



BRIEFING

Immigration New Zealand's Biometric Capability Update

Date:	12 July 2023	Priority:	Medium
Security classification:	In Confidence	Tracking number:	2223-4450

Action sought		
	Action sought	Deadline
Hon Andrew Little Minister of Immigration	Agree recommendations	20 July 2023
Hon Rachel Brooking Associate Minister of Immigration	Copy for your information	N/A

Contact for telephone discussion (if required)			
Name	Position	Telephone	1st contact
Richard Owen	General Manager, Immigration Risk & Border, Immigration New Zealand	s9(2)(a)	✓
s9(2)(a)			

The following departments/agencies have been consulted
The Treasury

Minister's office to complete:

☐ Approved

☐ Declined

☐ Noted

☐ Needs change

☐ Seen

☐ Overtaken by Events

☐ See Minister's Notes

☐ Withdrawn

Comments

BRIEFING



MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT
HĀKINA WHAKATUTUKI

Immigration New Zealand's Biometric Capability Update

Date:	12 July 2023	Priority:	Medium
Security classification:	In Confidence	Tracking number:	2223-4450

Purpose

This briefing provides you with background information on Immigration New Zealand's (INZ's) use of biometrics, and the current status of its Biometric Capability Update (BCU) project, including financial risks. It also seeks your agreement to an increase in budgeted whole of life costs for the solution from \$30.42 million to up to \$35 million.

Recommendations

The Ministry of Business, Innovation and Employment (MBIE) recommends that you:

- a **Note** that INZ's current identity management engine is out-dated, unnecessarily complex, and no longer deemed fit-for-purpose for the future needs of INZ.

Noted ✓
- b **Note** that MBIE's BCU project is a major upgrade of INZ's identity management solution and associated infrastructure to maintain security, the required level of technical support and reliability, and to improve productivity, efficiency and effectiveness.

Noted ✓
- c **Note** that while MBIE has currently scheduled the implementation of the BCU for November 2023, there is a risk that this will need to be delayed until around February 2024 to allow for system security issues to be resolved and for commercial negotiations on licensing and support arrangements to be concluded.

Noted ✓
- d **Note** that in November 2021 joint Ministers (Immigration and Finance) approved MBIE's allocation of \$22.15 million from its baseline funding capital to fund the BCU project, with whole of life costs for the new asset projected at that time to be \$30.42 million [2122-1880 refers].

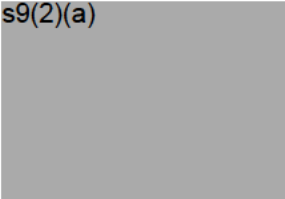
Noted ✓
- e **Agree** to an increase in budgeted whole of life costs for the asset from \$30.42 million to up to \$35 million from MBIE's baseline funding, to allow for some additional costs associated with security activities, timing, and the outcome of commercial negotiations on licensing and support agreements.

Agree/ Disagree/ Discuss

- f **Note** that there is a risk that budgeted whole of life costs could exceed \$35 million and that Cabinet approval would be required should this eventuate. Further advice will be provided should this become necessary.

Noted

s9(2)(a)



General Manager, Immigration Risk & Border
Immigration New Zealand, MBIE

11 / 07 / 2023

s9(2)(a)



Hon Andrew Little
Minister of Immigration

~~23~~ / ~~7~~ / ~~23~~

Background

The role of biometrics in identity management

1. Biometrics are measurable physical characteristics that are unique to an individual. They are fundamental to the effective application of identity management standards and practices. INZ's identity management processes, and the use of biometrics in particular, are crucial to establishing a person's identity to enable effective and efficient decision-making and manage the risk of identity fraud.
2. Identity information is divided into two groups:
 - Biographical: e.g – name and date of birth
 - Biometric: e.g – facial image and fingerprints.
3. Increased confidence in identity enables higher quality and faster immigration decision-making, improves our ability to protect New Zealand and our international partners from harm relating to the misrepresentation of identity, and reduces the risk of individuals concealing criminal histories.
4. INZ is New Zealand's authoritative source of identity information on non-New Zealanders. INZ is relied on to verify identities to determine eligibility for public services, maintain law enforcement and to deliver services that require high confidence identity verification.

INZ's current approach to identity processing

5. In 2016, INZ launched IDme alongside the rollout of a new platform for receiving visa applications online. IDme allows for automated biographic and biometric matching and manual resolution of unresolved identities. It enables INZ to assess risk and make informed decisions about applicants, assured that their complete history with INZ is known and all identities have been checked against international watchlists.
6. In addition, IDme s6(a) 
7. IDme, plays a key role in anchoring the identities of all foreign nationals applying for either a visa or an Electronic Travel Authority (ETA) prior to travelling to New Zealand. In total, approximately 73 million identities are stored by the IDme management engine.
8. Identities stored in IDme are accessed by INZ compliance officers undertaking enforcement activities within the field using the Mobile Regulator application and the New Zealand Police can access identities through a mobile phone app and information sharing arrangement.
9. s6(c) 

Biometric Capability Update project (BCU project)

10. The BCU project is a major upgrade of INZ's existing identity management solution and associated infrastructure to maintain security, the required level of technical support for the solution, and reliability. The solution will improve the accuracy of biometric matching,

enabling faster identity processing and lowering the number of cases that need manual intervention to resolve. This will increase efficiency, effectiveness and productivity.

11. Core business processes will remain the same and be undertaken by the same identity resolution staff more efficiently. There will be new software, a new algorithm and equipment. The project is not making fundamental changes to the way INZ collects identity data, the type of data collected or how the data is processed and managed.
12. The BCU project is upgrading the versions of biometric matching and management platforms, simplifying the platform to reduce ongoing cost and improving the utility of the system. This is a core capability for INZ in an environment where identity fraud, terrorism and other sources of harm are prevalent and increasingly sophisticated, and where the volume of identities from applications and border-crossings are expected to exceed pre-COVID-19 pandemic levels.

