

Inland Revenue

Independent Technical Assurance Business Transformation Programme TQA 12 Final v1.0

23 May 2022

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Inland Revenue Technical Quality Assurance TQA12 May 2022

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1 Executive Summary

This report presents the findings from the KPMG Technical Quality Assurance Review 12 (TQA12) of the Inland Revenue Business Transformation Programme (BT Programme).

The objective of this review is to provide independent assurance to the Programme Sponsor on decommissioning activities of heritage services, systems and applications, considering the perspectives of relevant stakeholders, and external monitoring agencies

1.1 Background to our review

Inland Revenue (IR) has been working to meet the Government's expectations of a Public Sector that delivers smarter, modern services for less, and where applicable, is aligned to the Government's Strategy and Action Plan and to meet IR's own strategic ambition of being a government organisation that delivers world class services to its customers and stakeholders. During 2011, IR began a journey to reduce the risk of its aging revenue system through the Business Transformation Programme ('BT'). Prior releases of BT went live in accordance with the planned deployment approach.

The final major release of the START functionality, which successfully went live in 2021 resulted in all of BT's customer-facing changes having now been completed. The business functionality for all core tax and social policy products and services are now in START, and the successful completion of this major milestone in turn enabled the final decommissioning of the legacy FIRST system.

In addition to transitioning the business functionality from FIRST, the Technology Landscape Optimisation Programme ('TLO') has been conducted in parallel, in order to ensure that IR's technical environments are simplified, enduring, suitable for IR, and sustainable for Technology Operations to operate when the BT Programme is closed in June. The associated work includes decommissioning all non-enduring ('heritage') services, systems and applications (including FIRST) and all satellite processes and functions. This, in turn, has enabled IR to rationalise and optimise the I.T. infrastructure, including IR's ultimate exit from the Unisys data-centre.

1.2 Summary terms of reference

To support the delivery of the Programme, IR has engaged KPMG to provide Independent Quality Assurance (IQA) and Technical Quality Assurance (TQA) across the Programme. This review follows prior KPMG reviews through the earlier Programme stages, and documents the results of the twelfth TQA cycle.

The detailed approach and scope are set out at Appendices 5.1 and 5.2, and the terms of reference for this review were confirmed in the Consultancy Services Order agreed between IR and KPMG in March 2022. Our terms of reference focus on the TQA, and specifically the work-in-progress on decommissioning activities prior to the final BT programme closure.



1.3 Overview of our assessment

We have been asked to report on the decommissioning of heritage systems, and specifically:

- whether IR has executed the Stage 4 decommissioning and archiving plan or is well placed to do so, and
- to confirm that any commercial contracts for heritage systems has, or will be discontinued, in line with the decommissioning plan.

With respect to the decommissioning and archiving plan, we are pleased to report that the prior high standard of the associated project management processes and controls has continued to be applied through these activities. The Governance has been well-integrated and informed, the associated change management activity has been effective, and IR stakeholders are well-informed with respect to any hand-offs from the TLO Programme. At the time of our fieldwork we noted that the final systems decommissioning has concluded, and this enables the handover to Unisys to take place as planned on 18th April. The responsibility then vests with Unisys to decommission the data-centre. At this time there is still some small, residual risk of an unknown emerging dependency; however, given the systematic and rigorous planning that has been carried out this risk is, in our view, very low and well-managed.

With respect to the commercial contracts for heritage systems, it is apparent that these activities have been planned and managed diligently, in order to optimise IR's commercial position while preparing to exit the Unisys data-centre. This has required significant management and stakeholder-engagement (both within and outside IR) to ensure that the requisite data-retention and disposal conditions have been met, and that the associated disposal is conducted in a way that is secure, ethical and sustainable. Our review of these activities confirms that they have been conducted and documented to a high standard, and we are comfortable that the commercial arrangements have been, or will be, discontinued or transitioned as appropriate, and in line with the decommissioning plan.

