	John Roche's report				
Reference	Recommendation	Governance position	Commentary	Actions to address	
1	Develop a project plan for the personnel required for the next six months / adopt review suggestions around staffing resource levels.	Agree	There is an existing National Action Plan and a Surge Plan was developed after the backlog was identified. The personnel and resourcing requirements to manage the upcoming work from the surge have been identified. The critical roles that require a veterinary epidemiologist have been identified and where we are unable to fill these through our current staff we are actively recruiting. The proposed restructure will see staffing levels increase above the suggested numbers.	In progress. The proposed restructure addresses the increased workload from the Surge and once agreed by Governance recruitment will begin. There is already recruitment underway for more regionally based veterinary epidemiologists.	
2	Divest some responsibility for Operations to regional centres and further engage stakeholders.	Agree	The programme is currently looking at how to transition to a more regionally based model. We agree that decision making needs to be more devolved to the regions and work is underway to achieve this.	In progress. A proposed restructure was presented to Governance on 25 June for initial discussion. A consultation paper is being drafted and will be presented to MBGG before being sent to Programm staff. There is recruitment underway for three additional veterinarians to be based in the regions.	
3	Encourage famers to comply with NAIT requirements so as to accelerate efforts in tracing, property prioritisation and ultimately disease eradication.	Agree	There is ongoing and urgent work underway to improve NAIT. There is work underway to strengthen the ties between the M. bovis programme and OSPRI, improve usability for NAIT users and remove barriers for compliance. Communication to farmers from OSPRI, MPI, levy-bodies and other stakeholders on the importance of NAIT compliance has increased significantly over the last 12 months. Awareness and usability of the NAIT system is OSPRI's role and MPI works alongside them to achieve this. In December 2018 MPI hired 27 new NAIT compliance officers and 600 NAIT compliance notices have been issued since 1 Jan 2019. With all the strands coming together it is anticipated that by mid to late next year the NAIT system will be much more robust tool for livestock tractability.	In progress. A comprehensive program of work to strengthen NAIT is being progressed with urgency. MPI is advancing a suite of legislative and regulatory changes while OSPRI is making changes to operations, business processes and standards. MPI is also working on NAIT compliance and enhancing their strategic stakeholder relationship with OSPRI. The legislative changes are due to be introduced to the House this year and there will be a high profile education campaign rolledout to farmers following the Bill's passage. Last year urgent legislation increased the penalties for non-compliance.	
4	Introduce Tiaki (new database management system) as soon as possible in order to provide 'line of sight' to track farms through the process and give staff visibility of how a property is progressing from Confirmed Property to limiting forward spread.	Agree	Phase 1 is expected to be delivered in July and will provide for farm case management and legal instructions. Phase two is in planning and will cover more indepth disease management and recovery and welfare aspects. It is expected to be delivered by September. NB – Tiaki is searchable and the reporting capability is flexible. Regular reports will be set up to give accurate information to key decision-makers.	In progress. The implementation plan remains on track.	
5	Implement the new management structure which has been proposed.	Agree	A new proposed restructure is under discussion and was presented to Governance on Tuesday 25 June and was agreed in principle. A consultation document is being drafted to be shared with the Governance Group before being sent to Programme staff.	In progress. A consultation paper on the proposed restructure is being drafted and will be sent to Programm staff. There is recruitment underway for three additional veterinarians to be based in the regions.	
6	Ensure the programme employs staff with adequate response expertise and relevant qualifications at the appropriate level.	Agree	We have identified critical roles that require a veterinary epidemiologist and where we are unable to fill these through our current staff we are actively recruiting.	In progress. A proposed restructure was presented to Governance on 25 June for initial discussion. A consultation paper is being drafted and will be presented to MBGG before being sent to Programm staff. There is recruitment underway for three additional veterinarians to be based in the regions.	
7	Until Tiaki is able to provide this function, the Intelligence team must provide intelligence reports and surveillance reports which include counts of queued properties in each step of the process.	Agree	The Intel team sends daily reports to the Programme's leadership team on the demand for Casing and Surveillance, including progress made.	Ongoing.	
8	Adopt Standards for good disease management as detailed in the report.	Agree	The programme has taken onboard the recommendation to identify and track metrics for completing Casing and Tracing and these have been included in a wider review of our Governance Dashboard and performance reporting.	Complete.	
9	Investigate opportunities for greater connection with and leveraging off key stakehholders such as GIA partner organisations, