

Quarterly Report to the Minister of Research, Science and Innovation

For the second quarter ending 31 December 2019

Introduction

This report provides an update on performance for the second quarter of the 2019/20 financial year. Each quarterly report contains:

- progress against the performance measures in our Statement of Performance Expectations 1 July 2019 – 30 June 2020
- financial performance
- update on significant projects
- significant risks or issues that may impact performance.

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Our strategy

WE ARE NEW ZEALAND'S INNOVATION AGENCY

We **activate innovation** &
accelerate commercialisation for a
better New Zealand



SHOW THE FUTURE

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



FUEL DEMAND

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

ACTIVATE INNOVATION

HOW
WE
DO IT

ACCELERATE COMMERCIALISATION



CONNECT THE ECOSYSTEM

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



EMPOWER INNOVATORS

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

CallaghanInnovation
New Zealand's Innovation Agency

Strategic priorities for 2019/20

For 2019/20, year two of our current five-year strategic period, Callaghan Innovation's Executive Leadership Team has evolved our three transformation programmes (falling under a fifth strategic pillar 'Building the critical foundations') and targeted four strategic projects that evolve how we serve customers – all aligned to our strategic pillars:

Y1 **Y2** Y3 Y4 Y5

This is **YEAR TWO** of our five year strategy, when our foundation transformation programmes gather momentum and start to delivery new capability

We are choosing to focus on **SEVEN AREAS**

TRANSFORMATION PROGRAMMES

STRATEGIC PROJECTS
that evolve how we serve customers

- 1 Digital transformation
- 2 Tatai Whetu
- 3 Gracefield redevelopment
- 4 Deliver the RTS strategy
- 5 Embed our customer journey
- 6 Support successful RDTI rollout and wider funding review
- 7 Support our health and safety



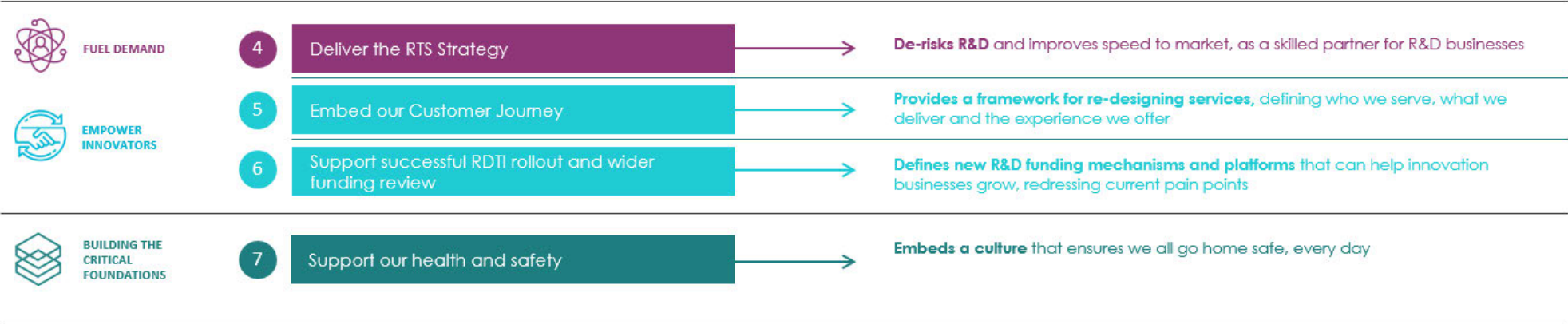
We are building an integrated 'portfolio' approach to drive collaboration and break down silos within these seven programmes/projects – this in turn identifies interdependencies, out of which emerge ways to better execute our overall strategy.

Our integrated portfolio approach to executing strategy

THREE TRANSFORMATION PROGRAMMES



FOUR STRATEGIC PROJECTS





Digital Transformation Programme – FY20 Plan

Through this programme we aim to create and enable digital experiences that strengthen collaboration, accessibility and innovation across our ecosystem; implement digital platforms, products and processes that are fit for purpose and increase staff collaboration, efficiency and confidence; and improve organisational agility through fit-for-purpose and scalable digital platforms and products.

Strategic priority	Committed Programme of work	FY20 Milestones	Long term measures of success (FY21 - 23)
G-Suite delivered	<ol style="list-style-type: none"> 1. Discovery, design, and Core IT implemented 2. Early adopters, Google guides and Business Change Managers (BCM's) trained and onboarded 3. Rest of organisation trained and onboarded 	<ol style="list-style-type: none"> 1. Discovery, design, and CoreIT delivered H1 2. Early adopters, Google Guides and BCM's trained and onboarded H1 3. Training and roll out to organisation completed in H2 	<ul style="list-style-type: none"> • 15% productivity gain • Reduced data storage costs by 15% • 15% reduction in travel spend
Network Optimisation	<ol style="list-style-type: none"> 1. Functional and user experience requirements defined 2. Network design including resilience options developed 3. Detailed business case developed 4. Network optimisation delivered by site 	<ol style="list-style-type: none"> 1. Requirements defined H1 2. Network design completed H1 3. Detailed business case delivered H1 4. Auckland & Chch delivered H1 5. Asteron House and GiQ delivered H2 	<ul style="list-style-type: none"> • Improved performance (particularly voice and video), reliability and security including BCP • Science productivity improvements due to fit for purpose science network and new science capabilities
Data architecture redesigned	<ol style="list-style-type: none"> 1. Functional and user experience requirements defined 2. Preliminary business case and RFI/RFP's completed 3. Preferred supplier identified and detailed business case developed 4. Supplier confirmed and platform built 5. Critical dataset migrated and reporting built based on priorities 	<ol style="list-style-type: none"> 1. Requirements defined H1 2. Preliminary business case and RFI/RFP completed H1 3. Preferred supplier identified and business case developed H2 4. Platform built H2 FY20 and H1 FY21 5. Agile delivery of benefits from H1/2 FY21 onwards with completion in H1 FY22 	<ul style="list-style-type: none"> • Trust in the accuracy of the data • The ability to easily add, share, integrate and aggregate data from different sources through the use of API's • Increased capabilities for data analysis and presentation
New Grants platform	<ol style="list-style-type: none"> 1. Functional and user experience requirements defined 2. RFI/RFP's completed 3. Preferred supplier identified and detailed business case developed 4. Supplier confirmed and implementation underway 5. Platform delivered 	<ol style="list-style-type: none"> 1. Requirements defined H1 2. RFI/RFP's completed H1 & 2 3. Preferred supplier identified and business case developed H2 4. Supplier confirmed and implementation underway H2 FY20 & H1 FY21 5. Platform delivered H2 FY21 	<ul style="list-style-type: none"> • Improved customer experience • Increased grants applications • Reduced manual administration – increasing value-add activities



Tātai Whetū Programme – FY20 Plan

The name Tātai Whetū is part of Callaghan Innovation's whakatauaākī (proverb) and as such holds great significance for our organisation. It translates to "reach for the stars" – our goal for providing exemplar customer service.