Taking a broader perspective (as this is our final review of the TLO workstreams in the context of IR's BT Programme) we should also note the scale and significance of this achievement. Having conducted multiple reviews of the TLO Programme since its inception in 2017, we have consistently reported on the high quality of the Programme's planning and execution. Furthermore, given the highly technical and complex nature of the work being undertaken 'behind the scenes', it would be easy to underestimate the significance of the TLO Programme's contribution to the broader BT objectives and benefits. In our experience, technical debt is often overlooked as a significant factor in 'Transformation' initiatives, and can easily erode benefits unless actively managed. This Programme has, in our view, done an exemplary job of enabling IR to exit the Unisys data-centre, while also aggressively reducing technical debt, in order to deliver a sustainable and cost-effective technology architecture to support IR in the future.

We commend IR's management of the TLO Programme for this successful milestone in preparation for exiting the Unisys data-centre. Given also the broader Government strategy to migrate towards outsourced cloud-services, many other agencies are, or will be, facing into similar challenges, and we consider that many could benefit from the approaches and experience of the TLO Programme. We would recommend that IR (and the Central Agencies) should take every opportunity to ensure that this knowledge is captured and leveraged across the sector.



2 Technical Quality Assurance Review 12 (TQA12)

Manager pro). These are, in our assessment, inevitable given the nature of the work being conducted, and the team have demonstrated agility in responding with effective mitigations (in this case, by rapidly migrating the

Otherwise we noted that progress had continued largely on-schedule since our prior review, including 33

applications being decommissioned as planned in March (including a major milestone with the

decommissioning of the legacy Enterprise Data Warehouse ('EDW').

2.1 Status of the Stage 4 decommissioning and archiving plan

Assessment	Recommendations	Rating
Conclusion: The BT Stage 4 decommissioning and archiving plan is likely to conclude on schedule	Recommendation TQA12/1	G
Since our prior review (IQA12 / TQA11, December 2021). The Decommissioning and Archiving ('D&A') activities (as a part of the TLO Programme) have continued with activities to decommission the heritage systems, archive any data that is to be retained, and then remove the systems, databases and underlying infrastructure for appropriate, secure and ethical disposal.	IR (and the Central Agencies) should take every opportunity to ensure that this knowledge gained (methodology, experience and lessons learned) from the TLO	G
To understand the current status of the Stage 4 decommissioning and archiving plan, we have reviewed the following controls:	Programme, are captured and leveraged across the sector.	
Schedule management and reporting		
We noted that the recent D&A activity has generally continued in accordance with the overall schedule. The Programme did encounter a substantive issue, however with the planned go live of Tranche 1 of the intended Identity Governance and Access (IGA) solution (Oneldentity Manager) late in 2021. This was significant, as it posed a risk to the critical-path, and prompted a detailed retrospective review of the delivery process and associated lessons-learned. This resulted in a pivot to a re-prioritised implementation into two waves ('Implementation 1' and 'Implementation 2'), where the first focussed solely on decommissioning of heritage Identity Management services in Unisys, in order to support the data-centre exit, and sustain the intended decommissioning date. This had the effect of increasing the D&A risk-profile through recent months; however, concurrent with our review we were pleased to note that 'Implementation 1' had successfully gone live, so that risk is now mitigated. There have also been a number of other 'unplanned dependencies' uncovered as work has progressed, including discovery of a recent issue with an undocumented application (Password		



application to an alternate 'Cloud' platform).

The substantive residual work included replacement of IR's

- Print Services solution, which migrates from legacy technology and introduces a new supplier and services to provides IR with greater flexibility. There had been some COVID-related delays to this workstream.
- Remote Access solution, allowing the contact centre to work remotely, and also FAST to provide offshore support, by introducing a new managed service.

At the time of our review, e were pleased to note that these had been concluded and therefore that all customer-facing legacy functionality had now been decommissioned. This leaves the final removal of back-end systems currently in-hand, in order that the network connections and supporting services can be shut down, and the process of dismantling and disposing of the infrastructure is intended to start. The BT programme has also transferred responsibility for management of the non-production environments to Technology Services.

