

Rapid Review of Border Worker Testing – Phase One

Border Executive Board

Final report

21 June 2021



Contents

Executive summary	3
Background	3
Purpose of the review	3
Overview	4
Recommendations	9
Part 1: Introduction	12
The Testing Orders	12
The main parties involved in the testing arrangements	14
Border testing and the BWTR	14
Managed isolation and quarantine	15
Purpose, scope and approach to the rapid review	15
Part 2: The border testing arrangements in MIQF	17
Objective of the testing arrangements	17
Findings and observations	17
Part 4: Wider border system	29
Operational considerations need to be better integrated into policy design and implementation	29
The speed of policy design and implementation	29
Implementing an assurance by design approach	30
Limitations and disclaimer	31
Appendix one	32
Terms of Reference: Rapid Review of Border Worker Testing	32
Appendix Two	36
MBIE's MIQF Workforce Testing Timeline	36

Executive summary

Background

The mandatory routine testing of border workers is a key control measure in New Zealand's COVID-19 surveillance strategy. The surveillance strategy supports one of the four pillars of New Zealand's COVID-19 elimination strategy.¹

There are approximately 20,000 people working at New Zealand's maritime and aviation border, and approximately 4,500 people who work in managed isolation and quarantine facilities (MIQF). These workers are generally referred to as 'border workers'. The MIQF are housed in hotels in Auckland, Hamilton, Rotorua, Wellington and Christchurch with a current operational capacity of 4,000 rooms.

The Ministry of Health is responsible for providing public health advice and administers the COVID-19 Public Health Response Act 2020 (the COVID Act), under which various orders are made. The Ministry of Business, Innovation and Employment (MBIE) is the lead agency for the management and administration of the managed isolation and quarantine (MIQ) system and has some functions under the COVID Act. It has a MIQ business group that leads these functions (MBIE MIQ). A large number of public and private sector organisations contribute to the operation of the MIQF.

The routine mandatory testing of border workers has been in effect from 6 September 2020 through the COVID-19 Public Health Response (Required Testing) Order 2020 (RTO or the Order).² The purpose of the Order is to prevent, and limit the risk of, the outbreak or spread of COVID-19 by requiring the testing and medical examination of certain border workers for COVID-19.

A recent case of a border worker not undergoing regular testing, as required by the law, raised concerns about the effectiveness of the border worker testing arrangements. The case prompted this review. The Border Executive Board³ (BEB) commissioned this rapid review on 22 April 2021.

Purpose of the review

The purpose of the rapid review is to assess the sufficiency of the high-level arrangements⁴ to support compliance with the RTO and the work planned to improve those arrangements (referred to as the border worker testing arrangements or the arrangements in this report). The review was asked to make recommendations for any further improvements.

This review is being carried out in two phases. This report covers the first phase of the review which focuses on the wider arrangements and the implementation of the RTO at MIQF. The second phase will look at the aviation and maritime border.

Further information about the scope and approach to the review is on page 15.

¹ The four pillars of New Zealand's elimination strategy are: Keep it Out (border settings and managed isolation and quarantine), Prepare for It (detection and surveillance and public health measures); Stamp it Out (contact tracing, case management); and Manage the Impact (health system preparedness) – Aotearoa New Zealand's COVID-19 Surveillance Strategy, 26 January 2021.

² An Order made by the Minister of Health under section 11 of the COVID Act in accordance with section 9 of that Act.

³ The Border Executive Board was established as an Interdepartmental Executive Board on 11 January 2021 under the Public Service Act 2020 to deliver an integrated and effective border system and is hosted by the New Zealand Customs Service.

⁴ For the purpose of the review, the arrangements include the processes, information and systems that support compliance with the RTO.

Overview

People working at the border and MIQF have a higher risk of exposure to COVID-19. The routine mandatory testing of border workers is designed to provide insight into the effectiveness of the infection prevention control measures that operate at these locations, and to prevent and limit the risk of community transmission.

Routine mandatory testing is expected to continue to be a key COVID-19 control measure. The recent vaccination of the border workforce strengthens the need for a robust surveillance regime as workers who do become infected are less likely to be symptomatic and therefore may not be alerted to the need for testing.

Are the testing arrangements sufficient to support compliance at MIQF?

The border worker testing arrangements to support compliance with the Order at MIQF have progressively improved since the Order first came into effect. However, further improvements are needed to provide a more accurate view of, and better support, compliance with the Order.

The initial implementation of the Order

The implementation of the routine mandatory testing from 6 September 2020 was a major undertaking for everyone involved. The initial roll-out was implemented in three phases to allow testing capacity to be scaled up and avoid large spikes in testing, to allow the workforce that was required to be tested to be identified, and for operational and logistics planning and communications to be done.

A cross-agency task force led by the Ministry of Health was set up to support the implementation. A governance group was set up to oversee the task force called the Border Order Testing Taskforce Governance Group.⁵ A cross-agency programme of work was established and the governance group met regularly through the planned phases of implementation. The governance group did not however have a terms of reference and formal decision-rights. Regular reports of progress and dashboards of testing status were provided to the Minister of Health.⁶ However, the work the group was doing had varying levels of visibility across the agencies interviewed for this phase of the review.

The Order placed obligations on the affected person⁷ to be routinely tested.⁸ It did not specify any duties for the organisations that employ or engage workers at MIQF initially. Nevertheless, right from the outset, MBIE took responsibility for the MIQ system and set up new manual processes to record the workers at MIQF who needed to be tested, and whether they had been tested. Standing up detailed operational processes in a short space of time to facilitate the routine testing of a diverse and rotational workforce was challenging. Additional staff were hired to keep records, monitor and follow-up with staff. The data was collected via sign-in sheets at each site, which were

⁵ Also referred to as the Border Order Testing Governance Group in some documentation.

⁶ After the November 2020 general election, the Minister for COVID-19 Response became responsible for all aspects of the government's ongoing health response to COVID-19, including matters relating to managed isolation and quarantine, border management, testing and contact tracing systems, and managing any resurgence of the virus.

⁷ An affected person, in relation to a place, means a person who belongs to a group and who carries out work in any capacity (whether paid or unpaid) at the place – as listed in Schedule 2 of the Order.

⁸ The requirement under section 7(1) of the Order is for the affected person to report for, and undergo, testing and medical examination for COVID-19 (a) at a testing centre specified in the table for the group to which the affected person belongs; and (b) at least once within each testing period specified in the fourth column of the item of the table for the group to which the affected person belongs.

then entered into a spreadsheet for each location. Many of the organisations spoken to by the review similarly set up manual and automated processes to do the same for their staff.

The initial Order was often described in interviews as a ‘high-trust’ model. This was because there were no requirements, or centrally-issued guidance about what evidence needed to be collected to provide assurance that testing had occurred. In practice, a variety of approaches was taken by MBIE MIQ and other PCBUs operating in MIQF to gather the information. It was mainly based on staff providing the information about having been tested voluntarily. In some cases the processes provided a level of assurance that testing had occurred. For example, staff sometimes showed or shared the texts they received about their results or took photographs of themselves being tested. A few PCBUs implemented a self-declaration process. District health board staff in some MIQF reviewed attendance lists and confirmed testing had occurred.

The 25 November 2020 amendment to the Order

A key amendment to the Order took effect from 25 November 2020. This was the third phase of the planned roll-out. The focus in the advice developed for the Minister of Health in this phase was to consider what additional duties could be placed on businesses and organisations to better support worker compliance with the mandatory testing.

The amendment to the Order:

- Required relevant PCBUs⁹ to facilitate compliance by notifying affected persons of the requirement to be tested and the testing period that applies, and not preventing an affected person from being tested during their working hours. They were also required to keep a record of the testing for each affected person.¹⁰
- Required affected persons to provide the PCBU the relevant information to enable them to keep these records.
- Introduced new infringement offences for breaches of the obligations by PCBUs.

The enforcement regime was designed as a ‘complaint-based’ model i.e. it would respond to any reported non-compliance, rather than actively monitor compliance. The advice to the Minister of Health was that WorkSafe New Zealand (WorkSafe)¹¹ would act as the enforcement officer on an interim basis, and that this would be in line with its existing education and graduated enforcement approach to COVID-19. It was not in a position to proactively monitor compliance with the Order. Enforcement action for breaches by individual workers would be undertaken by Medical Officers of Health.¹² The advice indicated that various review points of the Order in the coming months offered the opportunity to consider the scope of the enforcement function and who should hold responsibility for it.

MBIE and relevant PCBUs continued their monitoring and follow-up of staff to be tested.

⁹ A relevant PCBU (persons conducting a business or undertaking) means the PCBU (within the meaning of section 17 of the Health and Safety at Work Act 2015) who employs or engages the affected person to carry out work for the PCBU.

¹⁰ The requirement is for the PCBU to keep and maintain a record of particular information about an affected person – legal name, date of birth, telephone number, the testing period that applies to the affected person, the dates on which the affected person has undergone testing and medical examination in accordance with the testing period that applies to the affected person, and if the person is exempt, the testing period to which the exemption relates.

¹¹ WorkSafe inspectors are authorised under section 18 of the COVID Act to carry out the functions and powers of an enforcement officer with respect to workplaces for which WorkSafe is the regulator. This includes MIQFs.

¹² Medical Officers of Health are authorised as enforcement officers under the COVID Act as well as having complementary powers under the Health Act 1956.

The Border Workforce Testing Register

The Ministry of Health developed an online tool, the border workforce testing register (BWTR or the register), to support the required record-keeping by the PCBUs. The register was voluntary for PCBUs to use. The BWTR went live on 26 November 2020 after a six-week pilot period. There have been, and continue to be, regular upgrades to the system.

The BWTR started to send automated texts to workers on the system to remind them of upcoming and overdue tests from early November 2020. Notifications to PCBUs about upcoming tests started from mid-March 2021 and similar notifications for overdue tests started to be sent from the end of April 2021.

The BWTR enables the matching of workforce data loaded by the PCBU, through National Health Index (NHI) numbers, with the testing dates of border workers from data extracted from the laboratory database, Eclair. In doing so, it provides independent confirmation that testing has occurred and significantly improves the level of assurance that workers have been tested.

