



BRIEFING



High-level options for Managed Isolation and Quarantine future infrastructure

Date:	1 July 2021	Priority:	Medium
Security classification:		Tracking number:	2021-4107

Action sought		
	Action sought	Deadline
Hon Chris Hipkins Minister for COVID-19 Response	Agree to the key components and objectives of future MIQ infrastructure Indicate which infrastructure approach you wish officials to continue work on	9 July 2021

Contact for telephone discussion (if required)			
Name	Position	Telephone	1st contact
Privacy of natural persons	Director, MIQ Policy	Privacy of natural persons	✓
	Principal Policy Advisor		
	Senior Policy Advisor		

The following departments/agencies have been consulted
Ministry of Health, Department of Prime Minister and Cabinet (COVID-19 All of Government Response), Ministry of Foreign Affairs and Trade, Treasury and Ministry of Transport

Minister's office to complete:

- | | |
|---|--|
| <input type="checkbox"/> Approved | <input type="checkbox"/> Declined |
| <input type="checkbox"/> Noted | <input type="checkbox"/> Needs change |
| <input type="checkbox"/> Seen | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn |

Comments



BRIEFING

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Purpose

To seek your direction on options for future managed isolation and quarantine (MIQ) infrastructure, including purpose-built facilities, for the next two to three years.

Executive summary

MIQ has, for the most part, delivered on its purpose of keeping COVID-19 out of New Zealand. However, the hotel-based model has created some challenges. It requires complex operating procedures and, in some cases, significant changes to utilisation of and remediation to buildings and ventilation systems to mitigate the risk of transmission.

There is an opportunity to consider the merits and trade-offs of other approaches to MIQ infrastructure, such as purpose built facilities, drawing on experiences to date, developments in other jurisdictions and the Reconnecting New Zealanders work.

It is difficult to anticipate how the vaccination roll out, variations and viral developments, workforce investment, border settings and the broader public health response will impact on the future MIQ needs.

The Ministry of Business, Innovation and Employment Intelligence Unit developed future scenarios to support this advice. The key takeaway from the scenarios is that MIQ infrastructure needs to be adaptable and flexible to respond to COVID-19 in the next two to three years. We also consider any future infrastructure should be an effective, proportionate and equitable public health response; part of an economically sustainable public health response; scalable; resilient and timely.

There are four main options for future infrastructure: continue to use hotels, maintained to hotel standards (status quo); build dedicated facilities across the entire system; refurbish existing infrastructure (hotels or other) to public health standards across the entire system; or take a blended approach of dedicated facilities, refurbished facilities and hotels at current standards.

We recommend undertaking further work on the blended approach to find the best combination of these models to meet high risk and lower risk needs across the system. For example, we could look to build dedicated facilities for a small number at the quarantine and high-risk end of the spectrum, refurbish existing infrastructure (hotels or other) to meet public health standards for some and retain hotels at hotel standards for lower risk groups.

There will be trade-offs within any combination, and we consider a blended approach will be most tailorable and scalable to meet public health requirements. We note that purpose built facilities commissioned from scratch would be expensive and take time, however we think there is merit in exploring this further in addition to building new in partnership with an existing project or adapting existing infrastructure to meet our needs.

Subject to your agreement, officials will provide further advice on how a blended approach could be made up, including advice on number, location and size; assessments of multifunctional offers; and funding and cost recovery implications.

Recommended action

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

- a **Note** that there are a range of variables and dependencies that will impact the need for MIQ infrastructure, including the global COVID-19 context, domestic and international vaccination rollout, COVID-19 related border restrictions and evolving community-based capability and resilience. *Noted*
- b **Note** that the scenarios summarised at Annex One and in full at Annex Two provide a baseline, optimistic, pessimistic and wildcard scenario for the next two to three years. *Noted*
- c **Note** that all scenarios assume that the Elimination Strategy remains in place. *Noted*
- d **Note** that the scenarios indicate that broad demand for MIQ (whether from the border or community) will continue to outstrip MIQ's current total capacity. *Noted*
- e **Agree** that MIQ infrastructure over the next two to three years should:
- i. primarily focus on what is needed to respond to COVID-19, and that suitability for any pandemic other than COVID-19 is a secondary consideration Agree / Disagree
 - ii. be agile and flexible given the inherent assumptions in the future scenarios and other variables and dependencies Agree / Disagree
 - iii. provide facilities suitable for positive cases and potential cases, and manage a spectrum of high to low risk cases Agree / Disagree
 - iv. not exceed current maximum operating capacity of about 4,000 rooms, noting that if MIQ were to adapt and extend beyond current total capacity, significant workforce investment and development would be needed. Agree / Disagree
- f **Note** that officials recommend that a blended approach to future MIQ infrastructure would best meet the objectives that MIQ is an effective and proportionate public health response tool; it is part of an economically sustainable public health response; it is resilient and flexible; and that delivery of future infrastructure is timely. *Noted*
- g **Indicate** which of the following you wish officials to continue to work on:
- i. Status quo – retain the current hotel model Yes / No
 - ii. New purpose-built facilities across the whole system for managed quarantine and isolation Yes / No
 - iii. Refurbish existing infrastructure (hotels or other) to public health standards across the entire system Yes / No

- iv. A blended approach across the system of managed quarantine and isolation (e.g. a combination of new purpose-built facilities, refurbishing existing infrastructure (hotels or other) to public health standards and/or retaining some hotels that meet hotel standards) (**recommended**)

Yes / No

- h **Indicate** if you would like to meet and discuss this advice with officials (we suggest this is discussed together with the briefing to come on the commissioning process and MIQ short term infrastructure issues)

Discuss / No discussion

Kara Isaac
General Manager, MIQ Policy
Managed Isolation and Quarantine, MBIE

1 / 7 / 21

Hon Chris Hipkins
Minister for COVID-19 Response

11 / 7 / 21

Andrew Milne
Associate Deputy Secretary
Managed Isolation and Quarantine, MBIE

1 / 7 / 21

This report doesn't tell me much that I didn't already know. I'm looking for more concrete options/actions:

- 1) which hotels could we buy and how much would they cost?*
- 2) How quickly could purpose built facilities be constructed, where and how much?*
- 3) How can we regulate and scale the workforce?*

If the Aussies can do it in 6 weeks ...!

Background

1. You have asked for initial advice on options for MIQ infrastructure for the next two to three years, including the feasibility of developing purpose-built facilities that could have a future use for another pandemic or public health response.
2. MIQ has, for the most part, delivered on its purpose of keeping COVID-19 out of New Zealand. However, it has faced challenges in terms of capacity, staffing and suitability of the hotels to operate as facilities. MIQ has taken a continuous improvement approach. Its operations, including criteria for what is a good facility, have evolved as we have learned more about the virus and how to reduce infection risk, and as new variants have emerged. However, hotels may not be the most suitable option going forward, particularly if more transmissible variants increase in the future. With an opportunity for longer-term planning and alignment with the Reconnecting New Zealanders work, we are in a position to consider the merits and trade-offs of other options, such as purpose-built facilities.
3. This briefing seeks your agreement to key components of future MIQ infrastructure and direction on which models should be explored further.
4. This briefing is part of a suite of papers on the supply of MIQ infrastructure. MBIE officials are also providing you with advice this week on the commissioning process and MIQ short-term infrastructure issues, particularly the current limited ability to commission an additional or replacement facility due to not being funded post June 2022.

Current infrastructure model

5. MIQ is a core element of the 'Keep it Out' pillar in New Zealand's Elimination Strategy. Currently, MIQ primarily focuses on the border by managing:
 - a. international arrivals who are not part of a quarantine-free travel arrangement and are required to isolate for 14 days in a managed facility
 - b. those who test positive after arriving in New Zealand and need to quarantine until they are well and/or no longer considered infectious.
6. MIQ is also a way of managing positive or potential community cases (e.g. close contacts). To date, MIQ's role in managing community cases has been minimal compared to the number of people that have entered MIQ from the border.