Governance

The Decommissioning and Archiving ('D&A') activities have continued to operate within the TLO Programme and the established BT Governance structure. Given the technical nature of the Programme, the TLO Governance group has supported the PGC, and stakeholders that we spoke with continued to express a high level of satisfaction with the quality, reliability and transparency of the information on the D&A work, and the interaction with the Governance groups, and consequently confidence that the D&A objectives would be achieved.

Given that the BT programme will close down by 30th June, we understand that ongoing governance of any subsequent activities will be progressed under the post-BT governance model including technology delivery. Consequently, the TLO team is currently working with technology services to transition oversight of any ongoing work, including work assigned to Enterprise Services PD&D to progress.

Risk Management

Now that the final major release of START has been handed over to BAU operations on 31 January 2022 as planned, successfully ending the period of core systems' co-existence, IR's transition-related residual risk is relatively low.

That said, the over-arching BT risk-management processes have continued to be applied in the Decommissioning & Archiving activity, and it is evident that the TLO Programme Management team have continued to exercise diligent risk-management in closing out the residual activity. This is prudent as, in our experience, failing to manage risk adequately in the close-out Programme stage is a common cause of benefits erosion. In particular, failure to secure the target end-date often leads to cost overruns. Furthermore, the risk of carrying forward technical debt is often overlooked as a significant factor in 'Transformation' initiatives, and can easily erode benefits unless actively managed.



Our assessment is that the TLO Programme has done an exemplary job of managing these risks by focussing on securing the intended outcomes, to allow IR to exit the UDC on the target date, and deliver a sustainable and cost-effective technology architecture support IR in the future.

Stakeholder Management

Our review of D&A documentation indicates that IR's executive management, and other stakeholders, have been well-informed, and the associated change-management and transition activity has been highly effective. Furthermore, IR stakeholders whom we interviewed all confirmed that they are well-informed about the Programme, and commended the openness and transparency regarding D&A activities. They also commented that they had confidence with respect to any internal hand-offs from the TLO Programme at the point where it is disestablished.

We have also commented further on third-party stakeholder-management (section 2.2 'Status of the commercial contracts for heritage systems', below)

Budget Management

In this review it has been apparent that the robust financial management disciplines we have previously reported continue to be applied, and the budget is being tightly-managed. We noted also that the Programme is currently tracking to be within budget, and forecasting a spend of \$22.2million for the 21/22 financial year.

We also saw a sustained focus on the decommissioning objectives and target end-date. This focus, and the use of good financial-management to secure the target benefits, is highly commendable.

More broadly, it would be easy to underestimate the significance of the TLO Programme's contribution to the overall BT objectives and benefits; in our experience, technical debt is often overlooked as a significant factor in 'Transformation' initiatives, and can easily erode benefits unless actively managed. The TLO Programme has, in our view, done an exemplary job of delivering a sustainable and cost-effective technology architecture to support IR in the future, and the strong focus on budget and benefits management has been a key factor in securing that.

In summary, then, the TLO Programme has encountered some issues, and resulting challenges to the schedule and critical-path since our prior review, which had reduced the available timescale contingency to the point that there was no time available for the final 'scream test' (which ideally would have run for two weeks to provide additional comfort). However, our assessment is that the Programme has responded effectively in mitigating any schedule impact, in order to sustain the target-date for decommissioning, and the residual risk at the date of our review is now very low. Through this period, the prior high standard of the associated BT project-management controls has continued to be applied to the D&A activities. This under-pins, and provides confidence in, the robustness and sustainability of the outcomes that have been achieved.



At the time of our fieldwork, the decommissioning of the final systems has concluded, and this enables the handover to Unisys to take place on 18th April, as planned. There is still some small, residual risk in the short-term of an unknown emerging dependency; however, given the systematic and rigorous planning that has been carried out, and the continuing high standard of Project Management controls that have been applied, our assessment is that this risk is very low.