This key benefit of the BWTR did not seem to have been emphasised when it was rolled out. The focus in communication was on minimising the administrative burden on PCBUs, and to support them in their new record-keeping duties.

A significant current limitation of the BWTR is that it is not a real-time system. There is a time-lag between when swabs are taken and when the testing dates appear in the BWTR. This means the compliance reported in the system is not entirely accurate. A Ministry of Health e-ordering initiative to increase the efficiency of the testing process, when implemented, is expected to reduce this lag but not eliminate it. In addition, manual processes are needed to match duplicate NHIs, and resolve other data issues, which also add to the time-lag. The BWTR also does not currently have the functionality to provide aggregate reporting of historical compliance by workers to allow risk-based, targeted follow-up of workers who have a history of non-compliance.

Implementation of Who'sOnLocation and the BWTR in MIQF

MBIE loaded the MIQF worker information into the BWTR between 10 and 23 December 2020. The manually collated MIQF records were found to have significant quality and accuracy issues.

These data issues, along with the limitations and the developing functionality of the BWTR and the necessary workflows to meet operational requirements, have taken considerable time to resolve. MBIE found the BWTR very challenging to implement.

From 8 February 2021, after a pilot period, MBIE rolled out a new technology system called "Who'sOnLocation" (WOL) to automate and improve the record-keeping of workers who enter the MIQF. The attendance data from WOL was uploaded into the BWTR from then.

The new WOL system, along with its accompanying policies and processes, notably strengthen the controls over the completeness and accuracy of the MIQF data-set of who is required to be tested. The record-keeping in WOL relies on accurate records being kept of workers and their testing frequencies, and consistent sign-in processes operating at MIQF. It will be important to have ongoing

assurance that the controls over these processes are operating effectively in practice – a recently completed assurance review¹³ has highlighted a few areas for improvement.

MBIE considers itself the ‘lead PCBU’ because it has overall responsibility for MIQF. It maintains the records for all PCBUs in the BWTR.¹⁴ The other PCBUs have ‘read access’ to the BWTR and rely on MBIE to make any changes. This is a source of frustration for some PCBUs interviewed as it was adding delays to the data being amended in the BWTR, for example for workers starting and leaving and correcting errors.

The first reliable compliance report from BWTR was only produced on 13 April 2021 due to the issues with data quality and system limitations.

Compliance reporting

MBIE now runs weekly reports showing the compliance of workers who were onsite at MIQF in the previous week. This is the basis of monitoring and follow-up action by MBIE with its own staff and with other PCBUs. PCBUs can also run reports from BWTR to assist the monitoring and follow-up activity they do. Some PCBUs commented on the poor quality of the BWTR reporting.

The Ministry of Health’s BWTR dashboard compliance reports show the compliance of all active workers¹⁵ under the Order. Work has recently occurred to adjust the compliance reporting to exclude non-compliant workers in the BWTR who have not worked at the border since 12 April 2021 who are not considered a public health risk (see page 28).

MBIE’s weekly report, until recently, did not show the compliance of all active workers who have been onsite at MIQF who need to be tested. However, MBIE does maintain oversight of these other individuals and follows up with PCBUs accordingly.

MBIE and the Ministry of Health have advised that they are working to align their reporting. MBIE has recently amended its weekly reporting to also include the compliance of all MIQF active workers.

Going forward, there needs to be aligned and complete reporting of compliance and the areas of focus for monitoring and follow-up. Where there is different reporting produced by agencies to meet different needs, the measurement basis for the reporting should be made clear so that users of the compliance reports can clearly understand the information that is being reported.

The 27 April 2021 amendment to the Order

It was made mandatory for PCBUs to use the BWTR from 27 April 2021. The amendment to the Order also required the BWTR to be maintained and monitored by, or on behalf of, the Ministry of Health.

The Ministry of Health and WorkSafe started to design and implement an active compliance monitoring and enforcement regime from this point. At the time of fieldwork for this review, they were in the early stages of developing and agreeing an active compliance and enforcement framework. The roles and responsibilities of all involved were still to be confirmed.

¹³ MIQ Regional Quality Assurance observational review of WOL conducted over 16-20 April 2021 covering eight facilities.

¹⁴ As at 4 June 2021, there were 501 PCBUs registered in the BWTR under MBIE MIQ.

¹⁵ Active workers are defined as those who have recently worked at the border and have a test due; those who have not fulfilled their last testing requirement; and those recently added as a new worker.

Guidance on the Order and Health and Safety at Work Act 2015

Guidance issued by the Ministry of Health on the Order notes that PCBUs have obligations to monitor and track the testing status of their staff, and that the mandatory use of the BWTR will support PCBUs in fulfilling their obligations to ensure all staff are tested in accordance with their testing cycle.¹⁶ This goes further than specific duties placed on PCBU in the Order to keep records.

The majority of the PCBUs interviewed for this review considered the monitoring of testing status a key element of their staff health and safety systems. The WorkSafe guidance on managing duties for border and MIQF businesses and services, and the difference between Health and Safety at Work Act 2015 (HSWA) obligations and COVID-19 public health requirements is not explicit about whether PCBUs are expected to monitor compliance with the Order and ensure their staff are tested under HSWA or the Order.

The Ministry's guidance should be reviewed to make it more consistent with the Order. Better clarity about the duties and obligations of PCBUs under the HSWA as it relates to the testing requirements under the Order would also be helpful.

Wider system observations

Some wider system issues also emerged from the review. These highlight some important matters for consideration in the ongoing management of New Zealand's COVID-19 border response.

- There is a need to better integrate operational considerations early into the policy design and implementation of border measures. Steps were taken to incorporate these considerations into border worker testing arrangements, but strong views were expressed that more needs to be done. Insufficient consideration of the operational implications at the outset reduces the effectiveness of the implementation, and drives ongoing iteration and change over time, and therefore additional time, resource, energy and effort.
- Greater consideration should be given to the level of assurance needed about compliance with the public health requirements when measures are being designed. An assurance by design approach should be taken. The border worker testing arrangements evolved from a 'high-trust' model to what was described as a 'no-trust' model with a perception of several layers of assurance being added over time without a clear view of the total assurance picture. Where there are trade-offs in the level of assurance desired and possible, this should be made more transparent and visible.
- The issue of Orders, without sufficiently robust processes to ensure they operate consistently and effectively in practice, risks creating an illusion of compliance that may not be being achieved in practice. This is illustrated in the border testing arrangements where, eight months in, issues persist with the quality and accuracy of the data for MIQF in the BWTR, the time-lags in the compliance reported, and the growing functionality of the BWTR to assist in supporting compliance. More attention should be paid to the design of processes to support effective implementation and operation. Guidance on the expected or good practice controls and assurance processes would be beneficial.
- There is change fatigue in the system and a strong desire to find ways of being more proactive, and to anticipate the future requirements. There were views that the policy development is

¹⁶ *Guidance for implementing the Required Testing Order at Managed Isolation and Managed Quarantine Facilities*, Ministry of Health, Fifth Revised Version: 20 April 2021

challenged to keep pace with Ministerial expectations about the speed of delivery. This results in additional speed in policy development, consultation and implementation processes, and compromises the quality of the processes. It is clear that implementing the testing arrangements has been challenging for agencies, and noticeable tensions were evident in the working relationships. This increases the risk in and the fragility of the border system.

In conclusion

The recent changes to the testing arrangements, more broadly and at MIQF, i.e. the mandated use of the BWTR, the roll-out of WOL, the more reliable compliance reporting and the new active monitoring and enforcement regime considerably strengthen the level of assurance about compliance with the Order at MIQF. However, further improvements are needed. The recommended improvements are set out below.

The experiences with initial roll-out of the border worker testing arrangements and the subsequent changes to those arrangements, described in this report, offer important lessons for the design and implementation of other COVID-19 control measures. The operational implications, the data requirements, and the controls and assurance processes, need to be better considered at the design stage to provide confidence that the intended objectives of the measures will be achieved.

Routine mandatory testing is a significant control in New Zealand's elimination strategy. Acknowledging that it has been a significant new initiative to roll out in a complex MIQ environment, it is hard not to reach a conclusion that it has taken too long to achieve an increased level of confidence in the testing arrangements.

Recommendations

The recommendations arising from the review are set out below. Suggested owners (lead agencies or groups) for the recommendations are noted in square brackets at the end of each recommendation.

A cross-agency programme of work has been planned to further improve the border worker testing arrangements, under the oversight of a refreshed and renamed Border Testing Governance Group, reporting to the Border Executive Board. This review has identified some key areas for further improvement that need to be incorporated into the cross-agency programme of work. These are set out in recommendation one. Many of these improvements are known issues, and work is already progressing to address some of these areas. The owners of the recommendations and the timeframes and resources required to implement recommendation one should be confirmed as part of the finalisation of the cross-agency programme.

