PŪRONGO Ā-TAU

REANNZ
ANNUAL
REPORT

Year ended 30 June 2024

REANNZ

CONTENTS /

AT REANNZ, WE SEE OURSELVES AS CONNECTORS /

We connect learners, educators and researchers with each other, so they can study, research and collaborate.

And we foster innovation by connecting ideas and expertise.

BOARD CHAIR'S FOREWORD /

On behalf of the Board, I am pleased to present REANNZ's annual report for the year 2023/24.

REANNZ has a very different profile today from when I started my term as Board Chair six years ago. In that time the organisation has made huge progress, thanks to the combined efforts of the Board and REANNZ management.

We've worked with stakeholders to build our connection to the sectors we serve; and to be more flexible and responsive to the evolving needs of REANNZ members. We have increased the diversity of our Board, which has brought valuable member and technology insights to Board decision making.

We've broadened our focus as a national research and education network, bringing in new members from the education and wider Government sectors, boosting collaboration, access and digital equity. We've deepened our international relationships, working more closely with the global research and education community, delivering more for our members as a result.

REANNZ recognises the importance of evolving to support changes in the research and education sectors and the technology that supports them. The sectors' needs are constantly evolving, with more focus on remote and cloud-based computing; and increasing demand for seamless access to trusted research environments. In New Zealand, data sovereignty, security and digital equity are increasing concerns.

Over the past two years REANNZ has updated, replaced and extended the network. REANNZ was also able to support digital equity by providing access via eduroam across New Zealand to provide a seamless way for researchers and educators to connect. Additionally, REANNZ has worked with mobile, satellite and wireless operators to provide increased connectivity options for our members.

REANNZ has continued to support mātauranga Māori, engaging with iwi and the Māori research and education community to build relationships and partnerships and understand how to support their aspirations. As part of this work we are working with marae to roll out eduroam in recognition of the place of marae as centres of learning.
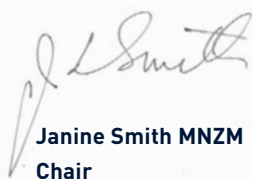
REANNZ Chair Janine Smith, MNZM

REANNZ's global connections are invaluable to our members and our ability to leverage these connections comes down to the strength of our global relationships. This year REANNZ has increased participation in the global research and education community and taken a greater leadership role in the Asia-Pacific region. This has allowed REANNZ to effectively and efficiently build an understanding of global best practice, leverage these learnings for the benefit of REANNZ members, and share our skills and insights with the global community in return.

My thanks go to my fellow Directors and to the REANNZ team for their enthusiasm and commitment to delivering maximum value to the sectors that we serve.

I also want to welcome the incoming Board Chair, Helen Robinson ONZM. Helen has extensive experience leading technology companies and driving innovation across the technology sector. She is ideally placed to lead REANNZ as it continues to enable research innovation and impact; and ultimately economic growth and impact for New Zealand Inc. I look forward to seeing REANNZ continue to provide this critical infrastructure for the research and education sectors in New Zealand, connecting the research and education sectors globally.

Janine Smith MNZM
Chair

CHIEF EXECUTIVE'S FOREWORD /

Kia ora tātou,

This year, REANNZ has continued to focus on maximising our impact for our members, and for New Zealand Inc, while building our reputation as a flexible and responsive organisation that is strongly connected to the sectors we serve.

REANNZ is now two years into delivering a five-year strategy and I want to acknowledge the ongoing support of our members, which has been critical to achieving our goals.

Their willingness to work with us reflects the value our strategy is delivering. This is demonstrated in our engagement survey results, which show increased levels of member satisfaction – and strong alignment between REANNZ's strategic direction, product set and the priorities of our members.

By being transparent and doing what we say we will we have earned permission to do more from our members and begun to build a vision for the future, starting this year with the completion of our first co-developed products and services roadmap.

Looking ahead, members see a critical role for REANNZ to support highly secure and controlled computing environments that allow researchers to access and collaborate on sensitive data in a single environment. We can broker common capability to deliver scalable solutions on behalf of the sector, leveraging network and identity services and the experience of our global colleagues to create trusted research environments. I look forward to continuing these discussions with members over the coming year.

This year we have refreshed our network hardware, thanks to Government funding that made this possible, to make it more cost-effective, resilient, and environmentally friendly – and ensure that performance is maintained. The network upgrade is being delivered under budget, meaning we did not have to draw down the final $6.1m of available Crown funding.

We have improved cyber security for our members over the past year, focusing on network level protections ensuring that all our members, regardless of their size, have access to consistent levels of protection from cyber security threats.

REANNZ has worked with the National Cyber Security Centre (NCSC), CERT NZ and commercial partner Cassini to block known malicious cyber threats from reaching members' institutions. We rolled out this protection in December last year, and by 30 June 2024 almost 5 million cyber threats had already been disrupted.

Amber McEwen, Chief Executive Officer

We have continued to invest in and leverage our global relationships, bringing global Research and Education Network solutions to the New Zealand market to deliver cost savings and global connectivity to New Zealand Inc – and sharing our work internationally, particularly in the cyber security space.

This year a key focus has been building awareness and capability to support mātauranga Māori. We also continue to work to understand the requirements of Māori researchers and the challenges of managing sovereign data.

We remain committed to working with our members to continuously improve the products and services we provide. The research and education sector and the technology that supports it continues to change. REANNZ is changing with it to ensure we can deliver the critical infrastructure the sector needs.

I'd like to acknowledge our departing Chair Janine Smith, Deputy Chair Ross Peat, and Board member Liz Gosling, who have retired from the REANNZ Board this year. It's been a pleasure to work with them to develop and deliver a refreshed strategy for REANNZ over the past three years.

I'd also like to welcome our new Chair Helen Robinson and Board Members Mike Harte and Ian Simpson. I look forward to working with you to increase the impact REANNZ delivers to the research, science and innovation sectors.

Amber McEwen
Chief Executive Officer

ABOUT REANNZ /

REANNZ operates and supports a specialist high-performance digital network engineered to meet the unique performance demands of Aotearoa's research and education sector.

Our network connects researchers and educators within Aotearoa and across the globe – helping them undertake leading edge research, collaborate, innovate, and share resources and research initiatives.

We're a Crown-owned membership organisation. Our members include museums, libraries, Crown research institutes, wānanga, universities, Te Pūkenga – New Zealand Institute of Skills and Technology, independent research organisations and government organisations.

VISION /

A globally connected and thriving research and education sector.

MISSION /

Connecting researchers and educators so they can change the world.

OUR PURPOSE /

CONNECTING RESEARCHERS. EVERYWHERE.

We provide New Zealand's National Research and Education Network (NREN). Our network gives our members the technology and infrastructure to collaborate with and contribute to global science initiatives. New Zealand's NREN connects to over 120 other NRENs around the world, creating regional partnerships and international communities that promote collaboration.

2024 BY THE NUMBERS /

100 Gbps

National bandwidth available
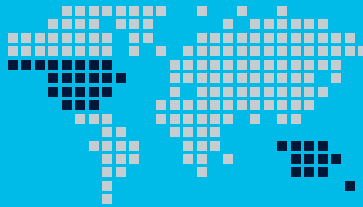
100 Gbps

International network capacity to Australia and the United States

144,000+ devices

connected via eduroam

0.053% packet delay variation

0.000052% packet loss

167.54 Petabytes

total traffic flow

100% availability

on the international network

99.999% availability

on the national network

LIBRARIES PROVIDE STUDENTS WITH SEAMLESS INTERNET ACCESS

REANNZ has partnered with Aotearoa People's Network Kaharoa (APNK) to provide students with secure eduroam WiFi at many of this country's public libraries – giving students another place where they can access the content and services they need. This work supports the Ministry of Education's wider Equitable Digital Access project, and is part of our strategy of connecting Aotearoa to reduce digital inequality.

The library rollout – a partnership approach

In July 2023, REANNZ and APNK piloted eduroam in 15 libraries in the South Island. In February 2024, after the successful pilot, we rolled out eduroam to 166 public libraries in the APNK network – almost doubling the locations the service is available in New Zealand.

In 2023/24, there were over 35,000 device connections to eduroam from New Zealand public libraries throughout the country, from Stewart Island in the south to Kaeo in the far north and as far east as the Chatham Islands.

eduroam gives students and researchers from over 100 countries (including New Zealand), access to free, secure, reliable WiFi wherever they are travelling or studying. International visitors made up 23% of eduroam device connections from our libraries, with the most coming from Australia and the USA. The service is available through the person's relationship with an international organisation – for example, a university or research institute.

The graph below gives further insights into the eduroam library rollout, showing devices connected to eduroam in 2023/24.

APNK's Business Development and Operations Manager Joan Simpson is pleased that the APNK infrastructure can support the eduroam network. "This enables students, researchers and staff from participating institutions to use the network – whether they are inside the library or accessing the network when the library is closed – as over 70% of the APNK library locations offer the network 24/7."

eduroam device connections from NZ libraries 2023/24
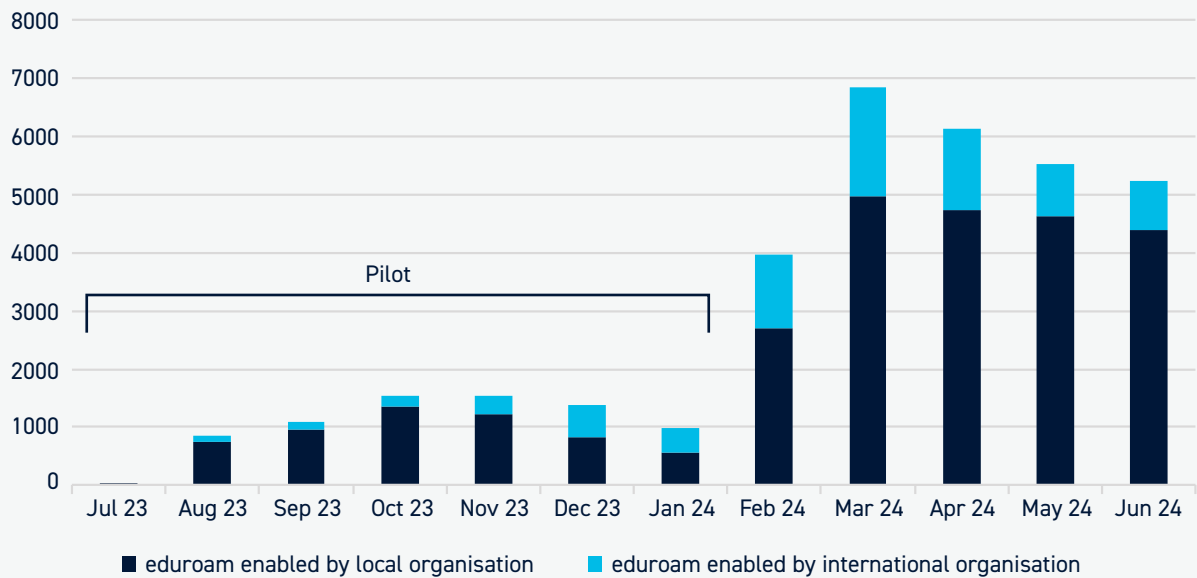
REANNZ CEO Amber McEwen says that the rollout of eduroam to APNK libraries has significantly expanded its reach across the country. "This move will mean thousands more students will be able to log on more easily and complete their assignments, conduct research on the go, and connect and collaborate with others. We will continue to explore ways to increase eduroam locations as part of our ongoing strategy to reduce digital inequity in Aotearoa."

THE NETWORK /

The REANNZ network is Aotearoa's national research and education network (NREN).

It is the backbone of Aotearoa's research, education and innovation sectors, a purpose-built, resilient, high-speed network that delivers reliable, cost-effective connectivity to thousands of users every day, helping to maintain NZ's scientific edge.

Today, our network supports thousands of people across the research, education and innovation sectors across Aotearoa.

We partner with over 120 research and education networks around the world, connecting scientific enterprises and providing access to the infrastructure the sector needs to collaborate and create impact. As part of this global research and education network (GREN), REANNZ can guarantee consistent data transfer capability worldwide at a scale that isn't consistently possible using a standard network.

REANNZ also delivers a range of services specifically designed to support education, accelerate research and drive innovation, including cyber threat intelligence, and cloud and identity services.

The REANNZ network is fully integrated and constantly upgraded, providing the power, speed and scalability to meet the changing needs of members now, and in the future.

REANNZ NATIONAL NETWORK MAP

NB lines are indicative only

Sydney

Seattle
Portland (Oregon)

Hawaiki Capacity

Los Angeles

— 100Gbps national backbone network

— 20Gbps and under

— Hawaiki Capacity

— Hāwea cable

MONTREAL

USA

AMSTERDAM

LONDON

SAO
PAULO

THUWAL

LAHORE

THIMPHU

BEIJING

SEOUL

TOKYO

TAIPEI

HONG KONG

HANOI

MUMBAI

DHAKA

BANGKOK

MANILA

COLOMBO

KUALA LUMPUR

SINGAPORE

BANDUNG

CAPE TOWN

PERTH

SYDNE
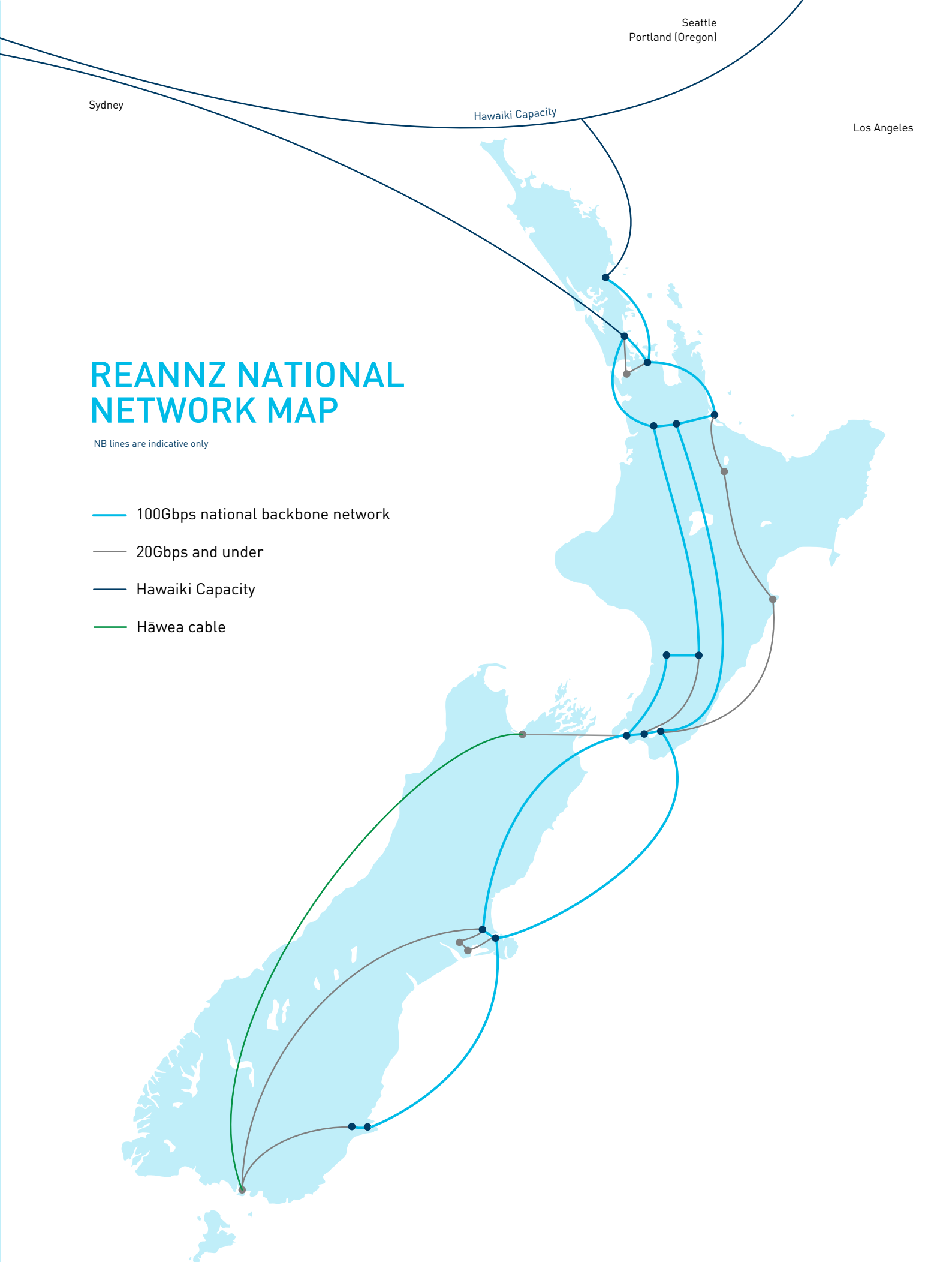
REANNZ
INTERNATIONAL NETWORK

NB lines are indicative only, they do not show precise routes and includes committed services.

NORDUnet

Europe/GÉANT

UK/Jisc

Netherlands/
SURFnet

CERN

LONDON

canarie

SEATTLE

PORTLAND

INTERNET
2

PALO ALTO
SAN JOSE

LOS ANGELES

NEW YORK

MIAMI

HONOLULU

MAUNA LANI

JAM

CLARA

SUVA

SAO PAULO

SANTIAGO

BUENOS AIRES

AUCKLAND

REANNZ

PROTECTING THE NETWORK BY STRENGTHENING CYBER SECURITY

REANNZ, as the operator of New Zealand's high performance National Research and Education Network (NREN), plays a crucial role in protecting our members from cyber-attacks. With security threats becoming increasingly sophisticated, we have formed strategic partnerships and adopted global best practices to further protect New Zealand's research and education sector and its sensitive data. This work supports our aim to become a technical centre of excellence and build capacity across the sector.

A security partnership to block cyber threats

In 2023/24, REANNZ worked with our security partners on a service to provide the research and education sector with additional protection from cyber threats – partnering with CERT NZ and the National Cyber Security Centre (NCSC) from the New Zealand public sector, as well as Cassini, an information security consultancy.

Both NCSC and CERT NZ provide threat intelligence, including from New Zealand's international cyber security partners:

> NCSC developed a service called Malware Free Networks (MFN), which provides intelligence about current malicious activity targeting New Zealand organisations

> CERT NZ provides a verified list of New Zealand-specific phishing indicators that organisations can act on and block from their network.

Cassini aggregates the threat information supplied by these partners to better protect our network, as well as providing REANNZ with regular reporting.

Before using this cyber threat intelligence to protect our members, REANNZ thoroughly tested the solution on our corporate network. Yeshaswini Ramesh, the Head of Network Operations at REANNZ, says "The trial met all our expectations, enabling us to confidently deploy the disruption service."

The rollout across REANNZ's full network started in December 2023. By 30 June 2024 almost 5 million threats had been blocked.

REANNZ's Chief Executive, Amber McEwen, emphasises how partnership is critical to tackle complex threats such as these. "This initiative demonstrates how the public and private sector can work together to stop cybercriminals in their tracks. Together, we are protecting the innovations and intellectual property of the research and education community."

Cassini co-founder Dean Pemberton says, "It was exciting to not just be helping one corporate but helping an entire sector. We moved from helping protect REANNZ staff to aiding many thousands of users."

Security best practice for routing security

A different type of partnership has helped strengthen the security of our internet routing. REANNZ was the first network operator in Aotearoa to be accepted as a participant in the global internet security initiative MANRS (Mutually Agreed Norms for Routing Security).

MANRS provides best practice guidelines for strengthening network security, defining the steps network operators should take to ensure the security and resilience of the Internet's global routing system. This ensures data is exchanged between the right people, reducing the risk of deliberate or accidental attacks on IT systems.

With REANNZ now fully compliant for MANRS, we are helping members identify areas for improvement within their own infrastructure. As part of this work, we adapted a self-assessment tool from Internet2 in the USA, with the aim of helping members improve their routing security. After successfully trialling the tool with a university, in April 2024 we began to share the tool with other interested members. We will continue this mahi as the year progresses.

REANNZ will respond to growing risks by continuing to add other protections. Our security focus ensures the researchers and educators using our network can confidently focus on what they do best – collaborating and contributing to ground-breaking studies and global science initiatives.

OUR ROLE FOR THE SECTOR /

The research and education sector and the technology that supports it continues to change. REANNZ is changing with it to ensure we can continue to deliver critical infrastructure for the sector.

REANNZ is two years into delivering a five-year strategy and we are making steady progress.

The research and education sectors are changing, with more focus on remote and cloud-based computing; and increasing demand for seamless access to trusted research environments. In New Zealand, data sovereignty, security and digital equity are increasing concerns.

The sector sees a critical role for REANNZ to support highly secure and controlled computing environments that allow researchers to access and collaborate on sensitive data in a single environment.

We can broker common capability and scalable solutions on behalf of the sector, leveraging network and identity services and international experience and products to create trusted research environments.

We also see opportunity to better support the research and education sectors to connect to the broader innovation and commercial sector to boost pre-commercial, research-based collaboration.

As we further implement our strategy, we will work with our members to be wherever they need us, aggregating their requirements and working with the commercial sector to deliver solutions.

We'll continue to extend and strengthen the network and work on digital equity. We'll support safe and connected learning and research environments. We'll increase the interoperability and security of the sector by driving consistent development and adoption of key products and services in cyber security, identity and access management and management information reporting.

We will continue to invest in and leverage our global relationships and be a "fast follower", bringing GREN solutions to the New Zealand market to deliver cost savings and global connectivity for New Zealand Inc. REANNZ will continue to engage with iwi and the Māori research and education community to build relationships and partnerships; understand how to support their aspirations; and grow Māori researcher representation in our membership.

GLOBAL CONNECTIONS – THE BENEFITS OF INTERNATIONAL PARTNERSHIPS

Global partnerships are crucial for advancing research and education in an increasingly interconnected world. REANNZ is an active member of the global network of over 120 NRENs, and our international partnerships provide significant benefits. These include access to innovative product research and a stronger network for our members.

Innovative new products and services

NRENs have always been innovators, with early research network roles playing a significant role in the development of internet and email. By partnering with the international NREN community, REANNZ can offer our researchers, educators, and students the latest digital infrastructure and services.

As a smaller organisation, REANNZ's strategy is to be a fast follower of innovation. We engage with our members about their needs, and source and test new products from international NRENs. In our current product catalogue, this includes eduGain and eduroam from GÉANT – a collaboration of European NRENs.

Working together on a stronger, safer network

As global NREN networks are typically non-profit, members often share tools, expertise, and even network resources to benefit the global community. In August 2023, the University of Hawaiʻi had an issue affecting their high-performance connection between Hawaii and the US mainland. REANNZ resolved the issue about 20 minutes after they got in touch by providing a backup path. The University and REANNZ are regular collaborators in PIREN (Pacific Island Research Education Network), which was a key reason why we could respond so quickly.

This collaborative spirit extends to sharing network tools and expertise. In 2023/24, AARNet (Australia) shared their expertise by reviewing our proposed core network hardware solution, while Sikt (Norway) provided REANNZ with open-source Argus software for improving incident management on our network. We have since developed software to integrate Argus into our monitoring platform and will be providing it open source for the wider NREN community.

Our commitment to global collaboration is further shown by our leadership's contribution to international and regional forums, with REANNZ Chief Executive, Amber McEwen, playing a key role. In February 2024, she represented New Zealand at the global CE forum for research and education networks in Sydney, which included strategic discussions addressing AI, routing security, and cybersecurity. Regionally, Amber serves as a governor on Asi@Connect, which connects the Asia-Pacific and European research communities.