Through this programme, we will evolve how we operate, with a specific focus on developing our culture and processes to:

- increase our impact on the innovation ecosystem, to accelerate economic and industry transition to a fully digital economy, while improving the wellbeing of our people and the health of our planet
- be a world class government agency that is an exemplar of innovation for others to follow.

The evolution of our culture and processes through Tātai Whetū is integral to the success of our other transformation programmes.

Strategic priority	Committed Programme of work	FY20 Milestones	Long term measures of success (FY21 -23)
Tātai Whetū Programme	<ol style="list-style-type: none">1. Discovery phase July/October2. Identify phase November/December3. Define phase January/March4. Delivery phase March onwards	<ol style="list-style-type: none">1. Current state assessment2. Programme identified3. Engagement with organisation including investment logic mapping (ILM)4. Programme defined5. Business case approved and team ready for implementation6. Programme delivery begins	<ul style="list-style-type: none">• ILM has identified benefits and strategic responses for the programme, with KPIs assigned to measure the benefits. These will be further developed during the definition phase.



Gracefield (GIQ) Redevelopment Programme – FY20 Plan

Through this programme we will transform our Gracefield site into a national hub for innovation where businesses and innovation organisations can come together to drive New Zealand's economic development. We want to create an environment for the GIQ Community to do their best work, where it's easy for our customers to engage with us and to access the R&D support they need to grow.

Strategic priority	Committed Programme of work	FY20 Milestones	Long term measures of success (FY21 - 23)
Vision & long term strategy (gateway review)	<ol style="list-style-type: none"> 1. Continue to develop a shared vision across the ecosystem for the Programme 2. Complete a draft Strategic Assessment for the long term future of the site 3. Gateway Review November 2019 	<ol style="list-style-type: none"> 1. A clear vision is developed in partnership with our stakeholders 2. Identify potential site partners and develop partnership agreements for the future GIQ Community 3. Target Green-Amber for the result 	<ul style="list-style-type: none"> • Increased demand from innovators to engage with our services • Increased ongoing investment from Government and private stakeholders • Improvements and benefits from how we execute the programme
Auckland office refit completion	<ol style="list-style-type: none"> 1. Co-locate Auckland teams at Textile Centre 	<ol style="list-style-type: none"> 1. Complete design for offices 2 & 4 and innovation showcase. 2. Fully re-locate to the Textile centre 	<ul style="list-style-type: none"> • Increase RTS revenue • A vibrant and supportive innovation community developed • Reduce earthquake risk and prototype the operating model.
Tactical estates	<ol style="list-style-type: none"> 1. Progress Emergency Response Works 2. Business case developed for Tranche 5.1 3. Tranche 2 business case developed 4. Deliver new Time-Lab facilities 5. Establish core processes/ procedures for Programme Management Office. Complete audits as required. Ensure ready for Gateway Review November 2019. 	<ol style="list-style-type: none"> 1. MSL building fitout complete and occupied 2. Business case approved 3. Complete strategies (monitoring and control; Risk; Procurement; investment framework; quality and assurance and information strategy). 	<ul style="list-style-type: none"> • Reduce H&S risk from MacKay: meet duty of care to MSL staff • Increased commercialisation of science and technology • Stabilise existing staff/tenant accommodation • Improve tenant and staff safety and resilience across the site. • Increase execution excellence and independent assurance the programme is on track.
Change management	<ol style="list-style-type: none"> 1. Establish change authority for GIQ 2. Embedding MSP - Complete MSP training for GIQ 3. Evolve governance structure for GIQ programme 	<ol style="list-style-type: none"> 1. Establish benefits framework & align GIQ change & comms approaches 2. Teams trained and understand benefits of MSP methodology 3. Embed new GDGG, embed programme board and project boards. 	<ul style="list-style-type: none"> • Increase staff understanding of what's happening in the programme: smooth transition when delivering improved infrastructure • Increase success of programme delivery • Shore up delivery of programme initiatives - on time, on budget and to scope with key risks identified/mitigated

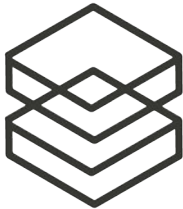
Strategic Projects – FY20 Plan

We have identified these four projects as the highest priorities for progressing our strategy in year 2. We have and will continue to identify areas of overlap among projects and initiatives – for example, embedding the Customer Journey is key to supporting the successful RDTI rollout and wider grants review, as well as the RTS services redesign.

Strategic priority	Committed Programme of work	GM	FY20 Milestones	Long term measures of success (FY21-23)
Deliver the RTS strategy	<ul style="list-style-type: none"> • New pricing model • Identify and size market opportunity • Redesign RTS services (scoping) 	Paul Linton	<ul style="list-style-type: none"> • New commercial structure implemented on pilot basis • New services scoped/designed by end of H2 	<ul style="list-style-type: none"> • \$3 return per \$1 invested • NPS of 55 • 50 frontier firms served per annum (TBC) • 80% of frontier firms receive other Callaghan services • 40% of time spent with NZ businesses
RDTI rollout & grants review	<ul style="list-style-type: none"> • RDTI establishment • Grants policy review • Grants platform selected • RDTI education/engagement campaign • Callaghan Innovation Internal Change • Grants Customer Experience and Process Improvement 	Vic Crone	<ul style="list-style-type: none"> • RDTI service and team set up • Funding review completed and agreed • Education campaign rolled out • Impact on CI staff and customers identified, action plan agreed • Customer experience and process remodelled 	<ul style="list-style-type: none"> • Growth in business R&D spend to 2% of GDP by 2027 • # of RDTI registrations • Grants NPS increases – target TBC
Embed Customer Journey	<ul style="list-style-type: none"> • Resource, embed and communicate • Customer triage and segmentation • Support RDTI and grants review • Support RTS services redesign 	Rosalie Nelson	<ul style="list-style-type: none"> • New customers assessed against triage framework • Retrofit plan for existing customers • Pilot for new account plan • # pilots for services re-design in FY21 	<ul style="list-style-type: none"> • Customer revenue & FTE growth is higher than counterfactual • Services NPS increase by 10% YoY
Health & Safety Project	<ul style="list-style-type: none"> • H&S critical risk • PCBU Framework • Callaghan Innovation as an importer, manufacturer, supplier, designer • Directors' due diligence obligations • Being well • Coordinated Information Management System (CIMS) 	Esther Livingston	<ul style="list-style-type: none"> • Each of these workstreams has an established project plan associated with delivery 	<ul style="list-style-type: none"> • Culture prioritises safety, health and wellbeing as core values • Operationalised safety partnerships • Safe production and work is our number one priority • Actively applying lessons learned • H&S environment is linked to our business performance

Q2 Progress report

Building the critical foundations



Foundation initiatives to drive our ambition.