Further improvements to the testing arrangements

1. Incorporate the following areas of improvement into the current cross-agency programme of work being set up to continue to enhance the border worker testing arrangements.
 - a. **Strengthen the governance and assurance of the programme of work.** The Border Testing Governance Group is currently being refreshed with a formal terms of reference to be approved by the Border Executive Board. Ensure the refreshed group has a clear mandate, and that the terms of reference are scheduled for regular review to ensure it continues to meet needs. Any decision-rights the group has, and its relationship with the BEB, should be

clear, documented and well-understood. The membership of the group should be chosen to reflect the appropriate experience, knowledge and expertise in the areas relevant for the programme of work e.g. policy, legal, operations, technology, compliance and assurance. Consider adding independent members to the group. Also consider how real-time assurance and advice can best be provided to the programme. **[Border Executive Board and Border Testing Governance Group]**

- b. **Enhance the cross-agency system-level visibility** of the progress with the programme of work and compliance with the Order. Establish appropriate and regular reporting from the refreshed BTGG to the BEB, and other relevant stakeholders to provide such visibility. **[Border Executive Board and Border Testing Governance Group]**
- c. **Clarify and confirm the accountabilities, roles and responsibilities of all involved in the border worker testing arrangements.** Formally document them in a clear accountability framework such as a RACI (Responsible, Accountable, Consulted, Informed) matrix to assist all involved including the Ministry of Health, WorkSafe, MBIE MIQ as 'lead PCBU', relevant PCBUs, workers and other parties. **[Ministry of Health]**
- d. **Formally document the arrangements, roles and responsibilities for the BWTR, and the management and use of the data in it.** This should recognise the different roles the Ministry of Health has in relation to the BWTR e.g. owner and service provider of the platform, monitoring compliance of affected persons under the Order using the information in BWTR etc. It should also document the role MBIE is playing in maintaining the data in BWTR on behalf of MIQ PCBUs. **[Ministry of Health]**
- e. **Establish a clear data governance model for the data in the BTWR** so that consistent and well-understood processes operate for the effective and safe management of the data. The agreed service expectations for the Ministry of Health provision of the BWTR to PCBUs should also be documented. **[Ministry of Health]**
- f. **Formally document the arrangements, roles and responsibilities for WhosOnLocation** and the record-keeping of worker attendance testing that MBIE is maintaining on behalf of MIQ PCBUs, and its upload into the BTWR. **[MBIE]**
- g. **Continue to improve the integrity of the data in the BWTR for MIQF** – both for the records of who needs to be tested and who is being tested. Reduce the time-lag in the reporting of testing data to improve the accuracy of the reporting of compliance. Until this is achieved, issue guidance to all PCBUs about how they should manage the time-lag to ensure a consistent approach is taken. **[Ministry of Health and MBIE]**
- h. **Continue to improve the functionality of the BWTR** to meet the user requirements. This should include improving the compliance reporting to enable effective, risk-based targeted follow-up, and the reporting of historical non-compliance. **[Ministry of Health]**
- i. **Further improve and align the reporting on compliance under the Order at MIQF.** The reporting should provide a full view of compliance, and be aligned between the different agencies. Where there is different reporting produced by agencies to meet different needs, the measurement basis for the reporting should be made clear so that users of the compliance reports can clearly understand the information that is being reported, particularly if it does not provide a full view of compliance. **[MBIE and Ministry of Health]**

- j. **Investigate whether ‘write’ access rights can be provided to PCBUs** for certain data for their staff in the BWTR to increase the timeliness of data entry, whilst maintaining the appropriate level of controls over the accuracy of the data **[MBIE]**
- k. **Further enhance the ways of engaging and communicating with PCBUs and workers** to gain confidence about the accuracy of the records of PCBUs and workers who are covered by the Order and to support effective compliance with the Order. **[Ministry of Health]**
- l. **Review the centrally-issued guidance on the Order** to ensure it is consistent with the requirements of the Order. Provide better clarity about how the Order relates to the duties and obligations of PCBUs under the HSWA. **[Ministry of Health]**
- m. **Continue to implement the active compliance and enforcement regime.** An assurance picture of the current controls and assurance processes in place for the testing arrangements should be developed to inform the risk-based monitoring and follow-up of workers and PCBUs. **[Ministry of Health and WorkSafe]**

Design and implementation of control measures, and changes to the measures

- 2. **Review the current processes followed for design and implementation of the COVID-19 control measures, and changes to the measures.** The review should identify practical ways of ensuring that the operational implications are better considered and addressed at the design stage. The design should also explicitly consider the data requirements, and the controls and assurance processes needed, when the measures are operationalised, to provide confidence that the intended objectives of the measures will be achieved.

Examples of how this could be achieved include:

- developing clear specifications or a checklist of the key matters that need to be addressed, and processes that should be followed in the design stage
- providing guidance on the expected controls and assurance processes that need to be put in place.

[Ministry of Health]

Part 1: Introduction

This part of the report sets out some context and background about the border worker testing requirements and arrangements.

It also outlines the purpose, scope and approach to the review.

The Testing Orders

Cabinet received a report back on COVID-19 Surveillance Plan and Testing Strategy on 20 July 2020.¹⁷ The Cabinet paper noted that the Ministry of Health was implementing the Testing Strategy approved by Cabinet on 22 June 2020. One of the five parts of that strategy was to maintain strong controls at the border. The updated approach had three key focus areas, one of which was proactive testing of people in high-risk areas, for example asymptomatic air crew, border staff and people working in MIQF.¹⁸ Cabinet agreed that there should be weekly testing of all staff working in MIQF.

The paper also noted that the Ministry of Health had introduced a programme of voluntary testing of asymptomatic workers at MIQF in Auckland, Wellington and Christchurch and at Auckland Airport on 10 July 2020.

On 11 August 2020, New Zealand experienced its first case of community transmission in 102 days. Three days later, a Testing Order came into effect requiring mandatory one-off testing of certain border workers.

The RTO came into effect on 29 August 2020 which introduced infringement offences under the COVID Act. Since then, there have been four main amendments to the RTO to put in place the mandatory routine testing requirements for border workers. The table below summarises the testing orders and the amendments made to them.

TABLE 1 | SUMMARY OF TESTING ORDERS AND AMENDMENTS

Order	Type of testing required	Key requirements / changes
Initial Testing Order - came into effect at 11.59pm on 14 August 2020	One-off	<ul style="list-style-type: none">Required a one off COVID-19 test for all people who had worked at MIQ, Port of Tauranga or provided transport to/from a MIFQ since 11.59pm on 21 July 2020.Testing to be completed by 11.59pm on 17 August 2020.A breach of the Order was an infringement offence under the section 26(3) of the COVID Act for which a person was liable to an infringement fee of \$300 or a fine not exceeding \$1,000.
Amendment to the 14 August 2020 Testing Order, came into effect at 11.58pm on 17 August 2020	One-off	<ul style="list-style-type: none">The main purpose of the amendment was to extend the timeframe within which persons under the Order must be tested, from 17 August to 20 August 2020.
Original RTO, came into effect 11.59pm on 29 August 2020	One-off	<ul style="list-style-type: none">Required one-off testing of higher-risk workers at Auckland International Airport, certain higher-risk workers at the Ports of Auckland and Port of Tauranga, and workers at MIQF.

¹⁷ CAB-20-MIN-0339 Report Back on COVID-19 Surveillance Plan and Testing Strategy, 20 July 2020.

¹⁸ The other areas of focus were the robust testing of all arrivals as part of the strong border controls, with testing on or around days 3 and 12 for all returnees; and the continued and widespread testing of symptomatic people in the community.

Order	Type of testing required	Key requirements / changes
		<ul style="list-style-type: none"> Testing was to be completed by 11.59pm on 6 September 2020. A breach of the requirements, without reasonable excuse, was an infringement offence under the COVID Act.
First amendment to the RTO, came into effect at 11.59pm on 6 September 2020	Routine	<ul style="list-style-type: none"> First Order to require regular routine testing of certain higher-risk border workers at Auckland International Airport, Ports of Auckland and Port of Tauranga and at MIQF. Regular surveillance testing was required either every seven or 14 days, as identified in the Schedule, based on the risks of exposure to COVID-19 the worker group faced.
Second amendment to the RTO, came into effect at 11.59pm on 16 September 2020	Routine	<ul style="list-style-type: none"> The amendment extended the testing and medical examination requirements to specified groups of affected persons at all airports and ports unless exempted.
Third amendment to the RTO, came into effect at 11.59pm on 25 November 2020	Routine	<ul style="list-style-type: none"> Introduced the concept of 'relevant PCBU' into the Order. Relevant PCBU has the same meaning as section 17 of the HSWA. New duties were placed on PCBUs to facilitate compliance with the testing and medical examination requirements. <ul style="list-style-type: none"> Must notify affected persons of the requirement to be tested and the testing period that applies Cannot prevent an affected person from being tested during their work hours PCBUs were required to keep and maintain a record of testing and medical examination for each affected person they employed or engaged. Affected persons were required to provide the PCBU the relevant information to enable them to keep these records. A breach of the Order by an affected person or PCBU is an infringement offence under the COVID Act.
Fourth amendment to the RTO, came into effect at 11.59pm on 21 April 2021	Routine	<ul style="list-style-type: none"> Extended mandatory testing requirements to new groups of border workers (e.g. relating to affected objects). Increased mandatory testing frequency for some higher-risk workers from every 14 days to every seven days (including health practitioners at MIQFs). Provided flexibility in the scope of sampling methods (e.g. saliva) that the Director-General can determine may be used. Clarified how the seven and 14-day testing cycles must be implemented.
Fourth amendment to the RTO, came into force on 27 April 2021	Routine	<ul style="list-style-type: none"> A requirement for the records being maintained by PCBUs to be entered on a register kept, maintained, and monitored by, or on behalf of, the Ministry of Health. The BWTR became mandatory for all relevant PCBUs to use from this point.

Two other minor amendments to the RTO have been made:

- With effect from 11.59pm 4 October 2020 – changes to definitions and testing requirements for aircrew.
- With effect from 11.59pm 18 April 2021 – changes to reflect quarantine free travel.

The main parties involved in the testing arrangements

The role and responsibilities of the main parties involved in the testing arrangements for phase one of the review are outlined in Table 2.

TABLE 2 | MAIN PARTIES INVOLVED IN TESTING ARRANGEMENTS – PHASE ONE

Name	Role and responsibilities
Ministry of Health	<ul style="list-style-type: none"> Leads New Zealand’s health and disability system. As the lead agency for pandemic risk under New Zealand’s national security system¹⁹, it has the primary mandate for managing pandemic risk across the “4Rs” of risk reduction, readiness, response and recovery Its COVID-19 responsibilities include leading the development of policy, legislation, regulatory and operational policy, advice and guidance. Responsible under the RTO for keeping, maintaining and monitoring the BWTR.
MBIE MIQ	<ul style="list-style-type: none"> The lead government business-facing agency. MIQ became a business group within MBIE on 13 July 2020 and manages the MIQ system including the MIQF.
PCBUs operating at MIQF	<ul style="list-style-type: none"> The PCBUs that operate at MIQFs include hotel operators, New Zealand Police, New Zealand Defence Force, security, transport and health providers.
WorkSafe	<ul style="list-style-type: none"> New Zealand’s primary workplace health and safety regulator under the HSWA. Responsible for education, engagement and enforcement of workplace health and safety duties generally. This includes how businesses and services manage the risk of their workers being exposed to COVID-19. WorkSafe inspectors also have responsibilities under the COVID Act. The inspectors’ responsibilities are limited to work and workplaces that WorkSafe regulates under HSWA. They do not have authorisation to enforce COVID Act requirements that apply to individuals.

Border testing and the BWTR

The testing results of border workers are recorded in the national laboratory database, Eclair. There have been 207,453 mandatory tests undertaken by border workers from 29 August 2020 to 25 May 2021. Twenty-five border workers have returned positive cases during this time. Of these, eleven cases have been detected via the routine mandatory testing.²⁰ Testing undertaken due to symptoms experienced are not recorded as routine surveillance testing.

Border Workforce Testing Register

The BWTR is an online tool developed by the Ministry of Health to support the record-keeping requirements of PCBUs. The use of the register was initially voluntary for PCBUs but became mandatory from 27 April 2021.

¹⁹ National Security System Handbook, Department of Prime Minister and Cabinet, August 2016

²⁰ Due to the way the data is recorded, these numbers may include tests required to be undertaken in response to positive cases being detected. For example, in response to a positive case or an outbreak, decisions can be taken to require everyone working at the facility to be tested. These are recorded as mandatory tests in the system.

The register tracks and records the COVID-19 testing activity of border workers. The BWTR does not record the results of a test, only the date a swab was taken, to protect the privacy of workers. The date of the test result is pulled into the BWTR from the laboratory database and matched to the NHI records for each worker uploaded by PCBUs into the BWTR. This enables the tracking of testing status.

The BWTR keeps border workers and PCBUs informed about when workers need to be tested, whether they have completed their most recent test and records their vaccination status.

The BWTR sits on a Salesforce platform. Version 1.0 of BWTR was released on 1 October 2020. This version was piloted by MBIE on 19 October 2020 at two MIQ locations in Wellington. The register went live on 26 November 2020.

The uptake by PCBUs of the BWTR increased steadily from November 2020 through to early April 2021. There was a significant increase when the BWTR became mandatory with the number of PCBUs using the BWTR increasing from 94 on 19 April 2021 to 218 on 28 May 2021.

MBIE is recorded as the sole PCBU for MIQF in the BWTR. They are considered the 'lead PCBU' and manage the records of all the PCBUs operating in the MIQF. There are currently 501²¹ 'teams' recorded under MBIE in the BWTR. These are the various PCBUs operating in the MIQF.

At 24 May 2021, there were 13,327 active workers²² recorded in the BWTR. Of these, 6,184 were recorded as working in MIQF.

Managed isolation and quarantine

On 9 April 2020, managed isolation and quarantine became mandatory for arrivals into New Zealand. In July 2020, MBIE became responsible for the management of the MIQ system. There are 31 facilities in five locations around New Zealand. Over 140,000 people have stayed at the facilities over the past year.

Purpose, scope and approach to the rapid review

Purpose

The purpose of the review was to assess the arrangements in place to support compliance with the RTO. For the purpose of the review, the arrangements include the processes, information and systems that support compliance.

Scope

The review focused on the sufficiency of the arrangements. The review looked into the existing arrangements, and the planned improvements, to ensure that all people requiring testing are being tested under the Required Testing Order. This included accountabilities, information and education, technology systems, data capture, use and access, and reporting for the relevant PCBUs and the 'lead' PCBU, monitoring, assurance and enforcement.

²¹ This is the number of PCBUs who have had workers engaged or working in MIQF at any time. They remain on the system even if they have only been there for a one-off piece of work.

²² Active workers are defined as those who have recently done work at the border; those who have not fulfilled their last testing requirement; and those recently added as a new worker (who then become inactive if they don't work in their next testing period).

Given the rapid nature of the review, the review scope was asked to focus on the arrangements at a high-level. It was not an examination of the detailed processes and controls.

Assessing individual agencies' compliance with the RTO and/or the HSWA was not in scope of the review. The processes and controls to ensure the accuracy of the testing results in the national laboratory database, and the system controls in BWTR were also not in scope.

The review is being carried out in two phases. The first phase focused on MIQF. The second phase will look at the arrangements relating to the other workers at the border.

The review sponsors are Christine Stevenson (Chair of the BEB), Carolyn Tremain (MBIE), Dr Ashley Bloomfield (Ministry of Health) and Peter Mersi (Ministry of Transport). The business owners for the first phase are: Megan Main, Deputy Secretary for Managed Isolation and Quarantine (MBIE), Sue Gordon, Deputy Chief Executive, COVID-19 Health System Response (Ministry of Health).

Approach

The approach to the review involved:

- Meeting with the nominated key contacts from all of the above agencies.
- Gathering, reviewing and analysing relevant documentation on the arrangements from the government agencies involved, including Ministry of Health, MBIE and WorkSafe. Various people in these agencies were interviewed. Thirty-one interviews were carried out involving 41 people.
- Viewing a demonstration of the BWTR.
- Selecting ten PCBU²³ to interview to gain their perspectives. A cross-section of PCBUs were selected to get coverage of large and small PCBUs, worker types, locations and compliance levels. The PCBUs interviewed included the New Zealand Defence Force, New Zealand Police, AVSEC, three hotels, two security operators, one health provider and one transport operator. In total, these ten PCBUs had 2,831 staff working at MIQF, accounting for 64% of the workers in MIQF.²⁴
- Progress meetings with the chair of the BEB and the business owners for the review.
- Preparation and issue of the draft report to the business owners for initial feedback and comment on 4 June 2021, and then to the BEB for final comment.
- Consideration of feedback provided, and finalisation of the report.

The review was carried out with the assistance of the Principal Advisor, Assurance of Customs' Risk, Assurance and Integrity team. The terms of reference for the review are in appendix one.

²³ Not including MBIE.

²⁴ The total numbers of workers for MIQF and for the ten PCBUs interviewed is based on the weekly report from the BWTR for the week ended 23 May 2021.

Part 2: The border testing arrangements in MIQF

This part of the report assesses the arrangements in place to support compliance with the RTO in MIQF.

It examines the sufficiency of the arrangements, the work planned to improve those arrangements, and whether further improvements are needed to the arrangements.

The review looked at the high-level arrangements designed and rolled out to support effective compliance with the RTO. The areas in-scope for the review were the accountabilities, information and education, technology systems, data capture, use and access, and reporting for the relevant PCBUs and the 'lead' PCBU, and monitoring, assurance and enforcement. The review considered the key controls and assurance processes in place to support compliance with the Order in MIQF.

Objective of the testing arrangements

The mandatory routine testing of border workers has been in effect from 6 September 2020.

The objective of the border worker testing arrangements is to ensure that all the border workers who are required to be tested under the Order are being tested to effectively manage the public health risk of an outbreak or spread of COVID-19.

Findings and observations

This section outlines the key findings and observations arising from the review relating to the border worker testing arrangements. It discusses the initial implementation of the Order, the BWTR, the main amendments made to the Order, the compliance and enforcement model adopted, and the arrangements in MIQF to support compliance with the Order.

Initial implementation of the RTO

The implementation of the routine mandatory testing was a major undertaking. The initial roll-out was implemented in three phases to allow testing capacity to be scaled up and avoid large spikes in testing, the workforce that was required to be tested to be identified, and operational and logistics planning and communications to be done. The phasing was reported as being based on a risk assessment framework which determined testing frequency depending on scope of the role and work settings.

The new processes were designed and implemented at speed in an environment of continued uncertainty. Many people interviewed commended the commitment of all concerned in the endeavour, particularly the border workers who had to be tested, to continue to keep New Zealand safe.

The Border Order Testing Taskforce Governance Group

In early September 2020, a cross-agency task force led by the Ministry of Health started to be set up to support the implementation of the mandatory routine border testing regime. On 5 September 2020, certain border sector and central agency chief executives were advised that a governance group was being set up to 'provide guidance to the taskforce and decision-making commensurate

with the speed that the taskforce will be operating at'. They were asked to nominate senior representatives for the group who would have the authority to commit to decisions made by the governance group on behalf of their agencies. The group would operate as a clearing house of issues and interests across the agencies and ensure alignment across government. The Border Order Testing Taskforce Governance Group²⁵ (the border testing governance group or the governance group) started meeting regularly soon after.

The border testing governance group was chaired by a senior manager from the Ministry of Health and included representatives with varying levels of seniority from MBIE, Ministry for Primary Industries, Ministry of Transport, Ministry of Health, Maritime NZ, the Department of the Prime Minister and Cabinet, the New Zealand Customs Service and WorkSafe.

The task force established a programme of work which had four key elements - Operationalisation, Engagement & Communications, Reporting & Monitoring and Authorising Environment. The initial planned programme of work was reported to the Prime Minister and the Minister of Health in a health report on 4 September 2020.²⁶

The border testing governance group did not have terms of reference and formal decision-rights, despite the stated intention for it to make decisions. Minutes were kept of meetings. It was not established under a formal programme structure with a documented programme plan, but it provided programme reports. The governance group provided advice, support and guidance to the various government officials, and enabled cross-agency coordination. A focus of the governance group was utilising the existing relationships and networks that government agencies had with various industry groups e.g. the transport sector, to communicate effectively and efficiently with the sectors and organisations affected by the Order.

The border testing governance group was seen as a useful group by a few people interviewed for this phase of the review. The members of the governance group were expected to 'brief upward' in their relevant agencies, but it was clear that it had varying levels of visibility across the agencies interviewed for this phase of the review. There were reports of 'decisions' made in the group that were overturned later. There was no reporting provided to the Border Sector Governance Group²⁷. A presentation was made to the Border Executive Board on the BWTR in April 2021.

The governance group moved into a phase of meeting less regularly after the roll-out of the three initial phases of the Order.