In February 2024, REANNZ hosted the eResearch 2024 Conference in Wellington, a collaborative initiative organised by REANNZ, NeSI and Genomics Aotearoa. The conference brings together national and international speakers and provides valuable networking and learning opportunities for researchers. REANNZ staff also contribute to global working groups and present at NREN events. In June 2024, Head of Network, Yeshaswini Ramesh, shared our cybersecurity lessons at an international conference in France (pictured below).

Summary of impact

REANNZ's global partnerships and active involvement in the international NREN community are pivotal to our success in advancing research and education. By embracing innovations and collaborating with global peers, we ensure that our members benefit from the latest digital infrastructure and services. Looking ahead, we will continue to build on these international relationships to drive further innovation and enhance network resilience.

GOVERNANCE /

Our Board

REANNZ's Board of Directors are appointed by the shareholding Ministers following agreement by Cabinet. REANNZ currently has seven appointed directors. The Board appoints the Chief Executive, who is responsible for the day-to-day operations of REANNZ.

Janine Smith MNZM, Chair

Janine was appointed Director and Chair of REANNZ in November 2018. She has over 20 years' experience as a non-executive director with experience in public listed, private and Crown-owned companies. Janine has held her most recent role as Chair of Asure Quality for the last nine years. Janine also trains and advises boards in governance through her role as Executive Director of The Boardroom Practice Ltd. She is a member of the AUT University Council, an independent member of Fonterra's Governance Development Committee, President of London Business School's Auckland chapter and a director of several private companies. Janine was awarded a Member of the New Zealand Order of Merit in 2015 for services to corporate governance. Janine retired from the Board on 30 June 2024.

Ross Peat, Deputy Chair

Ross is executive director and co-owner of digital health companies HealthSoft Ltd and HealthSoft Australia Ltd, and is Chair of AUT Ventures Ltd. He is a member of Limited Partner Advisory Committee for the Icehouse Ventures Seed III fund (angel and early-stage investment), a director of e-waste recycler Mint Innovation, and a director of the Digital Health Association (DHA) industry body. Ross retired from the Board in December 2023.

Liz Gosling, People and Culture Committee Chair

Liz is the Chief Information Officer at Auckland University of Technology (AUT). She brings three decades of experience in the IT sector in New Zealand, the US, UK and Europe. She was Director and faculty member of the Council of Australasian University Directors of Information Technology (CAUDIT) Leadership Institute in Australia, and the New Zealand invited representative on the CAUDIT Executive. Liz has chaired the Universities NZ Information and Communications Technology Committee and is a previous Chair of TUANZ. Liz retired from the Board in June 2024.

Sara Brownlie, Finance, Risk & Audit Committee Chair

Sara is the Managing Director of Fargher Woods Ltd providing Programme Management and Strategic Finance services, an Independent Director for Catalyst.net Ltd, an Independent Member of the Risk and Assurance Committee for Upper Hutt City Council and Independent Member of Finance, Risk and Audit Committees for Mana Mokopuna and Enable NZ. She is a Fellow Member of CPA Australia and a Chartered Member of the Institute of Directors in New Zealand and the Chartered Accountants Australia and New Zealand. Sara has had an extensive career working in senior management roles in the public sector. Sara was reappointed to the Board on 28 June 2023 for a further three-year term.

Dr Warren Williams

Warren has been in the ICT business and tertiary education industry for over 25 years. He is currently the CEO of 20/20 Trust which provides access and connection to digital skills and resources that empower and enable people to realise their aspirations. Warren's governance and leadership experience includes national and regional boards, working with Māori and entrepreneurship groups, tertiary ICT advisory groups, and technology and innovation groups. He is passionate about strategic Māori leadership and succession planning in decision-making forums, especially with rangatahi Māori and wahine Māori. Warren is appointed until 15 November 2024.

Professor Jim Metson

Jim is the Strategic Advisor Newmarket Campus at the University of Auckland. He is a materials scientist, was a founding member of the MacDiarmid Institute for Materials Science and Nanotechnology, a co-founder of the University of Auckland Research Centre for Surface and Materials Science, and the Light Metals Research Centre. Jim chaired the MoRST Research Infrastructure Advisory Group and represented the New Zealand Government on the Australian National Science Advisor Committee that oversaw the development of the Australian Synchrotron. He served as Chief Science Advisor to MBIE from 2013-2016. Jim is appointed until 30 June 2025.

Johnathan Eele

Johnathan has more than 20 years of experience in the technology, telecommunications and energy industries in the UK, Ireland, USA, Australia and New Zealand. Johnathan is currently the CEO of Enable Fibre Broadband and is based in Ōtautahi/Christchurch. Johnathan has extensive experience spanning various sectors, including wholesale, enterprise, government, and consumer. He also has significant regulatory affairs experience. He is a Chartered Member of the Institute of Directors in New Zealand (CMInstD) and is the current Chair of the Board of Trustees of Melanoma New Zealand. Johnathan was appointed to the Board on 30 November 2022 for a three-year term.

Governance and Management Structure

Shareholding Ministers

Minister of Science, Innovation and Technology	Minister of Finance

REANNZ Board

Finance, Risk and Audit Committee	People and Culture Committee

Chief Executive

Senior Leadership Team

Network Operations	IT and Development	Member Engagement	Corporate Services
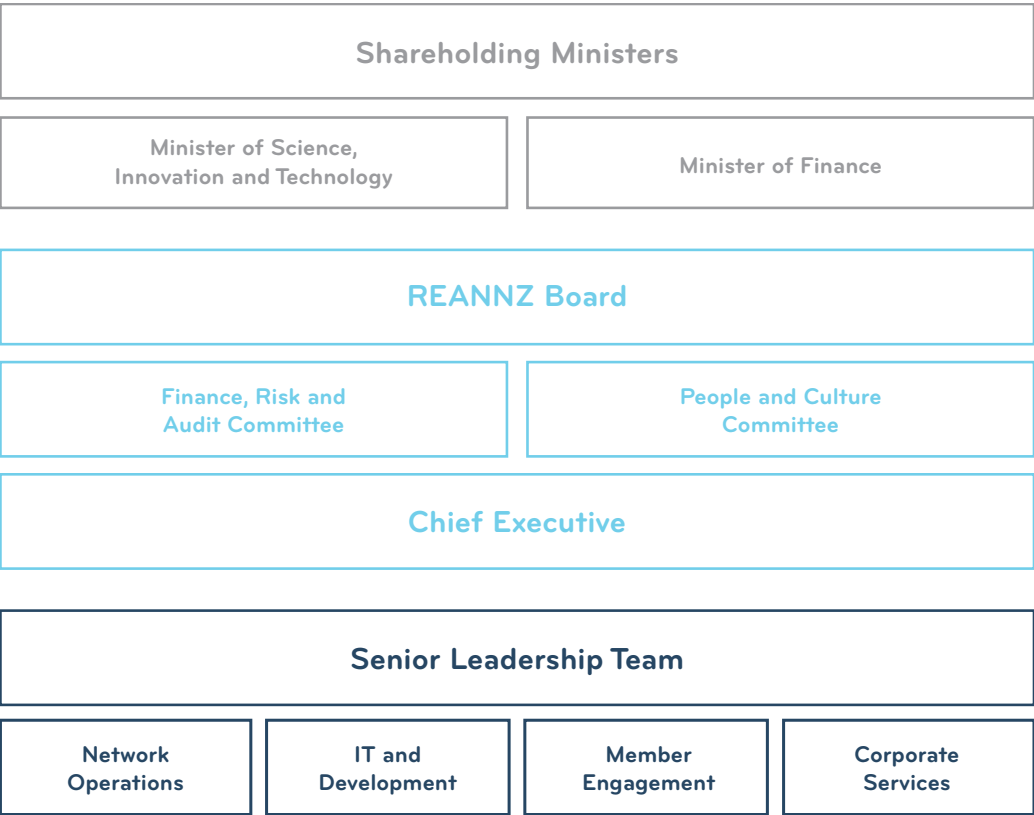
OUR PEOPLE /

Our people come from all walks of life – combining their technical expertise with a whole-hearted focus on members and their needs. They're united around a single purpose – to make a positive impact on New Zealand through research and education.

Specialist network operators

We manage an advanced network, providing seamless, real-time transfer of critical research data. We are part of an international federation of network operators dedicated to the research and education sector.

Global connectors

As a partner in the global research and education network, we connect New Zealand to the global research community, providing access and identity services so members can connect and collaborate wherever they are.

Technical experts for the research and education sector

We provide a range of products and services to support the specialist needs of our members in the research and education community, helping them move data and enabling collaboration.

Our Mindset

Our people are curious and open to trying new things. They work hard to create solutions that can support the wider community. Regardless of our individual roles in REANNZ, we act as one.

Together, we want to create a place where everyone can collaborate and make a difference.

Our core competencies support us to achieve our aspirations for our organisation, our members and the sector:

> **Lead by example** – being accountable for our actions

> **Act as one team** – working as one team in partnership with our members and stakeholders

> **Open to all** – creating a diverse workplace where everyone feels welcome

> **Be purposeful** – creating impact by doing what we say we will

> **Be curious** – seeking new and exciting ways to deliver for our community

> **Aspire to excellence** – aiming high, to be excellent in all that we do.

Our Teams

REANNZ teams support functions across the technical, corporate and engagement operations to meet the needs of our members and stakeholders:

> The **systems and development team** are responsible for desktop, server and Cloud software and infrastructure as well as products including eduroam – our WiFi roaming service – and Tuakiri, which provides trusted and secure federated identity and access management. They oversee software engineering, working closely with the network team to develop solutions for members. They resolve technical issues and support members' network infrastructure and service needs to facilitate the secure, uninterrupted transfer of research data.

> The **network operations team** monitor and design the network, working in partnership with members' technology teams to support an end-to-end view of the connectivity solutions in place. REANNZ network engineers are on call and available 24/7 for our members.

> The **engagement team** works closely with our members to support their use of the network. The team facilitates collaboration and connection between our members and the wider community; and shares with members and stakeholders examples of sector collaborations and research outcomes that have been enabled by access to the network.

> The **corporate services team** enables the organisation through the provision of strategic and operational advice and support across REANNZ.

PRIORITIES & MAJOR INITIATIVES 2023-24 /

This financial year REANNZ invested in three significant areas to improve performance and deliver on its long-term strategic objectives:

› Implementation of Stage 2 of the National Network Strategic Review

› Hosting the New Zealand eResearch Conference

› Digital equity initiatives

Stage 2 of the National Network Strategic Review

In 2021, we undertook a strategic review of the national network to ensure that we could continue to meet our members networking and connectivity requirements. The National Network Strategic Review is a programme with two distinct phases. It is designed to effectively support the network for 5-7 years after it is delivered.

> **National connectivity** – identify a partner, or partners, to connect between REANNZ points of presence, with a focus on flexibility and ability to scale – particularly in the regions.

> **Hardware** – identify a partner or partners for core hardware requirements, with greater transparency around service levels and a focus on reducing our energy needs.

In April 2023, we completed Phase 1, national connectivity, working with our new partner, One NZ. In FY23/24, we made significant progress on Phase 2, Hardware:

> Core Network Hardware: Juniper Networks was selected, with installations beginning in August 2024.

> Network Monitoring and Out-of-Band Hardware: PB Tech was chosen, supplying SuperMicro servers, with rollout happening in tandem with core network hardware installations.

> Managed Edge Hardware: Juniper Networks was selected and pilot testing completed. Migration of our members is expected to start in October 2024.

The rollout of Phase 2 is expected to take 12-18 months and be completed in FY25/26. The new hardware brings significant benefits, including reduced energy requirements, higher port density and speed, and lower cost per port.

These upgrades will enhance our network's performance, sustainability, and cost-effectiveness, ensuring we continue to meet our members' evolving needs.