Project background

13. In August 2019, MBIE approved a business case for the BCU project as part of its ongoing systems maintenance programme. NEC, a company specialising in biometric authentication, was sourced directly to develop the new system and MBIE procurement policies and guidelines were followed.
14. Unexpected levels of technical complexity emerged during the project design phase indicating the original solution would not have delivered all the outcomes set out in the business case and therefore the project's governance board agreed it was no longer suitable. A revised solution approach was developed in November 2021 which resolved the issues identified.
15. The project delivery plan has been regularly revised to reflect the implementation of the new solution, the impacts of COVID-19, and ensure the solution is well protected through adherence to security accreditation and certification processes. This has resulted in extended timeframes to deliver, and some increased costs. However, the new solution is expected to achieve efficiency gains from significantly reduced manual intervention effort due to increased automated matching rates. Better detection of identity fraud will lower costs for INZ by reducing illegal migration and immigration fraud.

Current status – delivery scheduled for November 2023 with some uncertainty

16. In April 2023, the Project Steering Group adjusted the implementation date for the upgraded system to November 2023. It noted, however, that this is a tight timeframe for successful project delivery and the date would likely need to be adjusted if unforeseen issues arise over the coming months. It is possible that there may need to be a delay to the current schedule should security assurance identify the need for additional safeguards, or should commercial negotiations for licensing and support arrangements take longer than expected. Should a delay become necessary, the implementation date would likely need to be moved out to February 2024, after INZ's peak processing period.
17. Currently, the project team is preparing for the commencement of System Integration Testing (SIT), where it will test the new software to confirm it will integrate with and support core immigration services. This is a significant project milestone. In addition to the completion of a mandated security assurance assessment, and test preparation, plans are underway to provide early visibility to business users and NZ Police, together with vendors, MBIE technical staff and support stakeholders from July.

Budget – on track but some risk

18. In November 2021, joint ministers (Immigration and Finance) approved MBIE to allocate from baseline funding capital \$22.15 million over 2021/22 and 2022/23 to implement the revised identity management system solution [2122-1880 refers]. In addition, project operating

expenditure is forecast to be \$4.5 million. Whole of life costs, including ongoing costs, are currently budgeted to be \$34.6 million. This has increased from previous advice, where whole of life costs were estimated to be \$30.42 million. This increase is mainly due to an increase in project costs from security activities and implementation timing¹. Support contracts and end user licensing agreements are also still under negotiation with vendors (NEC and Datacom) and the ongoing cost forecast is not yet fully known. Your agreement to an increase in budgeted whole of life costs for the solution to \$35 million is sought, noting that this increase would be met within MBIE's baseline funding.

19. There is a risk that the project costs, including whole of life costs will increase further. This is because the commercial negotiations mentioned above have not concluded with the vendors. The project budget has at least \$5.5 million over the life of the asset set aside for licensing and support but is projecting needing around \$7.3 million. There may be some additional hardware support and maintenance costs also, but these are unlikely to be significant.
20. Any delay in implementation would also create some pressure on the project budget and increase whole of life costs. While a delay to February 2024 would not in and of itself increase the estimated whole of life costs to over \$35 million, any delay beyond then would likely do so.
21. Cabinet approval will likely be needed if forecast whole of life costs for the solution exceed \$35 million². While MBIE is not currently forecasting cost estimates crossing this threshold, MBIE's Delivery Governance Board is closely monitoring the project and you will be advised of next steps should advice to Cabinet become necessary.

Next steps

22. Officials will update you on the project regularly through INZ's weekly report and standalone briefings where necessary. Officials are also available to brief you further on the project if required. Should the total whole of life cost estimate for the BCU exceed the \$35 million threshold, MBIE will provide further advice on obtaining Cabinet approval for MBIE to allocate sufficient baseline funding for this.

¹ s9(2)(b)(ii)



² MBIE has an Investor Confidence Rating of B, requiring Cabinet approval for any project with a whole of life cost exceeding \$35 million.



BRIEFING

Biometric Capability Update project – proposed approach to increasing Whole of Life Cost

Date:	19 March 2024	Priority:	High
Security classification:	In Confidence	Tracking number:	2324-2658

Action sought		
	Action sought	Deadline
Hon Erica Stanford Minister of Immigration	Indicate your preferred approach to seeking Cabinet agreement to increase the Whole of Life Cost for the Biometric Capability update project	21 March 2024

Contact for telephone discussion (if required)			
Name	Position	Telephone	1st contact
Jivan Grewal	General Manager, Employment, Skills, and Immigration Policy	s9(2)(a)	✓
s9(2)(a)			

The following departments/agencies have been consulted
The Treasury has been consulted on the proposal to seek an increase to the Whole of Life Cost.

Minister's office to complete:

☐ Approved

☐ Declined

☐ Noted

☐ Needs change

☐ Seen

☐ Overtaken by Events

☐ See Minister's Notes

☐ Withdrawn

Comments



BRIEFING

Biometric Capability Update project – proposed approach to increasing Whole of Life Cost

Date:	19 March 2024	Priority:	High
Security classification:	In Confidence	Tracking number:	2324-2658

Purpose

To seek your direction on a proposed approach to increasing the Whole of Life Cost for Immigration New Zealand's Biometric Capability Update project.