A cross-agency programme of work started to be planned in April 2021 to further improve the border worker testing arrangements, under a refreshed and renamed governance group – the Border Testing Governance Group (BTGG). It has been recognised that the mandate and focus of the group needs to be formalised, and people with the relevant expertise and responsibilities chosen for the group. A draft terms of reference has been prepared. Work had also started on confirming roles and responsibilities for the various agencies. Artefacts such as a risk profile were still in development. At the time of fieldwork for the review these areas of work were still to be finalised.

²⁵ Also referred to as the Border Order Testing Governance Group in some documentation.

²⁶ Health Report: COVID-19 Public Health Response (Required Testing) Amendment Order 2020 – for Border Workers.

²⁷ The Border Sector Governance Group (BSGG) was a Chief Executives' group established to look at the issues about integration and coherence at and beyond the border as New Zealand recovers from COVID-19. The BSGG's purpose was to provide system direction and governance on the programme of work across government that relates to re-opening New Zealand's borders post-COVID-19. The BSGG was later replaced by the new BEB.

Going forward, the governance and assurance of the programme needs to be strengthened.

Border testing dashboards

Regular reports of progress with the implementation of the routine border testing were provided to the Minister of Health. Dashboards of testing status were also provided. These were the first attempts at providing reporting of compliance with the testing requirements, but had a number of caveats about the data. For example, the data was reliant on the correct coding of border tests at the laboratories and the tests were based on tests processed rather than when swabs were taken. The 'denominator' (the total number of the workers who may be covered by the Order), which was sourced from the different organisations working at the border, was often based on manual collation processes and was still under refinement.

The compliance and enforcement model

During the early stages of implementation of the RTO, officials started to work to develop a compliance and enforcement model – with the key issues to be worked through being the roles of employers and employees, government agencies and what information needed to be shared to facilitate and demonstrate compliance with the Order.

A supportive approach was to be taken to enable individual workers to meet their obligations, primarily through education. Warnings or the issuing of fines for individual workers were not recommended.

The Border Workforce Testing Register

Right at the outset, the need for a technology solution that enabled a comprehensive view of who has or has not been tested was identified in a report to the Minister of Health in late August 2020.

The scope of the Reporting and Monitoring workstream of the BTGG included the 'implementation of a data management system so that the data can be shared with the health system and provide assurance to employers as to testing requirements being met'.

The system was later called the BWTR. The BWTR would match workforce data loaded by employers with the laboratory database, Eclair, through NHI numbers.

The BWTR was designed as a voluntary online tool by the Ministry of Health to support the record-keeping requirements of PCBUs introduced in the 25 November 2020 amendment to the Order, discussed later in the report.

The Ministry of Health first piloted BWTR for MBIE in two MIQF locations in Wellington on 19 October 2020, and it went live as a voluntary tool for employers on 26 November 2020.

A key benefit of the BWTR is that it provides independent confirmation, and therefore a much greater level of assurance, that workers have been tested. This key benefit did not seem to have been emphasised when it was rolled out. The focus in communication to PCBUs was on minimising the administrative burden on PCBUs, and to support them in their new record-keeping duties that took effect from 25 November 2020.

There are some known limitations with BWTR that continue to be worked on. These include:

- The BWTR is not a fully real-time system. There is a time-lag between when swabs are taken and when the testing dates are pulled into the BWTR. This means the compliance reported in the system is not entirely accurate. A Ministry of Health e-ordering initiative to increase the efficiency of the testing process, when implemented, is expected to reduce this lag but not eliminate it. Some PCBUs indicated that guidance should be provided about how to deal with this time lag e.g. should staff should be allowed onsite who show as non-compliant, and are within the known time-lag in the BWTR?
- Manual processes are needed to match duplicate NHIs, and resolve other NHI and data issues, which also add to the time-lag. Work to resolve these issues has improved the number of workers still to be NHI-matched in MIQF over recent weeks as shown in the table on page 25.
- The BWTR also does not currently have the functionality to provide aggregate reporting of historical compliance by workers to allow risk-based, targeted follow-up of workers who have a history of non-compliance.
- There are other areas where the functionality of the BTWR can be enhanced to assist the monitoring and reporting processes for MBIE and other PCBUs. For example, the ability to set up sub-teams in BWTR and to run reports at a location level. It is expected that these further ongoing improvements would form part of the 'development pipeline' for the BWTR.

Going forward, work should continue to reduce the time-lag in the reporting of testing data to improve the accuracy of the reporting of compliance, and to improve the functionality of the BWTR. Until this is achieved, guidance should be issued to all PCBUs about how they should manage the time-lag to ensure a consistent approach is taken.

In addition, the arrangements, roles and responsibilities of various parties involved in the ownership, management and use of the BWTR, and the data in it should be clearly documented. This should include the role MBIE is playing in maintaining the data in BWTR on behalf of MIQ PCBUs (discussed later in the report), the agreed service expectations for the Ministry of Health provision of the BWTR to PCBUs, and assurance processes for key controls over the BWTR data. A clearly defined data governance model would help ensure that consistent and well-understood processes operate to effectively manage the data in the BWTR.

[The 25 November 2020 amendment to the Order](#)

A key amendment to the Order took effect from 25 November 2020. The focus in the advice developed for this phase was to consider what additional duties could be placed on businesses and organisations to better support worker compliance with the mandatory testing.

The amendment to the Order:

- Required relevant PCBUs to facilitate compliance by notifying affected persons of the requirement to be tested and the testing period that applies, and not preventing an affected person from being tested during their working hours.
- Required PCBUs to keep a record of the testing for each affected person.
- Required affected persons to provide the PCBU the relevant information to enable them to keep these records.
- Introduced new infringement offences for breaches of the obligations by PCBUs.

Duties on PCBUs and the compliance and enforcement model

There was considerable work done in developing advice for the Minister of Health on the new duties introduced for PCBUs and workers, and the compliance and enforcement model.

Advice was provided on 16 September 2020 that the existing frameworks for compliance and enforcement under the Order and the HSWA provided adequate assurance that the required routine testing of high-risk border workers is, and will be occurring.²⁸

It was noted that, if desired, the existing framework could be strengthened by placing a further obligation on affected workers to confirm to their employer that they have been tested, and that an additional duty on affected workers to provide evidence to their employer would be included in an amendment to the Order.

Various options for new duties for PCBUs were explored to better support worker compliance with the mandatory regime. In the end the recommendation to the Minister were the new duties on PCBUs introduced in the 25 November 2020 amendment to the Order.

The enforcement regime was designed as a ‘complaint-based’ model i.e. it would respond to any reported non-compliance, rather than actively monitor compliance. The advice was that WorkSafe²⁹ would act as the enforcement officer on an interim basis for PCBUs, and that this would be in line with its existing education and graduated enforcement approach to COVID-19. It was not in a position to proactively monitor compliance with the Order. Enforcement action for breaches by individual workers would continue to be undertaken by Medical Officers of Health. The advice indicated that various review points of the Order in the coming months offered the opportunity to consider the scope of the enforcement function and who should hold responsibility for it.

Although the advice had focused on creating a duty on the worker to provide evidence of being tested, the new duty introduced for workers to provide relevant information to the PCBU does not specify the type of information or evidence to be provided with regards to the date of testing. Central guidance was also not provided. In practice, MIQF PCBUs took different approaches, as discussed on page 23.

Guidance on the Order and HSWA

Guidance issued by the Ministry of Health on implementing the Order notes that PCBUs have obligations to monitor and track the testing status of their staff, and that mandatory use of the BWTR will support PCBUs in fulfilling their obligations to ensure all staff are tested in accordance with their testing cycle.³⁰ The guidance for the maritime and aviation border sectors is similar.³¹

Both sets of guidance note that if a worker does not comply with their mandatory testing requirements or the requirement to provide information, ‘we expect their employer would follow up

²⁸ Health Report, Routine mandatory COVID-19 testing of border worker: Confirming roles and obligations, 16 September 2020.

²⁹ WorkSafe inspectors are currently authorised under section 18 of the COVID Act to carry out the functions and powers of an enforcement officer with respect to workplaces for which WorkSafe is the regulator. This includes MIQFs.

³⁰ *Guidance for implementing the Required Testing Order at Managed Isolation and Managed Quarantine Facilities*, Ministry of Health, Fifth Revised Version: 20 April 2021

³¹ *Guidance Manual for Border Worker Testing for COVID-19 (Aviation and Maritime sectors)* Version 3.0 – at 13 May 2021, Ministry of Health.

with them in the first instance'. The guidance goes further than specific duties placed on a PCBU in the Order.

The majority of the ten PCBUs interviewed for this review considered the monitoring of routine testing status a key element of their staff health and safety systems.

WorkSafe also provides guidance on managing duties for border and MIQF businesses and services, and the difference between HSWA obligations and COVID-19 public health requirements.³² There is guidance on meeting the public health requirements for workers to be regularly tested for COVID-19. The guidance is not explicit about whether PCBUs are expected to monitor compliance with the Order and ensure their staff are tested under HSWA or the Order.

The Ministry of Health's guidance should be reviewed to make it more consistent with the Order. Better clarity about the duties and obligations of PCBUs under the HSWA as it relates to the testing requirements under the Order would also be helpful.

Full review of the Order

The Ministry of Health's System Strategy and Policy directorate undertook a full review of the mandatory routine testing approach in February 2021. Some key points are summarised below.

Full review of the mandatory routine COVID-19 testing approach, 17 February 2021, prepared by System Strategy and Policy, Ministry of Health

The Minister of Health had agreed that the routine mandatory testing should be reviewed regularly. An earlier interim review was also carried out.

Surveys were carried out of PCBUs and their affected workers – 1,038 responses were received from affected workers, with the largest number from the air sector (47%) followed by MIQF (29%). Forty-four responses were received from PCBUs, mostly from the private sector (86%). Eight interviews were carried out with PCBUs and representative bodies.