Assessment	Recommendations	Rating
Conclusion: The commercial handover for heritage systems is well-managed, and likely to be concluded in line with the decommissioning plan.	We have no recommendations with regard to the commercial handover of heritage	G
The broad objectives of the TLO Programme have been to ensure that IR's technical environments are simplified, enduring, suitable for IR, and sustainable for Technology Operations to operate when the BT	systems other than (per TQA12/1, above) to reflect that this would serve as an exemplary	

2.2 Status of the commercial contracts for heritage systems

Programme is closed in June. This has enabled IR to rationalise and optimise their I.T. infrastructure, including IR's ultimate exit from the Unisys data-centre. The associated work requires decommissioning of all nonenduring (heritage) services, systems and applications (including FIRST) and all satellite processes and functions, (including the Enterprise Data Warehouse and SAP systems).

When the BT Programme closes down on 30th June 2022, all staff will have left IR as planned, or transitioned to post-BT BAU. As such, this also implies the transition of responsibility for any in-house management of suppliers, systems environment and applications, and the TLO team have been working with IR's Technology Services and Enterprise Services PD&D to support this transition.

In the course of our fieldwork, we have reviewed the 'Master Decommissioning and Archiving Register', which serves as the cornerstone documentation for all systems that have been identified as running in the Unisys data-centre. We understand that this originated when the D&A workstream began in 2017 and set out to document every system in the data-centre. The Programme has also subsequently collated a set of 'unplanned dependencies', being essentially issues arising from unknown or undocumented systems that have been uncovered as the team has progressed and have had to be resolved.

These are necessarily 'living' evolving documents, as the understanding of the applications landscape has improved over time, and they have formed the cornerstone of the D&A team's work since. In our assessment, they represent a high-quality and comprehensive baseline, from which the team has been able to plan and manage the activities necessary to close down the systems that were hosted in the Unisys data-centre, and either:

- Exit the commercial relationships with suppliers whose applications would no longer be required, or
- Migrate applications that IR still required onto alternate enduring platforms, and transition associated processes and relationships to IR's BAU management.

With respect to the systems that are no longer required, and where contracts have been, or will be discontinued in line with the decommissioning plan, we have reviewed the 'master commercial list' and associated documentation, which builds on the 'Master Decommissioning and Archiving Register' (above), and



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case-study, and the methodology, experience and lessons learned should be captured and leveraged across the sector.

collates the relevant commercial records. We understand that this has been used by the D&A team to monitor the progress of the BT and TLO teams, to confirm when systems would no longer be in service, in order that the supporting contracts would be terminated or renewed as required.

At a more granular level, we noted that the team has prepared individual 'Disposal Memos', which relate specifically to each item for decommissioning, and set out the appropriate staged process of authorisation and disposal, where this authorisation requires both the Business Owner(s) approval for the disposal action (confirming that the necessary retention and disposal conditions have been met), and the Executive Sponsor's authorisation for carrying out the disposal actions (destruction, transfer, retention for extended period with a new review date set), as appropriate. These reflect specific 'Disposal Authorities', which set mandatory legal minimum retention periods and disposal actions for the information and records they describe. They also incorporate documentation of the process to ensure that hardware is 'sanitised' and subsequently disposed of in a secure, ethical and sustainable fashion (whether for re-deployment or destroyed).

We have reviewed a sample of the relevant Disposal Memos, and have found them to be of a high standard, comprehensive and diligent in managing the detailed planning for the disposal activities, in addition to the mechanisms through which IR demonstrates compliance with the relevant Disposal Authorities,

With respect to the current status of D&A activities, and the detailed execution of the disposals workplan we noted that it is generally on schedule, and well-advanced. This is the case, also, for the commercial activities; as reflected in our review of the 'Master Commercial List', which the team is using to control and track commercial engagement with the suppliers (and liaise with IR's Commercial Team).

At the time of our fieldwork, there were a few outstanding issues that are pending resolution with vendors, including:

- An issue with an application, where the supplier has also informed IR that they do not want the associated hardware, and will not dispose of it themselves. IR also have a related issue where the supplier hasn't billed IR for over usage consumed by application users. In order not to jeopardise the critical-path for Data Centre exit, IR have chosen to engage Unisys to decommission this hardware, and have made provision for the possibility that the vendor may subsequently bill for the excess application usage.
- An issue with another supplier where (despite their obligations in contract to do so), the vendor has not been responsive to commercial discussions, which are ongoing.