The hotel-based model has worked, but it has public health and resourcing limitations

7. The hotel-based model of MIQ was deemed the most suitable at the time when an urgent response was needed. While it has largely worked, there is an opportunity to consider other models, including examining what other jurisdictions have done. The hotel-based MIQ model has, overall, kept the transmission of COVID-19 within facilities and to the wider community very low. It has also helped to maintain connectivity so there is pathway for people to return home, for critical workers to come to New Zealand and facilitates air and maritime crew laying over. However, it is a resource-intensive model that requires a large frontline workforce, complex operating procedures and in some cases, significant changes to utilisation of and remediation to buildings and ventilation systems to mitigate the risks of transmission.
8. We advised you recently that hotel ventilation systems were not designed for viral containment or isolation. The risk of contracting COVID-19 remains low with current variants [2021-4016 refers], however, the risk of transmission is increasing and may continue to increase with new variants. Current remediation is expected to meet hotel ventilation design

standards. There is no agreement yet on what a suitable ventilation standard is for a hotel to meet infection prevention and control (IPC) requirements as an isolation facility, and whether current hotels could meet such a standard.

9. In addition to ventilation, various changes have been made in the last six months to work within the limitations of hotels and reduce the risk of transmission risk, including cohorting, restricting movements within facilities, temporary room restrictions, changes to testing frequency and requiring onsite areas for accessing fresh air.
10. There are MIQ workforce challenges in relation to attraction and retention, shortages, fatigue, stigma, maintaining wider professional qualifications and experience, and competing priorities. The workforce is stretched to its maximum across MIQ's current capacity. The hotel-based MIQ model is based on individual contracts with the hotels which have recently been extended to June 2022. Our contracting arrangements are vulnerable to commercial interests, and there is uncertainty about how many hotels may want to remain as MIQ facilities in the medium term.

There is an opportunity to consider MIQ infrastructure going forward

International experience and lessons learned from hotel-based models

11. In Australia, Victoria's review found that although hotels were the best option under the circumstances for quarantine (known as isolation in New Zealand) they "were not designed as 'quarantine facilities'". It also highlighted that "the physical limitations of hotels, together with the highly infectious nature of the virus and the state of knowledge about transmission, meant that constant attention to all of the necessary infection prevention and control measures was needed".¹ A review found that individuals completing their stay in Howard Springs, Darwin (re-purposed mining accommodation) found it less stressful than completing their stay in a hotel.²
12. Victoria, Australia recently announced that they are partnering with the federal government to fund and build a purpose-built COVID-19 quarantine facility, based on Howard Springs in Darwin with some modifications. The facility is planned to have 500 beds and cost about AUD\$200 million (approximately NZD\$215 million) but could be up to AUD\$700 million if it is scaled up to 3,000. More recent reports have suggested that the facility will be 1,000 beds but will open when the first 500 beds are available. The facility is designed for use by high-risk groups and will include modules for singles, couples and families.³
International relations
International relations and confidential information entrusted to Government
13. International relations we understand the rationale for funding a purpose-built facility was that hotels are not fit for continued use with an elimination strategy. The decision is mainly a public health response to multiple quarantine leaks from hotels throughout Australia, and the Delta variant getting out despite ventilation remediation. The facility may be used for other purposes in future, such as temporary accommodation for people due to natural disasters.
14. The Australian Prime Minister has also noted that the criteria for selecting a quarantine (isolation) site include that it is:
 - a. within approximately one hour's vehicle transport to a tertiary hospital

¹ COVID-19 Hotel inquiry, Victorian Government, 21 December 2020

² National Review of Hotel Quarantine, Australian Government, Department of Health, 23 October 2020

³ <https://www.abc.net.au/news/2021-06-03/federal-government-backs-victorian-covid-quarantine-hub-proposal/100188922>

- b. within reasonable proximity to an international airport taking regularly scheduled international commercial passenger flights (with limited bus transfer)
- c. Commonwealth-owned, to provide an enduring asset to support increased resilience capability.

Future MIQ infrastructure will need to support a Reconnected New Zealand and the ongoing Elimination Strategy requirements

- 15. The Department of Prime Minister and Cabinet is leading the development of an approach to Reconnecting New Zealanders, including the establishment of a Ministerial Group to oversee, co-ordinate and drive a programme of work which will see the reopening of the country as public health conditions allow.
- 16. The process of reopening New Zealand's borders will change what is required from MIQ services and infrastructure. Reopening may not be a linear process, and MIQ needs to be flexible and adaptable. We need to be planning now for a responsive MIQ system and workforce which can accommodate an environment of change.

We have an opportunity to further incorporate the Crown's Te Tiriti obligations in our planning for the future of MIQ

- 17. Strengthening iwi-Māori partnerships has been identified as a priority in the Rapid Assessment. To date, engagement with iwi and Māori has been largely led at a local level with iwi in MIQ facility locations a particular focus. The expectation of early engagement at the policy and design phase was reiterated the recent hui held at MBIE on Tuesday 22 June.
- 18. There are a range of activities that can be undertaken to ensure the development of future MIQ infrastructure is consistent with Te Tiriti. These include:
 - a. identifying and understanding Māori interests in future MIQ infrastructure, including but not limited to the interests of Māori currently engaged with MIQ (largely those iwi with MIQ facilities located on their rohe, or with commercial interests in the operation of current facilities)
 - b. ensuring that decisions around the scale, location and configuration of facilities considers Māori interests, tikanga, and conceptions of hauora
 - c. working with iwi on workforce capability and sourcing, ensuring equity of access to work opportunities, and building greater cultural competency into the MIQ workforce over time
 - d. providing appropriate scope for Māori commercial interests to be engaged
 - e. ensuring that facility establishment approaches and timelines are sensitive to tikanga.

We do not know what the future looks like

- 19. While the current system has prevented the spread of COVID-19 into the community, this does not necessarily mean that the system will be able to do so in the future. The development of variants which are more transmissible and more resistant to vaccination may continue to occur throughout the world, and hotels may not continue to be fit for purpose.
- 20. In addition, we are yet to fully understand the impacts of vaccinations both globally and domestically. We will continue to learn about transmission and immunity as vaccination rolls out globally.
- 21. There are questions around community isolation and when and how it should be used. The latest Sydney case in Wellington shows that MIQ may still be needed for some community

cases. While MIQ was not needed in this instance, it highlights questions about MIQ's role if community transmission was widespread and the impact that could have on capacity.

22. In addition to the uncertainties around the evolution of COVID-19, there are also vulnerabilities in the current MIQ infrastructure model and its ability to respond effectively to COVID-19 in the medium term. Most hotels are contracted to be MIQ facilities until April 2022 (soon to be extended to June 2022). We consider there is a possible risk of hotels exiting the MIQ network as New Zealand starts to reopen and the hotels pivot back towards tourism. The longer the Reconnecting New Zealanders approach takes to open the border, the more time MIQ will have to prepare for any shift away from a hotel-based model.
23. Whether hotels exit will depend on how hotel customer bases align with countries that New Zealand might open up to, for example some hotels have a large customer base from Asia, whereas others are focused on Europe and North America. We are providing you with further advice about the impacts of this in the short-to-medium term. In the long term, we may see further impacts.
24. The future of the workforce in MIQ is also linked to these uncertainties. We know that a shift away from a hotel model would require other staff to be sourced as currently 40 per cent of staff in MIQ work for the hotels. MIQ reliance on the New Zealand Defence Force is also vulnerable to other emergencies requiring NZDF capacity, which may be prioritised over MIQ in the future. District Health Boards face some of the greatest challenges with shortages (particularly in Auckland, where the majority of MIFs are⁴). The role and availability of health staff in the future will be dependent on other things like vaccination roll out and their role in community responses to COVID-19.
25. There is currently social licence for New Zealand's border and public health settings, including MIQ, but this may decline in the long term if New Zealand's approach is not proportionate to the risk that COVID-19 poses.