Hosting New Zealand eResearch conference

eResearch NZ, a collaborative effort by REANNZ, NeSI, and Genomics Aotearoa, is the premier conference for New Zealand's eResearch community. In 2024, REANNZ hosted the event under the theme He Moana Pukepuke e Ekengia e te Waka | Navigating an Evolving eResearch Landscape.

Held from February 7-9 in Wellington, eResearch NZ 2024 | eRangahau Aotearoa attracted over 150 delegates from the research community. Attendees praised the conference for its content, international speakers, and the invaluable networking opportunities it provided. The event proved instrumental in showcasing innovations, successes, and challenges within the field.

The CE of REANNZ called for continued collaboration within New Zealand's research sector to drive national and global impact. Across the other presenters, data use and research accelerators were common themes, including supercomputers and the use of large language models (LLMs) to transform the processing of scientific literature.

We were grateful for the significant support and investment from our sponsors and strategic partners, who reported strong engagement and branding exposure, and allowed us to reduce ticket prices.

Digital equity initiatives

In 2023/24, digital equity continued to be a key focus, as REANNZ worked with the Ministry of Education to enable students to study, research and collaborate across multiple locations, when home is not an option. We did this through a further rollout of eduroam, our federated WiFi solution.

In the 2023/24 FY, there were over 360 locations enabled with eduroam around New Zealand, almost double the year before. In these locations over 144,000 devices connected to eduroam – a 22% increase on the year before.

The largest rollout of eduroam in 2023/24 was into 166 libraries across NZ, partnering with libraries connectivity group Aotearoa People's Network Kaharoa (APNK).

The ultimate goal for our digital equity programme is for all cities and towns in Aotearoa to have venues such as schools, marae, museums and transport hubs enabled with eduroam.

COST-EFFECTIVE CONNECTIVITY FOR SMALL SITES OR REMOTE LOCATIONS

Many of REANNZ's members operate remote or small sites across around the country. They need tailored solutions that can support connectivity and digital capability wherever they are.

Our Managed Access and Edge (MAE) suite of products has been developed to provide these members with a range of technology options for their unique connectivity and data transfer needs. These options include Ultra-Fast Broadband (UFB), 4G, Satellite, WiFi, and many more. MAE devices connect a member's local network with the REANNZ network, enabling data transfers nationally and internationally.

Plant & Food Research – a flexible solution

REANNZ worked with Plant & Food Research on smart solutions for their remote offices using MAE Flex. David Dyer, the technology services manager at Plant & Food Research, explains "We are geographically dispersed. The smallest site we have is Gore, and we have about 15 network sites around the country and a small presence in Adelaide. A lot of our regional sites have trouble with connectivity – they're remote."

With MAE Flex, REANNZ was able to customise the solution to the needs of each remote site. For example, in Kerikeri, REANNZ replaced a 100Mb circuit with a 1Gb circuit. "It meant everything worked better, especially video conferencing," says Dyer.

In Clyde, which had been a challenging site for connectivity, REANNZ explored several options. "We started off with 4G, but we got congestion on the cell tower and that was heavily impacting services," says Dyer. "We decided to go with the WISP solution ... everyone was really impressed with the connectivity at the site."

For Dyer, there are also other benefits: "REANNZ is really good because they're a smaller telco or ISP, if you like. They're more agile, nimble and respond to your needs. It's easier dealing with one telco for data needs."

MAE Lite: cost-effective and consistent

Another option used by several of REANNZ's members is MAE Lite, which is designed for smaller or more remote locations where a direct fibre connection is not available. MAE Lite enables members to connect their sites to REANNZ's high speed network, at a significantly lower cost, by leveraging existing UFB infrastructure.

Wallace Chase, the University of Otago's Head of Infrastructure, says "The University had contracts with several other providers ... we were able to consolidate all those contracts with REANNZ, and we've saved enough that way that we've been able to bring in around ten more sites on board and provide a uniform experience for students."

REANNZ continues to expand its MAE services for members with the recent launch of MAE Lite – Hyperfibre, which was rolled out to its first customer in March 2024. This offers all the same benefits as MAE Lite, but at four times the speed (1 vs 4 Gbps).

Dan Twohill, REANNZ's Team Lead for Network Services, says that MAE can be tailored for any sized member and their location.

> MAE offers our members customisation and flexibility. It solves unique connectivity challenges – such as making remote locations feel more like an urban site with the same type of services and consistency. Plus, because it's a managed service, we're always proactively monitoring it and will reach out to our members directly if there's a problem.

Above: David Dyer from Plant and Food at Clyde Dam, where one of their remote regional sites is located.

OUR PRODUCTS & SERVICES /

REANNZ provides a range of products and services that meet the specialist needs of our members in the research, science, innovation and education sectors.

These services focus on the following key areas:

› **Network and connectivity**

› **Identity and access management**

› **Network security**

› **Consultancy services**

› **Data transfer**

Network and Connectivity

The REANNZ network has been engineered with low latency, low contention and sufficient headroom capacity to support bursts of intense use, which means there's no congestion.

Our national network spans the country, including rural, regional and remote locations to support members wherever they operate.

Our international network provides links to the research and education communities across the world – including Europe, North America, Latin America, the Caribbean, Africa, Middle East, Central Asia and Asia-Pacific.

We offer high-performing solutions for connecting member sites, facilities and data centres across the motu, including

Managed Access and Edge (MAE) Solutions

MAE devices connect a member's local network with the REANNZ network, enabling data transfers both nationally and internationally. REANNZ's managed-edge devices are engineered and configured for high performance to meet the specialist needs of the research community when transferring large volumes of data. REANNZ offers a variation to MAE through the MAE Lite (UFB Bitstream service) and MAE Flex solutions (UFB style connectivity service, flexible options like wireless, 4G, 5G, and satellite) that are designed for smaller or more remote locations where a direct fibre connection is not available.

Science DMZ

Science DMZ is designed for high-performance scientific applications and provides a lightweight and high-performing on-ramp to the REANNZ international research and education network. It creates a dedicated path to get data from source to anywhere in the world, without slowing down and while retaining the integrity of the data.

Data Centre Connect (DC Connect)

DC Connect is a service provided from selected data centres located around Aotearoa. It provides members with high bandwidth, cost-effective connectivity into the REANNZ network.

Cloud Connect

REANNZ Cloud Connect enables members to use their existing high-performance network to connect directly to the Cloud service provider of their choice and leverage private access, which does not go over the internet. This results in greater stability and predictability of the connection without needing to expose information to the internet.

eduVPN

eduVPN is an easy-to-deploy VPN solution designed for and by the research and education community. It acts as a private network, sending and receiving data as if a user's device was directly connected. Users benefit from quicker functionality and additional security, from a service that is simple to deploy.

eduroam (education roaming)

eduroam is a secure, global roaming access service developed for the international research and education community. It provides researchers, educators and students simple, easy and secure connectivity from 25,000+ locations (including public hotspots, libraries, galleries and airports) across more than 100 countries.

Federated Identity and Access Management Solutions

Our members use REANNZ's trusted and secure federated identity and access management services to strengthen security, manage their users' digital identities and ensure all users have access to specific data and resources they need to perform their role.

Our identity and access management services include:

Tuakiri

Tuakiri allows end-users (students, academics, researchers) to seamlessly use services, access resources, and collaborate within New Zealand while using their home institution's identity. This means that the end-user does not require a unique identity for every remote organisation they are working with.

eduGAIN

eduGAIN provides over 30 million students, researchers and educators access to a network of around 300 identity providers and 2600 service providers worldwide. REANNZ users have access to these shared resources on an international scale, including licensed software and journals, research collaborations, databases, and scientific instruments – all enabled through single-sign on access using their home institution's identity.

Network Protection Services

As the provider of a network that connects New Zealand's researchers, educators and students to the rest of the world, it is critical that we ensure that our network and the traffic on our network is secure. This reflects the growing number of malware and data breaches across the world.

Our network protection services include:

Denial-of-Service (DDoS) Protection

Denial-of-Service (DDoS) attacks are increasing in scale, sophistication and frequency. Our foundation level DDoS Protection solution helps our members to manage DDoS attacks and the risk of business disruption. This solution efficiently detects, filters and mitigates volumetric attacks well before they reach our members' network, reducing the potential for disruption, financial loss and reputational damage.

Mutually Agreed Norms for Routing Security (MANRS)

Network security depends on a routing infrastructure that weeds out bad actors and accidental misconfigurations that wreak havoc on the internet. MANRS is a community-driven initiative, supported by the Internet Society, that provides for best practice routing security and crucial fixes to reduce the most common routing threats. REANNZ was the first network operator in New Zealand to join MANRS in 2020.

MFN/CERT Feeds

We apply MFN and CERT NZ cyber intelligence feeds to automatically protect against known nefarious actors and malicious activity.

Data Transfer

FileSender

FileSender simplifies the file-sharing process through a straightforward web interface. Users can upload up to 1,000 files (up to 5 Terabytes in total) and in any format. Encryption protocols ensure that files only reach their intended recipients.

END OF
YEAR
REPORTING /

GOOD EMPLOYER STATEMENT /

At REANNZ, we are committed to the principles of being a good employer. For us, this means treating people with dignity and respect. Policies are in place to guide REANNZ in what it means to be a good employer and to ensure we provide equal employment opportunities and support our people.

REANNZ values the uniqueness of everyone, and their contribution to the organisational culture. REANNZ is responsive to a diverse range of viewpoints and cultures within the workplace, helping to develop a more representative workforce that can respond to our increasingly diverse society.

We meet our obligations under Te Tiriti o Waitangi, working to ensure that we follow the principles of rangatiratanga (self-determination), equity, active protection, options and partnership.

Capability

As a small organisation, REANNZ is critically dependent on its people. The highly specialised nature of REANNZ's work means that they are highly valued.

REANNZ promotes and supports a flexible working environment that encourages our team to maintain a positive work-life balance. This includes both formal and informal flexible working hours as well as the option to split time between remote working and our office spaces.

Leadership, accountability and culture

REANNZ 's leadership culture is built on encouraging all members of the team to lead by example, supporting others to behave in a way that is consistent with our culture and values of being fair, open and respectful, being good partners to our members and wider community, and exercising responsible stewardship of the assets, people and skills within REANNZ.

Recruitment, selection and induction

REANNZ recruits new employees through several channels, including recruitment agencies and industry networks and recommendations.

We ensure that recruitment decisions are made based on merit, irrespective of a person's sex, gender identity, marital status, religious belief, ethical belief, colour, race, ethnic or national origins, disability, age, political opinion, employment status, family status or sexual orientation. We train managers on the benefits of diversity and require that that there is a balanced gender split on short lists for recruitment.

REANNZ provides a safe work environment to ensure that all employees, including those with disabilities, can do their work effectively and efficiently. An assessment of the working conditions for all new employees with disabilities is carried out as part of the induction process. Disabled employees are provided with specialised technical equipment to perform their job, subject to equipment requirements being reasonable and the availability of suitable funding.

Emergency procedures and building facilities for all employees, including people with disabilities, are made known to employees at induction.

Employee development, promotion

The nature of our work provides exciting global opportunities for personal and professional development across multiple disciplines. External training and development are encouraged, and specific budget is set aside for courses and conferences to ensure employees keep growing their skills and capability in their field.

Remuneration, recognition and conditions

We offer equal opportunities for career development, based on performance, potential, skills and knowledge, and leadership prospects. We also support initiatives which grow diversity, including equal employment opportunities, recognition of the employment requirements of women, flexibility, cultural sensitivity and celebration.

REANNZ is committed to attracting, retaining and motivating high-performing people. We provide an environment that identifies, encourages and rewards excellence, innovation and high-quality services by using a remuneration structure that is competitive and fair.

Harassment and bullying prevention

REANNZ has a zero-tolerance policy for unlawful discrimination, harassment and workplace bullying. An employee assistance programme is available to all employees to enable them to get confidential support if required. Open communication between employees and the leadership team is supported and encouraged.