Recommended action

The Ministry of Business, Innovation and Employment (MBIE) recommends that you:

- a **Note** that s6(c) s6(c) a Biometric Capability Update project is underway to address these issues. (Noted)
- b **Note** that the Biometric Capability Update project currently has a Whole of Life Cost threshold of \$35 million. (Noted)
- c **Note** that unforeseen cost increases, such as the COVID-19 pandemic, delays, and increased complexity identified during system testing, have led to the projected cost of the project to increase to \$39.9 million, thereby requiring Cabinet approval to continue. (Noted)
Need more information → need to understand the detail of increased costs.
- d **Note** that additional Crown funding is not required; the project is funded through immigration fees and levies. (Noted)
- e **Indicate** your preferred approach to seeking Cabinet agreement to increase the Whole of Life Cost for the Biometric Capability Update project (details set out in **Annex One**):

EITHER

- i. **Option 1:** Seek agreement through the upcoming Immigration Fee and Levy Review (approval for targeted consultation) Cabinet paper (**recommended**)

Agree / ~~Disagree~~

OR

- ii. **Option 2:** Seek agreement via a separate Cabinet process (before the confirmation of fee and levy charges in June/July).

s9(2)(a)

discuss at officials meeting 25 March.

~~Agree / Disagree~~

E. Stanford.
Hon Erica Stanford
Minister of Immigration

Jivan Grewal *PP*
General Manager, Employment, Skills, and Immigration Policy

Labour, Science, and Enterprise, MBIE

19 / 03 / 2024

24 / 3 / 24

The Biometric Capability Update

1. The Biometric Capability Update (BCU) is a project to deliver a significant upgrade of Immigration New Zealand's (INZ's) identity management, capture, and matching solution. Updating INZ's capability is crucial to risk mitigation, managing identity fraud, minimising harm and allowing MBIE to better manage immigration risk, meet national security requirements and international partner agreements.
2. The previous Minister of Immigration set the Whole of Life Cost (WOLC) of the project at \$35 million, which is the threshold set by the previous Cabinet for individual ministerial approval [as per Cabinet Office Circular CO (23) 9: *Investment Management and Asset Performance in Departments and Other Entities*].
3. The BCU project is well progressed in its final year, however, project costs have increased due to:
 - a. the COVID-19 pandemic delaying the project significantly, as MBIE had to reprioritise resources to support the Government's response
 - b. unforeseen complexity in the initial scoping and technical challenges which led to significant changes from the original specifications to ensure that the update can work within the wider immigration ICT platform, and
 - c. all-of-government cyber security guidelines have evolved over the term of the project and MBIE has had to adapt the solution to meet these new standards, requiring additional time and funding.
4. MBIE estimates that the project will cost \$39.98 million to deliver, exceeding the current WOLC by up to \$5 million. Cabinet agreement is therefore required to increase the WOLC and authorise the additional expenditure. Additional Crown funding is not required; the project is funded through immigration fees and levies.
5. The addendum, attached to this briefing as **Annex One**, sets out the case for increasing the WOLC from \$35 million to \$40 million. It outlines the:
 - a. drivers of the increased costs
 - b. rationale for continuing the project
 - c. risks if the project were to be prematurely ceased, and
 - d. processes MBIE has put in place to ensure costs do not rise in future.

Options for seeking Cabinet agreement to increasing WOLC

6. You are intending to shortly take a paper to Cabinet on the immigration fee and levy review. The paper seeks Cabinet's agreement to undertake targeted consultation on the proposed rates, and to address immediate immigration system cost pressures.
7. You could use this paper to seek Cabinet's agreement to increase the WOLC of the BCU project. This is our recommended approach for efficiency, and also because the paper is already seeking Cabinet agreement on other immigration system cost pressures.

8. Pending your agreement to this approach, the following text could be added to the Cabinet paper 'managing immediate cost pressures facing the immigration system' section of the paper (with corresponding changes to the purpose and recommendations section):

After paragraph 53:

*Additional **fee and levy funding** is also required to complete the project to upgrade New Zealand's biometric information management software. The upgrade is required to improve the accuracy of biometric matching and reduce the need for manual intervention.*

s6(c) As a result, MBIE will be able to better manage immigration risk, meet national security requirements and international partner agreements.

Additional funding is required due to unforeseen complexity in the initial scoping, technical challenges during the build and security vulnerabilities that needed to be addressed before the project could proceed. The project was also impacted by the Covid-19 response as resources were moved to support new initiatives to keep New Zealand safe.

After paragraph 60:

Cost pressures proposal 3: increase the authorised Whole of Life Cost of the Biometric Capability Update project

I seek Cabinet's approval to increase the Whole of Life Costs of the Biometric Capability Update project from the previously Cabinet-set threshold of \$35 million to up to \$40 million. This increase will allow the continuation of the project to upgrade New Zealand's biometric information management software, which will improve the accuracy of biometric matching and reduce the need for manual intervention.

As per Cabinet Office Circular CO (23) 9, as the Minister of Immigration I have the authority to approve a project's Whole of Life Cost up to \$35 million. However, as the BCU project's Whole of Life Cost is now estimated to be \$40 million, I am seeking Cabinet authority to increase the current spend limit.

This project is funded through immigration fees and levies and the increased costs can be met within MBIE baselines, and therefore does not require any additional Crown funding.

Annex Five provides further detail on the drivers of increased costs and the expected benefits of delivering the upgrade to New Zealand's biometric information management software.

9. An alternative approach would be to seek Cabinet agreement to increasing WOLC via a separate Cabinet process (but before the confirmation of fee and levy charges in June/July).
10. We seek your direction on this matter before the immigration fee and levy Cabinet paper is lodged, proposed to be this coming Thursday morning, 21 March 2024.

