
487	Deferred Income	20	–	–
93	Provisions	–	–	–
(240)	GST Payable	126	154	154
3,823	TOTAL CURRENT LIABILITIES	4,260	4,168	4,136
8,950	NET CURRENT ASSETS	27,174	28,269	8,739
NON-CURRENT LIABILITIES				
–	Income in Advance	15,000	15,000	–
20	Deferred Income	–	–	–
20	TOTAL NON-CURRENT LIABILITIES	15,000	15,000	–
26,044	NET ASSETS	27,532	27,906	39,771
PUBLIC EQUITY				
16,001	Share Capital	16,001	16,001	16,001
10,043	Accumulated Surplus	11,531	11,905	23,770
26,044	TOTAL PUBLIC EQUITY	27,532	27,906	39,771

**RESEARCH & EDUCATION ADVANCED NETWORK NEW ZEALAND
PROSPECTIVE STATEMENT OF MOVEMENTS IN PUBLIC EQUITY**

AS AT 30 JUNE

FORECAST 2014 \$000		2015 \$000	2016 \$000	2017 \$000
23,203	PUBLIC EQUITY AT THE START OF THE YEAR	26,044	27,532	27,906
–	Share Capital Introduced	–	–	–
	COMPREHENSIVE INCOME			
2,841	Surplus (deficit) for the year	1,488	374	11,865
26,044	PUBLIC EQUITY AT THE END OF THE YEAR	27,532	27,906	39,771

**RESEARCH & EDUCATION ADVANCED NETWORK NEW ZEALAND
PROSPECTIVE STATEMENT OF CASH FLOWS**

FOR THE YEAR ENDING 30 JUNE

FORECAST 2014 \$000		2015 \$000	2016 \$000	2017 \$000
	CASH FLOWS FROM OPERATING ACTIVITIES			
	CASH WAS PROVIDED FROM (APPLIED TO)			
4,000	Grant Revenue	19,000	4,000	4,000
7,465	Network Income	7,905	8,192	8,419
368	Interest Received	343	407	275
1,895	Other Income	1,370	773	652
(149)	Net GST	559	261	463
(7,710)	Payments to Suppliers & Employees	(8,980)	(10,597)	(11,130)
(2,050)	Prepayments for Network Connectivity	–	–	(19,700)
3,819	NET CASH FLOW FROM OPERATING ACTIVITIES	20,196	3,036	(17,021)
	CASH FLOWS FROM INVESTING ACTIVITIES			
	CASH WAS PROVIDED FROM (APPLIED TO)			
(14,401)	Purchase of Plant & Equipment	(839)	(1,978)	(3,622)
–	Funds deposited in Escrow	(15,000)	–	15,000
(4,012)	Term Deposit Investments	(5,989)	(1,000)	5,000
(18,413)	NET CASH FLOW FROM INVESTING ACTIVITIES	(21,828)	(2,978)	16,378
	CASH FLOWS FROM FINANCING ACTIVITIES			
–	Issue of Equity Share Capital	–	–	–
–	NET CASH FLOW FROM FINANCING ACTIVITIES	–	–	–
(14,594)	NET INCREASE/(DECREASE) IN CASH HELD	(1,632)	59	(643)
18,929	Cash at beginning of the year	4,335	2,704	2,762
4,335	CASH AT END OF YEAR	2,704	2,762	2,119
	REPRESENTED BY:			
4,335	CASH AT BANK	2,704	2,762	2,119

**NATURE AND PURPOSE OF PROSPECTIVE
FINANCIAL STATEMENTS**

The prospective financial statements above have been prepared to the best of our knowledge and belief as an indication of REANNZ's future financial performance. Actual financial results achieved for the period covered may vary from the information presented, potentially in a material manner.

The purpose of the prospective financial statements is to inform readers of this Statement of Performance Expectations of REANNZ's best estimate of its future financial performance at the date of publication, and to comply with REANNZ's specific reporting and disclosure obligations. The statements may not be suitable for other purposes.

STATEMENT OF SIGNIFICANT ASSUMPTIONS

The prospective financial statements have been prepared on the basis of the following value for money principles:

- REANNZ will maximise the public good outcomes for New Zealand by reinvesting in products and services which deliver further value to members, and
- REANNZ will build sufficient cash reserves to maintain and improve network infrastructure to meet growing demand without Crown support beyond the committed \$4 million annual contribution.

Revenues

REANNZ expects network revenue to remain steady, increasing with inflation annually. The Crown Funding Agreement is expected to continue for four years, in accordance with the contracted term.

Other income is expected to reduce as the national education network trial is expected to come to an end during the 2015 year and schools begin the transition to the Network for Learning.