Safe and healthy environment

Employee wellbeing is a high priority and REANNZ supports the processes, work environment and culture that enables the team to be successful, happy and healthy.

Health and safety are taken seriously at REANNZ. Policies and procedures are in place to minimise risk, particularly when handling network equipment; visiting our Point of Presence (PoP) locations; or travelling internationally for work.

Speaking up

REANNZ encourages employees to speak up if they are involved in, or identify, wrongdoing. In return, REANNZ deals with issues in a timely and confidential manner. No employee will suffer retaliation for reporting or participating in the investigation of a genuine complaint made in good faith.

STATEMENT OF RESPONSIBILITY /
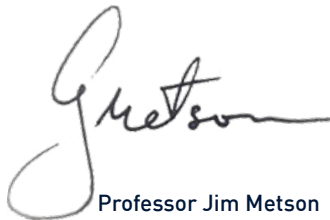
The Board of REANNZ accepts responsibility for the preparation of the annual financial statements and statement of performance, and for the judgements made in them.

The Board is responsible for any end-of-year performance information provided by REANNZ under Section 19A of the Public Finance Act 1989. The Board and management of REANNZ accept responsibility for establishing and maintaining a system of internal control designed to provide reasonable assurance as to the integrity and reliability of the financial reporting.

In the opinion of the Board, the financial statements and statement of performance fairly reflect the financial position and operations of REANNZ for the year ended 30 June 2024.

Sara Brownlie
Finance, Risk & Audit Committee Chair

Professor Jim Metson
Director

24 October 2024
Signed on behalf of the Board

INDEPENDENT AUDITOR'S REPORT /

TO THE READERS OF THE RESEARCH AND EDUCATION ADVANCED NETWORK NEW ZEALAND LIMITED FINANCIAL STATEMENTS, AND PERFORMANCE INFORMATION FOR THE YEAR ENDED 30 JUNE 2024.

The Auditor-General is the auditor of Research and Education Advanced Network New Zealand Limited ("REANNZ"). The Auditor-General has appointed me, Henry McClintock, using the staff and resources of BDO Wellington Audit Limited, to carry out the audit of the financial statements and the performance information of REANNZ on his behalf.

Opinion

We have audited:

- the financial statements of REANNZ on pages 43-57 that comprise the statement of financial position as at 30 June 2024, the statement of comprehensive revenue and expense, statement of changes in equity and statement of cash flows for the year ended on that date and the notes to the financial statements that include a summary of significant accounting policies and other explanatory information; and

- the performance information of REANNZ on pages 36 to 42.

In our opinion:

- the financial statements of REANNZ on pages 43-57:

  - present fairly, in all material respects:

    - its financial position as at 30 June 2024; and

    - its financial performance and cash flows for the year then ended; and

- comply with generally accepted accounting practice in New Zealand in accordance with Public Benefit Entity International Public Sector Accounting Standards Reduced Disclosure Regime; and

- the performance information on pages 36 to 42:

  - presents fairly, in all material respects, REANNZ's performance for the year ended 30 June 2024, including:

- for each class of reportable outputs:

  - its standards of delivery performance achieved as compared with forecasts included in the statement of performance expectations for the financial year; and

  - its actual revenue and output expenses as compared with the forecasts included in the statement of performance expectations for the financial year;

- complies with generally accepted accounting practice in New Zealand.

Our audit was completed on 24 October 2024. 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 and our responsibilities relating to the financial statements and the performance information, we comment on other information, and explain our independence.

Basis for our opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the Responsibilities of the auditor section of our report.

We have fulfilled our responsibilities in accordance with the Auditor-General's Auditing Standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of the Board of REANNZ for the financial statements and the performance information

The Board is responsible on behalf of REANNZ for preparing financial statements and performance information that are fairly presented and comply with generally accepted accounting practice in New Zealand. The Board is responsible for such internal control as they determine is necessary to enable them to prepare financial statements and performance information that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements and the performance information, the Board is responsible on behalf of REANNZ for assessing REANNZ's ability to continue as a going concern. The Board is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless there is an intention to merge or to terminate the activities of REANNZ, or there is no realistic alternative but to do so.

The Board's responsibilities arise from the Crown Entities Act 2004 and the Public Finance Act 1989.

Responsibilities of the auditor for the audit of the financial statements and the performance information

Our objectives are to obtain reasonable assurance about whether the financial statements and the performance information, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures, and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers, taken on the basis of these financial statements and the performance information.

For the budget information reported in the financial statements and the performance information, our procedures were limited to checking that the information agreed to REANNZ's statement of performance expectations.

We did not evaluate the security and controls over the electronic publication of the financial statements and the performance information.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the financial statements and the performance information, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- We obtain an understanding of internal control relevant to the audit 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 REANNZ's internal control.

- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board.

- We evaluate the appropriateness of the reported performance information within REANNZ's framework for reporting its performance.

- We conclude on the appropriateness of the use of the going concern basis of accounting by the Board and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on REANNZ's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements and the performance information or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause REANNZ to cease to continue as a going concern.

- We evaluate the overall presentation, structure and content of the financial statements and the performance information, including the disclosures, and whether the financial statements and the

performance information represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our responsibilities arise from the Public Audit Act 2001.

Other information

The Board is responsible for the other information. The other information comprises the information included on pages 1 to 29, 34-35, and 58-61 but does not include the financial statements and the performance information, and our auditor's report thereon.

Our opinion on the financial statements and the performance information does not cover the other information and we do not express any form of audit opinion or assurance conclusion thereon.

In connection with our audit of the financial statements and the performance information, our responsibility is to read the other information. In doing so, we consider whether the other information is materially inconsistent with the financial statements and the performance information, or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on our work, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Independence

We are independent of REANNZ in accordance with the independence requirements of the Auditor-General's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standard 1: International Code of Ethics for Assurance Practitioners issued by the New Zealand Auditing and Assurance Standards Board.

Other than in our capacity as auditor, we have no relationship with, or interests, in REANNZ.

Henry McClintock
BDO Wellington Audit Limited
On behalf of the Auditor-General
Wellington, New Zealand

GOVERNANCE STATEMENT /

Organisational form

REANNZ is a not-for-profit Crown-owned company under Schedule 4A of the Public Finance Act 1989. Our shareholders are the Minister of Finance and the Minister of Science, Innovation and Technology. At balance date, each shareholder held 908 shares on behalf of the New Zealand public.

REANNZ acts in a manner consistent with the Crown Entities Act 2004. REANNZ is subject to the Official Information Act 1982.

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. 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 the 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.

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, taking advisement from the Finance, Risk and Audit Committee. 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 company policies or delegates these to management to approve, where appropriate.

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 composition

There were seven directors for the year ending 30 June 2024. They are Janine Smith (Board Chair), Ross Peat (Deputy Chair), Dr Warren Williams, Liz Gosling (People and Culture Committee Chair), Professor Jim Metson, Sara Brownlie (Finance, Risk and Audit Committee Chair), and Johnathan Eele.

Board meetings

The Board generally meets every six weeks. These meetings are supplemented with additional meetings as required for strategic planning purposes and to progress specific decisions. The Board held eight scheduled meetings for the year ended 30 June 2024. In addition, there were out-of-cycle approvals for time sensitive matters.

Board committees

The Board has formally constituted two committees.

› **Finance, Risk and Audit Committee:** There were four Directors on the Finance, Risk and Audit Committee until the departure of Ross Peat at the end of his term in December 2023, then the minimum three directors for the remainder of 2023/24. The Committee has a focus on the integrity of financial reporting, internal controls and compliance of financial statements with appropriate standards and legislation. The Committee recommends the approval of statutory financial statements for approval by the Board. Three meetings were held during the year.

› **People and Culture Committee:** There are three directors on the People and Culture Committee. The Committee provides oversight on the company's People and Culture strategy and policy. This includes remuneration, performance management and employment conditions of the Senior Leadership team as well as health and safety, and other employment matters. A committee member is involved in the recruitment of any senior manager, including the Chief Executive. Four committee meetings were held during the year.

All Directors are entitled to attend committee meetings.

Interest procedures

The REANNZ Board has a documented conflict-of interest policy that sets out procedures for identifying and addressing potential conflicts of interest. This policy applies to the directors and staff of REANNZ. The key determination when considering whether an interest might create a conflict is whether it incentivises the director or staff member to act in a way that may not be in the best interests of REANNZ. It must be determined whether a reasonably informed objective observer would perceive from the circumstances that the director or staff member's judgement is likely to be influenced.

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

Auditor

BDO, 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 5 PlanIT House,

22 The Terrace,

Wellington 6011

STATEMENT OF PERFORMANCE /

For the year ending 30 June 2024

STRATEGIC INTENTIONS

REANNZ connects researchers and educators so they can change the world. We're a Crown-owned membership organisation that powers Aotearoa's research and education network.

Through our high-performance digital network (or NREN), we connect researchers and educators to each other within Aotearoa and in more than 120 countries across the globe. We enable them to collaborate and contribute to data intensive and complex science and research initiatives. We provide connectivity across their labs, offices and campuses, and we verify their identities with other global research organisations.

Over the next 2-3 years, we will continue to build a stronger, more connected network that is the backbone of Aotearoa's research and education community.

REANNZ's current strategic intentions are:

Supporting mātauranga Māori
Supporting the aspirations of the Māori research and education community as an integral part of REANNZ's work.

Connecting Aotearoa
Providing all researchers, educators and students with access to the infrastructure and connectivity they need to advance their work wherever they are.

Building our global connections
Investing in and leveraging our global relationships, bringing GREN solutions to the New Zealand market to deliver cost savings and global connectivity.

Making it easy
Working in partnership with the research and education sector to improve inter-operability and consistency, co-designing products and services to respond to members' changing requirements.

OVERALL SUMMARY OF PERFORMANCE

In 2023/24 REANNZ achieved or exceeded 19/20 targets set for the financial year.

SUPPORTING MĀTAURANGA MĀORI

Over the past 18 months, REANNZ has focused on building awareness and capability to support mātauranga Māori. We have worked to understand the requirements of Māori researchers and the challenges of managing sovereign data; and onboarded new Māori research organisations.

How we measure our performance

Impact Measure:

Cultural Capability Programme with learning tools and resources to help REANNZ staff strengthen their cultural capability, their knowledge of te ao Māori and REANNZ's role in supporting mātauranga Māori.

Target	2022/23	2023/24	Commentary
Increase understanding of te ao Māori by embedding key elements of tikanga (Whanaungatanga, Manaakitanga, Kotahitanga, Rangatiratanga) into REANNZ values by the end of FY24	N/A	Achieved	Te ao Māori committee established, and 1 hui held in 2024FY. 1 te ao Māori values workshop held during 2024FY.

Output Measure:

Training our people to increase staff capability and understanding of mātauranga Māori.

Target	2022/23	2023/24	Commentary
95% of permanent staff have participated in a minimum of two foundational cultural capability courses	Not achieved	Achieved	100% of staff participated in two courses (2023FY: 91%)

Output Measure:

Iwi and Māori research community engagement to build relationships and partnerships with iwi and the Māori research community and further understand their research needs.

Target	2022/23	2023/24	Commentary
Engage with three Māori research community programmes to support connectivity and/or provide identity management solutions	Achieved	Achieved	3 organisations engaged with. Connectivity provided across 7 sites (2023FY: 3 organisations engaged with)

CONNECTING AOTEAROA

REANNZ provides researchers and educators with access to the infrastructure and connectivity they need to advance their work wherever they are.

To ensure we're flexible enough to respond to our members' changing needs, REANNZ has shifted from being a network provider to aggregating sector demand and partnering with the commercial sector to extend our network. We've worked with mobile, satellite and wireless operators to provide connectivity wherever our members are in New Zealand.