Annexes

Annex One: Addendum on Biometric Capability Update

Annex One: Addendum on Biometric Capability Update



IN-CONFIDENCE

3644 Biometric Capability Update (BCU)

Update



Document Control

Version history

Date	Version	Author	Description of change
01/03/2024	0.1	BCU Project Manager	Create first draft
04/03/2024	0.2	BCU Project Manager	Amendments to document
06/03/2024	0.3	BCU Project Manager	Feedback from internal MBIE review
15/03/2024	0.4	BCU Project Manager	Additional Feedback from internal MBIE review

Endorsed by

Name	Role	Date	Signature
Richard Owen	General Manager, Immigration Risk and Border		
Richard Griffiths	Deputy Secretary Corporate Services, Finance & Enablement		
Alison McDonald	Deputy Secretary, Immigration NZ		
Greg Patchell	Deputy Secretary, Digital, Data and Insights		

Reviewed by

Name	Role	Date	Signature
s9(2)(a)			
Aaron Toatelegese	General Manager Partnerships & Programmes		
Michael Alp	Chief Operations Officer		



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1 Executive Summary

1.1 Introduction

The Biometrics Capability Update (BCU) is a project to deliver a significant upgrade of Immigration New Zealand's (INZ's) identity management, capture, and matching solution. The updated capability is crucial to risk mitigation, managing identity fraud, minimising harm and meeting INZ's future business needs. It will also assist with expediting visa application processing, improving the customer experience, and an anticipated reduction in manual identity resolution.

Funding for the project is now estimated to breach its Cabinet-approved Whole of Life Cost (WoLC) of \$35 million; this addendum seeks approval to raise the WoLC from \$35 million to \$40 million.

Costs for the project are funded through immigration fees and levies, and therefore no further Crown funding will be required to meet these higher costs.

1.2 Background to the BCU

Identity resolution is a core component of INZ's processing of visa and New Zealand electronic Travel Authority (NZeTA) applications, ensuring only bona fide customers can travel to New Zealand. s6(a)

As above, the BCU project aims to deliver a significant upgrade to INZ's identity management system.

The project is a multi-year, technically complex project, involving multiple IT systems, products, and vendors, as well as very large volumes of biometric and biographic data.

The project is needed to improve the level and sophistication of automated match/no match results of identities by INZ. This will improve the overall quality of the matching of identity information for non-New Zealanders (thereby reducing harm and minimising risk) whilst reducing the level of manual resolution of identities by INZ staff, speeding up visa and travel authority application processing to improve the customer experience.

The current system for biometric matching and management engine is out-dated, unnecessarily complex, inflexible, and no longer deemed fit for purpose for the current, let alone the future, needs of INZ. The system is now at end of life and will degrade and/or continue to have an increasing number of outages over time.

BCU has been designed to address the business needs by upgrading the versions of biometric matching and management platforms, rationalising and simplifying the platform to reduce ongoing costs and improving the flexibility and usability of the system in the process.

The project is not making fundamental changes to the way INZ collects identity data, the type of data collected or how the data is processed and managed. Core business processes will remain the same and be undertaken by the same INZ staff more efficiently.

The main objective of the investment is to deliver a significant upgrade to INZ's identity management, capture and matching solution. The BCU project will provide:

- Improved match results with an updated biometric matching algorithm and software.
- Removal of redundant middleware.
- Remove technical and support complexity.



- Provide better quality data.
- Onshore support from the lead vendor.
- A support model that aligns to INZ's current and future business needs.

1.3 Problem and opportunity statement

The following issues have been identified with the current Biometric system:

- s6(c)
-
-
-
-
-

The original Business Case and subsequent Change Requests (CRs) approved the following capital investment, operating expenditure, and WoLC. This also include the funding required to complete the project (in green).

Date	Document	Capex	Opex	Total Project Costs	Project Cost Increase	WOLC	Comments
Aug 2019	Business Case	\$10.46m	\$0.05m	\$10.51m		\$19.49m	Original Business Case
May 2020	CR1	\$12.21m	\$0.05m	\$12.25m	\$1.75m	\$22.83m	Change in scope, budget and duration. Photo quality checker was added to scope.
Jul 2020	CR2	\$17.08m	\$0.05m	\$17.12m	\$4.87m	\$30.75m	Change in scope, benefits, budget and duration. In person enrolment integration was added to scope
July 2021	CR3	\$22.15m	\$0.05m	\$22.20m	\$5.08m	\$30.42m	Change in scope, benefits, budget and duration due to Increase in technical complexity



Date	Document	Capex	Opex	Total Project Costs	Project Cost Increase	WOLC	Comments
Aug 2022	CR4	\$21.29m	\$4.71m	\$26.0m	\$31.93m	\$31.93m	Change in benefits, budget and duration as lead vendor was not going to meet one of their critical milestones
Jun 2023	CR5	\$21.9m	\$4.34m	\$26.13m	\$31.95m	\$31.95m	Change in benefits, budget and duration as Data Migration had taken longer than planned.
April 2024	CR6	\$33.33m	\$7.28m	\$40.61m	\$8.66m	\$39.98m	Change in benefits, budget and duration due to the number of defects found and infrastructure issues slowing the project.

BCU is upgrading the current Identity System which went into production in 2016, which had a capital cost \$53 million (\$67m inflation adjusted) compared with \$33 million for the replacement solution. The current system is starting to attract extended support costs of \$0.5 million and means that we are unable to focus on improving the overall Identity System, s6(c)

s6(c)

1.4 High-level business outcomes

The following high-level business outcomes are linked to the delivery of the updated solution:

- A modern, fully supported system, with NZ based lead vendor support and maintenance capability.
- A system that can meet INZ's future business needs and aligns to INZ's "Striking the Balance" strategy and its vision of being a trusted world-class immigration service.
- Greater efficiencies in processing high volumes of identity resolution work, in time reducing staffing costs.
- Improvement in the quality of matching capability due to an increase in automated matching using a more sophisticated up to date algorithm matching technology.
- The target is a reduction of 5 to 10 Full Time Employees (FTE), a saving of between \$2.5 - \$5 million over 5 years. This is based on the assumption that Identity Resolution volumes remain static or reduce in comparison to the baseline of 2024 volumes.
- Strengthened decision making on visa and New Zealand Electronic Travel Authority (NZETA) applications by INZ, as all available data on applicants is made available to decision makers.
- The implementation of the updated system will allow INZ to see a reduction in legacy platform risks.