REANNZ is currently exploring opportunities to grow and improve its product and service offering to members. However, no significant revenues or costs have been budgeted, as the exact nature and scope of these services are not yet known.

Network Expenditure

During 2013/14, REANNZ procured and implemented two new network services to replace the existing supply of national and international connectivity. These new contracts have allowed REANNZ to deliver on its strategic objective to continue to meet the increasing bandwidth needs of its membership, without increasing the cost base of those services.

Surpluses are forecast for 2014 and 2015 as we transition to new international connectivity arrangements. We expect to return to a breakeven position in 2015/16 once the new international service is at full capacity.

REANNZ is working with the Ministry of Business, Innovation and Employment to participate as an anchor tenant on a new submarine cable system. Our aim is to secure international capacity for the research and education sector over the long term. The initiative also supports the government's policy objective of encouraging a new submarine cable to New Zealand for the purpose of telecommunications market competition.

The surpluses generated by REANNZ in 2014 and 2015 are crucial to REANNZ's potential role as an anchor tenant on a new cable. The accumulation of \$10 million in reserves by the close of 2015 will be required for REANNZ to be able to participate in such an initiative. REANNZ also expects to be the vehicle for Crown support of a new submarine cable, through the allocation of a \$15 million grant already reserved by vote telecommunications. The new cable is assumed to be ready for service in 2017, when the Crown Grant is recognised and ongoing costs associated with the cable begin.

Should a new cable opportunity not come to fruition in the medium term, REANNZ will require the accumulated surpluses to procure alternative international connectivity supply at the expiry of the existing service in 2019. We will continue to work with the Ministry of Business, Innovation and Employment over this time as we explore the alternatives that may be available to REANNZ.

Forward Cash Projections

REANNZ owns and operates infrastructure to deliver its advanced network products and services. As with most infrastructure based businesses, REANNZ therefore operates on medium to long term infrastructure investment cycles.

To support the periodic investment in this infrastructure, REANNZ's business model requires the accumulation of cash reserves. The following graph shows REANNZ projected cash balances over the coming ten year period, including:

- a new international cable that is forecast to be ready for service in the 2017 financial year
- national network infrastructure that will require renewal in 2021/22, as the useful life of the equipment and the associated operating agreements expire.

This forecast also assumes the continuation of \$4 million per annum of sustainable funding, which is currently provided by the Crown.

REANNZ remains sensitive to exchange rate fluctuations, and mitigates this risk where possible by entering into forward exchange contracts with the New Zealand Debt Management Office.



NOTES TO THE PROSPECTIVE FINANCIAL STATEMENTS



The reporting entity is Research and Education Advanced Network New Zealand Limited ("REANNZ"), a Crown entity as defined by the Crown Entities Act 2004 and a New Zealand incorporated company. As a Crown entity, REANNZ's ultimate parent is the New Zealand Crown.

REANNZ's primary objective is to establish, own and operate a high-speed data 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 generally accepted accounting practice ("NZ GAAP").

BASIS FOR PREPARATION

Statement of compliance

The prospective financial statements have been prepared in accordance with New Zealand GAAP and comply with PBE FRS 42 Prospective Financial Statements.

REANNZ qualifies as a Tier 2 reporting entity and is required to apply Public Benefit Entity Accounting Standards with reduced disclosure requirements from the reporting period beginning on or after 1 July 2014.

Measurement base

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

SIGNIFICANT ACCOUNTING POLICIES

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 prospective financial statements:

a) 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 income received in advance in the statement of financial position.

Interest revenue is recognised using the effective interest method.

b) Property, plant and equipment

Property plant and equipment asset classes consist of office equipment, ICT equipment, PoP equipment, leasehold improvements and network hardware and dark 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:

Fibre	20 years
PoP equipment	8 years
Network hardware	5–7 years
ICT equipment	3 years
Office equipment	5 years
Leasehold improvements	3 years

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

c) 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
----------	---------

d) 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 revalued, 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.

e) Borrowing costs

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

f) 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.

g) 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 instalments 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.

h) 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 three months or less and are net of outstanding bank overdrafts.

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.

i) 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 a variety of 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.

k) 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.

l) 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.

m) Taxation

REANNZ, as a public entity, is exempt from taxation. Accordingly, no charge for income tax has been provided for.

n) Cash flow statement

The Prospective Statement of Cash Flows is prepared exclusive of GST, which is consistent with the method used in the Prospective 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 and includes at call borrowings such as bank overdrafts, 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.

o) Goods and Services Tax (GST)

These prospective financial statements have been prepared on a GST exclusive basis except for accounts receivable and accounts payable, 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 Prospective Statement of Cash Flows.

Commitments and contingencies are disclosed exclusive of GST.



REANNZ



REANNZ