Our scenarios that tell us MIQ needs to be adaptable

26. The Intelligence Unit within MBIE worked with four other agencies⁵ to generate possible future scenarios that provide insight into the likely impact of COVID-19 on MIQ in the next two to three years by considering potential future border and health settings.
27. The scenarios were generated using structured analytic techniques (SATs). SATs are used to enhance analytical rigour, remove bias and improve analytical transparency. These techniques have allowed the Intelligence Unit to develop four potential future scenarios.
28. These scenarios are summarised in **Annex One** and are attached in full in **Annex Two**. These range from a likely baseline scenario that is similar to our current state; optimistic and pessimistic scenarios which are both realistic possibilities; and an unlikely 'wildcard' scenario. The scenarios cover what the MIQ cohort is likely to be, the global context (vaccines and variants of COVID-19), the domestic context (vaccine uptake) and some possible features of MIQ (isolation and quarantine demand, community cases, self-isolation etc.).
29. The future scenarios are based on the following key assumptions:
 - a. The government continues with the Elimination Strategy.

⁴ Murray Jack and Katherine Corich, *Rapid Assessment of MIQ Final Report* (9 April 2021)

⁵ The Ministry of Health, Department of Prime Minister and Cabinet, Ministry of Transport, Ministry of Foreign Affairs and Trade.

- b. Opening up is heavily dependent on further vaccine development, global availability and efficacy. Border controls will remain tight even after a vaccine is rolled out domestically.
- c. MIQ remains the primary mechanism for managing risk at the border. All travellers will enter MIQ unless a quarantine-free travel zone agreement or other quarantine-free arrangement for cohorts to avoid MIQ is in place.

Key takeaways

- 30. In all of the scenarios except the 'wildcard' scenario, it is expected that demand for MIQ will remain high over the next two to three years, although the source of cases (whether it is from the border or community cases) differs between scenarios. While demand may fluctuate and is dependent on a number of variables, we will need to consider maintaining current capacity levels for the near future, unless decisions are made otherwise.
- 31. The scenarios suggest we need to be prepared for both border and community cases. This is particularly important in considering the location of facilities where centralised locations close to international airports are important for managing the border, whilst facilities spread regionally would support community cases.
- 32. The current MIQ workforce model is at capacity and would require significant investment to be sustainable or adapt in the long term. If MIQ has a higher proportion of higher-risk cases due to more transmissible variants developing, then clinical needs may be greater. There is a trade-off between preparing for a higher risk and underutilising the health workforce in the meantime.
- 33. We need to be prepared to be flexible given the inherent assumptions in the scenarios, in particular the assumption that the elimination strategy and risk appetite remains the same across all scenarios. There is a trade-off between flexibility and financial sustainability, discussed below.

Agility and flexibility in MIQ are key going forward

- 34. The future scenarios tell us that overall, MIQ needs to be agile and flexible to respond to COVID-19. Within this, we consider that an MIQ infrastructure model should meet the following objectives:
 - a. **MIQ is an effective, proportionate and equitable public health response tool for COVID-19.** MIQ can respond quickly to changing public health evidence in a proportionate way. MIQ is designed with a primary public health purpose. The MIQ model takes equity considerations into account such as where most facilities are located and how it treats people in MIQ.
 - b. **MIQ is part of an economically sustainable public health response to COVID-19.** While the MIQ model is unlikely to be cost neutral it needs to be part of an economically sustainable COVID-19 response. Cost recovery through fees, commercial arrangements with third parties, and multifunctional use of space could be relevant to MIQ's financial sustainability and its role in the overall economic sustainability of the response.
 - c. **MIQ is scalable.** MIQ capacity can be adjusted, including workforce and surge capacity. However, we recommend that future capacity should not extend beyond current capacity as this would have significant implications on the workforce.
 - d. **MIQ is resilient.** MIQ is less vulnerable to external shocks, for example commercial interests. We have a stable and skilled workforce with career pathways and progression options, and any stigma is minimised.

- e. **The MIQ response needs to be timely.** MIQ needs to continue to be an effective public health response now, while ensuring any changes to the model are meeting needs within the next two to three years.

35. We also considered whether durability for future pandemics should be an objective. We recommend that MIQ infrastructure over the next two to three years should primarily focus on what is needed to respond to COVID-19. Suitability for any future pandemic is a secondary consideration that could be taken into account within the objectives above. It is important that we focus efforts where they are currently most needed while not losing sight of efficiencies for public health beyond COVID-19.

There are trade-offs between objectives

- 36. Any current and future MIQ model is unlikely to be cost neutral. Some options may provide an asset as a benefit, however if the overarching objective is for an agile and flexible MIQ model, this will come at a cost. In particular, there is a trade-off between scalability and financial sustainability. The more scalable the model is, the more costly it likely will be. Consideration will need to be given to cost recovery in the future.
- 37. Multifunctional use or use for future pandemics could have cost efficiencies and be taken into account as part of economic sustainability. There are possibilities for multifunctional use such as accommodation for temporary disaster relief, defence personnel or students, or for broader public health needs such as managing other communicable diseases. Further work is needed to explore these multifunctional options more fully and in particular how suitable they would be if MIQ were to require them at short notice.
- 38. We consider that where there are conflicts or trade-offs, the objective for MIQ to be an effective, proportionate and equitable public health response tool should be weighted more heavily. For example, if MIQ is needed to respond to a surge in cases and has to scale up quickly, economic and financial sustainability may be the trade-off.

Options for future MIQ infrastructure

- 39. Future MIQ infrastructure needs to suitably provide for public health needs across the system for people who potentially have COVID-19 and positive cases of COVID-19.
- 40. People could come into MIQ from either the border or the community. The main feature is that the facilities provide for quarantine or isolation that is managed or supervised in some way, and does not include unmanaged or unsupervised self-isolation.
- 41. We see three main accommodation options for future MIQ infrastructure:
 - a. Option 1: retain the current hotel, maintained to hotel standard (status quo)
 - b. Option 2: Build dedicated facilities across the system for managed quarantine and isolation
 - c. Option 3: Refurbish existing infrastructure (hotels or other) to public health standards across the system for managed quarantine and isolation
 - d. Option 3: A blended model of dedicated facilities, refurbished facilities and current hotels (recommended).

Option 1: Continue to use hotels, maintained to hotel standard (status quo)

- 42. Our current MIQ model uses hotels that are designed to hotel standards for ventilation. There are choices to make some iterations and improvements to the status quo to continue remediation and enhanced IPC measures, or revisit location and capacity. There are choices around centralising hotels in one location or urban area (decentralisation would be limited if

we still require large, multi-storey hotels as these tend to be in central locations), and consider the number of rooms (not extending beyond maximum current operational capacity for approximately 4,500 rooms). To maintain current operational capacity we would have to replace any hotels that exited with other hotels that are fit for purpose, or otherwise accept that capacity is likely to decrease over time as hotels exit and cannot be replaced.