How we measure our performance

Impact Measure:

Better connected members

Target	2022/23	2023/24	Commentary
Increase number of Optional Service Agreements/ Order Forms signed by 25%	Achieved	Achieved	80 signed in 2023/24 compared to 30 signed in 2022/23

Output Measure:

National Network Strategic Review connectivity

Target	2022/23	2023/24	Commentary
Stage 1: National Network Connectivity completed by 1 April 2023	Achieved	N/A	
Stage 2: Create a scalable model by 30 June 2024 for connecting regional sites	New Measure	Achieved	NNSR Hardware selected for core and edge devices. Orders placed, installation during FY25

Output Measure:

Packet Delay Variation

Target	2022/23	2023/24	Commentary
Fewer than 0.1% of hourly measurements across the core network have over 20ms of packet delay variation	Achieved	Achieved	0.05% packet delay (2023FY: 0.01%)

Output Measure:

Packet loss

Target	2022/23	2023/24	Commentary
Less than 0.0001%	Achieved	Achieved	Actual packet loss was 0.000052% (2023FY: 0.00002311%)

Output Measure:

Solutions launched to enable researchers to connect wherever they are

Target	2022/23	2023/24	Commentary
4G remote pilot programme (use case) moved into production. Starlink satellite capability evaluated and delivered	Achieved	Achieved	2 x 4G sites in production

Output Measure:

Advanced network bandwidth available

Target	2022/23	2023/24	Commentary
National backbone capacity 100 Gbps	Achieved	Achieved	International network capability was upgraded to 120 Gbps in July 2024
International network capability 120 Gbps (2023: 100 Gbps)	Achieved	Not Achieved	

BUILDING OUR GLOBAL CONNECTIONS

The success of REANNZ's ability to leverage our global connections comes down to the strength of our global relationships.

Over the past eighteen months, we have increased our participation in the GREN and taken a greater leadership role in the Asia-Pacific region. We've identified areas of best practice across the GREN and leveraged these for the benefit of REANNZ members as part of our product roadmap work; and have found opportunities to share our skills and insights with the global community.

How we measure our performance

Impact Measure:

Contribute to the global NREN community by leading the global discussion in our areas of expertise, including Mutually Agreed Norms for Routing Security (MANRS) compliance

Target	2022/23	2023/24	Commentary
6 technical presentations in total at both regional and international conferences	Achieved	Achieved	10 technical presentations at regional conferences
			5 technical presentations at international conferences
			(2023FY: 7 technical presentations in total)

Output Measure:

Attend key conferences to increase global participation

Target	2022/23	2023/24	Commentary
Attend 3 regional and 3 key international conferences	Achieved	Achieved	8 regional conferences attended
			5 international conferences attended
			(2023FY: 5 regional and 8 international conferences attended)

MAKING IT EASY

Over the past two years, we've engaged with our members to understand how REANNZ can best support data intensive research and collaboration in New Zealand; and we have co-developed a member-endorsed product and services roadmap.

How we measure our performance

Impact Measure:

Member satisfaction and engagement [Survey question: "How much do you agree that REANNZ's network and supporting services meet the data transfer and collaboration needs of your organisation?"]

Target	2022/23	2023/24	Commentary
Greater than 80%	Not reportable	Achieved	91% (survey response rate 18%)

Impact Measure:

Member satisfaction and engagement [Survey question: "How much do you agree that REANNZ's network is valuable or essential to your organisation?"]

Target	2022/23	2023/24	Commentary
Greater than 80%	Not reportable	Achieved	91% (survey response rate 18%)

Output Measure:

Develop the Tuakiri service to deliver interoperability for the research and education sector

Target	2022/23	2023/24	Commentary
High level trust and identity product roadmap to be refined and ratified with members by 30 September 2023	N/A	Achieved	-

Output Measure:

Digital equity proposition – increase eduroam education microsite footprint

Target	2022/23	2023/24	Commentary
20% increase	N/A	Achieved	365 additional eduroam sites as at 30 June 2024 (up from 186 at 1 July 2023)

Output Measure:

Member endorsed product and solutions roadmap

Target	2022/23	2023/24	Commentary
Roadmap complete and approved by members	Not achieved	Achieved	Endorsed by universities and CRI in September 2023 and other members by June 2024

Output Measure:

Issue resolution timeliness - the proportion of members that consider any issues are resolved in a timely manner.

Target	2022/23	2023/24	Commentary
Greater than 80%	Achieved	Achieved	94% (2023FY: 90%)

Output Measure:

National and International Network Availability

Target	2022/23	2023/24	Commentary
National network availability 99.95%	Achieved	Achieved	99.999% availability (2023FY: 99.99%)
International network availability 99.95%	Achieved	Achieved	100% availability (2023FY: 100%)

FINANCIAL STATEMENTS /

Research and Education Advanced Network New Zealand Limited

**Statement of Comprehensive Revenue and Expense
for the year ended 30 June 2024**

	Notes	Actual 2024 $ 000	Budget 2024 $ 000	Actual 2023 $ 000
Revenue				
Grant revenue	2	6,250	6,250	6,250
Membership fees		7,257	6,687	6,416
Other revenue	2	3,313	3,520	4,081
Interest revenue		1,675	1,408	930
Total Revenue		**18,495**	**17,865**	**17,677**
Network Expenses				
Depreciation		413	1,580	660
Employment expenses		2,360	2,773	2,497
Network operating expenses	3	8,624	8,297	9,332
Total Network Expenses		**11,397**	**12,650**	**12,489**
Gross Surplus		**7,098**	**5,215**	**5,188**
Less:				
Operating Expenses				
Audit		55	60	51
Depreciation		86	98	64
Directors' Fees	4	154	163	165
Employment expenses		2,290	2,202	2,041
Other operating expenses		689	951	700
Professional services		889	763	658
Operating leases		418	408	397
Travel expenses		217	361	171
Total Operating Expenses		**4,798**	**5,006**	**4,247**
Other (Losses) / Gains				
Impairment loss on Intangible Assets	11	(129)	-	-
Foreign currency gains / (losses)	5	(92)	90	(6)
Total other (losses) / gains		**(221)**	**90**	**(6)**
Net Surplus / (Deficit)		**2,079**	**299**	**935**
Total Comprehensive Revenue and Expense		**2,079**	**299**	**935**

Explanations of major variances against budget are provided in note 21.
The accompanying notes form part of these financial statements.

Research and Education Advanced Network New Zealand Limited

Statement of Financial Position
as at 30 June 2024

	Notes	Actual 2024 $ 000	Budget 2024 $ 000	Actual 2023 $ 000
CURRENT ASSETS				
Cash and cash equivalents		6,574	2,888	3,144
Derivative financial instruments	8	162	90	200
Receivables	6	2,406	230	2,202
Investments	7	27,217	21,391	27,504
Prepayments		333	132	286
Prepaid network expenses	9	1,667	1,500	2,255
Total current assets		**38,359**	**26,231**	**35,591**
NON-CURRENT ASSETS				
Derivative financial instruments	8	-	-	154
Prepaid network expenses	9	15,467	14,100	16,410
Property, plant and equipment	10	944	10,045	785
Intangible assets	11	464	1,189	385
Total non-current assets		**16,875**	**25,334**	**17,734**
TOTAL ASSETS		**55,234**	**51,565**	**53,325**
CURRENT LIABILITIES				
Payables	12	509	655	773
GST payable		196	19	106
Employee entitlements	13	392	286	396
Revenue in advance	14	1,783	-	1,842
Deferred revenue		-	-	15
Deferred lease incentive		-	10	10
Right of Use Lease Liability		-	332	-
Total current liabilities		**2,880**	**1,302**	**3,142**
NON-CURRENT LIABILITIES				
Deferred lease incentive		-	14	24
Derivative Financial instrument	8	116	-	-
Right of Use Lease Liability		-	665	-
Total non-current liabilities		**116**	**679**	**24**
TOTAL LIABILITIES		**2,996**	**1,981**	**3,166**
NET ASSETS		**52,238**	**49,584**	**50,159**
EQUITY				
Contributed capital	15	20,101	20,101	20,101
Accumulated surplus		32,137	29,483	30,058
TOTAL EQUITY		**52,238**	**49,584**	**50,159**

Explanations of major variances against budget are provided in note 21.
The accompanying notes form part of these financial statements.

Research and Education Advanced Network New Zealand Limited

Statement of Cash Flows
for the year ended 30 June 2024

	Actual 2024 $ 000	Budget 2024 $ 000	Actual 2023 $ 000
CASH FLOWS FROM OPERATING ACTIVITIES			
Cash was provided from (applied to)			
Receipts from the Crown	6,250	6,250	6,250
Network Receipts	6,979	6,702	6,553
Receipts from other revenue	3,303	3,519	4,045
Interest received	1,611	1,423	624
GST (net)	91	45	(330)
Realised gain/(losses) on foreign currency	99	-	137
Payments to suppliers and employees	(11,067)	(11,090)	(11,597)
Prepayments for network connectivity	(3,330)	(3,570)	(5,548)
Net cash flow from operating activities	**3,936**	**3,279**	**134**
CASH FLOWS FROM INVESTING ACTIVITIES			
Cash was provided from (applied to)			
Receipts from sale of plant and equipment	-	-	37
Purchase of plant and equipment	(571)	(8,136)	(223)
Purchase of intangible assets	(285)	(1,189)	(385)
Term deposit investments (made)/realised	350	6,500	(5,850)
Net cash flow from investing activities	**(506)**	**(2,825)**	**(6,421)**
CASH FLOWS FROM FINANCING ACTIVITIES			
Cash was provided from (applied to)			
Capital contribution	-	-	4,100
Net cash flow from financing activities	**-**	**-**	**4,100**
Net (decrease)/increase in cash held	**3,430**	**454**	**(2,187)**
Cash at beginning of year	3,144	2,434	5,331
Cash at end of year	**6,574**	**2,888**	**3,144**

Explanations of major variances against budget are provided in note 21.
The accompanying notes form part of these financial statements.

Research and Education Advanced Network New Zealand Limited

Statement of Changes in Equity
for the year ended 30 June 2024

	Notes	Actual 2024 $ 000	Budget 2024 $ 000	Actual 2023 $ 000
ACCUMULATED SURPLUS				
Balance at 1 July		**30,058**	**29,184**	**29,123**
Total Comprehensive Revenue and Expense for the year		2,079	299	935
Balance at 30 June		**32,137**	**29,483**	**30,058**
CONTRIBUTED CAPITAL				
Balance at 1 July		**20,101**	**16,001**	**16,001**
Capital contribution		-	4,100	4,100
Balance at 30 June	15	**20,101**	**20,101**	**20,101**
Total Equity at 30 June		**52,238**	**49,584**	**50,159**

Explanations of major variances against budget are provided in note 21.
The accompanying notes form part of these financial statements.

NOTES TO THE
FINANCIAL STATEMENTS /

1. Statement of accounting policies

Reporting Entity

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 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 Tier 2 public benefit entity for the purposes of Public Benefit Entity (PBE) accounting standards with reduced disclosures.

The financial statements for REANNZ are for the year ended 30 June 2024 and were approved by the Board on 24 October 2024.

Basis of Preparation

The financial statements have been prepared on a historical basis with a few exceptions as detailed in the notes below and the accounting policies have been applied consistently throughout the year.

Statement of compliance

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

The financial statements comply with Public Benefit Entity accounting standards.

The financial statements have been prepared in accordance with Tier 2 PBE Accounting Standards with reduced disclosures. REANNZ is eligible to report as a Tier 2 reporting entity on the basis that it does not have public accountability and is not large.

Presentation currency and rounding

The financial statements are presented in New Zealand dollars (NZD) and all values are rounded to the nearest thousand ($000).

Summary of 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.

Significant accounting policies are included in the notes to which they relate. Policies that do not relate to a specific note are outlined below:

Foreign currency transactions

Transactions in foreign currencies, including those for which forward foreign exchange contracts are held, are translated to New Zealand dollars (the functional currency) at the spot rate on the date of transaction.

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the Statement of Comprehensive Revenue and Expense.

Statement of Cash Flows

The Statement of Cash Flows is prepared exclusive of GST, which is consistent with the method used in the Statement of Comprehensive Revenue and Expense.

Definitions of the terms used in the Statement of Cash Flows are:

"Cash" includes investments that are readily convertible into cash and used by REANNZ as part of its day-to-day cash management.

"Investing activities" are those activities relating to the acquisition and disposal of long-term assets and other investments not included in cash equivalents.

"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 and accounts payable that are stated inclusive of GST.

The net GST paid to, or received from, Inland Revenue, 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 2023/24 Statement of Performance Expectations dated 30 June 2023 and approved by the Board.

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.

Critical accounting estimates and assumptions

In preparing these financial statements, REANNZ has made estimates and assumptions concerning the future. These estimates and assumptions may differ from subsequent actual results. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The estimates and assumptions that have significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

- Useful life of network prepayments – refer to note 9.

2. Revenue

Accounting Policy

The specific accounting policies for significant revenue items are explained below:

Grant revenue

REANNZ is funded in part by the Crown from the Strategic Science Investment Fund (SSIF). The SSIF grant is provided to partially fund the delivery of specialist services and activities to meet the Government's goals for research and education. REANNZ delivers an agreed work plan and the grant is recognised as revenue when paid because there are no other conditions attached.

Membership fees and other revenue

Revenue is measured at the fair value of the consideration received or receivable. All transactions are exchange transactions.

Interest revenue

Interest revenue is recognised by accruing the interest due for the investment on a time proportion basis using the effective interest rate method.

i. Grant revenue

	2024 $ 000	2023 $ 000
Non-exchange transactions		
Ministry of Business, Innovation and Employment Strategic Science Investment Fund contract	6,250	6,250
Total grant revenue	**6,250**	**6,250**

REANNZ and the Ministry of Business, Innovation and Employment ('MBIE') entered into a SSIF Infrastructure Platform Investment contract ('the contract') during the 2018 financial year. The contract was for an initial period of seven years that expired on 30 June 2024. The contract was varied to include a one-year extension expiring on 30 June 2025. This mutually agreed variation involves a funding allocation of $6.75M.

All conditions relating to the contract have been met.

ii. Other revenue

	2024 $ 000	2023 $ 000
Exchange transactions		
Managed services	2,526	2,710
Internet	449	1,050
Other	338	321
Total other revenue	**3,313**	**4,081**

3. Network operating expenses

	2024 $ 000	2023 $ 000
National network		
Fibre circuits	1,961	2,421
Other*	792	1,209
PoP accommodation	314	384
Connectivity	195	50
Total national network expenses	**3,262**	**4,064**

International network		
Connectivity	4,830	4,764
Fibre circuits	207	207
Other	200	177
PoP accommodation	125	120
Total international network expenses	**5,362**	**5,268**
Total network operating expenses	**8,624**	**9,332**

* 2023 Consultant expenditure was reclassified to Professional Services for consistency with 2024 presentation

4. Directors' fees

Remuneration paid to each director during the year was paid in accordance with the Directors Fees and Reimbursement Guidelines.

There were no special director fees paid during the year (2023: $Nil).

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

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

REANNZ holds Directors and Officers Liability and Professional Indemnity insurance cover in respect of the liability of Board members and employees.

No Board members received compensation or other benefits in relation to cessation (2023: $Nil).

5. Foreign currency gains/ (losses)

	2024 $ 000	2023 $ 000
Realised foreign currency gains / (losses)	99	137
Unrealised foreign currency gains / (losses)		
Fair value gains / (losses) on derivatives*	(309)	(325)
Bank account (USD)	118	182
Total foreign currency gains/(losses)	**(92)**	**(6)**

*includes reversal of unrealised gains and losses on settlement of trades

Realised gains or losses arose from the settlement of forward contracts on the purchase of USD and payment of supplier payments in foreign currency.

Unrealised gains or losses are derived from forward USD contracts held with the New Zealand Debt Management Office (NZDMO) and reflect the net movement in the fair value of open contracts. Unrealised gains and losses are reversed on settlement of the trades.

On 30 June 2024, REANNZ held six forward contracts (2023: 9 contracts) to purchase a total of USD$8.88M (2023: USD$6.11M). Three contracts will settle during the next financial year. The contracts were entered into to mitigate foreign exchange exposure arising from annual network connectivity payments contractually required to be paid in USD.

6. Receivables

Accounting Policy

Receivables are reported at the amount due less an allowance for credit losses. REANNZ applies the simplified credit loss model of recognising lifetime expected credit losses for receivables.

In measuring expected credit losses, receivables have been assessed on an entity-type basis as this determines shared credit risk characteristics.

Receivables are expensed in the Statement of Comprehensive Revenue and Expense when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include the debtor being in liquidation.

	2024 $ 000	2023 $ 000
Exchange transactions		
Receivables	2,401	2,197
Less: provision for expected loss	-	-
Total receivables	**2,401**	**2,197**
Other debtors	5	5
Total receivables	**2,406**	**2,202**

Of the total Receivables above $1.98M including GST (2023: $1.96M) relate to membership fees and services to be provided by REANNZ during the coming financial year.

7. Investments

Accounting Policy

Term deposits

Investments in bank term deposits are initially measured at the amount invested.

Interest calculated using the effective interest method is subsequently accrued and added to the term deposit balance.

	2024 $ 000	2023 $ 000
Term deposits	27,217	27,504
Total investments	**27,217**	**27,504**
Weighted Average Interest Rate	6.08%	5.49%

All term deposits are held with major trading banks with equivalent Standard and Poor's AA- rating.

8. Derivative financial instruments

Accounting Policy

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 or issue derivatives for trading purposes. REANNZ has not adopted hedge accounting.

Derivatives are initially recognised at the fair value on the date a derivative contract is entered into and are subsequently re-measured to their fair value at each balance date with the resulting gain or loss recognised in the Statement of Comprehensive Revenue and Expense.

A forward foreign exchange derivative is classified as current if the contract is due for settlement within 12 months of balance date. Otherwise, the full fair value of forward foreign exchange derivatives is classified as non-current.

Derivative financial instruments are recognised at fair value in the Statement of Financial Position.

On 30 June 2024, the net fair value of derivative financial instrument assets was $46K (2023: $354K). Of the net asset amount, $162K (2023: $200K) relates to USD forward contracts due to be settled within 12 months, with the remaining amount to be settled in FY2026 and beyond.

The fair value of forward foreign exchange contracts has been determined using a discounted cash flows valuation technique based on quoted market prices. The inputs into the valuation model are from independently sourced market parameters such as currency rates. Most market parameters are implied from forward foreign exchange contract prices.

9. Prepaid network expenses

Prepaid network expenses relate to core connectivity and network operations. These prepayments are expensed to the Statement of Comprehensive Revenue and Expense on a straight-line basis over the contract term.

During the prior financial year REANNZ entered a multi-year contract with One NZ Limited to provide connectivity services. This contract required upfront payments of NZ$1.7M and these payments will be amortised over 10 years commencing from May 2023.

Hawaiki contract

In June 2014, REANNZ entered into a 25-year lease of managed capacity with Hawaiki Submarine Cable Limited Partnership. The first condition of the lease was met on 31 March 2016, at which point the contract became non-cancellable.

The contract required four milestone payments in USD. The milestone payments were converted into NZD at the spot rate on payment date. The total amount of the four milestone payments (including taxes) was NZ$19.34M.

Straight-line amortisation of the initial fee spread over the lease term commenced in August 2018 when the cable was ready for service. The annual expense is $774K.

Annual payments in advance associated with the Hawaiki contract are recognised evenly over the prepaid period. Prepayments of $3.83M were made during the year.

	2024 $ 000	2023 $ 000
Balance at beginning of year	18,665	17,748
Prepayment expensed during year	(4,861)	(4,631)
Payments made during the year	3,330	5,548
Total prepaid network expenses	**17,134**	**18,665**
Current/non-current split		
Current	1,667	2,255
Non-current	15,467	16,410
Total prepaid network expenses	**17,134**	**18,665**

10. Property, plant and equipment

Accounting Policy

Property, plant and equipment consists of six classes, which are measured as follows:

› leasehold improvements, at cost less accumulated depreciation and impairment losses

› information technology equipment, at cost less accumulated depreciation and impairment losses

› office equipment, at cost less accumulated depreciation and impairment losses

› national PoP ('Point of Presence') equipment, at cost less accumulated depreciation and impairment losses

› international PoP ('Point of Presence') equipment, at cost less accumulated depreciation and impairment losses

› fibre and fibre housing, at cost less accumulated depreciation and impairment losses.

Additions

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.

In most instances, an item of property, plant and equipment is initially recognised at cost. Where an asset is acquired through a non-exchange transaction, the asset will be recorded at fair value at the date of acquisition.

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.

Where assets are purchased outright they are recognised once control is obtained and available for use. Where assets are yet to be installed, relevant costs are initially captured in capital work in progress and then transferred to fixed assets and depreciated once the asset is available for use.

Disposals

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 Revenue and Expense.

Depreciation

Depreciation on property, plant and equipment is provided 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:

	2024	2023
Leasehold improvements	3-5 years	3-5 years
Information technology equipment	3 years	3 years
Office equipment	5 years	5 years
National PoP equipment	3-8 years	3-7 years
International PoP equipment	5-7 years	3-7 years
Fibre and fibre housing	20 years	20 years

Impairment of property, plant and equipment

REANNZ does not hold any cash-generating assets. Assets are considered cash-generating where their primary objective is to generate a commercial return.

Non-cash generating assets

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 service amount. The recoverable service amount is the higher of an asset's fair value, less costs to sell, and value in use.

Value in use is the present value of an asset's remaining service potential. It is determined using an approach based on either depreciated replacement cost, restoration cost, or service units. The most appropriate approach used to measure value in use depends on the nature of the impairment and availability of information.

If an asset's carrying amount 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 in the Statement of Comprehensive Revenue and Expense.

Any reversal of an impairment loss is recognised in the Statement of Comprehensive Revenue and Expense. 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.

To the extent that an impairment loss for a revalued asset was previously recognised in the Statement of Comprehensive Revenue and Expense, a reversal of impairment loss is also recognised in the Statement of Comprehensive Revenue and Expense.

For items of property, plant or equipment that are not carried at a revalued amount, the total impairment loss is recognised in the Statement of Comprehensive Revenue and Expense, a reversal of impairment loss is also recognised in the Statement of Comprehensive Revenue and Expense.

Impairment

There was no impairment recognised in the current year (2023: nil).

Critical accounting estimates and assumptions

Estimating useful lives and residual values of property, plant and equipment

At each balance date, the useful lives and residual values of property, plant and equipment are reviewed. Assessing the appropriateness of useful life and residual value estimates of property, plant and equipment requires a number of factors to be considered such as the physical condition of the asset, expected period of use of the asset by REANNZ, and expected disposal proceeds from the future sale of the asset.

REANNZ has not made significant changes to past assumptions concerning useful lives and residual values.

Breakdown of property, plant and equipment

Movements for each class of property, plant and equipment are as follows:

	Equipment not in Use $000	Office equipment $000	ICT equipment $000	National PoP equipment $000	International PoP equipment $000	Leasehold improvements $000	Network services $000	Fibre and fibre housing $000	Total $000
Cost or valuation									
Balance at 1 July 2022	-	135	642	11,304	1,231	451	15	8,113	21,891
Balance at 30 June 2023	-	133	539	8,419	1,125	451	6	278	10,951
Additions	337	8	75	151	-	-	-	-	571
Disposals	-	(19)	(115)	(486)	(10)	(59)	-	(20)	(709)
Balance at 30 June 2024	**337**	**122**	**499**	**8,084**	**1,115**	**392**	**6**	**258**	**10,813**
Accumulated depreciation									
Balance at 1 July 2022	-	116	575	10,639	902	405	15	7,951	20,603
Balance at 30 June 2023	-	119	483	8,034	977	417	6	130	10,166
Depreciation expense	-	5	43	209	88	-	-	13	358
Disposals	-	(18)	(113)	(485)	(10)	(25)	-	(4)	(655)
Balance at 30 June 2024	**-**	**106**	**413**	**7,758**	**1,055**	**392**	**6**	**139**	**9,869**
Carrying amounts									
Balance at 1 July 2022	-	19	67	665	329	46	-	162	1,288
Balance at 30 June 2023	-	14	56	385	148	34	-	148	785
Balance at 30 June 2024	**337**	**16**	**86**	**326**	**60**	**-**	**-**	**119**	**944**

11. Intangible assets

Accounting Policy

Intangible assets are tested annually for impairment.

An indefinite intangible asset refers to a non-physical asset that has no foreseeable limit to its useful life. When recognising and initially measuring these assets, REANNZ has established that they are identifiable, under its control, and likely to generate future economic benefits. These assets are initially recorded at cost.

Indefinite intangible assets – IPv4 Addresses

IPv4 addresses (internet protocol version 4) are a set of rules that govern how data packets are sent and received over the internet. IPv4 addresses are used to uniquely identify devices on the internet.

Indefinite intangible assets – Perpetual Bandwidth Licences

Perpetual bandwidth licences are held for certain network infrastructure assets that allow the operation of hardware assets to maintain services indefinitely.

Impairment of intangible assets

If there are any impairment indicators, as detailed in the note 10 policy for impairment of property, plant and equipment, then the impairment loss will be recognised in the Statement of Comprehensive Revenue and Expenses. For indefinite useful life intangible assets, an impairment test has to be done annually.

At year end, the carrying value of an indefinite intangible asset will be assessed and any market adjustment will be recognised in the Statement of Comprehensive Revenue and Expense.

Critical accounting estimates and assumptions

Estimating useful lives of perpetual licences

In assessing the useful lives of perpetual licences several factors are considered, including the period of time the licence is intended to be in use and the effect of technological change on systems and platforms. At each balance date, the useful lives and residual values of intangible assets are reviewed.

REANNZ has not made significant changes to past assumptions concerning useful lives and residual values.

	IP Addresses $000	Perpetual Licences $000	Total $000
Gross carrying amount			
Balance at 1 July 2023	385	-	385
Additions	180	105	285
Disposals	(77)	-	(77)
Balance at 30 June 2024	**488**	**105**	**593**
Accumulated amortisation			
Balance at 1 July 2023	-	-	-
Disposals	-	-	-
Impairment losses	(129)	-	(129)
Balance at 30 June 2024	**(129)**	**-**	**(129)**
Carrying amounts			
At 1 July 2023	385	-	385
At 30 June 2024	359	105	464
At 30 June 2024	**359**	**105**	**464**

12. Payables

Accounting Policy

Payables are recorded at the amount payable. All payables presented have arisen from exchange transactions.

	2024 $ 000	2023 $ 000
Exchange transactions		
Trade payables	303	252
Accrued expenses	206	521
Total payables	**509**	**773**

13. Employee entitlements

Accounting Policy

Employee entitlements are benefits due to be settled within 12 months after the end of the year in which the employee provides the related service. These are measured based on the accrued entitlements at current rates of pay. These include salaries and wages accrued up to balance date, annual leave earned but not yet taken at balance date.

A liability is recognised for bonuses where there is a contractual obligation or where there is a past practice that has created a constructive obligation and a reliable estimate of the obligation can be made.

	2024 $ 000	2023 $ 000
Accrued salaries and wages	118	113
Accrued short term incentive	39	90
Accrued Annual leave	235	193
Total employee entitlements	**392**	**396**

It is expected that all employee entitlements will be settled within 12 months of balance date.

14. Revenue in advance

	2024 $ 000	2023 $ 000
Exchange transactions		
Fees received in advance	65	140
Fees invoiced but not yet received	1,718	1,702
Total revenue in advance	**1,783**	**1,842**

Revenue in advance includes membership fees, fees for services and the reimbursement of expenses. All services billed in advance will be provided by REANNZ in the coming financial year. Revenue received in advance will be recognised in the Statement of Comprehensive Revenue and Expense when the service is provided.

15. Equity

Capital management

Equity is comprised of accumulated surplus and contributed capital. Equity is measured as the difference between total assets and total liabilities.

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.

Contributed capital

Issued capital

Share capital comprised 1,816 ordinary shares (2023: 1,816). All issued shares are fully paid and have no par value.

Capital Contribution

During the previous financial year REANNZ received a capital contribution from MBIE of $4.1M. All conditions in respect of this contribution were satisfied.

16. Capital commitments and operating leases

i.   Capital commitments

There were capital commitments of USD$1.7M at balance date (2023: NIL)

ii.   Operating lease commitments

Accounting Policy

An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership of an asset to the lessee. Lease payments under an operating lease are recognised as an expense on a straight-line basis 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 revenue, these prepayments are released to the Statement of Comprehensive Revenue and Expense on a straight-line basis over the period of the remaining operating lease term.

Operating leases relate to the following activities:

a.   Office premises: 22 The Terrace, Wellington, University of Auckland Newmarket campus, Building 906, 314-390 Khyber Pass Road, Newmarket, Auckland and 248 St Asaph St, Christchurch; and

b.   Network PoP accommodation and associated support facilities.

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

	2024 $ 000	2023 $ 000
Less than one year	527	529
Between one and two years	398	376
Between two and five years	244	603
Total operating lease commitments	**1,169**	**1,508**

There are no restrictions placed on REANNZ by any of its leasing arrangements.

iii.   Connectivity and managed service commitments

Connectivity and managed service commitments relate to:

a.   Payments to suppliers for national and international connectivity services

b.   Payments to suppliers for service management of the national network

	2024 $ 000	2023 $ 000
Less than one year	4,086	3,193
Between one and two years	4,093	3,470
Between two and five years	8,216	8,266
Later than five years	36,492	36,136
Total connectivity and managed service commitments	**52,887**	**51,065**

In February 2023, REANNZ signed a contract with One NZ Limited, this contract was for an initial period of four years with two further extensions of three years each.

Hawaiki contract

REANNZ will incur annual connectivity charges over the 25-year lease term of the Hawaiki contract. These costs are reflected above and form the whole amount of the later than five years total.

17. Contingencies

There were no contingent assets or liabilities at balance date for which disclosure is required (2023: $Nil).

18. Related party transactions

REANNZ is a wholly owned entity of the Crown.

Related party disclosures have not been made for transactions with related parties that are within a normal supplier or client/recipient relationship with terms and conditions no more or less favourable than those that it is reasonable to expect REANNZ would have adopted in dealing with the party at arm's length in the same circumstances.

Further, transactions with other government agencies (for example, government departments and Crown entities) are not disclosed as related party transactions when they are on normal terms and conditions consistent with the normal operating arrangements between government agencies.

Key management personnel compensation

The compensation of Directors, Chief Executive and Senior Leadership Team, being the key management personnel of REANNZ, is set out below:

	2024 $ 000	2023 $ 000
Directors		
Remuneration	154	165
Full-time equivalent	0.86	0.89
Senior Leadership Team		
Remuneration	1,193	1,407
Full-time equivalents	4.64	5.95
Total key management personnel remuneration	**1,347**	**1,572**
Total full-time equivalent personnel	**5.50**	**6.84**

Directors

Full-time equivalent for the Directors is based on 50 working days for the chairperson, 37.5 working days for the deputy chairperson, 32.27 working days for the committee chairs and 30 working days for members. FY2023 Full-time equivalent has been restated from 0.82 to 0.89 based on these assumptions.

An analysis of Directors' fees is provided in the Statutory Renumeration Disclosures in the Annual Report.

Chief Executive's remuneration

Total remuneration paid and payable for the Chief Executive role for the year was $357,270 consisting of:

- Salary: $314,096
- Benefits: $15,405
- Short term incentive (FY24) $27,768

Benefits include KiwiSaver and car park allowance.

The Chief Executive's remuneration package does not include any long-term incentives. Short term incentives (STI) are set at up to 10% (2023: 10%) of base salary plus 3% KiwiSaver employer contribution. Incentive payments are discretionary and are granted at the sole discretion of the Board and are based on both individual and company performance measures. The Board identified the performance criteria used to determine the Chief Executive's STI payment.

19. Events after balance date

There were no significant events after balance date.

20. Financial instruments

Financial instrument categories

The carrying amount of financial asset and liability categories are as follows:

	2024 $ 000	2023 $ 000
Mandatorily measured at fair value through surplus or deficit		
Derivative financial instrument assets	162	354
Derivative financial instrument liabilities	116	-
Financial liabilities measured at amortised cost		
Accounts payable and accrued expenses	509	773
Financial assets measured at amortised cost		
Cash and cash equivalents	6,574	3,144
Receivables	2,406	2,202
Investments	27,217	27,504
Total financial assets measured at amortised cost	**36,197**	**32,850**

21. Explanation of major variances to budget

Statement of Comprehensive Revenue and Expense

Revenue

Total Revenue was above budget by $630K. Other revenue exceeded budget due to a delay in the implementation of a revised bundled service model. Interest revenue exceeded budget due to higher interest rates and higher cash balances. Net Membership fees exceeded budget overall as a result of new acquisitions.

Expenditure

Network expenses

Total Network expenses were $1.2M lower under budget due to:

Network Personnel costs underspent by $413K due to a salary saving arising from a role being consolidated into existing roles.

Depreciation expenses lower than budget by $1.18M due to less capital expenditure for the current year and a revision to the useful life estimate for an asset.

Operating expenses

Operating expenses were under budget by $208K due to:

Travel costs $134K under budget due to lower levels of domestic travel required for the installation of new network equipment.

Other operating expenses $262K underspent due to lower ICT costs and lower expenditure for hosting the eResearch conference and product marketing material.

Professional services were $126K over budget due to outsourced Legal services and support for Accountability document services.

Statement of financial position

Actual expenditure for the year was lower than budget for capital expenditure impacting cash, investments and property, plant and equipment.

Statement of Cash Flows

Operating cash flows

Net cash flow from operating activities was higher than budget due to differences in Revenue and Expenses explained above.

Investing cash flows

Purchase of plant and equipment assets was $8.5M under budget due to the deferral of capital expenditure, including NNSR assets. This resulted in an increase in investments.

STATUTORY REMUNERATION DISCLOSURES /

Employee's remuneration

The number of employees who received remuneration and other benefits in their capacity as employees during the year ended 30 June 2024 that in value was $100,000 or more per annum paid or payable is set out in the table below:

	2024 no of employees	2023 no of employees
$100,000 - $109,999	-	3
$110,000 - $119,999	4	-
$120,000 - $129,999	3	2
$130,000 - $139,999	2	2
$140,000 - $149,999	3	2
$150,000 - $159,999	-	1
$160,000 - $169,999	2	-
$170,000 - $179,999	1	2
$180,000 - $189,999	1	2
$190,000 - $199,999	3	2
$200,000 - $209,999	-	1
$220,000 - $229,999	1	-
$240,000 - $249,999	1	-
$270,000 - $279,999*	-	1
$350,000 - $359,999	1	-
$360,000 - $369,999	-	1

* During the year ended 30 June 2024, REANNZ paid $NIL compensation or other benefits in relation to cessation to one employee (2023: $ 66K).

2024 employee remuneration was lower than 2023 mainly due to one senior role being consolidated into an existing role.

Directors' Fees

The total value of remuneration paid or payable to each Board member during the year was:

	2024 $000	2023 $000
Janine Smith (Chair) ***	40	40
Ross Peat (Deputy Chair) **	12	25
Sara Brownlie	21	21
Liz Gosling ***	21	21
Jim Metson	20	20
David Skinner*	-	5
Warren Williams	20	20
Johnathan Eele	20	13
Total Directors' fees	**154**	**165**

*   tenure ceased 30 September 2022
**   tenure ceased 31 December 2023
*** tenure ceased 30 June 2024

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