The **key findings** were:

- The Order was working well.
- Despite more virulent strains, there was no material change to the public health risk that would justify amending the Order at this stage.
- Opportunities were identified to improve the flexibility and clarity of the Order to make it more agile and easier to implement.

With regards to the **benefits and costs**, the review found:

- The benefits of the routine testing could not be stated as, given the multiple layers of the elimination strategy, it was impossible to say if any of the border workers would have gone on to cause a community outbreak if mandatory testing was not in place.
- The costs of the testing was estimated to cost \$50m per annum at the current rate of testing, plus the additional administrative costs for PCBUs which could not be estimated. It was estimated that voluntary daily saliva testing could cost \$114m per annum for MIQF.

In relation to the **BWTR**, the review noted that it could not be used as a comprehensive enforcement tool without making it mandatory. Privacy considerations would need to be worked through to see if it was possible. It was also noted that making it mandatory does not guarantee all PCBUs would sign up. Only a third of those surveyed had signed up, as it may represent an unnecessary administrative burden for small PCBUs and others had developed their own systems which were working well.

There had been some confusion about who was responsible for **compliance and enforcement activities**, and a perceived lack of enforcement. The Ministry of Health was noted as being best placed to be the enforcement officers for workers.

³² [Managing duties for border and MIQF businesses and services – what you need to know | WorkSafe](#), sourced on 4 June 2021.

MIQF arrangements to support compliance with the Order

The initial implementation of the Order in MIQF

The initial RTO only placed obligations on the affected person to be tested. It did not require workers to provide any information to their employers, or specify any duties for the organisations that employ or engage workers at MIQF.

Arrangements were made at the MIQF to enable testing onsite. MBIE took responsibility for the MIQ system and set up new manual processes to record the workers at MIQF who needed to be tested, and whether they had been tested.

Standing up detailed operational processes in a short space of time to facilitate the routine testing of a diverse and rotational workforce in MIQF was challenging. Thirty-two workforce coordinators were immediately recruited to collect and maintain records, and follow-up with staff. The data was collected via manual sign-in sheets for each site, that was entered into an excel spreadsheet for each location. This manual record-keeping occurred for a five-month period from 8 September 2020 through to 7 February 2021.

A few PCBUs spoken to for this review also established their own record-keeping processes for staff testing. Payroll, roster or other workforce records were often used to identify who should be tested. The processes to track the testing status were often manual but in a few cases technology-based solutions were implemented.

The Order was often described in interviews as a 'high-trust' model. This was because there no requirements, or centrally-issued guidance about what evidence needed to be collected to provide assurance that testing had occurred. Even the 25 November 2020 amendment did not provide any specificity about the nature of the evidence recommended to provide assurance that testing had occurred. In practice, a variety of approaches was taken by MBIE MIQ and other PCBUs operating in MIQF to gather the information required. It was mainly based on staff providing the information about having been tested voluntarily. In some cases the processes provided a level of assurance that testing had occurred. For example, staff sometimes showed or shared the texts they received about their results or took photographs of themselves being tested. A few PCBUs implemented a self-declaration process. District health board staff in some MIQF reviewed attendance lists and confirmed testing had occurred.

MBIE produced some compliance reporting from the manual processes but it was not formally reported to the MIQ leadership team. The reliability of the data for this reporting would have highly questionable given the significant quality issues later identified with attendance data when the new automated sign-in system WhosOnLocation (WOL) was piloted, as discussed below.

The key data-sets that underpins the testing arrangements

There are two key data-sets that underpin the testing arrangements – the records of who should be tested, and the records of who has been tested. The completeness and accuracy of these data-sets underpins the level of confidence that can be placed in border worker testing arrangements.

The records of who should be tested – implementation of WhosOnLocation in MIQF

Soon after the issue of the 25 November 2020 amendment to the Order, MBIE started to pilot WOL³³ on 27 November 2020 in four sites. The pilot ran till 6 December 2020.

The MBIE MIQF worker profiles were uploaded into the BWTR between 10 and 23 December 2020, based on the consolidation of names and attendance from the 32 spreadsheets maintained for each location. The manually collated data-set had significant quality and accuracy issues which has required a substantial amount of work to correct – discussed further below.

Reservations were raised about loading the data into the BWTR before it was properly cleansed, but the review was told that the timeframe was followed because of expectations that had been created with Ministers that this dataset would be loaded by then. It is unclear whether the extent of the data issues were known previously.

MBIE started to roll-out WOL at all sites. It continued to run the manual processes until the new WOL processes were embedded. The last attendance data from manual sign-in sheets was collected on 7 February 2021. From 8 February 2021 onwards, all attendance at MIQF has been recorded on WOL. Data started to be regularly uploaded in BWTR, based on the WOL attendance records, from this point.

The new WOL system, along with its accompanying policies and processes, notably strengthen the controls over the completeness and accuracy of the MIQF data-set of who is required to be tested.

It is important to note that the record-keeping in WOL relies on accurate records being kept of workers and their testing frequencies, and effective and consistent sign-in processes operating at MIQF. A quality assurance review was recently carried out at eight MIQ sites in April 2021 to identify areas for improvement. The main general findings were that sites were enforcing compliance with the sign-in process utilising WOL for all staff and visitors, however the level of training received and guidance available to those implementing the process was found to be inconsistent across the facilities.

The records of who has been tested - implementation of BWTR in MIQF

MBIE found the BWTR very challenging to implement. This was caused by the significant issues with the attendance data discussed above, but also because of the limitations and the developing functionality of the BWTR. New workflows had to be developed between the Ministry of Health, MBIE, and PCBUs to meet operational requirements.

A substantial amount of work was done over February and March 2021 to cleanse the MIQF attendance data in BWTR, such as correct the names of people, NHI numbers etc. A number of issues also had to be resolved as the functionality of the BWTR continued to develop. Understanding how the algorithms worked in the BWTR that determine the compliance of affected workers also caused issues, as there were errors and inconsistencies with the data held by the PCBUs and workers. On 8 April 2021, duplicate records from historical uploads were removed from BWTR.

Until this data was cleansed, limited reliance could be placed on the reporting from the BWTR. The first reliable report on compliance was only produced on 13 April 2021.

³³ WOL is an off-the-shelf software solution that provides visitor and employee management in buildings. It is used at MIQF to gather attendance data for workers coming onsite.

Case B – security guard working for First Security Group (FSG)

A worker testing incident occurred in the Grand Millennium Hotel in early April 2021. The situation with Case B illustrates the need for personal details of workers and their NHIs numbers to be accurately loaded into the BWTR before it can be matched with the testing data to confirm that testing has occurred. It also highlights the developing functionality of BWTR and data issues.

Some key points from Case B from the review undertaken of the incident³⁴ is summarised below.

- Case B told FSG they had undergone nine tests between December 11 2020 and March 24 2021, when they had not undergone any testing.
- Case B's lack of testing was only picked up when they were contacted to be tested as part of contact tracing in late March, and subsequently tested positive on 7 April 2021.
- Case B had first used WOL on 17 February 2021 and was sent two reminder and overdue notifications on 28 February 2021 and 4 March 2021. At this stage, the BWTR did not send notifications to PCBUs about tests. This now occurs.
- On 10 March 2021, Case B's worker profile and NHI number were matched with the testing data in BWTR.
- On 12 March, Case B logged into WOL again, and was sent further text notifications.
- There were data issues over a five-day period from 10-15 March 2021 where Case B was made inactive in BWTR. It was attributed to data issues.

Compliance reporting

MBIE has since introduced weekly reporting showing the compliance of workers who were onsite at MIQF in the previous week.³⁵ This report, produced from the BWTR, is the basis of monitoring and follow-up action by MBIE with its own staff and with other PCBUs. PCBUs can also run reports from the BWTR to assist the monitoring and follow-up activity they do. Based on interviews with a few PCBUs, many are continuing to maintain their own records until they get greater confidence in the data. Some PCBUs commented on the poor quality of the BWTR reporting

Table 3 below shows the recent compliance rates in MIQF, based on MBIE's weekly reports of the compliance of workers who were onsite at MIQF in that week. The table shows the numbers of workers who are yet to be NHI-matched steadily decreasing, reflecting the work that has happened recently to cleanse the data. The non-compliance rates have also steadily decreased.

TABLE 3 | MBIE MIQF - RECENT WEEKLY COMPLIANCE RATES WITH THE RTO OF WORKERS ONSITE DURING THAT WEEK

Week (2021)	MIQ workers onsite during week	Compliant (% of total NHI-matched workers)	Overdue, (% of total NHI-matched workers)	Still to be NHI-matched (% of total workers)
5 April – 11 April	4,902	3,415 (90%)	383 (10%)	1,104 (23%)
12 April – 18 April	5,167	4,125 (92%)	382 (8%)	660 (13%)
19 April – 25 April	4,469	3,760 (91%)	383 (9%)	326 (7%)
26 April – 2 May	4,495	3,825 (93%)	272 (7%)	397 (9%)
3 May – 9 May	4,397	3,958 (92%)	350 (8%)	89 (2%)
10 May – 16 May	4,128	3,831 (95%)	210 (5%)	87 (2%)

Data from MBIE MIQ, received 24 May 2021

³⁴ KPMG Review of MIQ First Security Incident, May 2021

³⁵ The report is based on the worker's compliance on their last day onsite.

The Ministry of Health’s dashboard compliance reports show the compliance of all active workers³⁶ as well analysis for those active workers attending work in the past 28 and seven days. Work has recently occurred to adjust the compliance reporting to exclude non-compliant workers in the BWTR who have not worked at the border since 12 April 2021 who are not considered a public health risk (see page 28).

The MBIE weekly reports do not show the compliance of all active workers who have been onsite at MIQF who need to be tested.³⁷ However, MBIE advised that it does maintain oversight of these other individuals and follows up accordingly. Some of the follow-up of workers who are long-term overdue or show as ‘no-swab’ in the BWTR has highlighted that many workers have since left employment. MBIE workforce advisors have been reminding PCBUs that workers are to be tested after their last shift. Additional communication materials have been developed to make this clearer.