To achieve these high-level outcomes and to meet the changing needs of INZ, s6(c) Biometric system needs to be updated with a modern service. This will deliver the following benefits:

- A biometric system that can be fully supported and can manage future data volumes.
- A biometric system that enables INZ s 6(c) .
- Reduction in time and cost to implement future configuration changes and updates, as the INZ Identity Services team will be able to make its own changes to these rather than outsourcing to a vendor.
- Reduction in the number of identity fraud cases each year and increased ability to minimise risk and immigration harm.
- Reduction in the number of manual identity resolution tasks that need to be completed by Identity Services staff.
- Enhanced quality and accuracy of biometric data captured and stored in INZ's systems.
- Faster visa and NZeTA processing times through enhanced rates of automated resolution of identities, improving outcomes for customers.
- Reduced risk of identity fraud and/or risk of bad actors being able to travel to New Zealand (which negatively impact our economy, infrastructure and services, and creates immigration harm).
- INZ will be using a biometric algorithm that meets international standards and best practice.

2 Current State

The project has been in progress since August 2019, when the initial Business case was approved to update the biometric matching and management platforms.

The BCU project is well progressed however project costs and delays have increased due to the following:

- Unforeseen complexity in the initial scoping and technical challenges which led to significant configuration changes from the original specifications to ensure that the update can work within the wider immigration platform.
- Early testing in the lead vendor's test environment identified weaknesses in their solution that needed to be addressed prior to the code being released into MBIE's test environments.
- Cyber security guidelines have evolved over the term of the project and MBIE has had to adapt the solution to meet these new standards, requiring additional time and funding
- The Covid-19 pandemic delayed the project as MBIE had to reprioritise resources; and
- Implementation and testing activities taking longer than planned due to infrastructure issues and the number of defects found.

These challenges are being overcome and the project has progressed significantly.

During the project, alternatives to the current delivery have been considered and discounted. These included:

1. Stopping the project and continuing with the current solution – this was not a feasible option s 6(c)
2. Stopping the project and establishing a new project to upgrade only the algorithm of the current solution – this was not feasible as it only partially meets the requirements and does



not align to INZ's future roadmap and strategy. It would also result in sunk costs and additional funding being sought to establish the new project.

If the project was stopped, the potential financial penalties in relation to vendors is estimated to be approximately \$12 million. Potential liability and exposure to costs from vendors, including the key vendor, could include costs for the deliverables as per agreed milestones in relevant vendor MSA termination clauses. The key vendor may also try and claim for all losses (included sunk losses). This key vendor has indicated the sunk cost to be up to \$4 million, in addition to the \$12 million above.

In addition, the estimated impairment of Work in Progress (WIP), if the project was stopped, is estimated to be \$22 million.

The BCU Go Live date is planned for Quarter 2 FY 24/25 and MBIE has sought assurance from all vendors involved in the project that they can meet this date, subject to the successful completion of SIT and UAT testing.

3 Project Assurance

The project has the following governance arrangements in place:

- A Project Steering Group (PSG) which meets weekly; and
- A Delivery Governance Board (DGB) which meets monthly.

The members of the PSG include:

Name	Substantive Role	Project Role
Richard Owen	General Manager, Immigration risk and Border	Project Sponsor
s 9(2)(a)		
Michael Alp	Chief Operating officer	Commercial Oversight
s 9(2)(a)		
s 9(2)(a)		

In addition, all governance documentation is subject to the standard MBIE governance processes.

The DGB governs all projects and programmes that are on the approved investment plan. The board is governed by Senior Leaders and chaired by a Deputy Secretary from within MBIE.

The project has undertaken three Independent Quality Assurance (IQA) reviews, the last one being in September 2023. The latest IQA confirmed the project approach was sound and robust, the build is achievable, and the risk management practice is effective. The project has implemented the IQA recommendations and continually looks for opportunities to improve.

To manage any further increase in costs, the Project Steering Committee is actively managing all Change Requests and only approving those that are critical for Go Live. They are actively engaged on reviewing schedule progress weekly, along with monitoring defect resolution timeframes. The



project is providing regular updates to the MBIE Delivery Governance Board on progress against schedule and costs.

4 Financial Case

The project will require capital expenditure of \$33.33 million, operating expenditure of \$7.28 million, and a \$4 million contingency in line with projects of a low to medium risk.

Funding for the on-going operating costs and depreciation has been included in the upcoming Fee and Levy review and can be managed within Immigration New Zealand's baseline.

MBIE is not seeking any additional Crown funding to complete the BCU project, instead, it seeks Cabinet *endorsement* to fund the remainder of the project from immigration fees and levies. MBIE is required to seek the financial authority of Cabinet to continue with the project as the current approval of \$35 million WoLC is likely to be exceeded. To complete the project, the financial authority needs to be revised up to a WoLC of \$40 million.

Financial risks on any potential out year costs are being managed through agreed commercial arrangements with the lead vendor, so future costs are well understood and pre-determined.