Our milestones this quarter:

The integrated portfolio approach to our strategic initiatives prioritises our three transformation programmes as essential to successfully delivering our four priority projects, as well as identifying interdependencies within these three programmes.

As such we have created a dedicated enterprise project management office (ePMO) to track programme progress; ensure strategic alignment and consistency across various programmes and projects; embed a nimble, flexible standardised approach in the organisation; and provide guidance, governance, standardised process and project management, portfolio management best practise, tools and techniques.

Digital Transformation Programme

- ✓ Received Programme Mandate and business case approval.
- ✓ Stood up programme organisation and governance.
- ✓ Created a team of Change Agents for the organisation-wide implementation of Google G Suite.
- ✓ Received approval for the preliminary business case for the new data and integration platform.
- ✓ Conducted a procurement process to identify an organisation to map and benchmark our processes under the Tātai Whetū programme.

Tātai Whetū Programme

- ✓ Stood up a team of Change Agents from across all business areas and locations to champion the programme.
- ✓ Held well-attended engagement and feedback/input sessions hosted by Change Agents at all locations.
- ✓ Programme Mandate approved by ELT.
- ✓ Completed investment logic mapping workshops.

GIQ Programme

- ✓ Completed our third Treasury Gateway Review in November 2019.
- ✓ Four Indicative Business Cases were approved (demolition project; extensions for KiwiStar, MSL and Protoshop; roof replacement and lab refurbishment for GlycoSyn; maintenance and replacement of site HVAC).
- ✓ Embedded the full Governance Structure with the establishment of Programme and Project Boards to support the Sponsoring Group.

Health and safety

- ✓ Prioritised and confirmed work streams; appointed leads to four of these.
- ✓ Significantly progressed our understanding and knowledge of our business's critical health and safety risks.
- ✓ Significantly progressed the development of our PCBU framework with an emphasis on overlapping responsibilities.
- ✓ Developed the framework and processes to support Callaghan Innovation as an importer, designer, manufacturer and supplier.
- ✓ Established a framework to support Directors and Officers to meet their due diligence.

Our focus for the next quarter:

Digital Transformation Programme

- Embed the organisation and governance structure.
- Complete the organisation-wide implementation of the Google G Suite including multifactor authentication and mobile device management.
- Continue to develop our cyber security capabilities and maturity.
- Complete the network and digital services for the labs at our new Auckland Offices.
- Progress the procurement process and design for our new data and integration platform.
- Complete the indicative business case for the optimisation of our Wellington and Christchurch networks including the development of a separated science network.
- Initiate projects to replace our enterprise voice and identify management platforms.

Tātai Whetū Programme

- Define programme and develop business case.
- Develop KPIs for measuring success.

GIQ Programme

- Five procurement processes seeking consultants for design teams to contribute to detailed business cases for key projects.
- Complete fit-out of the new building for the Measurement Standards Laboratory, which will be followed by a six month decant project.
- Following relocation to the new Auckland office at the Textile Centre in July 2019, commence construction of the new laboratories.
- Issue an RFP to the market which will seek to establish a panel of consultants to assist the Strategic Services Programme.

Further information is provided in the GIQ Programme Report in the Appendices.

Health and safety

- Finalise our approach to being well and planning its implementation.
- Transition the H&S Critical Risk, PCBU and Callaghan Innovation as an importer, designer, manufacturer and supplier – from design and development into implementation.
- In conjunction with our GIQ team, plan for hazardous goods procurement and laboratory remediation projects as elements of larger projects within GIQ tranches 3 and 2, respectively.

Fuel demand



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

Our milestones this quarter:

RTS Strategy

- ✓ Completed kick-off with all project assets.
- ✓ Completed Definition and Design (Workstream #1): Define a new RTS customer base.
- ✓ Completed Definition and Design (Workstream #2): Optimise the RTS commercial value model.
- ✓ Completed Discovery and Initiate Workshop (Workstream #5): Develop an R&D Sharing Platform.

Our focus for the next quarter:

RTS Strategy

- Complete Phase one of RTS Commercial Value Model with a gateway review to assess RTS Payment options for both established and a newly identified customer base. This includes:
 - Evidence based on the relative performance of RTS as a whole, and segmentations to identify high-performing and under-performing segments, as well as high growth potential areas for RTS to focus on.
 - A financial model that can be used to run scenarios on future RTS states.
 - A preferred rate card option for Established customers.
- Definition, Design and Kick off Workstream #3: Design an Integrated Service Model and Workstream #5: Develop an R&D Sharing Platform
- Discover and Initiate Workshop (Workstream #6): Design a 'Future' Callaghan Innovation Showcase Hub (Lighthouse).

Empower innovators



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

Our milestones this quarter:

Implementation of the RDTI and Grants Review

- ✓ Promoted RDTI at conferences, seminars and workshops nationwide with attendance totalling more than 1,500 stakeholders including tax professionals, SMEs, startups, tech/founder incubators and government influencers.
- ✓ Commenced RDTI pilot with Inland Revenue to inform and improve customer experience with criteria and methodologies process.
- ✓ Hired two additional R&D Specialists as part of standing up RDTI Core Team.
- ✓ Completed analysis of R&D Grant policy settings in light of introduction of RDTI.
- ✓ Held three full-day workshops with Callaghan Innovation and MBIE staff to provide input and feedback on grants policy.

Customer Journey

- ✓ Held 15 Fit for Purpose workshops across the business, with 520 pieces of feedback received to shape workstreams:
 - Foundation – strengthen the current frameworks and model.
 - Customer Transformation – design new services and processes that will transform the customer experience on the innovation journey and improve the existing services that we are delivering.
 - Future – continuous improvement. V2.0 of the Customer Journey, design a strategy for what a future ecosystem might look like for customers.
- ✓ Held sessions with NZTE, MBIE and other key players in the ecosystem who fed back that the MVP is a tool that provides both insight and a framework to guide decision-making on how to design a suite of services and products to accelerate the commercialisation of the innovation ecosystem.

