

Quarterly Report to the Minister of
Research, Science and Innovation

For the second quarter ending 31 December 2018

Introduction

This report provides an update of performance for the second quarter of the 2018/19 financial year. Each quarterly report contains:

- progress against the performance measures in our Statement of Performance Expectations 1 July 2018 – 30 June 2019;
- financial performance;
- update on significant projects; and
- significant risks or issues that may impact performance.

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Executive Summary

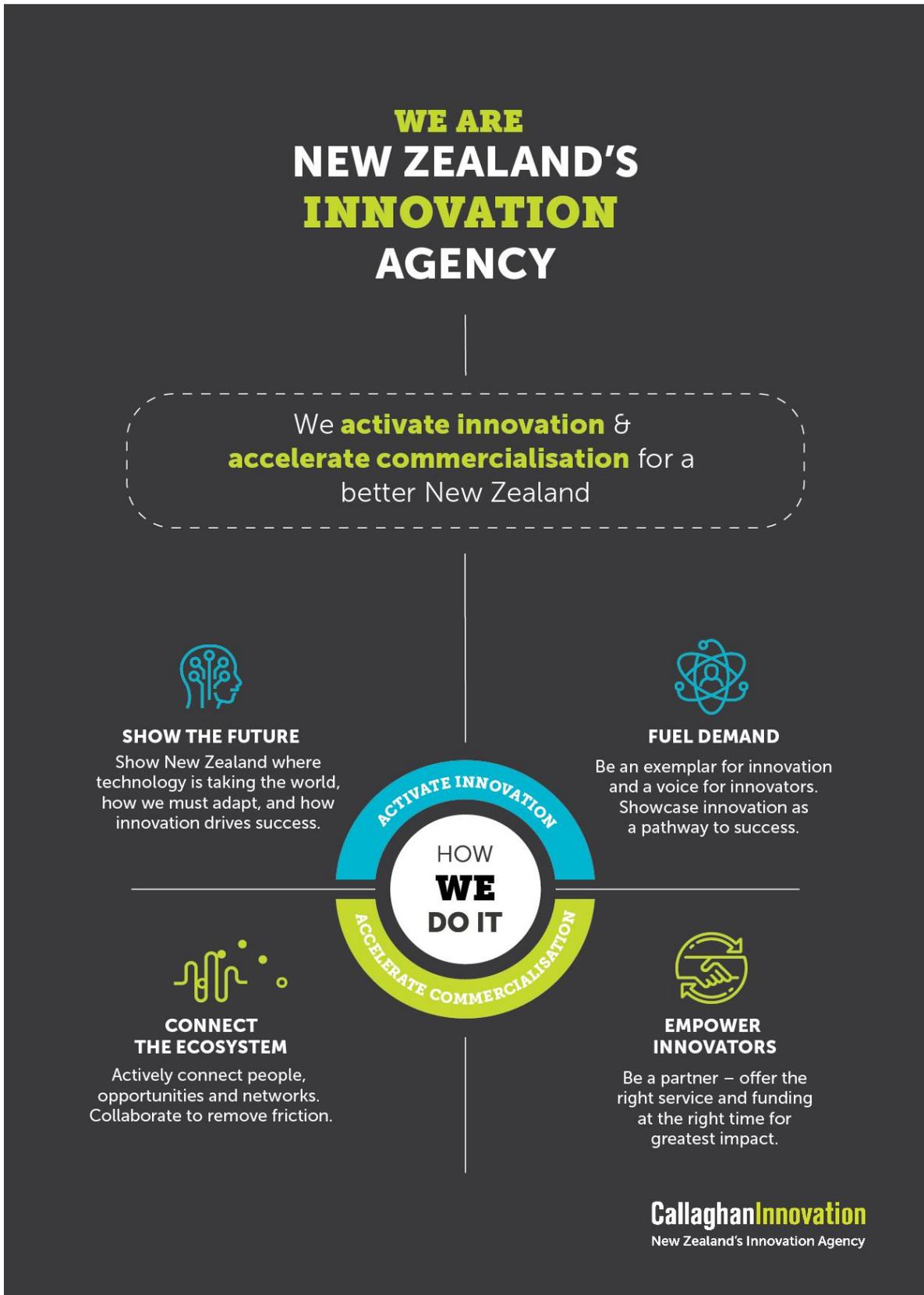
Our highlights this quarter:

- In the 12 months to 31 December 2018 we worked with 2,789 organisations to provide services including programmes, events, international missions and grants, with a Net Promoter Score of +54.
- This quarter has seen significant progress at Gracefield including:
 - Received approval from the Government for the drawdown of \$20 million for the Gracefield Innovation Quarter (GIQ) to address issues including seismic improvements, asbestos removal, roof and weather tightness.
 - Starting construction of the new, purpose-built facility for the Measurement Standards Laboratory, and holding a Gateway Review with external knowledge experts.
 - In December we experienced a fire in the A Block research building. All staff were safe and accounted for and the fire was extinguished the same day. Former occupants of the building have now been temporarily relocated elsewhere on site.
 - Completed roof replacements for Robertson, B Block and Glycosyn.
 - Started the removal of asbestos out of the MacKay building that MSL occupy.
- The year to date operating surplus of \$2.8m is ahead of budget by \$5.1m for the half year. This is primarily due to higher overseas commercial revenue and lower expenses experienced over the period. However the lower than forecast expenditure is due to timing and the favourable expense variance will reverse as the year progresses. We continue to expect to record a full year operating loss.
- We are on track to achieve 13 out of 18 performance measures. We have partially achieved five, however are confident that measures underway to improve our customers' experience of our services will positively impact these measures.
- Significant progress was made in implementation of our strategic agenda during the quarter including:
 - In regards to implementation of our digital strategy, we have completed the upgrade of our CRM system to the cloud, conducted independent cyber and physical security audits and received tenders for our Google G-Suite implementation partner.
 - Signed an MOU with Inland Revenue and finalised the high-level design for joint delivery for the R&D Tax Incentive.
 - Scale Up NZ is now in beta mode, the team have completed their training on the platform and we have received over 500 registrations from companies to be part of the platform.
 - Developed and launched our customer persona's, an important part of our strategic initiative to understand our customers and what they need so we can better serve them.
 - Kicked off customer research on our R&D services to complete the RTS Strategy.
- Other key points to note include:
 - Significant increase in volume of grants applications as the deadline for growth grant applications closed. This will impact delivery times.
 - RFP for the incubator/accelerator funding was released to market.
 - Led a delegation of over 30 Māori business leaders to Ireland and the United Kingdom in November, as part of the Te Tira Toi Whakangao (T³W) programme.
 - Commemorated the 150th anniversary of standard time at a public event on 1 November 2018, hosted by The Measurement Standards Laboratory in partnership with the Ministry for Culture and Heritage.
 - Completed lease negotiations for the Textile Centre, our new Auckland premise and set up the programme board and engagement group to deliver the programme.