43. The main disadvantage of the status quo is that hotels are not designed as a public health facility, which may become more of a risk if more transmissible variants of COVID-19 become more prevalent. For example, some may require significant investment in ventilation systems to meet IPC requirements and some may never be able to be remediated to meet IPC requirements. The design of some hotels means that not all rooms can be utilised (after allowing for contingency and cohorting) and makes it difficult to manage behaviour of people. This also affects the proportionality and equity of the model as procedures are designed to work within the constraints of a hotel, and as such movement is often restricted.
44. The advantages of the status quo is that hotels are inherently multifunctional, and it is comparatively quick to scale up or down currently (about three to four months to get a hotel up to current requirements and similar timeframes to decommission). However, the current model may be less resilient and is vulnerable to commercial interests and workforce constraints.
45. While our current system-wide hotel-based model has largely worked, it is resource intensive and has considerable public health limitations. Our workforce and MIQ capacity is at maximum. We do not consider that this model alone will be the best way to keep out and treat COVID-19 in the next two to three years, given the issues with hotels meeting IPC requirements and the vulnerabilities of our commercial arrangements. To continue with this model alone would be a missed opportunity to more effectively deliver MIQ.

Option 2: Build dedicated facilities across the system for quarantine and isolation

46. This option would explore new, dedicated facilities for quarantine and managed isolation needs, up to current capacity.
47. The advantages of this option are that IPC requirements can be met most effectively, enabling a more proportionate and equitable response and it will be more resilient than the current model.
48. The disadvantages are that it would require significant, upfront investment and the time required to build new could mean it is not ready when we need it the most.
49. Sourcing land and getting consent is typically the lengthiest part of a new build process and could take two to three years.
50. Recent Department of Corrections builds took three years from when consents were obtained, land was acquired, and contract terms were confirmed. Specifically:
 - a. Modular Programme – these were low security, approximately 500 cells in total at 9m² floor area each with inbuilt bathroom facilities, spread across 5 sites in the network. Common service areas for catering, recreation, learning, management and security, single story, lighter steel and composite construction materials. Capital cost approximately \$400 million.
 - b. Waikeria Prison Development – high security facility with 440 cells at 9m² with inbuilt bathroom facilities, full precinct design with large kitchen, laundry, multiple learning and recreation environments, full secure perimeter, fully electronic movement control and surveillance, two story massive concrete and steel construction, very high seismic rating. Capital cost approximately \$750 million.

51. While requirements for MIQ facilities are likely to be different and potentially less expensive in some aspects (e.g. corrections facilities tend to require expensive reinforced materials), this provides an idea of time and cost involved in new builds pre-COVID-19.
52. It is also important to note that the construction sector currently faces skill and labour shortages, and COVID-19 has created shortages and delays getting building materials into New Zealand. Both of these could have implications for the timing, cost and possibly location of any new build facility.
53. Some of the upfront cost may be mitigated if the build is multifunctional and/or could be used for future pandemics. Partnering on a current build may take less time and might be less expensive than commissioning a new facility. There are some potential options to partner on construction underway or planned construction, however this is unlikely, on its own, to provide sufficient capacity.
54. We do not consider building dedicated isolation and quarantine facilities to meet current capacity to be feasible, due to the significant cost and time required. Shifting from hotels would require a significant separate workforce, as hotels currently make up 40 per cent of the MIQ frontline workforce. That said, we could undertake a feasibility study of partnering on a current build or greenfields options for dedicated facilities on a smaller scale that could feed into option 3 (blended model).

Option 3: Refurbish existing infrastructure (hotels or other) to public health standards across the entire system

55. This option would involve refurbishing existing infrastructure (whether this is hotels or other buildings) to meet public health standards across the system of managed quarantine and isolation facilities. This would mean all facilities would be at a higher and more fit for purpose standard than current hotels.
56. As with building new facilities, refurbishing infrastructure to meet public health standards will take time and investment. Some costs could be mitigated through the facilities being multifunctional as discussed below.
57. The extent of refurbishment will be a decision point – i.e. whether this focuses solely on fundamental public health standards such as ventilation or whether refurbishment is more extensive to include other aspects of design and layout (noting that there are no confirmed public health standards for refurbishment for MIQ purposes currently). Not addressing these additional aspects of refurbishment may mean MIQ could still face some challenges around cohorting, suitable access to fresh air and capacity.
58. Depending on whether the refurbished infrastructure is a hotel or other building, and what commercial arrangement sits behind this, there could also be limitations on resilience, particularly if private contractual arrangements are vulnerable to parties exiting. It would also not have the same flexibility or agility to respond and scale up and down, as significant upfront investments of time and money will have been made.
59. It is likely that the transition to a refurbished set of infrastructure would have to be phased and we would need to continue using hotels at hotel standards to ensure operational capacity is not significantly affected during that transition.
60. Given the limitations of the current hotel stock, and the limitations in the construction sector discussed below, this may be the next best option to address issues with current MIQ infrastructure.

Option 4: A blended model of dedicated facilities, refurbished facilities and current hotels (recommended)

61. This option would explore a blended model of current hotels, building dedicated facilities and refurbishing existing infrastructure. We would explore the best combination of these models to meet high risk and lower risk needs across the system. Existing infrastructure could be refurbished to public health and infection prevention and control standards (higher than current hotel standards), and could include modifying an existing hotel or other buildings including existing government-owned infrastructure.
62. There would be a trade-off between scaling quickly, building new or refurbishing to public health requirements, and the opportunity cost if a newly built or refurbished facility is no longer needed. Some of this could be mitigated if facilities were multifunctional and could quickly accommodate other needs, and if facilities could be used for future pandemics.
63. We have defined multifunctional as infrastructure having dual or multiple purposes. The primary purpose could be for COVID-19 or another purpose, depending on what the other function is and the role that it plays in a blended model – e.g. if it is a core piece of infrastructure or used for surge capacity. As noted earlier in this paper, further work is needed on what other purposes for the facilities would be suitable.
64. This approach may be able to accommodate changes in cohorting such as placing all very high risk groups in a specific facility, and would allow flexibility to place lower risk groups or community close contacts in specific facilities. It would also be able to accommodate changes to isolation requirements, for example, if public health requirements allow for short-stay MIQ for low risk groups.
65. The advantages of this option are that public health requirements could be met where the need is greatest, for example returnees from very high risk countries. MIQ could scale up or down as needed with a suite of facilities that could be quickly set-up depending on need. Moving away from sole reliance on commercial arrangements with hotels would support a more resilient MIQ system.
66. The disadvantages are that significant upfront investment may be required to build new dedicated facilities or refurbish existing infrastructure, depending on the scale. It would also take time to build a new facility and refurbish existing infrastructure to an acceptable public health standard, noting the examples of new builds discussed in option 2. The trade-off is that continuing to use current hotels may not be sustainable long-term and would not be enduring for future pandemics, though we note that entering into longer term commercial arrangements would reduce risks to the extent they are required as part of this model.
67. Some examples of what this blend could look like include:
 - a. **Government partners or builds new dedicated facilities for quarantine/high risk groups, and refurbishes existing infrastructure for managed isolation capacity.** Building dedicated facilities between about 200 to 500 rooms could be ready in three to five years if commissioning from new, but could be quicker if there are suitable builds that the government could partner on. Existing infrastructure could be refurbished to IPC requirements to accommodate the remaining current capacity and could be ready in about one to two years. Assuming facilities are centrally located (e.g. in Auckland or Christchurch), economies of scale could be gained with workforce requirements.
 - b. **Government partners or builds new dedicated facilities for quarantine/high risk groups and contracts with hotels for managed isolation.** Building dedicated facilities between about 200 to 500 rooms that could be ready in three to five years if commissioning from new, but would be quicker if there are suitable builds to partner on. Contracting costs with hotels may increase from approximately \$600 million per year as the government would need to compete with tourism if New Zealand opens up and

tourism increases, but it would be a shorter timeframe to set up another hotel. This example would likely cost the least.

- c. **Government refurbishes existing infrastructure to public health standard for all MIQ.** Suitable buildings may be refurbished to an IPC requirements to accommodate current capacity. These could be ready in about one to two years.
- d. **Government refurbishes existing infrastructure for quarantine/high risk groups, and contracts with hotels for managed isolation.** This would mean refurbishing a building or buildings of about 200 to 500 rooms that could be ready in one to two years. Contracting costs with hotels may increase from approximately \$600 million per year as the government would need to compete with tourism if New Zealand opens up and tourism increases, but it would be a shorter timeframe to set up another hotel.