Our focus for the next quarter:

Implementation of the RDTI and Grants Review

- Continue the RDTI Education and Engagement Campaign, including launching online Hub and content-driven advertising directing traffic to Hub content, and ongoing execution of the Stakeholder Action Plan.
- Support Interagency RDTI KPMG Roadshow and host National Innovation Showcase in conjunction with Regional Business Partners.
- Implement RDTI pilot findings and feedback into processes to continuously improve customer experience.
- Continue to stand up RDTI Core Team with R&D Specialists.
- Further grants policy development to support funding review outcomes.

Customer Journey

- Create plan and business case to shift the Customer Journey project from a strategic 'design' project into an operational project that creates impact.
- Deliver improvements to the foundation piece (v1.1) and launch the first series of customer improvement experiments, targeting the onboarding and triage process.

Show the future



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

Case study: Beca's new approach to R&D pays off

In December we shared a customer story about how Beca – one of the largest employee-owned professional services consultancies in the Asia Pacific – is transforming its business from within, accelerating ideas that have emerged as market-leading innovations.

Aware that its customers were facing accelerating forces of change – environmental, technological and social – Beca realised it needed a faster way to innovate to serve their needs. Two years ago it created the New Ventures Accelerator (NVA), a lean seven-person unit based at Beca's Auckland headquarters.

Discussions with us led Beca to startup accelerator Creative HQ, which assisted in the early stages of developing the NVA. Working inside a large, century-old company in an industry that has a low tolerance for failure when hundreds of millions of dollars are on the line, the NVA was tasked with commercialising new services to help tackle the big problems Beca and its customers are facing.

The high demand for Beca's building management consulting work created a challenge: to scale up delivery to meet market demand. Building Scientist Dr Shaan Cory had a potential solution. The outcome was to automate part of the process, using Internet of Things (IoT) sensors to gather data from building management systems and energy meters, and use artificial intelligence (AI) to analyse performance and energy efficiency and set KPIs to track.

Previous innovation pathways for Beca employees with bright ideas involved developing their projects in their spare time before getting noticed and supported. That changed with the NVA. Now there is a dedicated venture team, funding to develop ideas, and even more empowerment to free up staff to work on new innovations - turning ideas into ventures. The approach has yielded new award-winning technologies and services that have been rolled into Beca's commercial offerings.

[Read more on our website](#)

Connect the ecosystem



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

Case study: Increasing Robotics and Automation Collaboration workshops

Off the back of a Robotics and Automation delegation we led and hosted in the US in June to build awareness and networks for early stage and scaling NZ Agritech businesses, delegates wanted to follow-up and collaborate on valuable connections made, for example to Western Growers and Farming 2050 (offshore capital) initiatives.

Our Agritech team saw this an ideal opportunity to deepen relationships and gain further value from the delegation. In November we hosted a series of post-delegation workshops with the aim to:

- identify opportunities globally that NZ-based Agritech companies could take advantage of
- grow our tech export revenue
- build stronger collaboration between NZ and global partners
- benefit from being an off-season testbed for innovative opportunities
- create cross-agency government support for focus and funding
- access offshore funding opportunities
- identify opportunities that provide clarity for our researchers and developers and create commercial pathways
- create more investment connection opportunities and access for commercialising companies to showcase their products globally
- attract and grow the required skills to support this tech sector.




In Auckland, delegates discussed key lessons (what worked, what didn't work and what we would do next year) and had a valuable session on challenges around commercialisation. Feedback from this session has been fed back into a stream of work with the Agritech Taskforce (representation from cross-government agencies including Callaghan, NZTE, MBIE, MPI).

The Tauranga workshop was attended by around 25 people from grower groups, tech industries, researchers and supporter groups to build regional awareness of initiatives underway in Robotics and Automation in Horticulture.

Recognising that it is often difficult to get people out of the regions, our team took this initiative to Hawke's Bay, trialling a new format (similar to what we do offshore) to better connect the ecosystem nationally. Our next workshop is planned for the end of March in Nelson/Blenheim, and we are looking at hosting additional workshops in Lincoln and Northland.





Performance measures

Callaghan Innovation operations: Multi-category appropriation

Performance measure	2018/19 Performance standard	2019/20 Performance standard	Progress to end Q2 FY 19/20	Status
Total number of organisations working with Callaghan Innovation on services this financial year	2600	2600	2962	
Net Promoter Score of all surveyed customers	+60	+60	+58	
Total number of organisations working with Callaghan Innovation and NZTE as a F700 customer	300	300	383	



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	2019/20 Performance standard	Progress to end Q2 FY 19/20	Status
Number of customers who worked with Callaghan Innovation in the following services: Events, International Missions and Programmes	1500	1200	1470	
Net Promoter Scores for Callaghan Innovation Services ¹ :		+30	+47	
• Events	+50			
• International missions	+50	+60	+67	
• Programmes	+50	+60	+58	



¹ Global expert discontinued as a service in 2018, no longer a performance measure.

Category 2: Business research and development contract management

Performance measure	2018/19 Performance standard	2019/20 Performance standard	Progress to end of Q2	Status
Number of new project and student grant applications received during the financial year	New measure	700	1026	
Percentage of project and student grant applications who have received a decision within 30 working days of receipt of the completed application ²	90%	90%	85%	

Last year we received significantly more Student Experience Grant and Project Grant applications than in previous years. However, at the end of the Q1 processing times began to reduce and processing times continued to improve.



Category 3: Research and development services and facilities for business and industry

Performance measure	2018/19 Performance standard	2019/20 Performance standard	Progress to end of Q2	Status
Net Promoter Score from Research and Technical Services, services	+60	+50	+37	
Number of customers with a Research and Technical Service project this financial year	175	240	260	


There is work underway to improve survey data collected from RTS customers that will provide more accurate measures of customer satisfaction. Additionally, the work underway by the RTS Group to implement its new strategy and reorganise its customer engagement process is expected to positively impact RTS' Net Promoter Score.

² Growth Grant scheme closed for applications in Q3 FY18/19, applications have been excluded from this performance measure.