Our focus next quarter:

- Strategic delivery focus:
 - Gracefield:
 - Develop the programme plan to deliver the \$20m of funding received for GIQ. This will confirm the timing, delivery, resources and business cases required to deliver these initiatives.
 - Confirm the fit out of our new MSL building in order to move to final business case approval in May.
 - Construction of the new MSL Time lab, Café improvements and KiwiStar Optics gantry crane and workshops.
 - Design an extended workshop space for Kiwistar Optics.
 - Starting work on Programme Business Case for GIQ Strategic Programme.
 - Undertake recruitment for a director on our board with property development experience, and member of the executive to take over implementation of our Gracefield programme of work. Implementation of Gateway review findings will be a key focus of this quarter.
 - Deciding upon, getting approval for, and undertaking remedial work to restore workspace destroyed in the fire.
 - Continue to collaborate with Inland Revenue on the operational policy and design of the R&D Tax Incentive and deliver a campaign to educate and engage with businesses to encourage uptake.
 - Ensuring the Scale-Up NZ platform is tested, and our customers, partners and those in the wider innovation ecosystem are aware of and on the platform ahead of its launch in April 2019.
 - With regards to our digital strategy, will choose the implementation partner for Google G-Suite transition along with business case sign off from the board, will release an RFP to market for our new Payroll provider and develop our requirements for the Grants system and validate these with sectors and customers.
 - Have confirmed our new strategic planning process for the organisation which will include our draft 19/20 operating strategy and budget to go to the board for feedback in the next quarter.
 - Leadership Development is a key focus for us and this quarter we will kick off two leadership development programmes with 60 of our leaders over a five month period. Alongside this we are introducing leadership skills assessment programme to work 1:1 with our leaders to develop the skillset for leading a transformed organisation.
 - RTS Strategy will go to our board for input and then approval.
 - Working towards a launch date of Scale Up NZ in April, this quarter will focus on removing bugs in the platform and customer consents to release data.
- And finally, other operational priorities include:
 - Planning and managing the move of our two Auckland-based teams into a single premise in Parnell.
 - Panel will work through the accelerator / incubator RFP funding applications and make recommendations to the CEO on which ones to fund.
 - Development of the RFP for Tech Incubators alongside kicking off recruitment for a new leader for this team.
 - Manage the exits of Christchurch NZ and ATEED from NZFIN operational funding.
 - Taking over 30 agritech businesses, researchers, entrepreneurs and others on a mission to the EvokeAG exhibition and conference in Melbourne, Australia in February 2019.
 - Taking more than 70 New Zealand companies to SaaS Annual, a global meeting of the 'software as a service' (SaaS) community in San Jose, USA in February 2019.
 - Release the IM for the Glycosyn sale process.

Our Strategy



Strategic Initiatives for 2018/19

| Strategic Pillar | # | Initiative |
|---------------------------------------|----------|--|
| Build the critical foundations | 1 | Develop funding strategy |
| | 2 | Deliver digital architecture and innovation process |
| | 3 | Develop leadership capability and talent |
| | 4 | Cyber-security initiatives delivered |
| | 5 | Gracefield reinvigoration |
| Show the Future | 6 | NZ Futures, impact and modelling capability |
| Fuel Demand | 7 | RTS role and strategy defined |
| Connect the system | 8 | Super connector platform delivered |
| Empower innovators | 9 | Successful R&D tax credit migration plan agreed |
| | 10 | Customer segmentation / portfolio models implemented |

Progress Report

Show the Future

Show New Zealand where technology is taking the world, how we must adapt, and how innovation drives success.

Our highlights this quarter

- Provided thought leadership with a series of articles and presentations from our experts providing insights in a variety of areas of interest to New Zealand businesses including future of work, smart packaging and productivity tools in manufacturing.
- Released a report on distributed ledger and blockchain technologies that found these emerging technologies could have significant economic benefits for New Zealand. We commissioned the report, in partnership with Centrality and the Ministry of Business, Innovation and Employment, as part of our strategic objective to help businesses to understand how technology is changing and what they need to do to keep ahead of technology trends.
- Our Research and Technical Services group (RTS) recently purchased a Waters high resolution qToF mass spectrometer and super critical CO2 chromatography system, the first of its kind in New Zealand. We are helping to increase adoption of these technologies by minimising travel and user training costs and reducing other barriers to equipment acquisition and access. As part of an innovative cooperative arrangement with Waters and their New Zealand agents AlphaTech, we recently hosted a Chromatography Educational Workshop at Gracefield to provide local demonstrations of state-of-the-art analytical capabilities to 23 New Zealand companies, Crown Research Institutions, and advanced educational institutions. Attendees learned about advanced separation technologies, strategies for simplifying method development, saw sophisticated analytical equipment demonstrations and had networking opportunities. Our mass spectrometry facility has also hosted a number of visits to see this new equipment demonstrated.

Our focus for the next quarter

- Promoting the findings from the 'Innovation Challenge' to challenge business leaders to look beyond the business-as-usual horizon and towards longer term strategies fuelled by innovation and emerging technologies. The Innovation Challenge, an online discussion forum, helped form a collective vision that will provide a catalyst to bring the innovation ecosystem together.