We recommend a blended approach

- 68. We recommend that future MIQ infrastructure should explore a blended approach across the system of MIQ, for example a combination of new purpose-built facilities, refurbishing existing infrastructure (hotels or other) to IPC requirements and refurbished hotels to hotel standards.
- 69. While purpose-built facilities commissioned from scratch are less likely to be feasible given the time and cost even as part of a blended approach, we think there is merit in exploring this further in addition to building new in partnership with an existing project or adapting existing infrastructure to meet our needs.
- 70. There are still a number of moving parts and potential risks that need to be explored that will impact how this option could be made up, including:
 - a. the number of rooms required at the positive case and high-risk end of the spectrum
 - b. how quickly New Zealand moves to reopen its borders under the Reconnecting New Zealanders framework – the faster this goes the less time there is to build and more vulnerable current commercial arrangements will be to hotels exiting
 - c. clarity on public health requirements for a purpose-built facility – we need to try and ensure that any new build is suitable to deal with any future, more transmissible COVID-19 variants.

Procurement options

- 71. We have considered public-private partnerships and traditional delivery models at a high level. The main focus has been on provision of assets, not services. Further work would be required on services that hotels provide that would be needed if there were a shift away from the current hotel-based model and considered in further work on a blended approach.

Public-private partnerships (PPP)

- 72. Generally, these refer to long-term contracts for the delivery of a service, where the provision of the service requires the construction of a facility or asset, or the enhancement of an existing facility. The private sector finances and builds the facility, operates it to provide the service and usually transfers control of it to the public sector at the end of the contract. A key objective of the PPP approach is the drive to optimise whole-of-life outcomes by encouraging innovation from the private sector.
- 73. The key to success of any PPP is to have long-term certainty of demand and service provision due to the long term nature of the contract. Changes to PPP contracts once in operation can be extremely costly. We do not consider that a PPP would be suitable to deliver a sole purpose MIQ facility because there is significant uncertainty in what is needed

for COVID-19 and arrangements need to be flexible to accommodate this. However, we could further explore whether PPP has any utility for partnering on current construction.

Traditional delivery

74. For a new build significant capital would be required to fund it and the government would need to source land. Sourcing land would be a lengthy process to arrive at an operational ready asset (about two to three years) and would need significant funding. Due to the unpredictable nature of COVID-19, the infrastructure may or may not be fully utilised which would make it a challenge to achieve value for money. There are options to consider standalone single storey units built off site by a provider but land demand for this approach would be bigger and therefore more costly to source. With any modular type solution a commitment would need to be made for a minimum number of units to be supplied to make it worthwhile for the private sector.
75. For refurbishment, we could look at the current existing hotel service providers and test their appetite for longer term service agreements, potentially with refurbishments made to the relevant MIQ standard needed to minimise health risks, or other existing infrastructure. Depending on hospitality industry projections there could be opportunities to explore which providers would want to continue, what benefits to the local community that would provide (such as local staff employed at the hotel), and what options there are for who does the refurbishment e.g. hotel vs government. The benefit of this approach is that there are ready-made assets that may be able to be brought up to standard relatively quickly and at considerably less expense than a new asset, potentially.
76. Partnering on a current build would be more expensive than refurbishment but would allow the government greater control over the asset in the future if MIQ facilities need to be expanded.
77. All of these options would need to be explored further, and we may need to engage property advisors who understand the hotel market. An options appraisal that took into account NPV over the life of the asset and required services would be needed to determine which would provide the best value for money.

Future work programme

78. Subject to your agreement that a blended approach to infrastructure will be required to establish a model of MIQ that is agile and flexible, we will come back to you with further advice on future infrastructure in relation to:
 - a. Different options around number, location and size of MIQ facilities which will be able to fulfil the role of MIQ in public health response to COVID-19 over the next two to three years.
 - b. An assessment—including more detailed costings—of the use of purpose-built, refurbished and existing infrastructure in the options developed. This could include an options appraisal that takes into NPV over the life of the asset and what required services would be needed to provide the best value for money
 - c. Confirming what public health and IPC requirements are for current hotels, refurbishment and new dedicated facilities
 - d. An assessment of the viability of offers which have been made to you for partnered infrastructure development for MIQ purposes. This will involve working closely with New Zealand Government Procurement, particularly given the scale and profile of any decisions, and the need to adhere to the Government Procurement Rules.

- e. Consideration of different approaches to funding any future infrastructure, including planning for quarantine or isolation facilities to be multifunctional (whether for with private or government uses).
 - f. Any opportunities available to strengthen the Crown's relationship with Māori as part of this work, and how consideration has been given to existing Te Tiriti obligations.
 - g. Detailed workforce projections and associated risks, development opportunities and costs.
 - h. Implications of changes to the MIQ model on MIQ fees and cost recovery.
 - i. Consideration of public service agency leads and accountabilities for this work, taking into account appropriate expertise and capacity to support a blended approach including any new builds.
79. We note that further advice needs to be timely to make the most of the opportunity, and taking into account how long any new build is likely to take. This advice will need to reflect and inform a range of work happening concurrently, including:
- a. The development of Reconnecting New Zealanders, including the role of MIQ in contributing to the public health measures at various phases of the strategy.
 - b. Future public health approaches to and IPC requirements for COVID-19, including the potential role of community or self-managed isolation.
 - c. The development of an approach to Budget 2022 to seek any additional government investment. While final budget decisions will start to be shaped up in early 2022, we will need to begin socialising our intentions in coming months.
 - d. Any relevant changes to the legislative framework of New Zealand's COVID-19 response.
80. We suggest that Cabinet consideration of this work will also be appropriate in due course given its impact across COVID-19 work streams.

Next steps

81. Officials would like to meet with you to discuss this advice together with the briefing to come on the commissioning process and MIQ short term infrastructure issues.

Annexes

Annex One: Future scenarios

Annex Two: Future scenarios report in full

Annex One: Future scenarios summary

Overview of possible future scenarios concerning managed isolation infrastructure

Created by MBIE Intelligence Unit, 23 June 2021

Optimistic scenario— “a reconnected New Zealand” – Realistic Possibility



- MIQ demand the same
- Facilities located in major centres



- Community managed isolation for low risk travellers



- NZ travel at will, not solely repatriation
- Country risk assessments in place
- Processes to adapt border controls quickly



- Appeal to ‘high value’/low risk travellers



- Increase in Quarantine Free Travel
- Increase in vaccination rates
- Increase in risk appetite for high risk travellers
- Increase in global vaccine uptake helps to stabilise COVID-19



- Testing for COVID-19 vastly improves and is more timely

Baseline scenario— “the status quo” – Likely



- MIQ demand higher than capacity
- MIQ at capacity levels
- All travellers to undertake 14 day MIQ stay
- Quarantine Free Travel Zone with Australia has changed demand profile of MIQ guests



- Vaccine hesitancy amongst New Zealanders,
- Herd immunity will not be achieved
- ‘Opening up’ NZ dependent on international vaccine uptake and risk profile of travellers



- Attempts to undermine Quarantine Free Travel due to snap lock downs



- Increased confidence in COVID-19 testing
- Increase in disparities between developed and developing countries
- Increase in new variants around the globe



- Border settings restricted to those with a critical purpose to enter NZ or through a Quarantine Free Travel Zone

Pessimistic scenario— “a grim outlook” – Realistic Possibility



- Isolation facilities converted into quarantine facilities to deal with outbreaks.