National Measurement Standards





Performance measure	2019/20 Performance standard	Progress to end of Q2	Status
Provide 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	Underway	
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 2020	Achieved	There were 100 technical procedures in validation on 1 Jan 2020, of which 2 were validated or revalidated during the three months from 1 Oct 2019 to 31 Dec 2019. 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	2019/20 Performance standard	Progress to end Q2 FY 19/20	Status
Percentage of businesses receiving a Growth Grant that maintain or increase eligible R&D expenditure over the grant period ³	70%	70%	81%	

³ 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

Targeted Business Research and Development Funding

Performance measure	2018/19 Performance standard	2019/20 Performance standard	Progress to end of Q2	Status
Number of active Project Grants this financial year	New measure	570	603	
Net Promoter Score from Project Grants recipients	New measure	Baseline to be established	+77	N/A
Percentage of Project Grant recipients who perceived that the grant-funded project had an overall positive impact on their business	New measure	95%	98%	
Percentage of Project Grant recipients who perceived that the grant-funded project increased knowledge acquisition	New measure	85%	95%	
Percentage of Project Grant recipients who perceived that the grant-funded project improved business productivity	New measure	85%	86%	
Net Promoter Score from Experience Grants recipients	New measure	+70	Survey conducted annually, results reported Q4	N/A

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'.

Repayable grants for startups

Performance measure	2018/19 Performance standard	2019/20 Performance standard	Progress to end of Q2	Status
Number of customers that received a service from either an incubator or accelerator	New measure	180	139	A
Percentage of surveyed start-ups who agree that they have gained business or commercialisation skills due to working with the incubator/accelerator ⁴	New measure	Baseline to be established	N/A	N/A

Future-proofing New Zealand's Manufacturing Sector by Driving Industry 4.0 Uptake and Skills Development⁵

Performance measure	2018/19 Performance standard	2019/20 Performance standard	Progress to end of Q2	Status
Number of customers who received a service during the financial year	New measure	Baseline to be established	N/A	N/A
Net Promoter Score from customers who receive a service during the financial year	New measure	Baseline to be established	N/A	N/A

⁴ We are reviewing this measure as part of our incubator/accelerator refresh process.

⁵ Service category is new and still in RFP, no services delivered to date.

Financial performance

Financial summary

Key Financial Indicators to 31 December 2019

	Actual \$m	Budget \$m	Variance \$m
Parent Surplus after non-operating items	2.7	(1.1)	3.8
Revenue	53.7	54.9	(1.2)
Expenses	51.6	56.3	4.7
Interest income and non-operating items	0.6	0.3	0.3
Cash and deposits	41.3	28.5	12.8

The parent surplus for the six months ended 31 December 2019 of \$2.7m is \$3.8m up on budget, driven largely by staff vacancies and savings across several other key costs.

Crown revenue is in line with expectations, however strong commercial revenue in Glycosyn for the first half of the year (+\$1.1m) has been more than offset by shortfalls in both Kiwistar (\$1.5m), and Research and Technical Services (\$1.0m). These shortfalls have been managed through reduced project delivery costs and tactical delays in hiring new staff, however this is expected to be more difficult to achieve in the second half of the year.

The favourable expenditure variance of \$3.4m was driven by savings across a range of categories. The key drivers include:

- Personnel costs (\$1.6m) – several budgeted new roles in the first half of the year have not yet been filled, delivering significant salary savings. This has been partially offset by contractor spend to fill immediate skill gaps, and additional recruitment costs as the rate of hiring picks up.
- Services and contracts (\$1.2m) – the shortfall on commercial revenue is also generating savings on project delivery costs, with the largest contribution coming from deferral of costs on Kiwistar projects.
- Software licencing (\$0.5m) – driven by a deferral in the rollout of new applications.

Cash and term deposits remain well above budget, due to higher than expected opening cash balances (\$2.5m), changes in planned phasing of capital investment, and the YTD surplus of \$3.8m.

All output classes are favourable against budget.

YTD grants expenditure YTD is \$155.3m.

Preparation notes

All financials above are for the Callaghan Innovation Parent.

The Callaghan Innovation Parent includes all operations *excluding* our subsidiary and associate companies New Zealand Food Innovation (South Island) Limited, New Zealand Food Innovation Auckland Limited, and New Zealand Food Innovation (Waikato) Limited.

The Callaghan Innovation Group includes all operations *including* our subsidiary and associate companies New Zealand Food Innovation (South Island) Limited, New Zealand Food Innovation Auckland Limited, and New Zealand Food Innovation (Waikato) Limited.

Detailed financial results

All financials below are for the Callaghan Innovation Parent. Subsidiary results will be included in these financial results from later in the year. It also includes a gross increase for the SftI National Science activity funding and activity which has had a net nil impact on the Group's financial result YTD and is not reflected in the commentary above.

Statement of revenue and expense

Callaghan Innovation Parent

For the 6 months ended 31 December 2019

	Actual	Budget	Variance	Full Year Budget
	\$k	\$k	\$k	\$k
Revenue				
Crown operating				
Crown Funding - Other	-	-	-	1,413
Callaghan Innovation Funding	20,400	20,400	-	40,800
Strategic Investment	9,261	9,261	-	18,523
Business R&D Grants administration	3,875	3,875	(0)	7,751
National Measurement Standards	3,816	3,816	-	7,632
Programme Funding	1,689	1,689	-	3,378
Food Innovation Network	2,350	2,350	-	4,700
Total Crown operating	41,391	41,392	(0)	84,197
Crown contestable contracts and other	4,305	9,121	(4,816)	18,250
Commercial revenue				
Domestic Commercial	3,858	5,283	(1,425)	10,212
Overseas Commercial	7,033	6,874	159	13,352
Total Commercial revenue	10,891	12,157	(1,266)	23,563
Other Income	1,428	1,316	112	2,732
Total revenue	58,015	63,986	(5,971)	128,742
Expenses				
Personnel	27,564	29,185	1,621	57,578
Services and Contracts	10,577	15,442	4,866	30,697
Other costs	13,928	16,428	2,500	34,138
Depreciation	3,901	4,410	509	9,361
Total expenses	55,969	65,465	9,496	131,773
Operating surplus / (deficit)	2,045	(1,480)	3,525	(3,031)
Interest Income	612	316	296	581
Non Operating Income	-	-	-	-
Surplus / (Loss)	2,657	(1,164)	3,821	(2,450)

The following grants funding and expenditure occurred in the 6 months ended 31 December 2019:

	\$k
Grants funding from MBIE	155,345
Grants expenditure	<u>(155,345)</u>
Net Impact	0