Fuel Demand

Be an exemplar for innovation and a voice for innovators. Showcase innovation as a pathway to success.

Our highlights this quarter

- Supported the Agritech New Zealand Roadshow that visited eight centres across New Zealand in October. The events provided insights into innovative and developing local and offshore initiatives, and businesses learned how Callaghan Innovation can support their research and development.

Our focus for the next quarter

- Following a positive discussion on the draft RTS Strategy with the Board in October and receiving agreement to continue to develop the strategy along the lines proposed, the final RTS Strategy is being developed to go to the Board for approval.

Connect the Ecosystem

Actively connect people, opportunities and networks. Collaborate to remove friction.

Our highlights this quarter

- Received positive feedback from stakeholders and significant interest from businesses wanting to be part of our super connector platform, Scale-Up New Zealand. Following initial promotion we received over 500 registrations from companies to be part of the platform. The team travelled to Israel in October and received intensive training on the platform. We have made good progress to get customer profiles on the platform and are on track to have 500 profiles on the platform ahead of its launch this year.
- Led a delegation of over 30 Māori business leaders to Ireland and the United Kingdom in November, as part of the Te Tira Toi Whakangao (T³W) programme. Participants were exposed to successful technology strategies for regional economic development, progressed trade and investment deals, and built relationships with Māori investors. T³W is a joint initiative between Callaghan Innovation and NZTE designed to support and grow Māori technology businesses.
- Commemorated the 150th anniversary of standard time at a public event on 1 November 2018, hosted by The Measurement Standards Laboratory in partnership with the Ministry for Culture and Heritage. Speakers at the event included historian Gerard Morris and Dr Bruce Warrington, Chief Metrologist and CEO of the National Measurement Institute, Australia.

Our focus for the next quarter

- Ahead of the launch of Scale-Up New Zealand in April 2019 we will focus on completing testing to ensure the platform responds to the tasks it is required to complete. We will also start engaging with our customers and seek consent for their profile to be on the platform. We will work closely with our partners to ensure the wider innovation ecosystem is aware of, and encouraged to be on, the platform.

Empower Innovators

Be a partner – offer the right service and funding at the right time for greatest impact.

Our highlights this quarter

- Developed and launched our customer personas, following an extensive consultation process with our staff, customers and partners. This is an important part of our work to better understand our customers and what they need, so we can better serve them. We are now focused on understanding the current innovators' journey through the innovation ecosystem.
- Worked with the Ministry of Business, Innovation and Employment (MBIE) and Inland Revenue to support the implementation the R&D Tax Incentive, including communicating with customers about their grant funding arrangements and the starting the second phase of policy work.
- Our MicroMaker3D team designed a new type of 3D printing for microfabricated structures, enabling 3D printing of structures smaller than a human hair. The technology was granted an international patent. After securing an exclusive launchpad, the Micromaker3D team attended IDTechEx, the premier international show for emerging technologies in 3D printing, wearables, sensors, IoT devices and more in Silicon Valley. The team received a number of

commercial leads they are following up on. We secured great local and global media coverage of this new technology.

Our focus for the next quarter

- As part of our support for our agritech customers, we will be taking over 30 agritech businesses, researchers, entrepreneurs and others on a mission to the EvokeAG exhibition and conference in Melbourne, Australia in February 2019. The mission will give New Zealand agritech businesses the opportunity to see first-hand the latest developments in their fields and connect with potential partners and investors.
- Following a successful mission in 2018, we will be taking more than 70 New Zealand companies to SaaSr Annual, a global meeting of the 'software as a service' (SaaS) community in San Jose, USA in February 2019. New Zealand SaaS companies will learn, network and connect with the international SaaS community, and return with valuable insights to implement in their own businesses.
- We will continue to collaborate with Inland Revenue on the operational policy and design of the R&D Tax Incentive. We will also work with Inland Revenue and MBIE to implement an Education and Engagement campaign to inform businesses in New Zealand about the R&D tax incentive and encourage uptake in its first year.

Build the critical foundations

Foundation initiatives to drive our ambition.

Our highlights this quarter

- Progressed our digital programme including: conducting an RFP to select our implementation partner for Google G Suite, upgrading and migrating our CRM to the cloud, conducting an RFP to select a new payroll solution, continued development of our cyber and physical security programme and planning the optimisation of our identity management platform (includes single sign on) and network architecture. In parallel, progressed a number of process improvement initiatives including: people on/off boarding, accounts payable, OIA and Privacy requests, contractor onboarding and IT ticketing and job tracking.
- Started constructing the new, purpose-built facility for the Measurement Standards Laboratory (MSL), and the design of its interior is almost complete. The other emergency response works underway at Gracefield also continued.
- We prepared a business case for the single-site relocation of the two Auckland-based Callaghan Innovation teams and received sign off by the board. Lease negotiations for premises in Parnell have been completed. An Engagement Group has been formed with members of both existing offices and draft layouts have been presented for feedback.
- As part of work to build our leadership pipeline, nine tier three leaders undertook Accelerated Development planning to identify learning plans and activities. We are planning to refresh talent management practices for all people leaders.

Our focus for the next quarter

- Continuing construction of the MSL facility and starting construction of Café improvements and the KiwiStar Optics gantry crane and workshops. We will also be recruiting Board and Executive level expertise to support the implementation of this programme of work.
- Continue to develop our leaders, including rolling out 'Emotional Intelligence' and 'Storytelling at Work' programmes to over 50 people leaders. We will also undertake a leadership skills assessment to identify additional programmes to support the development of leaders, and progress work to refresh our Competency Framework to align with our Values.
- Planning and managing the move of both Auckland-based Callaghan Innovation teams into a single premise that includes an innovation showcase as well as desk spaces and laboratories.