As a result, there is a difference between the compliance reporting produced between MBIE and the Ministry of Health. MBIE and the Ministry of Health have advised that they are working to align their reporting. MBIE has recently started to also include the compliance of all active workers in MIQF in its weekly reporting to ensure all MIQ worker compliance is monitored.

The MBIE report for the period 7 – 13 June 21 in Table 4 below shows the compliance rates of workers who have been NHI-matched who have been onsite during that week and all active MIQF workers.

TABLE 4 | MBIE MIQF COMPLIANCE REPORT FOR THE PERIOD 7 JUNE 21 – 13 JUNE 21

	MIQF workers onsite during the week 7– 13 June 2021 (% of total NHI-matched workers)	MIQF Active Workers (% of total NHI-matched workers)
Compliant workers (NHI-matched)	3,687 (90%)	4,469 (77%)
Workers overdue for tests (NHI-matched)	419 (10%)	1,368 (23%)
Workers still to be NHI-matched	27	118
Total	4,133	5,955

Going forward, there needs to be aligned and complete reporting of compliance and the areas of focus for monitoring and follow-up. Compliance reports should provide a clear explanation of what is being measured, and why, so that users of the compliance reports can clearly understand the information that is being reported. Where there is different reporting produced by agencies to meet different needs, the measurement basis for the reporting should be made clear so that users of the compliance reports can clearly understand the information that is being reported, particularly if does not provide a full view of compliance.

Data managed in WOL and BTWR by MBIE for other PCBUs

As the ‘lead PCBU’ MBIE maintains the records for all PCBUs in the BWTR that operate in MIQF. The other PCBUs have ‘read access’ to the BWTR and rely on MBIE to make any changes. This is a source

³⁶ Active workers are defined as those who have recently worked at the border and have a test due; those who have not fulfilled their last testing requirement; and those recently added as a new worker.

³⁷ MBIE’s reports, until recently, only showed the compliance of workers who were onsite at MIQF in the previous week.

of frustration for some PCBUs interviewed as it was adding delays to the data being amended in the BWTR, for example for workers starting and leaving and correcting errors.

Going forward, the current arrangements between MBIE and the PCBUs for the maintenance of the WOL and BWTR processes should be documented, with the accountabilities and service levels made clear. The ability to provide 'write' access rights to PCBUs to directly manage certain data for their staff in the BWTR should be investigated – to increase the timeliness of data entry, whilst maintaining the appropriate level of controls over the accuracy of the data.

Summary of main current MIQF current controls and assurance processes

The table below summarises the main controls and assurance processes in the MIQ border testing arrangements.

SUMMARY | MAIN CURRENT CONTROLS AND ASSURANCE PROCESSES IN THE MIQF BORDER TESTING ARRANGEMENTS

- The controls to ensure the completeness and accuracy of the relevant personal information of each worker operating in MIQ and their testing frequency is correctly recorded in BWTR.
- Clear guidance and communication to all workers and PCBUs about the testing requirements.
- The use of WOL and the operational directives and processes at each MIQ to ensure all workers use WOL to sign-in at all MIQF.
- The controls around the regular upload of WOL data to BWTR – this is occurring three times a week at present.
- Automated texts sent to workers to remind them of upcoming tests, and when tests are overdue. Automated texts are also sent to PCBUs.
- Monitoring and follow-up with workers who are overdue for testing. This is done by MBIE MIQ and the relevant PCBU.
- Weekly compliance reports reported to MBIE MIQ – which provides the overall oversight and visibility of compliance with the Order, and further follow-up action needed.
- PCBUs can also run reports from BWTR to monitor and follow-up testing status with their staff.
- The recently introduced active compliance monitoring regime by the Ministry of Health and WorkSafe, which involves the follow-up of test results that are outstanding after a specified period with workers and PCBUs. This was 11+ days overdue at the time of writing this report, which allowed time for the MBIE MIQ and relevant PCBU follow-up processes to be undertaken first.
- Any compliance / assurance reviews that may be planned by MBIE MIQ or PCBUs to give them assurance that the controls are operating effectively in practice.

NB: The controls in place for the correct recording of testing results are not listed here, nor are the system controls in the BWTR, as these controls and assurance processes were outside the scope of the review.

Mandatory use of the BWTR and active compliance and enforcement

The BWTR was made mandatory for PCBUs to use BWTR from 27 April 2021. The amendment to the Order also required the BWTR to be maintained and monitored by, or on behalf of, the Ministry of Health.

The Ministry of Health and WorkSafe started to design and implement an active compliance monitoring and enforcement framework from this point. Enforcement scenarios have been drafted. At the time of fieldwork for the review, the framework had still to be agreed, and the roles and responsibilities of all involved were still to be confirmed.

A graduated approach to enforcing the compliance continues to be taken. In the case of non-compliance by a PCBU or a worker, the focus is on encouraging compliance through education. Since the active monitoring regime commenced on 27 April 2021, two Ministry of Health investigations are underway into individuals for failing to meet their obligations.

Additional staff had been recruited by the Ministry of Health to implement the active compliance monitoring. The plan was to follow-up test results that are outstanding after a specified period with workers and PCBUs i.e. it was 11+ days at the time of writing this report, to allow time for the MBIE MIQ and relevant PCBU follow-up processes.

The monitoring team were also working through a process of 're-categorising' non-compliant workers in the BWTR who were over 43+ days non-compliant, and have not since become an affected person as defined in the RTO. This was being done to allow the reporting to omit these workers out of follow-up activity, because they were unlikely to pose public health risk after such a long time, and because they skewed the data. Another reason was the BWTR was voluntary and not mandatory until 27 April 2021.

Public health sign-off was received on the date limit proposed. The data on these workers would remain on the BWTR. It is not clear what processes are in place to inform PCBUs that this is being done.

A subsequent 'ageing off' process has been undertaken to exclude non-compliant workers in the BWTR who have not worked since 12 April 2021. This was done with public health and legal signoff.

It will be important that strong controls are in place to ensure these types of decisions are properly authorised and documented, communicated to relevant parties, and implemented accurately.

Part 4: Wider border system

Some common themes arose in the review about the wider border system.

They highlight some broader matters for consideration in the ongoing management of New Zealand's COVID-19 response.

Operational considerations need to be better integrated into policy design and implementation

There is a need to better integrate operational considerations early into the policy design and implementation of border measures.

The operations at the border and in MIQF environments are complex, incorporating many different businesses, organisations and working arrangements.

Steps were taken to incorporate these considerations into border worker testing arrangements, through consultation with other agencies on the new requirements. However, strong views were expressed that more needs to be done to understand the 'on the ground' implications. There also seems to be an expectation gap, as some interviewed had the view that there was a high level of consultation and engagement to understand operational implications before the testing orders came into effect.

Insufficient consideration of the operational implications at the outset reduces the effectiveness of the implementation and increases the risk that the intended policy objectives may not be achieved. It also drives ongoing iteration and change over time, which requires additional time, resource, energy and effort.

This is not a new theme. It has been highlighted in other reviews.³⁸

The speed of policy design and implementation

Another common theme was the speed of the policy design, consultation and implementation.

Whilst sudden changes in circumstances and public health needs was recognised to drive the need for speed at times, there were views that some of the haste is driven by the policy development and implementation being challenged by Ministerial expectations about the speed of delivery. The speed compromises the quality of the processes, such as the adequate consultation and consideration of operational implications discussed above.

There is change fatigue in the system and a strong desire to find ways of being more proactive, and to anticipate the future requirements. The organisations in the border system have now been operating in a high-risk and high-scrutiny environment for over a year, with critical responsibilities to keep their people and the wider community safe from the transmission of COVID-19. This places the system and the people that work in it under considerable pressure.

³⁸ Report of the Advisory Committee to Oversee the Implementation of the New Zealand COVID-19 Surveillance Plan and Testing Strategy, 28 September 2020, and the Review of COVID-19 Border Measures – Tranche One (Aviation), Venter Consulting, 2 October 2020.

It is clear that implementing the testing arrangements has been challenging for agencies, and noticeable tensions were evident in the working relationships. This increases the risk in and the fragility of the border system.

Implementing an assurance by design approach

As discussed in Part 2 of the report, the initial design of the border worker testing arrangements was described as a 'high-trust' model. Following cases of non-compliance being identified, the arrangements have strengthened to provide greater confidence in the arrangements. For example, the most recent changes to introduce the mandatory use of the register and the active monitoring and enforcement regime.

Options to enhance the level of assurance in the testing regime were considered, such as working through the privacy considerations of making the BWTR mandatory. But the impetus for the strengthening the arrangements seems to have come only after positive border cases were identified where routine testing had not occurred.

In another example, the problem was recognised, i.e. the need for evidence from workers about the testing but the solution fell short of providing sufficient assurance or consistency – a new duty on workers to provide information about the dates of testing without further guidance or requirements about what was expected to be obtained to provide confidence that testing had occurred.

Greater consideration should be given to the level of assurance needed about compliance with the Orders when measures are being designed.

An assurance by design approach should be taken. In other words, considering the assurance requirements at the time of design of the new arrangements or processes. The risks, and the level of tolerance for non-compliance, should guide the design of the assurance arrangements. Such an approach also enables greater transparency and visibility, where trade-offs are needed about the level of assurance desired and possible.

Providing guidance on the expected or good practice controls and assurance processes when Orders are issued would help in robust and consistent operational processes being established at the outset.

The current testing arrangements was described in one interview as a 'no-trust' model. This model was characterised as one in which several layers of assurance are added over time without adequate consideration of the total assurance picture, and smarter and more effective ways of getting the desired assurance. A total assurance picture or framework minimises the risk of overlap or duplication and helps ensure that any changes are optimal. The assurance considerations should be integrated into the work that is currently being done on the compliance and enforcement framework for the RTO.

Limitations and disclaimer

This report was prepared solely in accordance with the terms of reference for this engagement and for no other purpose. We disclaim any responsibility for the use of the work for a different purpose or in a different context.