- Widespread community transmission



- Quarantine Free traveller infectious with new variant and spreads in NZ.
- Quarantine Free Travel arrangements stop and start leaving NZ’ers stranded in other countries



- Considerable vaccine hesitancy
- Vaccine campaign fails
- The healthcare system fails under unprecedented demand



- Return to higher alert levels/lockdown



- High demand from New Zealanders wanting to return home.

Wild card scenario— “an unintentional effect” – Unlikely



- Multiple Quarantine Free Travel arrangements in place
- Travellers undertake MIQ requirements offshore



- Community managed isolation models



- Reduced MIQ requirements (only for ‘red’ flights and community cases)
- Decrease in ‘red’ flights due to availability



- Public perception negative due to ‘waste’ of funds on MIQ facilities



- Increase in vaccination rates
- Increase in risk appetite for high risk travellers



- Potential for reduced stays in MIQ facilities

Key Drivers



MIQ Settings



Funding



Health settings



Traveller demand



Global pandemic situation



Border Settings

Icons Key

Positive factor

Neutral factor

Negative factor

Key Assumptions

- The government continues with the primary strategy of COVID-19 elimination.
- All scenarios are heavily dependent upon further vaccine development, global availability, and efficacy. Border controls will remain tight even after a vaccine is widely rolled out domestically.
- All travellers will enter MIQ unless a Quarantine Free Travel Zone or similar arrangement for cohorts to avoid MIQ is in place.
- Quarantine Free Travel is a bilateral agreement between New Zealand and another country. Reference to Quarantine Free Travel in this report reflects both formal arrangements and a broader agreement whereby policy settings can enable Quarantine Free Travel under certain conditions, such as meeting specific health requirements like including vaccine status and pre- departure testing.



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IN CONFIDENCE

Annex Two: Future scenarios report in full



Scenario Generation

MIU21-129

17 June 2021

TITLE	Scenario generation for future options for Managed Isolation and Quarantine (MIQ)
PRIMARY CUSTOMERS	Andrew Milne, Associate Deputy Secretary, DCE Managed Isolation and Quarantine Kara Isaac, General Manager Managed Isolation and Quarantine Policy
WRITTEN BY	MIU004 (Senior Intelligence Analyst) MIU078 (Intelligence Analyst) MIU034 (Principal Intelligence Analyst)
RELEASED BY	MIU072 (Manager)

Purpose

1. (IC) The purpose of this assessment is to provide scenarios and insight into the likely impact of the global COVID-19 pandemic on Managed Isolation and Quarantine (MIQ) in the next two-three years (up to 2024) by considering possible future border and health settings.

Methodology

2. (IC) These scenarios were created using structured analytic techniques, including PESTLE¹ analysis and the cone of plausibility. MIQ settings, traveller demand, funding, the global pandemic situation, health settings and border settings were identified as key factors considered when creating these scenarios. A multi-agency group was convened to identify these key drivers and assumptions to support the scenarios, this included Department of Prime Minister and Cabinet (Reconnecting New Zealand), the Ministry of Transport, Ministry of Health (MOH), Ministry of Foreign Affairs and Trade (MFAT), and MIQ policy. Previously published scenarios from these groups were also considered as sources of information along with similar international scenarios such as those developed by the UK Foreign, Commonwealth and Development Office.
3. (IC) Data from Immigration New Zealand, MIQ and the Ministry of Health was requested and incorporated as appropriate within the scenarios to add weight to the corresponding assumptions.

¹ Political, Economic, Social, Technological, Legal factors and Environmental factors.



Assumptions and Dependencies

4. (IC) Each scenario has been assessed for how likely it is to occur.² These assessments are moderate confidence;³ while there are high levels of uncertainty in the current environment, the fundamental elements assessed for the scenarios are based on plausible information from reputable sources. The four scenarios are assessed as:
 - Baseline, Likely;
 - Optimistic, Realistic Possibility;
 - Pessimistic, Realistic Possibility;
 - Wildcard, Unlikely.
5. (IC) This work has a number of underlying assumptions and dependencies:
 - Government strategy – The government continues with a strategy of COVID-19 elimination and it has not been assessed whether widespread vaccination programs will have an impact on this strategy.
 - Border settings and vaccines – The border settings in all four scenarios, especially the baseline and optimistic, are heavily dependent upon further vaccine development and global availability. It is assessed that given the high risk of reintroduction of the virus through the border and given the continuation of the elimination strategy, border controls will remain tight even after a vaccine is widely rolled out domestically.
 - MIQ – In all four scenarios it is assumed either; all travellers arriving into New Zealand will be required to go through a period of managed isolation unless a Quarantine Free Travel Zone (QFTZ) is established with the country of travel origin, all border restrictions are lifted, or a provision exists which allows people who meet health requirements to travel to New Zealand without having to enter MIQ.
6. This report refers to both Quarantine-Free Travel Zone (QFTZ) arrangements, which are bilateral agreements between New Zealand and other countries, as well as potential future broader settings that may take account of individuals meeting health requirements, such as vaccination status and pre-departure test results that enable entry into New Zealand without needing to go into MIQ.

Optimistic scenario – “A reconnected New Zealand”

7. (IC) New Zealand starts to engage with other countries and implement more QFTZ, traveller cohorts are also identified which can travel with either a reduced stay, or no requirement for a stay in a MIQ facility. QFT is likely only applicable when there is no community spread in both countries meaning QFT can only be linked to those countries with an ongoing elimination strategy, of which there are very few. Any QFTZ are likely to be very ‘stop start’ every time there is an outbreak, relying on advice from health officials about when to pause ‘bubbles’. Vaccination rates in New Zealand rise significantly and the risk appetite to allow

² See ‘Probabilistic Language’ paragraph within the Administration section at the rear of this report.

³ See ‘Analytic Confidence’ paragraph within the Administration section at the rear of this report.



higher risk travellers to enter New Zealand is increased. This is in conjunction with appropriate MIQ and risk mitigation strategies in place. There is a likelihood that risk tolerances for travellers to enter New Zealand from non-QFTZ will remain fluid and will need to shift in response to the developing global situation which may put temporary pressure on MIQ capacity in the event of outbreak situations in QFTZ countries.

8. (IC) It is accepted that COVID-19 cases will emerge sporadically for the long term and that New Zealand will continue to see community clusters. Management of MIQ is not solely focused on border controls and is shifted into a combined public health capacity⁴. This reflects the decreasing level of risk present at the border due to the increasing rates of global vaccine uptake and efficacy, and acknowledges the potential for increased risk within the community. The role of MIQ as the primary tool for preventing COVID-19 from entering New Zealand will change as health requirements such as vaccination status and advanced pre-departure testing will increasingly be used to control risk.. This could mean lower risk travellers have a reduced length of stay in a managed facility and/or the potential in the long term for in home isolation. A high trust, wrap around support model combined with technological options to ensure compliance is implemented in some cases to assist in reducing the requirement for MIQ facilities.
9. (IC) MIQ facilities will be located in major centres with health approved transport options for those who may require a 'stay' in these facilities. Community managed isolation models are implemented for low risk cohorts which aim to increase wrap around support in communities for future outbreaks. This support is targeted towards higher risk communities, meaning instead of all affected bubbles necessarily having to go into a quarantine facility, community options may be available and the most appropriate for those who are considered contact but not tested positive.⁵
10. (IC) Although there is still considerable vaccine hesitancy within New Zealand vaccination levels are higher than projected and the small number of community cases that occur are effectively traced and managed. This leads to reduced pressure on the healthcare system from a decreased requirement for MIQ. The global vaccine uptake and efficacy stabilises the rampant nature of the disease and the opportunities for new variants to emerge is reduced. There is increasing confidence in COVID-19 testing as more timely, accurate and widespread methods become available.⁶ A global technical health solution is created and implemented that provides verified proof of vaccination and/or testing status, allowing for greater ease of travel.
11. (IC) Demand to enter New Zealand from higher risk countries⁷ will remain but New Zealand's economic requirements are met by facilitating 'high value' migrants from higher risk countries through the MIQ system. Demand on MIQ facilities dropped 28.5% when the initial QFTZ agreement with Australia was introduced, while sharp declines like this are unlikely to

⁴ While a 'mixed' workforce may still be necessary, this scenario doesn't suggest MBIE will be the lead agency for Managed Isolation and Quarantine in the long term.