Performance Measures

Callaghan Innovation Operations: Multi-Category Appropriation

| Performance measure | 2018/19 Performance Standard | 12 months to end Q2 FY 18/19 | Status |
|---|------------------------------|------------------------------|---|
| Total number of organisations working with Callaghan Innovation on services this Financial Year | 2600 | 2789 |  |
| Net Promoter Score of all surveyed customers | +60 | +54 |  |
| Total number of organisations working with Callaghan Innovation and NZTE as a F700 customer | 300 | 353 ¹ |  |

Callaghan Innovation is focused on improving our customers' experience engaging with us. Detail is provided below on initiatives underway to improve our Net Promoter Score.

Category 1: Building Business Innovation

| Performance measure | 2018/19 Performance Standard | 12 months to end Q2 FY 18/19 | Status |
|--|------------------------------|------------------------------|---|
| Number of organisations working with Callaghan Innovation in the following services: <ul style="list-style-type: none"> • Programmes • Events • International Missions • Global expert | 1500 | 1383 |  |
| Net Promoter Score for Callaghan Innovation Services: <ul style="list-style-type: none"> • Programmes • Events • International Missions • Global expert | +50 | +42 |  |

Following a ten percent increase in the number of businesses we worked with in 2017/18, we are focused on deepening engagement with our customers who are increasingly using more than one of our services.

Our event activity has increased as our experiences become a platform to connect, communicate and strengthen our brand and reputation with customers and stakeholders. We are implementing a number of initiatives to drive an increase in our Net Promoter Score for our events, including an extensive events guide to support staff training, investing in event management software, and providing more focused and effective event marketing and communications.

¹ The number provided in Q1 2018/19 (657) was incorrect, and mistakenly included organisations working with Callaghan Innovation who were NZTE Foundation Build customers. The correct figure for Q1 was 348.

Category 2: Business Research and Development Contract Management

| Performance measure | 2018/19 Performance Standard | Progress to end of Q2 | Status |
|---|------------------------------|-----------------------|---|
| Percentage of growth, project and student fellowship applications who have received a decision within 30 working days of receipt of the completed application | 90% | 80% |  |

This quarter we received a significantly higher number of Student Experience grant applications compared to previous years. Coupled with a general increase in grant applications, this has resulted in a backlog and slightly longer processing times. We have recently increased resourcing and streamlined some processing and are confident that processing times will reduce.

Category 3: Research and Development Services and Facilities for Business and Industry

| Performance measure | 2018/19 Performance Standard | Progress to end of Q2 | Status |
|--|------------------------------|-----------------------|--|
| Total commercial revenue from Research and Technical Services (excluding commercial group) | \$8.9 million | \$3.9m |  |
| Total commercial revenue for the Commercial Group (excluding Research and Technical Services) | \$12.6 million | \$10.1m |  |
| Net Promoter Score from Research and Technical Services, services (excluding commercial group) | +60 | +43 |  |

| Performance measure | 2018/19 Performance Standard | 12 months to end Q2 FY 18/19 | Status |
|--|------------------------------|------------------------------|---|
| Number of New Zealand organisations with a research and technical service project this financial year (excluding commercial group) | 175 | 232 |  |

The work underway by the Research and Technical Services (RTS) Group to develop its new Strategy and reorganise its customer engagement process is expected to positively impact RTS' Net Promoter Score.

National Measurement Standards

| Performance measure | 2018/19 Performance Standard | Progress to end of Q2 | Status |
|---|------------------------------|---|---|
| Provision of national measurements and standards and related services in accordance with statutory obligations under section 4 of the Measurement Standards Act 1992, reported annually to the Minister and accepted | Achieved | In progress |  |
| All technical procedures related to the maintenance of national measurement standards (in accordance with the resolutions and recommendations of the Metre Convention) independently reviewed and validated, with all external review actions completed by 30 June 2018 | Achieved | In progress There were 103 technical procedures in validation on 1 Jan 2019 of which 7 were validated or revalidated during the three months from 1 Oct 2018 to 31 Dec |  |

| | | | |
|--|--|--|--|
| | | 2018. IANZ have not audited MSL during this three-month period. There are no outstanding corrective action requests from previous audits. | |
|--|--|--|--|

Research and Development Growth Grants

| Performance measure | 2018/19 Performance Standard | Progress to end of Q2 | Status |
|---|------------------------------|-----------------------|---|
| Percentage of businesses receiving a Growth Grant that maintain or increase eligible R&D expenditure over the grant period ² | 70% | 79% |  |

Targeted Business Research and Development Funding

| Performance measure | 2018/19 Performance Standard | 12 months to end Q2 FY 18/19 | Status |
|---|------------------------------|---------------------------------------|---|
| Percentage of businesses completing research and development project grants that positively rate Callaghan Innovation's assistance as valuable in their final reports | 80% | 98% |  |
| Percentage of surveyed recipients who would recommend the R&D Experience Grants to others ³ | 80% | Results will be available at year end |  |
| Percentage stating that grant enabled them to improve or accelerate their research and development | 90% | 97% |  |

Repayable Grants for Start-ups

| Performance measure | 2018/19 Performance Standard | Progress to end of Q2 | Status |
|---|------------------------------|---------------------------------------|---|
| Percentage of incubator contracts that are assessed as delivering as required (founder focused, and technology focused) ⁴ | 90% | Results will be available at year end |  |
| Percentage of surveyed start-ups who agree that they have gained business or commercialisation skills due to working with the incubator/accelerator | 60% | Results will be available at year end |  |

² This compares the average eligible quarterly R&D spend in the two years prior to the Growth Grant (the years used to enter the scheme) with the average eligible quarterly R&D spend during the Growth Grant period. Note: the wording about eligible R&D spend being maintained or increased has changed in the latest Ministerial direction. It was previously 'the business has maintained or increased non-government funded eligible R&D expenditure over the two years of the grant period as compared to the two years prior to the grant period'. It is currently 'has maintained or increased eligible R&D expenditure over the two years of the grant period as compared to the two years prior to the grant period'.

³ Surveyed recipients are companies that found a student and students who identified as working on the company projects.