The breakdown by year of the funding is detailed below:

Operating costs (\$m)	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25 & out years	Total
Project Costs	\$1,385,585	\$6,022,500	\$2,124,309	\$7,988,189	\$12,735,953	\$10,355,371	\$40,611,906
Operating costs						\$10,000,000	\$10,000,000
Depreciation						\$33,332,080	\$33,332,080
Capital Charge	\$69,279	\$370,404	\$454,961	\$839,464	\$1,319,286	\$5,833,114	\$8,886,510



The forecast expenditure of the project (by year) is illustrated in the table below:

Financial Summary	Financial Years						Total
	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	
Capital expenditure	\$1,385,585	\$6,022,500	\$1,691,150	\$7,690,061	\$9,596,432	\$6,946,352	\$33,332,080
Operating expenditure			\$433,159	\$298,128	\$3,139,521	\$3,409,018	\$7,279,826
Total Project Delivery Expenditure	\$1,385,585	\$6,022,500	\$2,124,309	\$7,988,189	\$12,735,953	\$10,355,371	\$40,611,906
Ongoing Cost (Excl. Depreciation)						\$10,000,000	\$10,000,000
Whole of Life costs*							\$39,975,367

* Delivery Cost + Ongoing Cost, excluding Depreciation, 6% discount rate

5 Benefits

The project will deliver benefits to two broad areas: agency and government.

There are limited benefits that can be clearly quantified due to the focus being on reducing the risk of security issues that are non-quantifiable, but serious security exposure would have wide reaching impacts for New Zealand in terms of economic impact, safety of New Zealanders, international reputation and social cohesion. One benefit that can be quantified is the target reduction of FTE, a saving of between \$2.5 - \$5 million over 5 years.

Agency benefits

- **Reduce risks to New Zealand** – The project will facilitate the protection of the border by enabling high quality decisions and will allow automated decision making. The product will allow early detection of high-risk applicants and suspected identity fraud. Risks will be significantly reduced by using the world's top ranking matching algorithms. INZ will have assurance of high-quality data delivered by an increase in face images used in matching and a higher quality check of fingerprints.
- **Remove complexity** - By simplifying the support model.
- **Assurance of quality biometrics** – Implementation of a biometric matching solution provided by a Global Tier 1 biometric provider to provide capability to quality check and correct fingerprints. This will reduce the number of manual resolutions.
- **Encourage reuse and consistency** - Allow different channels to use a single biometric matching service.
- **Simplify technology and improve performance** - Consolidation of the biometric populations and the replacement of the middleware with NEC software, enhances functionality and simplifies the system and the vendor mix responsible for support.

Government benefits

This project will achieve the following benefits for the New Zealand government:



- **Reduce the risk of illegal migrants entering New Zealand** - By detecting bad actors at the application stage, visas will not be issued. The risk to INZ, and cost incurred facilitating departures is reduced.
- **Cross agency initiatives** – Provide the path to simplify working with other agencies (e.g. NZ Customs with the Biometric at the Border) by delivering a single biometric matching service consumable by different channels.
- **Support economic growth of the country** – Through greater confidence in biometric matching, leading to automated processing and a reduction of processing time for visa applicants (e.g. tourists, international students and skilled labour).

Updated overall costs

This table has been completed based on several assumptions and estimates because of the embedded nature of middleware solution in the core INZ systems. Engagement with the Middleware vendor to derive a cost breakdown was unsuccessful in 2019 when the cost benefit was documented. Consequently, we are presenting an analysis of “Required Maintenance cost of Retaining the Current Solution” against the Recommended Option.

	Status Quo: Maintenance Costs of Retaining Current Solution	Cost of New BCU system
Project Capital Costs	\$52,759,572 (FY2015/16)	\$33,332,080 (FY2024/25)
Operating Costs	\$12 million/yr (FY2023/24)	\$14 million/yr (FY2024/25)
Cost of Identity Volume step increases	\$2 million/ step increase	\$2 million/ step increase
Whole of life costs (Project Delivery Capex + Opex + Ongoing Cost)	>\$50 million	Up to \$40 million
Impairment of BCU if project stopped	\$22 million	N/A

The cost to operate the new Identity system is around \$3 million more than the current. \$2 million of the increase is contributed to BCU. In addition to this cost either the current system or BCU would incur higher costs to move into higher bands of stored/ managed identities. Each step increase of 5 million identities will cost about an extra \$2 million annually, with around 3 million additional identities added each year. A decision could be made to reduce the period identities are stored to limit future step increases. Digital identities started to be stored in 2016 and are approaching 10 million to date.

If the BCU project is stopped there would be a \$22 million impairment to recognise for Work in Progress for the capital spend to date.

6 Risks

The approval to continue funding the BCU project would reduce INZ’s current risk profile as the new system would be resilient, fully supported, manage future data volumes, and use a more up to date biometric algorithm.



INZ would see a reduction in time and cost to implement future configuration changes. INZ will be able to undertake some configuration changes in house, therefore being able to react quickly to legislative changes.

INZ would see a reduction in the number of identity fraud cases each year and the increased ability to minimise risk and immigration harm. INZ will see faster visa and NZeTA processing times through enhanced rates of automated resolution of identities, improving outcomes for customers.

If the BCU project is not progressed, INZ would need to continue working with the current legacy platforms, which use old algorithms and are now at end of life, and out of support. INZ would be unable to meet any new legislation requirements, as well as any changes required to current and future business needs.

Due to the current system being at end of life, there is an increased risk of system outages with an increase in support and maintenance costs. This will lead to a greater reliance on manual resolution of identities (meaning reliance on staff) and no efficiency gains. It would result in visa/NZeTA processing times taking longer and a decrease in customer satisfaction.

Closing the project will result in sunk costs of approximately \$25+ million dollars, leaving INZ no further ahead than when the project started in 2019.