⁵ This is dependent on the requirements and decisions of the Medical Officer of Health and the COVID-19 Public Health Response Act 2020.

⁶ Faster and less invasive testing is becoming more accurate and innovate ways of testing (for example breathalysers) are being implemented.

⁷ As defined by the Ministry of Health country risk assessments.



be replicated with other QFTZ arrangements, there are some 'high value' countries which will have an impact on the demand requirements of MIQ.⁸

12. (IC) Currently, approximately 21 percent of MIQ demand stems from travellers from the United States of America, United Kingdom and China.⁹ These 'high value/potentially low risk' countries could be included in future QFTZ arrangements, further potentially reducing the demand for MIQ capacity. A survey¹⁰ undertaken of MIQ for Kiwi arrivals suggested that 52% of New Zealanders who returned to NZ between August 2020 and January 2021 said COVID-19 was not a factor in their decision to return. This indicates a potential plateau with the nature of traveller cohorts changing to those travelling at will rather than for the purpose of repatriation.
13. (IC) MOH and MFAT continue to monitor and assess high risk countries to adapt border controls in a timely and efficient manner to ensure the requirements of any QFTZ agreements are met and any rapid response to emerging high risk ports are delivered smoothly. A system is in place that uses statistical data about international health conditions, which can provide authorities with predicted infection rates of those travellers entering New Zealand from a non-QFTZ without a vaccine. Condition of entry to New Zealand is on the basis of paying MIQ fees (where applicable) which enables easier and more effective cost recovery. With the different requirements for MIQ facilities realised in this scenario, costs will be reduced and streamlined.

Baseline scenario – “the status quo”

14. (IC) New Zealand remains committed to the 'keep it out' pillar of the elimination strategy¹¹ using pre border (Immigration) & border settings in conjunction with MIQ. Overall demand to enter New Zealand will continue to exceed the capacity of MIQ but the immigration/border settings¹² continue to act as a control for passenger arrivals, this has a flow on effect to sectors reliant on the migrant workforce. All arrivals into New Zealand with the exception of those arriving under a formal QFTZ arrangement will be required to enter managed isolation.
15. (IC) The extension of QFTZs (potentially including some of our Pacific neighbours) will reduce the volume of individuals required to go through MIQ, especially for large scale work groups, for example Recognised Seasonal Employer (RSE) workers. QFT is likely only applicable when there is no community spread in both countries meaning QFT can only be linked to those countries with an ongoing elimination strategy. A change in demand for MIQ is solely reliant

⁸ Based on MIAS bookings between 1 March 2021 – 19 April 2021 (prior to QFTZ implementation), 'High value'/potentially low risk countries include United States of America, Great Britain and China.

⁹ A two month sample of border arrivals between April and June 2021 show approximately 1,670 travellers arrived from the US, 1,500 arrived from the UK, and 1,100 arrived from China.

¹⁰ MBIE and DPMC have contracted an independent consultancy service to survey people that have arrived into New Zealand since the COVID-19 border restrictions were imposed to get a better idea of the potential impact on government services and the New Zealand economy.

¹¹ Reconnecting New Zealand 16 April 2021.

¹² Immigration settings have changed to assess travellers based on critical purpose requirements to enter New Zealand restricting the flow of travellers as per COVID-19 Public Health Response (Air Border) Order (No 2) 2020.



on the implementation of new QFTZ arrangements or travellers who do not require MIQ facilities, which will be dictated by public health recommendations.

16. (IC) The tolerance for risk at the border will change in line with vaccination efforts and public health requirements, but will be primarily dictated by QFTZ arrangements and travellers who do not require MIQ facilities. The potential for expanding QFT to countries which have eliminated the virus is remote and is likely to be very stop-start every time there is an outbreak relying on advice from health officials to pause 'bubbles'. As individuals grow increasingly frustrated with snap lock downs within QFTZ countries, they will attempt to undermine the restrictions of travel to and from QFTZ zones or circumvent pre departure requirements. As previously highlighted, a survey undertaken of MIQ for Kiwi arrivals suggested that 52% of New Zealanders who returned to NZ between August 2020 and January 2021 said COVID-19 was not a factor in their decision to return.¹³ This indicates a potential plateau with the nature of traveller cohorts changing to those travelling at will rather than for the purpose of repatriation.
17. (IC) It is accepted that COVID-19 will emerge sporadically for the long term and that New Zealand will continue to see community clusters. Although contained - the risk appetite for cases to be managed in the community is aligned with the elimination strategy which is zero tolerance. As all MIQ facilities operate in a Level four environment this means every returnee is treated as if they may have COVID-19, and this has a significant impact on the volume of workforce required to facilitate this approach. MIQ is peaking in its capacity to deal with imported cases and would have difficulty managing any community cases and their contacts. The required 14 day stay in facilities remains static until further advice from health authorities around the efficacy of vaccinations and testing indicate a relaxation of this rule. MIQ facilities are situated in multiple regions to ensure effective coverage for incoming travellers and potential community cases.
18. (IC) The public health campaign to vaccinate New Zealanders continues and a large percentage of the population will have full coverage by the end of 2022, however there is still a considerable vaccine hesitancy within New Zealand. This may not be sufficient to prevent uncontrollable spread in the advent of community cases, and herd immunity will not have been achieved at this time. The volume of New Zealanders vaccinated will be considered in public health decisions in relation to the border settings, and will help manage the risk appetite around opening up to other countries/cohorts who may be of high value to New Zealand and do not pose an overwhelming risk of spreading COVID-19. The shift between different phases of 'opening up' will not be a linear progression and will remain fluid in response to international outbreaks and new variants. There will be increasing confidence in COVID-19 testing as more accurate and widespread methods become available, the vaccine will reduce the severity of the disease and boosters will exist.
19. (IC) Inequality in the traveller profile will become increasingly prevalent as QFTZ open countries who are not in a similar 'COVID-19' situation to New Zealand will unlikely meet travel and health requirements. Those travellers who would have previously travelled to New Zealand and fed into the economy will be restricted due to the availability of vaccines in their home countries, the economic impacts of the pandemic and the availability of 'red zone'

¹³ The survey had a 30 percent response rate and it is anticipated further surveys will be undertaken.



flights. An increase in QFTZ will have a potential impact on the mechanism for red flights from high risk countries to occur.

20. (IC) The definition of low risk countries will shift depending on global health settings, some carriers will be reluctant to carry red flight passengers due to logistical and staff safety issues. The pandemic will worsen in developing countries with new variants, high transmission and fatality rates and a lack of access to vaccines, but will improve in developed countries. A system is in place which uses statistical data about international health conditions which can provide authorities with predicted infection rates of those travellers entering New Zealand from a non-QFTZ without a vaccine.
21. (IC) Funding for MIQ facilities is guaranteed until June 2022 and whatever the ongoing requirement is for the next two-three years, funding will need to be requested from a central model. The current multi-agency approach to management of MIQ will remain static.