⁴ Callaghan Innovation will be assessing the contracts as meeting the reporting requirements which were agreed between us and the incubators

Financial Performance

Financial Summary

Key Financial Indicators six months to 31 December 2018

| | Actual \$m | Budget \$m | Variance \$m |
|---|-----------------------------|-----------------------------|-------------------------------|
| Group Surplus after non-operating items | 2.8 | (2.3) | 5.1 |
| Revenue | 56.9 | 51.7 | 5.2 |
| Expenses | 54.6 | 54.4 | (0.2) |
| Interest income and non-operating items | 0.5 | 0.4 | 0.1 |
| Cash and deposits | 43.0 | 15.5 | 27.5 |

The operating surplus for the six months ended 31 December 2018 was \$2.4m compared to a budgeted operating loss of (\$2.7m). After including non-operating items consisting of share of loss from Associate (\$0.1m) and interest income \$0.5m the total Group Surplus for the three months period is \$2.8m.

Total revenue was higher than budget \$5.2m. The favourable revenue variance is due to favourable overseas commercial revenue \$3.6m and other income \$0.4m. Other income includes higher than budgeted insurance recoveries, \$0.3m. Overseas commercial revenue is favourable to budget due to work completed by Glycosyn for overseas clients including higher than planned Kifunensine overseas product sales.

The unfavourable expenditure variance of \$(0.2)m is due to Personnel \$(0.9)m mainly higher spend on contractors \$(1.2)m offset by salary savings \$0.9m and unbudgeted severance costs \$(0.4)m. Services and Contracts are unfavourable \$(1.5)m due to higher payments to external National Science Challenge and Biological Processing Alliance subcontractors \$(1.6)m (offset by higher Crown Contestable contracts and other revenue \$1.6m) and other costs \$1.6m favourable due to lower spend on strategic initiatives \$1.2m which will reverse as the year progresses.

The cash balance at 31 December totalled \$43.0m which is \$30.4m higher than budget. The higher cash balance figure is due receipt of capital appropriation \$21.1m (not yet budgeted, full year budget \$10.0m), better than plan operating cash flow \$3.5m and year to date under spend on investing activities \$5.8m.

All output classes at 31 December 2018 were ahead of the year to date 2019 budget.

Grants expenditure for the six months was \$124.2m. Full year (2019) planned grant expenditure is \$212.9m.

Interest income is \$0.1m ahead of budget reflecting higher than budgeted cash balances. Year to date share of associate company loss is \$(0.1)m.

Statement of Comprehensive Revenue and Expenses

For the six months ended 31 December 2018

| \$000 | Group | | | Full Year |
|---|---------------|----------------|--------------|----------------|
| Revenue | Actual | Budget | Variance | Budget |
| Crown operating: | | | | |
| Crown funding other | 125 | - | 125 | - |
| Other departmental transfers | 1,689 | 1,689 | - | 3,378 |
| Callaghan Innovation Funding | 15,000 | 15,000 | - | 30,000 |
| Strategic Investment | 9,261 | 9,261 | - | 18,523 |
| Business R&D Grants administration | 3,874 | 3,875 | (1) | 7,751 |
| National Measurement Standards | 3,535 | 3,535 | - | 7,069 |
| Total Crown operating | 33,484 | 33,360 | 124 | 66,721 |
| Crown contestable contracts and other | 8,170 | 6,556 | 1,614 | 12,487 |
| Commercial revenue | | | | |
| Domestic commercial | 3,991 | 4,517 | (526) | 9,062 |
| Overseas commercial | 10,074 | 6,443 | 3,631 | 12,463 |
| | 14,065 | 10,960 | 3,105 | 21,525 |
| Other income | 1,219 | 835 | 384 | 2,420 |
| Total revenue | 56,938 | 51,711 | 5,227 | 103,153 |
| Expenses | | | | |
| Personnel | 25,409 | 24,489 | (920) | 48,583 |
| Services and contracts | 14,115 | 12,648 | (1,467) | 24,792 |
| Other costs | 11,463 | 13,074 | 1,611 | 26,914 |
| Depreciation | 3,600 | 4,159 | 559 | 8,636 |
| Total expenses | 54,587 | 54,370 | (217) | 108,925 |
| Operating surplus / (deficit) | 2,351 | (2,659) | 5,010 | (5,772) |
| Finance Income | (507) | (390) | 117 | (765) |
| Non operating items | 52 | - | (52) | - |
| Net surplus / (deficit) | 2,806 | (2,269) | 5,075 | (5,007) |
| The following grants funding and expenditure occurred in the six months ended 31 December 2018: | | | | |
| | \$000 | | | |
| Grants funding from MBIE | 124,259 | | | |
| Grant expenditure | (124,259) | | | |
| Net impact | - | | | |

Statement of financial position

| As at 31 December 2018 | | | | |
|-----------------------------------|------------------|-----------------|---------------|------------------|
| \$000 | Actual | Group Budget | Variance | Full Year Budget |
| ASSETS | | | | |
| Current assets* | 155,857 | 97,238 | 58,619 | 93,793 |
| Non-current assets | | | | |
| Fixed Assets | 51,840 | 60,550 | (8,710) | 72,234 |
| Investment in associates | 9,275 | 8,871 | 404 | 8,871 |
| Total assets | 216,972 | 166,659 | 50,313 | 174,898 |
| Liabilities | | | | |
| Current liabilities* | (120,307) | (93,784) | 26,523 | (94,770) |
| Non current liabilities: | | | | |
| Non current employee entitlements | (309) | (433) | (124) | (423) |
| Total liabilities | (120,616) | (94,217) | 26,399 | (95,193) |
| Net assets | 96,356 | 72,442 | 23,914 | 79,705 |

Statement of equity

| As at 31 December 2018 | | | | |
|--------------------------------|---------------|---------------|---------------|------------------|
| \$(000) | Actual | Group Budget | Variance | Full Year Budget |
| Equity | | | | |
| Capital | 93,550 | 74,711 | 18,839 | 84,712 |
| Current year surplus (deficit) | 2,806 | (2,269) | 5,075 | (5,007) |
| Total equity | 96,356 | 72,442 | 23,914 | 79,705 |