Statement of financial position

As at 31 December 2019

	Actual	Budget	Variance		Full Year Budget
	\$k	\$k	\$k		\$k
Assets					
Current assets*	195,167	140,335	54,832		165,983
Non-current assets					
Fixed Assets	61,199	65,554	(4,356)		79,076
Investment in associates	9,529	9,373	156		9,373
Total assets	265,894	215,262	50,632		254,432
Liabilities					
Current liabilities*	(166,700)	(123,776)	(42,924)		(122,794)
Non-current liabilities					
Non-current employee entitlements	(328)	(299)	(29)		(299)
Total liabilities	(167,027)	(124,075)	(42,952)		(123,093)
Net assets	98,867	91,187	7,680		131,338

Statement of equity

As at 31 December 2019

	Actual	Budget	Variance		Full Year Budget
	\$k	\$k	\$k		\$k
Equity					
Capital	96,210	92,777	3,433		133,788
Current year surplus / (deficit)	2,657	(1,590)	4,247		(2,450)
Total equity	98,867	91,187	7,680		131,338

* includes the following estimated grants liability at 31 December 2019:

\$k

Current assets

MBIE grants receivable 145,036

Current liabilities

Provision for grants payable (145,036)

Statement of cashflow

For the 6 months ended 31 December 2019

	Actual	Budget	Variance		Full Year Budget
	\$k	\$k	\$k		\$k
Net cash flows from:					
Operating activities	12,571	3,212	9,358		6,545
Investing activities	(10,699)	(13,226)	2,527		(31,698)
Financing activities	-	-	-		41,070
Net increase / (decrease)	1,872	(10,014)	11,885		15,917
Add cash at start of period	39,435	36,995	2,440		36,995
Balance at end of period	41,307	26,982	14,325		52,912

Appendices

R&D Grants Forecast

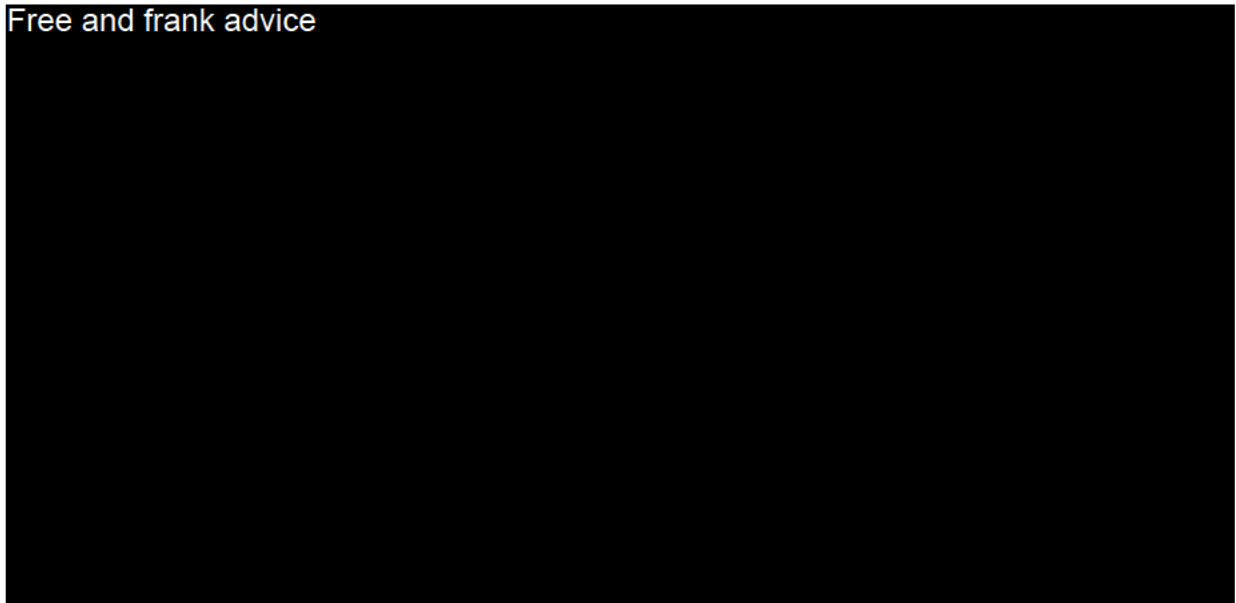
Free and frank advice



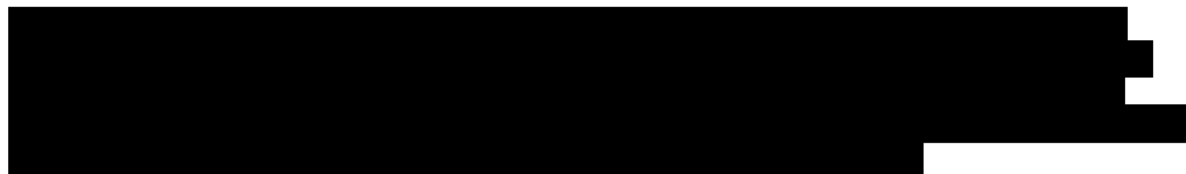
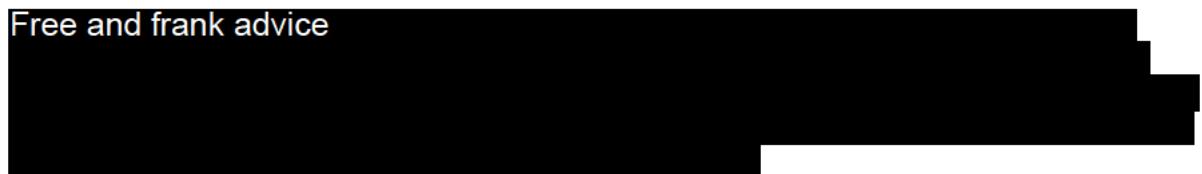
Free and frank advice




Free and frank advice



Free and frank advice



Free and frank advice



Repayable grants forecast

Free and frank advice



Measurement Standards Laboratory Report

Overview

- The Chief Metrologist was elected to the Executive Committee of the Asia Pacific Metrology Programme (APMP), which is the regional governing body for mutual recognition of New Zealand's measurement capabilities.
- Callaghan Innovation signed a Memorandum of Understanding with the Dodd Walls Centre for Photonic and Quantum Technologies, which will facilitate greater collaboration on metrology and training the next generation of innovators.