The report is provided solely for the purpose of assisting the Border Executive Board with advisory services and is not to be used for any other purpose or distributed to any other party without our consent. Other than our responsibility to the Border Executive Board, we undertake no responsibility arising in any way from reliance placed by a third party on our work. Any reliance placed is that party's sole responsibility. Accordingly, we accept or assume no duty, responsibility, or liability to any other party in connection with this report or this engagement.

This report is based on information provided by the Border Executive Board and agencies and/or interviewees made available by it. We have considered and relied on this information. We have assumed that the information provided was reliable, complete, and not misleading.

The work was not performed in accordance with any generally accepted auditing, review or assurance standards in New Zealand and accordingly does not express any form of assurance. None of the advisory services constitute any legal opinion or advice. The work did not involve any form of inquiry to detect fraud or illegal acts.

Appendix one

Terms of Reference: Rapid Review of Border Worker Testing

Purpose

The purpose of the rapid review is to assess the arrangements in place to support compliance with the COVID-19 Public Health Response (Required Testing) Order 2020 (the Required Testing Order).

The review will assess the current arrangements, the work planned to improve those arrangements, and make recommendations for any further improvement.

For the purpose of the review, the arrangements include the processes, information and systems that support compliance with the Required Testing Order.

Background

The Required Testing Order sets out the 'affected person' who is required to be tested on a regular basis. These include certain workers at:

- Managed isolation and quarantine facilities (MIQFs);
- Affected airports; and
- Affected ports.

These categories cover a large number of PCBU³⁹ from the private and the public sector. There are approximately 4,500 workers requiring regular testing as a result of work related to MIQFs and approximately 20,000 workers in affected airports and ports.

Recent cases of border workers not undergoing regular testing, as required by the law, have raised concerns about the border worker testing arrangements.

There is a programme of work planned to improve the end-to-end border worker testing arrangements across agencies including:

- Reviewing processes and systems e.g. the border workforce testing register;
- Working with PCBUs in relation to reinforcing their obligations;
- Clarifying and strengthening the programme governance arrangements and accountabilities
- Improving data capture, reporting and information quality; and
- Establishing monitoring, compliance and assurance practices.

A rapid review is required to identify whether the current arrangements, along with the planned improvements, are sufficient to support compliance, and to identify any further improvements that would increase confidence in the arrangements.

³⁹ A 'relevant PCBU' is defined in the Required Testing Order as, in relation to an affected person, the PCBU (within the meaning of section 17 of the Health and Safety at Work Act 2015) who employs or engages the affected person to carry out work for the PCBU.

Scope

The rapid review will focus on the sufficiency of the high level arrangements. The review is to enquire into the existing arrangements, and the planned improvements, to ensure that all people requiring testing are being tested under the Required Testing Order, including:

- Accountabilities under the Required Testing Order;
- Information and education;
- Technology systems;
- Data capture, use and access, and reporting for the relevant PCBUs and the 'lead' PCBU;
- Monitoring, assurance and enforcement.

The review will be carried out in two phases.

- Phase one will focus on MIQF
- Phase two will look at the arrangements relating to the other workers at the border.

Out of scope

The following is out of scope of the review:

- individual agencies' compliance with the Required Testing Order and/or the Health & Safety at Work Act 2015.

Review arrangements

The rapid review is commissioned by the Border Executive Board.

The reviewer is Wendy Venter, supported by the Principal Advisor, Assurance, New Zealand Customs.

The project sponsors are Christine Stevenson (Chair of the Border Executive Board), Carolyn Tremain (MBIE), Dr Ashley Bloomfield (Ministry of Health) and Peter Mersi (Ministry of Transport).

The business owners are:

- Phase one: Megan Main, Deputy Secretary for Managed Isolation and Quarantine (MBIE), Sue Gordon, Deputy Chief Executive, COVID-19 Health System Response (Ministry of Health)
- Phase two: the names of the relevant business owners will be confirmed before the commencement of phase two.

The primary point of contact for the rapid review is Sarah Holland, Interim Executive Director, Border Executive Board

Approach

The approach to the review is expected to include the review of documentation and interviews with relevant people, including the following:

Documentation

Relevant documentation of the arrangements currently in place and the proposed improvements, including:

- Required Testing Order and other relevant legislation
- Relevant information and guidance from the Ministry of Health relating to worker testing
- Lead PCBUs worker-facing documentation relating to worker testing.
- Process and system documentation

Interviews

Relevant representatives from:

Phase One

- Managed Isolation and Quarantine (MBIE)
- Ministry of Health
- WorkSafe New Zealand
- A selection of PCBUs who employ or engage affected persons who fall within Parts 1 and 2 of the Schedule 2 of the Required Testing Order ensuring both private and public sector coverage, such as:
 - security firms
 - transport providers
 - accommodation providers
 - District Health Boards
 - New Zealand Defence Force
 - New Zealand Police
 - subcontractors to any of the above (such as cleaning companies, maintenance providers, etc).

Phase Two

- New Zealand Customs Service
- Ministry of Health
- Immigration New Zealand (MBIE)
- Ministry for Primary Industries
- Ministry of Transport
- Aviation Security
- Maritime New Zealand
- District Health Boards
- WorkSafe New Zealand

- A selection of PCBUs who employ or engage affected persons who fall within Parts 3 to 5 of Schedule 2 of the Required Testing Order ensuring both private and public sector coverage, such as:
 - Airport companies and prime contractors (cleaning companies, baggage handlers etc)
 - Stevedore companies
 - Port pilots
 - Airlines with affected aircrew

Points of contact will be established in all relevant agencies to assist with accessing information and arranging interviews. The reviewer will keep the business owners informed of progress.

Timing and deliverables

The review will commence on 19 April 2021, and a draft report for phase one will be provided to the Chair of the Border Executive Board by 17 May 2021. A final report for phase one will be provided by 24 May 2021.

The timing for phase two and any amendments to the terms of reference will be confirmed upon completion of phase one.

Funding

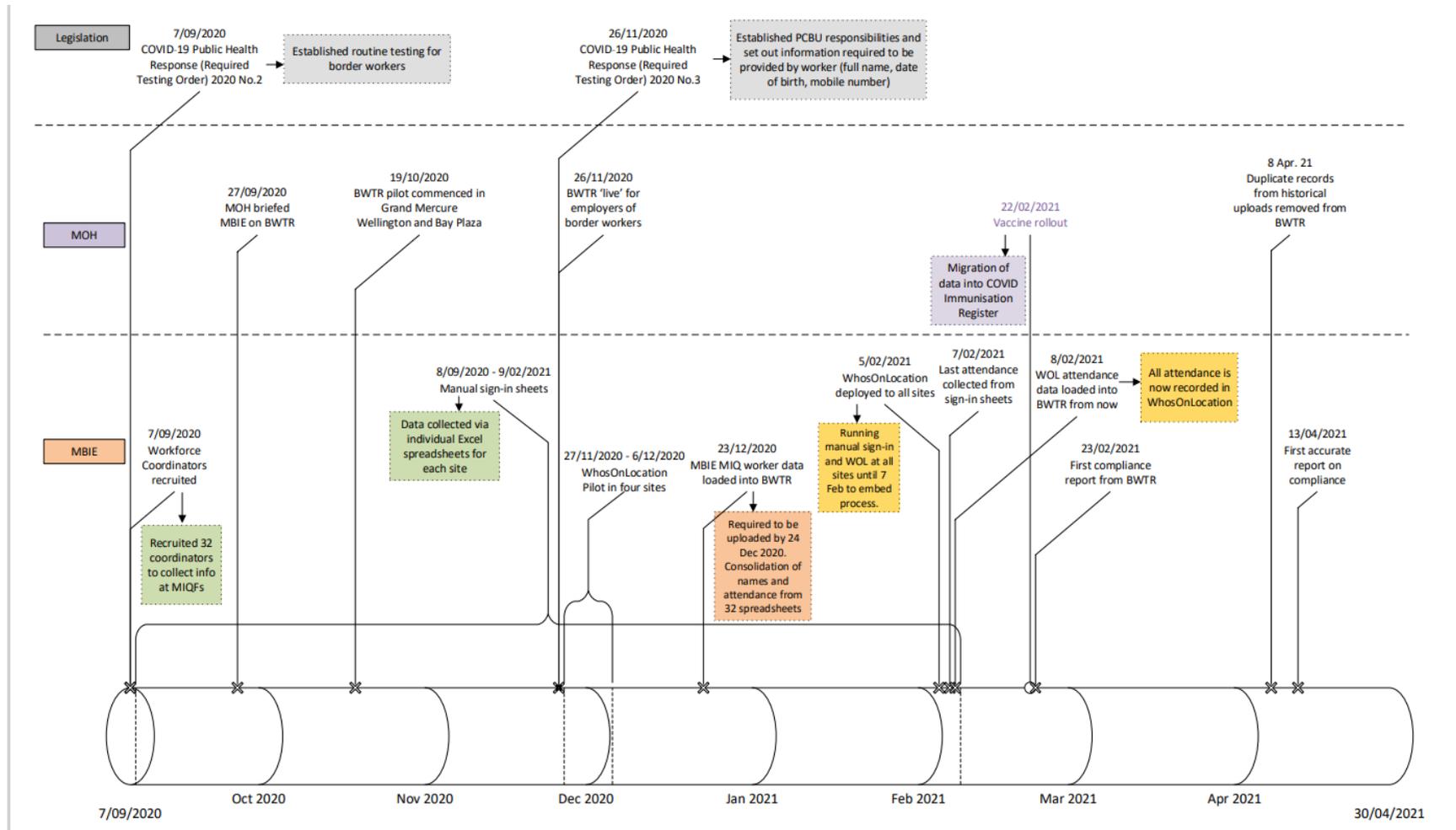
Phase one will be funded by the Ministry of Business, Innovation and Employment. Funding arrangements for phase two will be discussed and determined by the Border Executive Board.

Approval of terms of reference

These terms of reference were agreed by the Chair of the Border Executive Board following a discussion at the Border Executive Board meeting on 22 April 2021.

Appendix Two

MBIE's MIQF Workforce Testing Timeline



Timeline prepared by MBIE