* includes the following estimated grants liability at 31 December 2018:

| | |
|------------------------------|-----------|
| Current assets | |
| MBIE grants receivable | 104,995 |
| Current Liabilities | |
| Provision for grants payable | (104,995) |

Statement of cash flow

| For the six months ended 31 December 2018 | | | | |
|---|---------------|-----------------|---------------|------------------|
| \$000 | Actual | Group Budget | Variance | Full Year Budget |
| Net cash flows from: | | | | |
| Operating activities | 1,830 | (1,700) | 3,530 | 2,518 |
| Investing activities | (8,030) | (13,790) | 5,760 | (29,951) |
| Financing activities | 21,152 | - | 21,152 | 10,000 |
| Net increase / (decrease) | 14,952 | (15,490) | 30,442 | (17,433) |
| Add cash at start of period | 28,061 | 31,016 | (2,955) | 31,016 |
| Balance at end of period | 43,013 | 15,526 | 27,487 | 13,583 |

Reconciliation: statement of service performance to statement of comprehensive income

| For the six months ended 31 December 2018 | | | | |
|---|--------------|----------------|--------------|------------------|
| \$000 | Actual | Budget | Variance | Full Year Budget |
| Statement of service performance: | | | | |
| Output class: Building Business Innovation | 3,821 | 2,150 | 1,671 | 4,313 |
| Output class: Research and Development Services | 542 | (2,549) | 3,091 | (5,610) |
| Output class: Business Research and Development Contract Management | (792) | (1,883) | 1,091 | (3,779) |
| Output class: National measurement standards | 180 | 13 | 167 | 67 |
| Total crown operating funding | 3,751 | (2,269) | 6,020 | (5,009) |
| Non operating items | (945) | - | (945) | 2 |
| | 2,806 | (2,269) | 5,075 | (5,007) |

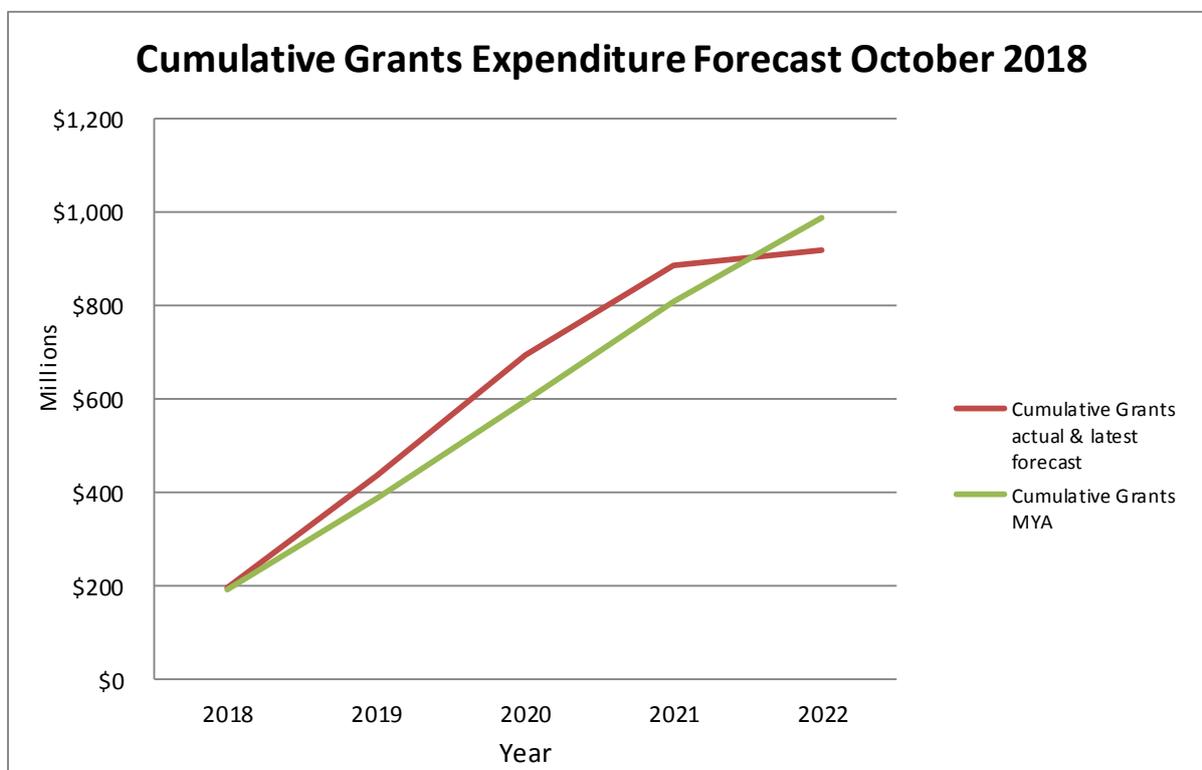
Appendices

Grants Forecast

Please note that due to system updates we are unable to provide an updated Grants Forecast for this quarter. We will provide updated figures in the report for the third quarter ending 31 March 2018.

Executive Summary

The Grants multi-year appropriation (MYA) announced at the May 2017 Budget was for \$990.4m over 5 years. This MYA runs from 1 July 2017 to 30 June 2022. The growth grants forecast has been updated to take into account the new tax incentive transition rules which states no new grants approved post 31 March 2019 and existing grants extended to 31 March 2021. As a result, we are forecasting a spend of \$921.0m (underspend of \$69.4m). For a further breakdown of these numbers see the Growth, and Project and Students Grants sections below.



Growth Grants

Multi-year appropriation period from 2017/18 to 2021/22

A multi-year appropriation (MYA) of \$822.9m (\$802.9m + \$20m for 2017/18 OBU adjustments) was established to fund R&D Growth Grants over the five-year period 2017/18 to 2021/22.