Notwithstanding these issues (which are relatively minor, well-understood and mitigated to the extent possible), our overall assessment is that the commercial management of the suppliers involved in the decommissioning is well-communicated and controlled, and issues are being resolved in a timely fashion. The issues are also being handed over appropriately to BAU staff and processes.

In the course of our fieldwork, we have noted also that there are some pre-existing contracts that IR requires to continue beyond 30 June, and after the Unisys data-centre has been decommissioned. These include:



- DIA lead agency fees for Vodafone
- Microsoft Server Maintenance
- Vodafone contact centre (TSOA)
- APEX support
- SAP FMIS

For these enduring services, we understand that the Programme team have been working with the relevant Service Integration Delivery Managers ('SIDM') in the BAU organisation, to ensure the managed transition of these contracts, the supplier relationships and the budgetary provisions. We have reviewed the heritage Budget and Commercial Update (March 2022), and note that this records the detailed view the budget lineitems, and identifies the items where BAU budgets will take over. We have also reviewed samples of the handover documentation, and discussed the handover with relevant stakeholders through our fieldwork interviews. This has provided confirmation that the handover of the contracts for the enduring systems is welldocumented and well-understood. The anecdotal feedback has also been very positive, in particular with respect to the commitment and working relationships between the D&A and Heritage teams in support of the transition, and the openness, accuracy and transparency of the reporting provided by the D&A workstreams. All of the stakeholders we interviewed, expressed a very high level of confidence in the processes underpinning the Unisys data-centre exit, and IR's ability to transition the management of the commercial relationships and operations, going forward.

In summary, then, with respect to the termination of commercial contracts for heritage systems, and also the transition of enduring services and relationships to BAU processes, our assessment is that these activities have been planned and managed diligently, in order to optimise IR's commercial position, and we are not aware of any issues that would compromise IR's ability to exit the Unisys data-centre on-schedule.







3 Appendices

3.1 Appendix 1: General terms of reference

Focussed entirely on completing the decommissioning of heritage systems, KPMG are to:

Ref	Scope Area
TQA12.1	Confirm that IR either have executed the Stage 4 decommissioning and archiving plan, or are well placed to do
TQA12.2	so. Confirm that any commercial contracts for heritage systems have or will be discontinued in line with the decommissioning plan



3.2 Appendix 2: Assessment criteria

Priority	Definition				
R	Major Risk/Issue – Potential showstopper and likely to have a significant impact on time, costs or quality. Significant improvements recommended.				
A Medium Risk/Issue – May have an important impact on time, costs or quality. Some improvements are recommended.					
Y Low Risk/Issue – Some improvements are required or recommended. G Good practice – Well controlled but minor efficiency improvements may be required and recommended.					



3.3 Appendix 3: List of interviewees and meeting attendees

KPMG would like to acknowledge the following people who we interviewed, through the course of this review:

Name	Role
Helen Ward	Transition & Business Integration Programme Manager
Mike Cunnington	DC, Information & Intelligence Services
Rob Taylor	Decommissioning & Data Archiving Lead
Naomi Ferguson	Commissioner, Inland Revenue
Beverley Den Boestert	Release Deployment Lead – Non START
Greg James	DC, Transformation
Steve Johnson	Enterprise Lead Technology Services
Rob Taylor	Decommissioning & Data Archiving Lead
Patrick O'Doherty	Enterprise Architecture Transformation Lead
Malcolm Breadmore	Enterprise Leader Technology Services
Jess Wawatai	Domain Principal, Technology Commcercial