Pessimistic scenario – “a bleak outlook”

22. (IC) New Zealand remains committed to the ‘keep it out’ pillar of the elimination strategy¹⁴ using pre border (Immigration) & border settings in conjunction with MI&Q. Overall demand to enter New Zealand will continue to exceed capacity of MIQ but the immigration/border settings¹⁵ continue to act as a control for the flow of passengers, this is having a flow on effect to sectors reliant on the migrant workforce. All arrivals into New Zealand with the exception of those arriving under a formal QFTZ arrangement will be required to enter managed isolation.
23. (IC) The tolerance for risk at the border will change in line with vaccination efforts and public health requirements, but will be primarily dictated by QFTZ arrangements which have not been as widespread as expected. QFT is likely only applicable when there is no community spread in both countries meaning QFT can only be linked to those countries with an ongoing elimination strategy. The potential for expanding formal QFT to countries which have eliminated the virus is remote and is likely to be very stop-start every time there is an outbreak relying on advice from health officials to pause ‘bubbles’. As individuals grow frustrated with snap lock downs within QFTZ countries, they will increasingly attempt to undermine the restrictions of travel to and from QFTZ zones or circumvent pre departure requirements.
24. (IC) The pandemic has worsened in developing countries with new variants, high transmission and fatality rates and the lack of access to vaccines. This has spread to countries with QFTZ arrangements (including traveller cohorts who have entered New Zealand without going through a MIQ facility due to meeting the necessary health requirements). Travellers from these areas have travelled to New Zealand prior to restrictions being put in place and entered while infectious. This has spread though the community and the vaccine is not as effective against the new variant(s) causing widespread

¹⁴ Reconnecting New Zealand 16 April 2021.

¹⁵ Immigration settings have changed to assess travellers based on critical purpose requirements to enter New Zealand restricting the flow of travellers as per COVID-19 Public Health Response (Air Border) Order (No 2) 2020.



infections and overwhelming demand on quarantine facilities from both border and community cases. New Zealand returns to higher alert levels and reinstates strict border controls in an attempt to eliminate the virus again.

25. (IC) There is a significant increase in demand for New Zealanders still stranded in other countries to be repatriated back to New Zealand, which has become increasingly difficult with the cessation of many international flights.
26. (IC) Managed isolation facilities are required to be converted to quarantine facilities to facilitate the increase in infections, which has a flow on effect on the workforce required and puts additional strain on the healthcare system, which is also managing community cases in hospitals. The health system is not capable of managing a major community outbreak of COVID-19. An almost complete failure of the healthcare system as seen in Italy and other countries cannot be ruled out. MIQ is peaking in its capacity to deal with imported cases and would have difficulty managing any community cases and their contacts.
27. (IC) The considerable vaccine hesitancy within New Zealand grows and the public health campaign to vaccinate New Zealanders starts to fail as people lose faith in the efficacy of the vaccine with the introduction of the new variants. While the vaccine is not as effective against the new variants it is still effective in the reduction of fatalities and the New Zealand Government attempt to appeal to New Zealanders to get vaccinated in an effort to eliminate the virus faster. The vaccination roll out is not uniform and will be patchy enabling potential corridors of infection throughout the country.

Wild card scenario – “an unintentional effect”

28. (IC) As New Zealand starts to engage with other countries, implements more QFTZ, and the vaccination rates in New Zealand rise significantly, the risk appetite to allow higher risk travellers to travel to New Zealand is increased. The creation of a number of bi-lateral QFTZ has created a flow on effect where there are primarily only ‘green’ flights to New Zealand which has significantly reduced the demand for MIQ. Very few ‘red’ flights are flying directly to New Zealand, which has another impact on MIQ demand.
29. (IC) There is the potential for an inadvertent ability to push the requirement for managed isolation onto another country. A requirement to be eligible for quarantine free travel is that any traveller must reside in a QFTZ for at least 14 days prior. Any travellers intending to come to New Zealand from a ‘red’ zone would need to spend 14 days in a country with a QFTZ agreement with New Zealand, therefore eliminating the requirement to enter a MIQ facility on arrival.
30. (IC) The requirement for MIQ would be restricted to the very limited number of ‘red’ flights that are able to fly directly to New Zealand, or for charter planes coming from ‘red’ countries. This would mean a significant scale back in the requirement for facilities located around New Zealand. Any infrastructure spending associated with bespoke large scale facilities or long term hotel contract renewals may be viewed poorly by the public and deemed a waste of tax payers’ money, considering the reduced risk level of ‘green’ flights



only.

31. (IC) Community managed isolation MIQ models are implemented for low risk cohorts which aim to increase wrap around support in communities for future outbreaks. This support is targeted towards higher risk communities, meaning instead of all affected bubbles necessarily having to go into a quarantine facility, community options may be available and the most appropriate for those who are considered contact but not tested positive.
32. (IC) It is accepted that COVID-19 cases will emerge sporadically for the long term and that New Zealand will continue to see community clusters. Although contained - the risk appetite for cases to be managed in the community is aligned with the elimination strategy. Management of MIQ is shifted into a public health capacity¹⁶. This reflects the decreasing level of risk present at the border due to the predominance of 'green' only travellers. The role of MIQ as the primary tool for preventing COVID-19 from entering New Zealand will change as health requirements such as vaccination status and advanced pre-departure testing will increasingly be used to control risk.
33. (IC) This could mean lower risk travellers have a reduced length of stay in a managed facility and/or aligned with reduced stays or the potential in the long term for in home isolation for lower risk travellers. A high trust, wrap around support model combined with technological options to ensure compliance is implemented in some cases to assist in reducing the requirement for quarantine MIQ facilities.
34. (IC) New Zealand is a transit port for a number of Pacific countries and might become the proxy quarantine centre for these travellers in the absence of reciprocal QFTZ agreements, however these travellers would not need to enter a MIQ facility on arrival in New Zealand.

¹⁶ While a 'mixed' workforce may still be necessary, this scenario doesn't suggest MBIE will be the lead agency for Managed Isolation and Quarantine in the long term.



Administration

Document Control

Version	Date	Author	Description of change
1.0	15 June 2021	MIU004	Final
1.2	17 June 2021	MIU004	Revised final version

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Paragraph Classifications

Paragraph policy and security classifications are used throughout this report. Policy classifications protect policy information that could harm the security or interests of government, a group or organisation, or give an unfair advantage. Information that could affect our national security has a separate set of classifications. These are the same across all government agencies. More information can be found on the LINK: <http://thelink/it/security/Pages/classifications.aspx>.



Classification	Abbreviation	Description
UNCLASSIFIED	(U)	The compromise of information does not have the potential to cause harm or breach a person's privacy.
IN-CONFIDENCE	(IC)	The compromise of official information could damage the reputation of the Ministry or the Government, breach the privacy of a citizen or cause problems with law and order
SENSITIVE	(SEN)	The compromise of information is likely to damage New Zealand's interests or endanger the safety of its citizens
RESTRICTED	(R)	The compromise of information would be likely to adversely affect the national interest.

The use of probabilistic language in this document

Intelligence assessments are often based on incomplete and inconsistent information that can be from sources of differing reliability. These assessments are not fact, evidence or proof. Certain words are used in this document to convey the confidence of the analytical assessment regarding the probability of something occurring, or having occurred. The New Zealand Intelligence Community has standard wordings for these assessments (please see below). These words are capitalised in this report to clearly identify intelligence assessments.

Probabilistic language

Qualitative Statement	Associated Probability Range
Remote / High Unlikely	<10%
Improbable / Unlikely	15 – 20%
Realistic Possibility	25 – 50%
Probable / Likely	55 – 70%
Highly / Very Probable / Likely	75 – 85%
Almost Certain	>90%

Analytic Confidence

High confidence	Generally indicates judgments based on high-quality information, and/or the nature of the issue makes it possible to render a solid judgment. A “high confidence” judgment is not a fact or a certainty, however, and still carries a risk of being incorrect.
Moderate confidence	Generally means credibly sourced and plausible information, but not of sufficient quality or corroboration to warrant a higher level of confidence.
Low confidence	Generally means questionable or implausible information was used, the information is too fragmented or poorly corroborated to make solid analytic inferences, or significant concerns or problems with sources existed.