The demand for growth grants continues to be strong with nearly 100 new growth grants added at an average value of over \$1m each in the last 12 months. Looking forward the forecast for growth grants has been set at 10 new approvals per month with an average value of \$1.2m through to March 2019 after which no new growth grants can be approved.

This forecast takes into account the new tax incentive transition rules, and has forecasted 60 new Growth Grants between now and 31 March 2019. However, this may increase due to a growing

amount of applications being commenced. More certainty can be provided at the next quarterly report when applications have been submitted for review, and the applications for new Growth Grants have closed.

Table 1 shows forecast demand for R&D growth grants over the same five-year appropriation period is \$767.7m. This results in a forecasted underspend of \$55.1m.

Table 1: Forecast demand for R&D Growth Grants for the appropriation period

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | Total |
|--|--------------|--------------|--------------|--------------|------------|--------------|
| | \$m | \$m | \$m | \$m | \$m | \$m |
| Forecasts provided by the 339 firms with existing contracts ¹ | 172.3 | 152.4 | 91.3 | 28.4 | 0.0 | 444.4 |
| Renewal of existing Growth Grant contracts ² | 0.0 | 53.6 | 118.0 | 121.9 | 0.0 | 293.5 |
| Drop Out Factor 5% | 0.0 | (10.3) | (10.5) | (7.5) | 0.0 | (28.3) |
| Estimated Cost of 60 new applicants ³ | 0.0 | 15.3 | 24.5 | 18.3 | 0.0 | 58.1 |
| Total forecast demand for R&D Growth Grants | 172.3 | 211.0 | 223.4 | 161.1 | 0.0 | 767.7 |
| MYA before Cost Pressure Factored In | 145.7 | 145.6 | 145.6 | 145.6 | 145.6 | 728.2 |
| Cost Pressure - additional MYA | 8.2 | 15.7 | 23.6 | 27.2 | 0.0 | 74.6 |
| Updated MYA (as per Bud 2017) | 153.9 | 161.4 | 169.2 | 172.8 | 145.6 | 802.9 |
| OBU 2017 Adjustments | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 20.0 |
| Additional MYA carried over from 2016/17 | | | | | | 0.0 |
| Updated MYA | 158.9 | 166.4 | 174.2 | 177.8 | 145.6 | 822.9 |
| Underspend against updated MYA | (13.4) | (44.6) | (49.2) | 16.7 | 145.6 | 55.1 |

Notes

1. Based on approved and signed contracts to 30 September 2018.
2. Cost of Growth Grants renewals assumes that businesses maintain their current level of R&D expenditure.
3. Takes into account new tax incentive transition rules which states no new grants approved post 31 March 2019 and existing grants extended to 31 March 2021.

Project and Student Grants

Table 2: Forecast spending on R&D Project and R&D Student Grants for the appropriation period

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | Total |
|--|---|-------------|-------------|-------------|-------------|--------------|
| | Acts | Fcast | Fcast | Fcast | Fcast | |
| | \$m | \$m | \$m | \$m | \$m | \$m |
| Estimated amount already committed to in existing contracts | 24.6 | 23.0 | 3.3 | 0.7 | 0.0 | 51.6 |
| Estimated cost of new contracts | 0.0 | 7.0 | 29.3 | 32.3 | 33.1 | 101.6 |
| Total forecast spending on R&D Project and R&D Student Grants | 24.6 | 30.0 | 32.6 | 33.0 | 33.1 | 153.3 |
| Multi-year appropriation for R&D Project and R&D Student Grants | Total 2017/18 to 2021/22 (Updated MYA) | | | | | 167.5 |
| Potential Savings | | | | | | 14.2 |

A multi-year appropriation (MYA) of \$167.5m (\$187.5m less \$20m for 2017/18 OBU adjustments) was established to fund R&D Project and R&D Student Grants over the five-year period 2017/18 to 2021/22.

The latest forecast out until 2021/22 is indicative of a steady increase in demand for Project & Student grants in 2018/19 pushed by increased engagement with companies by the Callaghan Innovation Sector Teams. This is reflected in the table above which shows \$23.0m in project and student grants commitments for 2018/19 as at 30 September 2018.

It is estimated that about \$51.6m of R&D Project and R&D Student grants (31% of the \$167.5m multi-year appropriation) has been committed in existing contracts (see table 3 below). This is based on the latest payment data available.

Table 3: Estimated amount committed to existing contracts as at 30 September 2018

| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | Total |
|--------------------|-------------|-------------|------------|------------|------------|-------------|
| | Act | Fcast | Fcast | Fcast | Fcast | |
| | \$m | \$m | \$m | \$m | \$m | \$m |
| R&D Project Grants | 20.3 | 19.5 | 2.2 | 0.2 | - | 42.2 |
| R&D Student Grants | 4.3 | 3.4 | 1.1 | 0.5 | 0.0 | 9.4 |
| Total | 24.6 | 23.0 | 3.3 | 0.7 | 0.0 | 51.6 |

Measurement Standards Laboratory Report

Overview

- There was significant collaboration activity with the National Measurement Institute of Australia (NMIA) under the Australia New Zealand Science, Innovation and Research Cooperation Agreement. Activities included visits by the Chief Executive of NMIA to participate in joint strategic foresighting, and scientists from NMIA and MSL completing training and research projects in each other's laboratories.
- There was good media coverage of our event with the National Library and the Ministry for Culture and Heritage to commemorate the 150th anniversary of New Zealand Standard Time.
- MSL scientist Dr Chris Sutton won the Science and Technology category of the Wellingtonian of the Year Awards for his contribution to establishing New Zealand's metrology system and work on the Kibble Balance. Sadly, Dr Sutton passed away on 13 December.