3.4 Appendix 4: Documents reviewed

Document Name	Document Name
Stage 4 - DecomArchive March 22 Decommissioning Archiving Plan March 22 Heritage Budget and Commercial Update March 2022 BT Programme Monthly Report_20220128 BT Programme Monthly Report_20220304 IR2022-043 Joint Ministers report Dec 21 Jan 22 vFINAL IR2022-096 Joint Ministers report Feb 22 vFINAL EPPC 16 Dec 2021 Final Mins for EPPC 16 december 2021_FINAL PGC February 2022 PGC March 2022 - BT items TLO Governance Meeting Report 24022022_final V1 TLO Governance Meeting Report 20220315_final TLO Governance Meeting Report 20220315_final TLO Governance Meeting Notes and Actions 20220215_V1 Minutes PGC March 2022 FINAL FIRST Archive dashboard 11 Jan 2022 FIRST Archive dashboard Feb 2022 RE Databridge Cancellation Cancellation Form - Databridge - Inland Revenue Department	FIRST Mainframe Data Disposal memo - Approval SAP CAS - KiwSaver - R4 - Data Disposal memo - Approval eFile - Stg4.2 - Data Disposal memo - Approval DIA Deaths - Data Disposal memo - v1.0 - Approval UDC All Racks equipment list DCSG (CIC) System Disposal Procedure v2.8 SOP_ Device Sanitisation and Disposal v1.1 IR Decomm Disposal Process Notes 22NOV2021 Unisys DC - IR Asset Disposal Process Rev 4 10JAN2022 IGA PAM TLO Governance 20220119_extract lessons learned FIRST Satellites Grouping Overview Master Decommissioning and Archiving Register with disposal graph MASTER COMMERCIAL LIST RE Action Point from TLO meeting last week RE Seek further clarification around Heritage costs to be transitioned to Enduring RE FW H013 DIA Lead Agency Fees - Vodadone Datacom - Heritage to Enduring RE Action Point from TLO meeting last week



3.5 Appendix 5: Summary table of recommendations with management response

Report Reference	Recommendation	Review Rating	Assignee	Management Response	Status	Due Date
TQA 12/1	IR (and the Central Agencies) should take every opportunity to ensure that this knowledge gained (methodology, experience and lessons learned) from the TLO Programme, are captured and leveraged across the sector.		Helen Ward	Accepted and in progress. Over the past 18 months, IR has actively shared IP including conversations, documents and templates with a number of agencies. IR is also aiming to publish a "Guide to Transformation" that will also include the lessons learned from the process, and the approach and plans. This will enable other agencies to access this knowledge base. Part of that exercise is to document a case study.	Accepted / In Progress	30 th June 2022

The table below collates the recommendations from the body of our report, with the associated management response:



4 Version Control

File Name	IR TQA12 2022 KPMG Draft	
Document Owner	Perry Woolley	
Status	Final	

Version No.	Date	Change Summary	Author
0.0	12 April 2022	Initialised	P Woolley
0.1	24 April 2022	First draft	P Woolley
0.2	4 May 2022	Factual accuracy feedback	P Woolley
1.0	23 May 2022	Issued incorporating feedback & management commentary	P Woolley

Disclaimer

Inherent Limitations

This report has been prepared in accordance with our Consulting Services Order dated 16/3/22. Unless stated otherwise in the Engagement Letter, this report is not to be shared with third parties. However, we are aware that you may wish to disclose to central agencies and/or relevant Ministers' offices elements of any report we provide to you under the terms of this engagement. In this event, we will not require central agencies or relevant Ministers' offices to sign any separate waivers.

The services provided under our engagement letter ('Services') have not been undertaken in accordance with any auditing, review or assurance standards. The term "Audit/Review" used in this report does not relate to an Audit/Review as defined under professional assurance standards.

The information presented in this report is based on that made available to us in the course of our work/publicly available information. We have indicated within this report the sources of the information provided. Unless otherwise stated in this report, we have relied upon the truth, accuracy and completeness of any information provided or made available to us in connection with the Services without independently verifying it.

No warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by IRD management and personnel / stakeholders consulted as part of the process.

This report is solely for the purpose set out in Section 1.2 of this report and for IRD's information, and is not to be used for any other purpose or copied, distributed or quoted whether in whole or in part to any other party without KPMG's prior written consent.

Third Party Reliance

Other than our responsibility to IRD, neither KPMG nor any member or employee of KPMG assumes any responsibility, or liability of any kind, to any third party in connection with the provision of this report. Accordingly, any third party choosing to rely on this report does so at their own risk.

Additionally, we reserve the right but not the obligation to update our report or to revise the information contained therein because of events and transactions occurring subsequent to the date of this report.

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