Use of MSL capital appropriation

- \$1.27 million of capital expenditure has been approved against the full-year appropriation of \$3.44 million.
- In addition, preliminary business cases (stage 1) have been approved for major capital equipment items above \$100K and we expect to spend the entire full-year appropriation by 30 June 2020.

MSL's outputs

- 39 calibration jobs delivered to customers.
- 10 IANZ assessments of external laboratories carried out by MSL staff.
- 2 Proficiency Tests delivered.
- 64 Enquiries to info@measurement.govt.nz
- 1090 downloads of resources (e.g. technical guides, software) from measurement.govt.nz
- Measurement standards recalibrated for roundness (Length Standards), pipettes (Mass Standards) and DC voltage (Electrical Standards).

International acceptance of New Zealand's measurement system

- MSL staff represented New Zealand at the Asia Pacific Metrology Programme (APMP) Technical Meetings in Sydney, Australia.
- An MSL staff member acted as an expert peer reviewer for Hong Kong's international audit of their length standards.
- MSL also represented New Zealand at the NMI Directors' Meetings at the BIPM, Paris, and the Kibble Balance Technical Working Group meetings in the United Kingdom.
- MSL staff members also visited the National Measurement Institute of Australia to progress research collaborations on Light Standards and Temperature Standards between our two economies.

Actions to address MSL resilience

- Three new technical staff started work with MSL this quarter to cover staff retirements and provide back up for key technical areas in Electricity, Time and Temperature/Humidity Standards.
- Three student interns and one PhD student also began research projects with MSL this quarter, including automating calibration functions.
- The construction of the new MSL building interior is progressing well and was 83% complete as at 31 December 2019. Project planning documents have been drafted for the move to the new building and MBIE officials visited in December to discuss progress.
- Construction has begun on the new MSL Time and Radiofrequency Laboratory in the Robertson Building café.

Financial performance

Statement of revenue and expense

For the 6 months ended 31 December 2019

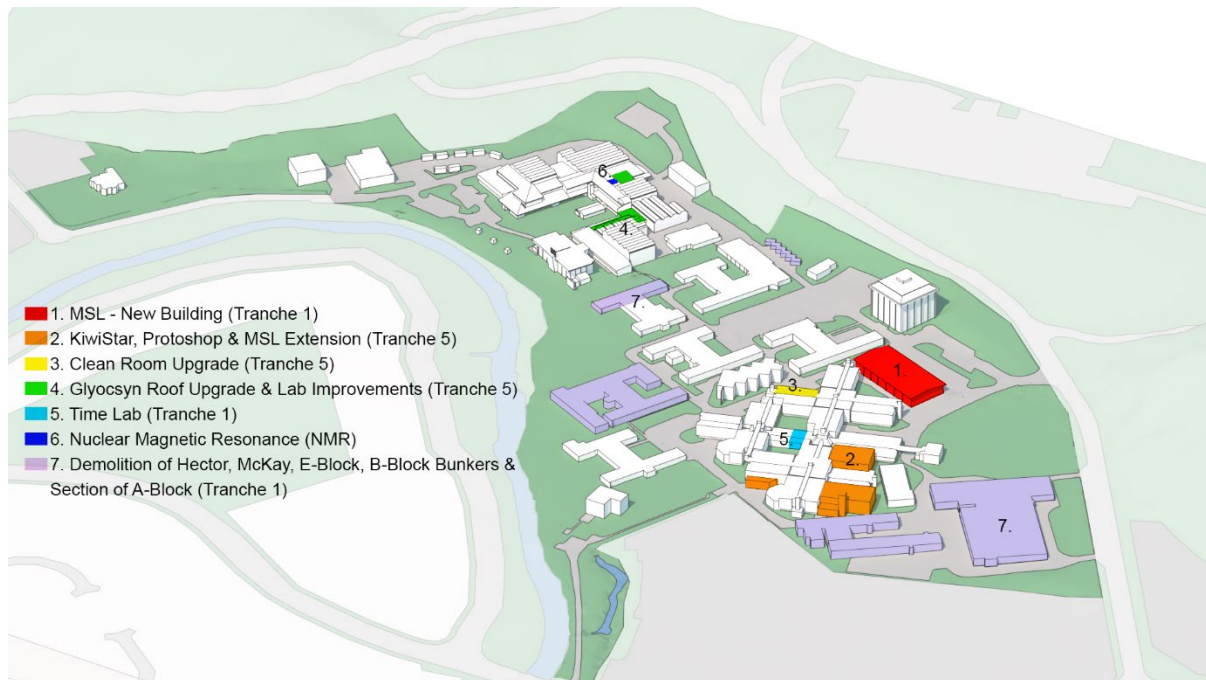
	Dec-19 YTD			Full Year
	Actual	Budget	Variance	Budget
Revenue	\$k	\$k	\$k	\$k
National Measurement Standards	3,816	3,816	(0)	7,632
Strategic Investment	67	67	-	133
Total Crown Revenue	3,883	3,883	(0)	7,765
Domestic Commercial	333	291	42	582
Overseas Commercial	71	14	58	67
Total Commercial Revenue	404	305	100	649
Other Income	11	8	4	15
Total Revenue	4,298	4,195	103	8,429
Expenses				
Personnel	2,238	2,331	92	4,582
Services and Contracts	38	73	34	140
Other Costs	549	339	(210)	658
Depreciation	381	422	41	956
Total Expenses	3,206	3,165	(42)	6,336
Contribution Margin	1,092	1,030	62	2,094
Indirect Expenses	1,187	1,120	(67)	2,221
EBIT	(95)	(90)	(5)	(128)

Overall MSL is running close to budget with commercial revenue slightly ahead this quarter.



The Director of the French National Metrology Institute, Mr Thomas Grenon, with MSL Director, Dr Fleur Francois, visiting Gracefield on 26 November 2019.

Gracefield Innovation Quarter (GIQ) Programme



Gracefield site map with key GIQ Programme project sites identified.

Our highlights this quarter

Programme Organisation

- Completed our third Treasury Gateway Review in November 2019. The GIQ Programme was assessed against Review 0 (Strategic Assessment) for the Strategic Services Programme and Review 3 (Investment Decision) for the Tactical Estates Programme. The Report is currently being considered by the GIQ Programme SRO.
- The Programme Management Office (PMO) for the GIQ Programme transitioned to an Enterprise Programme Management Office (ePMO) to provide centralised support to Callaghan Innovation's three transformation Programmes, Strategic Projects and core projects.
- Implemented the full Governance Structure with the establishment of Programme and Project Boards to support the Sponsoring Group, the Gracefield Development Governance Group (GDGG).
- Recruited critical roles in GIQ Programme team, including:
 - Asset Manager responsible for planning and implementing robust asset management plans and providing asset advice on the ongoing and future requirements of the site.
 - GIQ Change Specialist to lead the Change Authority for the GIQ programme and maximise the outcomes of the site's transformation.
 - Geospatial Designer responsible for providing accurate digital representation of geospatial mapping of asset and levels of service, civil design and below ground infrastructure assets.