Financial performance

- MSL is running a small surplus for the year mainly driven by an underspend in personnel costs due to vacancies, which will reduce later in the year due to other planned expenditure.

| Statement of revenue and expense | | | | |
|--|---------------|---------------|-----------------|------------------|
| For the six months ended 31 December 2018 | | | | |
| \$000 | Group | | | Full Year |
| Revenue | Actual | Budget | Variance | Budget |
| Crown operating: | | | | |
| Strategic Investment | 66 | 66 | - | 133 |
| National Measurement Standards | 3,534 | 3,534 | - | 7,069 |
| Total Crown operating | 3,600 | 3,600 | - | 7,202 |
| Commercial revenue | | | | |
| Domestic commercial | 277 | 281 | (4) | 562 |
| Overseas commercial | 49 | 26 | 23 | 53 |
| | 326 | 307 | 19 | 615 |
| Other income | 10 | 8 | 2 | 15 |
| Total revenue | 3,936 | 3,915 | 21 | 7,832 |
| Expenses | | | | |
| Personnel | 1,985 | 2,134 | 149 | 4,248 |
| Services and contracts | 149 | 184 | 35 | 569 |
| Other costs | 168 | 156 | (12) | 112 |
| Depreciation | 298 | 368 | 70 | 800 |
| Total expenses | 2,600 | 2,842 | 242 | 5,729 |
| Operating surplus | 1,336 | 1,073 | 263 | 2,103 |
| Indirect expenses | 1,110 | 994 | (116) | 1,903 |
| Net surplus | 226 | 79 | 379 | 200 |

Use of the MSL capital appropriation

- \$528,921 of capital expenditure has been approved against the full-year appropriation of \$1.125 million.

MSL's outputs

- 34 calibration jobs were delivered to customers.
- 8 IANZ assessments of external laboratories were carried out by MSL staff.
- 2819 downloads of MSL Technical Guides from www.measurement.govt.nz from 1 July to 31 December 2019.

International acceptance of New Zealand's Measurement System

- The Director of MSL represented New Zealand at the General Conference on Weights and Measures (CGPM) in Versailles, France, in the vote to redefine the International System of Units.
- Five MSL staff represented New Zealand's interests at the technical committees and General Assembly for the Asia Pacific Metrology Programme (APMP) in Singapore.
- MSL staff assisted the China, Thailand and Hong Kong National Metrology Institutes as technical expert reviewers for their international accreditation reassessment.

Actions to address resilience of MSL

- Construction of the building envelope for the new MSL building is underway. The next stage is to finalise the design for the building interior.
- The Gracefield fire has created some delays to the asbestos removal work in McKay Building. The Temperature Standards laboratory is now due to reopen in January 2019, and the Electricity, Time and Radiofrequency laboratories are likely to be closed until late February 2019.



Participants at our event to commemorate 150 Years of NZ Standard Time at the National Library.

Gracefield Innovation Quarter Report

Overview

Q2 2018/19 saw us continue to build on the momentum created in the first quarter, including:

- Approval from Government for the drawdown of \$20m for GIQ from the funds set aside for Callaghan Innovation when it was created.
- Preparation and submission of a budget bid for additional funding for GIQ.
- Construction of the new, purpose-built facility for the Measurement Standards Laboratory (MSL) began in October and design of the interior of the new building is nearly complete.
- GIQ Gateway Review with external knowledge experts took place in November. The focus this time was on: Feedback on GIQ PBC; Input into Shared Vision; Advice around Callaghan Innovation Customer Journey; Response to Operating Model for RTS; as well as progress made on implementing the six recommendations made by the Panel at the first Gateway in February 2018.
- Storyboard for a Shared Vision for GIQ was circulated among internal stakeholders and feedback was incorporated.
- Delivery Lead, Workplace Designer, 3D Renderer and Graphic Designer roles have been filled.
- Removal of asbestos and roof replacement works continued in some affected buildings.
- Design was completed for a new MSL Time Lab and main Café upgrade.

In December we experienced a fire in the A Block research building. All staff were safe and accounted for and the fire was extinguished the same day. As a precautionary measure, only essential staff were permitted on site while the situation was assessed, and the clean-up was started. Former occupants of the building have now been temporarily relocated elsewhere on site and options are being assessed before a next steps recommendation goes to the board for approval.

Our focus next quarter:

- Starting work on Programme Business Case for GIQ Strategic Programme, which was only briefly summarised in the first GIQ Programme Business Case.
- The adoption of Prince2 Project Management and MSP Programme Management Frameworks.
- Undergoing construction of the new MSL Time lab, Café improvements and KiwiStar Optics gantry crane and workshops.
- Design an extended workshop space for Kiwistar Optics.
- Deliver initial prioritised deferred maintenance projects.
- Recruiting for:
 - Additional project managers
 - A director on our board with property development experience.
 - A member of the executive with property development expertise and skills to take over the implementation of our Gracefield programme of work
- Deciding upon, getting approval for, and undertaking remedial work to restore workspace destroyed in the fire.

Financial Performance

- We are improving project forecasting processes and actively managing projects within available programme budgets.
- The initial funding of \$20m for the GIQ Tactical Estates Programme enables work to start – prioritised to deferred maintenance works.
- The GIQ programme currently has a pipeline of projects in initiation stage with project business cases in development.

A breakdown of progress and expenditure against the Emergency Response Works is available in the following page.

Section 9(2)(b)(ii)

Commentary:

Emergency Response Works

The Robertson roof stage 1 has been successfully complete with 23 roof sections replaced.

Replacement of the Robertson roof glass atriums has been deferred with focus on other priorities.

Construction is in progress for the new MSL building exterior with ground works completed.

Design for the internal fit-out of the new MSL building is continuing, due March-2019.

Design for improvements to the Hector building is complete.

Demolition work is still pending as planned.

Asbestos removal has been prioritised for the McKay building and is progressing well.

The additional site management costs for the accelerated asbestos work have been funded from baseline.

GIQ Tactical Estates Programme

Funding of \$20m (capital) from MBIE towards the programme was approved in December.

Each project within this programme is subject to a project business case approval - these are in progress.

Projects are being prioritised to deferred maintenance works (duty of care to improve existing workspaces)

This initial funding is also prioritised to an urgent capacity extension to support KiwiStar Optics. This design is in progress.