AIDE MEMOIRE

Further information on the Biometric Capability Update project and proposed increase to Whole of Life Cost

Date:	28 March 2024	Priority:	Medium
Security classification:	Sensitive	Tracking number:	2324-2793

Information for Ministers

Hon Erica Stanford

Minister of Immigration

Contact for telephone discussion (if required)

Name	Position	Telephone	1st contact
Michael Alp	Chief Operating Officer, Corporate Services	s9(2)(a)	✓
s9(2)(a)			

The following departments/agencies have been consulted

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Minister's office to complete:

☐ Approved

☐ Declined

☐ Noted

☐ Needs change

☐ Seen

☐ Overtaken by Events

☐ See Minister's Notes

☐ Withdrawn

Comments

AIDE MEMOIRE

Further information on the Biometric Capability Update project and proposed increase to Whole of Life Cost

Date:	27 March 2024	Priority:	Medium
Security classification:	Sensitive	Tracking number:	2324-2793

Purpose

This briefing provides you with further information on the Biometric Capability Update project and proposed increase to Whole of Life Cost [briefing 2324-2658 refers]. Officials will be available to discuss this paper and the wider project at your next officials meeting on 2 April 2024.

s9(2)(a)

Michael Alp, Chief Operating Officer, MBIE
28 March 2023

Background

1. The Biometric Capability Update (BCU) is a project to deliver a significant upgrade of Immigration New Zealand's (INZ's) identity management, capture, and matching solution. Updating INZ's capability here is crucial to allowing MBIE to better manage fraud and immigration risk, meet national security requirements and international partner agreements.
2. The current system was operationalised in 2016 with a capital cost of \$53 million.
3. INZ continues to carry security exposures due to a legacy platform component not being compatible with a core MBIE security software.
4. The current solution lacked sufficient capacity and flexibility to support other initiatives such as NZeTA, Biometric Enrolment, and Automated Decision Assist without each of those projects undertaking independent development to meet their needs. The core IDme biometric matching and management engine is out-dated, unnecessarily complex and inflexible.
5. In addition to the technical components of the project, the following benefits will also be achieved:
 - **Reduce the risk of illegal migrants entering New Zealand** - By detecting non-genuine applicants at the application stage, visas will not be issued, which in turn will reduce that fraudulent arrivals and the cost incurred facilitating departures is reduced.
 - **Cross agency initiatives** – Provide the path to simplify working with other agencies (e.g. s6(c)) by delivering a single biometric matching service consumable by different channels.
 - **Facilitate administrative efficiency and improved processing time** – Through greater confidence in biometric matching, leading to automated processing and a reduction of processing time for visa applicants (e.g. tourists, international students and skilled labour).

History of the project

6. Identity resolution is a core component of INZ's processing of visa and NZeTA travel authority applications, ensuring only bona fide customers can travel to New Zealand. s6(a)
[REDACTED]
7. The current system is unable to meet deal with the significant volumes it has had to process. It also remains limited in its ability to accommodate new initiatives or legislative changes. This has a corresponding impact on application processing timeframes during periods of high demand or broader system change.
8. The project has been in progress since August 2019, when the initial Business case was approved to update the biometric matching and management platforms components.
9. The original IDme platform went live during 2016 as part of a larger Immigration NZ transformation programme (Vision2015) however the core components provided by NEC and Daon were sourced in 2012. s 6(c)
[REDACTED]
10. The BCU project was commenced in 2019 to provide the appropriate lead in times to provide the future upgraded capacity and to take advantage of technology changes in line with normal ongoing support and maintenance activities.
11. The existing IDme platform will be fully depreciated during the next financial year.

12. The BCU project is now well progressed however project costs and delays have significantly increased since the original business case due to the following:
- The initial scoping underestimated the requirements of the project. This together with technical challenges led to a full rescope of the project (from being an upgrade of the old system to the implementation of a new system). This allowed for significant changes from the original specifications to ensure that the initiative could work within the wider immigration platform.
 - Resourcing constraints due to the highly technical skills required (for the vendors and MBIE) for biometric and biographic activities including testing and assurance of matching processes. This resulted in delays to the project. [Due to the nature of MBIE's contractual obligations, however, we continued to be liable for a level of fixed costs, which had the effect of pushing the overall costs of the project up].
 - Migration of large amounts of data through testing environments, beyond what was initially forecast, which had a cost and timing impact.
 - Strengthening Cyber security requirements. s9(2)(b)(ii)
- This was not considered during the initial scoping of the project.
- The Covid-19 pandemic delayed the project as MBIE had to reprioritise resources on it. As noted, MBIE continued to have ongoing fixed liabilities through this.
 - High turnover of Project Management and support staff throughout the whole programme, which reduced the expected rate of efficiency of the project.
- These challenges are being overcome and the project has progressed significantly.
13. The BCU Go Live date is planned for Quarter 2 2024/25 and MBIE has sought assurance from all vendors involved in the project that they can meet this date subject to the successful completion of System Integration (system integration testing (SIT) – testing to ensure that the new system works within the MBIE environment) and User Acceptance Testing (user acceptance testing (UAT) – testing in the “real world” by future users).
14. The proposed Go Live date is based on the critical path activities been completed and approved by the business as part of Go Live activities. Any decision to defer Go Live for a material amount of time (for whatever reason) will raise the risk profile during the peak holiday period and would not be supported. Deferral of Go Live post the holiday period would have an additional cost impact.

Increases to the Whole of Life Costs

15. The original Business Case and subsequent Change Requests (CRs) approved the following capital investment, operating expenditure, and Whole of Life Costs (WoLC) (including additional costs sought to complete project)

Date	Capex	Opex	Total Project Costs	Project Cost Increase	WOLC	Comments
Aug 2019	\$10.46m	\$0.05m	\$10.51m		\$19.49m	Original Business Case
May 2020	\$12.21m	\$0.05m	\$12.25m	\$1.75m	\$22.83m	Change in scope, budget and duration. Photo quality checker was added to scope.
Jul 2020	\$17.08m	\$0.05m	\$17.12m	\$4.87m	\$30.75m	Change in scope, benefits, budget and duration. In Person enrolment integration was added to scope
July 2021	\$22.15m	\$0.05m	\$22.20m	\$5.08m	\$30.42m	Change in scope, benefits, budget and duration due to Increase in technical complexity
Jul 2023	\$21.9m	\$4.34m	\$26.13m	\$4.58m	\$35m	Change in benefits, budget and duration as Data Migration had taken longer than planned.
April 2024	\$33.02m	\$6.98m	\$40m	\$5m	\$40m	Change in benefits, budget and duration due to the number of defects found and infrastructure issues slowing the project.