Tactical Estates Continuity Programme

- Fitout of the new building for the Measurement Standards Laboratory (MSL) is progressing with services installation currently underway. The fitout is expected to run through to March 2020 and will be followed by a 12 month move in project. It is critical that we maintain the traceability of our standards as we transition into the new

building. We have started planning the building opening to be in May 2020 to coincide with World Metrology Day.

- An Indicative Business Case has been approved for the demolition of Hector and MacKay buildings, E Block, B Block bunkers and a section of A Block, and we are now undertaking detailed planning for this work.
- Building Consent granted and started construction of a new laboratory for the MSL's Time and Radio Frequency teams which is forecast to be completed by July 2020.
- Following the approval of the Indicative Business Case for projects for KiwiStar, MSL and Protoshop to ensure our commercial businesses have appropriate workspaces, we have commenced an open competitive tender to procure a design team to commence preliminary through to detailed design work.
- An Indicative Business Case has been approved to support GlycoSyn with a project to replace a leaking roof at the end of its life and remedial work to laboratories.
- As part of the Deferred Maintenance Tranche, which seeks to stabilise and improve safety and resilience across the site, we have completed a review of existing Heating Ventilation and Air-Conditioning (HVAC) services condition documentation and identified systems and components to be replaced or retained. An Indicative Business Case has been approved to maintain and replace HVAC across the site.
- Construction commenced on a Facilities project to fit out a room to meet the requirements of the new Nuclear Magnetic Resonance Suite purchased. The room is located within the processing building, which is a strategic asset for the site, and therefore investment into this building has long term benefits. Practical completion is forecast for February 2020.
- We have progressed work to build and fitout the new laboratories at the Textile Centre in Auckland. Resource and building consents were submitted in December.
- Started development of the Asset Management Strategy to define and align Callaghan Innovation's asset management approach with best practice (ISO 55000). This will ensure important business decisions, such as the prioritisation and approval of asset investments, and preventative maintenance scheduling, are based on sound, robust and transparent principles.

Strategic Services Programme

- We have focused on building strong relationships with key partner Victoria University of Wellington, including discussions to identify a preferred solution for the Ferrier Research Institute and Robinson Research Institute in the medium-long term.
- The Chief Executive has met with potential partners as part of work to create a shared vision for GIQ. This includes Victoria University of Wellington, Hutt City Council, Wellington NZ, GNS Science, and ESR.
- Commenced planning and review of evidence as part of work to complete a Strategic Assessment this year.

Our focus next quarter

Programme Organisation

- Recruitment will continue for key positions, including:
 - Delivery Lead to ensure successful delivery of the capital works projects and lead critical infrastructure projects.
 - Additional Project Managers to manage the delivery of projects for the Tactical Estates Continuity Programme.
 - Revit Specialist responsible for providing accurate digital representation of architectural, structural and building services assets.
- Consider and implement the recommendations from the Treasury Gateway Review.
- Embed the GIQ Programme Change Framework within Callaghan Innovation and align with programme communications.

Tactical Estates Continuity Programme

- External design team procured for projects to support the growth of our commercial businesses, KiwiStar, MSL and Protoshop. Preliminary design work is expected to be completed in March 2020.
- External design team procured for the GlycoSyn re-roofing work and laboratory refurbishment. Construction is expected to start in March 2020.
- Commence a procurement process for consultants to contribute to the Detailed Business Case for the demolition of Hector and MacKay buildings, E Block, B Block bunkers and a section of A Block and engage a contractor for the Demolition works, which is expected to commence in mid-2020.
- Commence a procurement process for consultants to contribute to the Detailed Business Case for the HVAC maintenance and replacement project.
- Appoint a contractor and commence construction the refurbishment of the microfabrication cleanroom facility, which was closed last year due to health and safety concerns.
- Procurement of contractors to design and build the new laboratories at the Textile Centre in Auckland. Construction is scheduled to commence around March 2020.
- Deliver an Asset Management Policy for Callaghan Innovation and an Asset Criticality Framework. This will feed into the Asset Management Strategy and will enable Asset Management Plans to be prioritised in Q4.

Strategic Services Programme

- We recognise the need for specialist skills and additional resource to develop the Strategic Services Programme. During Q3 of FY20 we intend to issue an RFP to the market which will seek to establish a panel of consultants who would be available to assist the Programme Team with future work on the Strategic Services Programme.
- Finalising resource planning for the GIQ Programme team to progress the Strategic Assessment.
- We are supporting an event at Gracefield on 11 February to celebrate International Day of Women and Girls in Science, with local school children to visit Gracefield and learn with our women scientists, engineers and researchers.

Financial performance

- The Tactical Estates Continuity Programme is a significant capital programme. Capital expenditure incurred in Q2 **Negotiations**
- The following table outlines capital expenditure to 31 December 2019:

Negotiations

- Tranche 1 Emergency Response Works continued to be the main source of expenditure during the quarter. This was driven by the fitout work for the new MSL

building, and **Negotiations** is forecast to be spent on this during the third quarter. By the end of the 2019/20 financial year, capital expenditure on Tranche 1 will have substantially finished.

- Tranche 5 Business Growth Workspaces is the next tranche where expenditure will begin to pick up. Expenditure within this tranche will be driven by design work on the expanded business workspaces for KiwiStar, MSL and Protoshop, GlycoSyn re-roofing and laboratory refurbishment, and microfabrication cleanroom refurbishment.
- The programme is also supported by funding for operating expenditure, which is outlined in the table below for 2019/20:

Negotiations

- Funding of **Negotiations**
The intention is to go out to market for this work in Q3 of this financial year.
- Funding for the GIQ Programme Office covers the cost of establishing the programme management framework, preparing for the recent Gateway review, and the ongoing personnel and overhead costs associated with delivering a significant capital works programme.
- At this early stage of the programme, no significant financial risks have been identified. Notwithstanding, due to the size of the programme, the bespoke nature of some works, and the particular challenges of the site (including the extensive use of asbestos), the potential for financial risks to emerge cannot be discounted.