16. MBIE has reviewed all its commercial arrangements with its key vendors on the project and was able to renegotiate a number of costs that it was liable for out of the project. This reduced vendor costs by approximately \$3 million.
17. MBIE estimates that the project will cost \$40 million to deliver, exceeding the current WOLC by up to \$5 million. This increase includes a contingency of \$4 million. Cabinet agreement is therefore required to increase the WOLC and authorise the additional expenditure. Additional Crown funding is not required; the project is funded through immigration fees and levies.
18. MBIE forecasts it will exceed to approved \$35 million amount in September 2024 and therefore requires Cabinet approval for the additional amount as soon as reasonably practicable.

Cost of stopping the project now

19. MBIE would need to recognise an impairment cost of \$31 million if the project was stopped now and this would be recorded in the 2023 financial year. There may also be several costs that cannot be quantified, such as the risk of security exposure in our identity management system.

Governance and assurance

Independent Quality Assurance reviews have been completed

20. During the project lifecycle several independent assurance activities have been undertaken including an Independent Quality Assurance (IQA), through David Williams IQA, process and a technical evaluation of the solution. The latest IQA was issued in October 2023 as part of the delivery phase in order to

- Provide an independent view of the effectiveness of the project planning and delivery phases with specific focus on what went well, areas for improvement, and how the projects current state.
- Provide the Sponsor, Project Steering Group and Delivery Governance Board assurance that the project is well positioned to deliver expected outcomes within time and budget, and to the expected level of quality.
- Identify any strengths and possible areas for improvement and highlight learnings and lessons so they can be incorporated into future projects.

21. The IQA findings highlighted that the proposed implementation date would not be met, and successful delivery of the change was “Unlikely”.

22. The IQA made 18 remediation actions. These are summarised in the table below:

1. Governance • Update terms of reference and membership. • Have MBIE only Project Steering Group meetings. • Update project milestones. • Gain senior leadership support.
2. Delivery and Management Controls • Review and update risks and issues. • Review and update internal communications plan. • Review and update external communications plan
3. Re-planning and Delivery • Complete the replanning and gain vendor acceptance. • Confirm remaining delivery budget. • Confirm the continuation tolerances and criteria. • Confirm the day 1 must haves and align go/no go. • Look for ways to manage parallels to gain time. • Capture the SIT deployment issues. • Determine alternate options.
4. Testing and validation • Look for ways to reduce the testing timeframes.
5. Contractual Arrangements • Statements of work, milestone payments and costs. • Support arrangements.

6. Benefits Management

- Consolidate and finalise the benefits.

23. All these actions have been agreed to by MBIE. Remediation is underway and monitored by the Delivery Governance Board with the majority completed last calendar year which has enabled to project to move forward to System Integration Testing (SIT) and Cyber Assurance before proceeding to User Acceptance Testing.
24. A Go Live IQA Report will be commissioned and MBIE will use the same organisation and reviewer that was used for the October 2023 review.

Governance

25. Governance for this project is being overseen by two additional groups. The first is a senior Steering Group which is made up of three MBIE General Managers and senior project staff, along with senior project staff from NEC as well as their s9(2)(a)
26. The second governance group is MBIE's Digital Governance Board which meets monthly. This group is made up of two Deputy Secretaries and five MBIE General Managers and several senior technical staff. Project delivery and financial tracking are required to be reported on to this governance group including any escalation items. The system is still tracking to the revised agreed plan with the vendors to go live in early November 2024.
27. The project has a Business Owner and Project Sponsor as the Senior Responsible Officer. These roles ensure the project is delivering to the business requirements and have accountability for benefit realisation and accepting the delivered platform post go live.
28. Several levels of project governance are in place that include project team stand ups, vendor alignment and a project steering committee that includes the key delivery partner and senior managers. Escalation channels have also been established both for the key delivery partner and senior management.

Approach to managing further increases to costs

29. The majority of cost pressure comes in the form of delivery delays as vendors raise change requests to cover resourcing requirements for an extended period of time.
30. In order to manage further cost increases MBIE has proactively worked with the key vendor to remove any commercial uncertainty and sought confirmation from all other vendors regarding implementation timeframes. Cost confidence continues to increase as over 80% of priority 1 and 2 test cases have now been executed. The contingency sought will cover any costs that are required to be remediated any system defects uncovered during SIT.
31. The project has also proactively engaged Cyber resources to ensure advanced security assurance and penetration testing can be undertaken early to minimise any potential vulnerabilities.
32. Finance Business Partners have oversight of project costs and validate the monthly forecasts for accuracy and have provided inputs for ongoing costs including out years and their impact on the Immigration NZ fee and levy review.

Next steps

33. The project is focused on the completion of priority 1 and 2 test scripts for System Integration Testing as this provides the baseline and assurance of a fit for purpose system. Once Governance approval is obtained the establishment and completion of User Acceptance Testing environments (including performance testing) is required, data migration, final defect remediation and security certification and accreditation.
34. Business readiness activities and operational team involvement are also starting to increase to ensure change impact activities are completed to support Go Live.
35. The project also needs to complete commercial arrangements with vendors for post go-live support and maintenance agreements, operational readiness activities including communication and change plans, business readiness and operating procedures, contingency plans and go-live approval. These items are well progressed and are on track for completion prior to 30 June 2024.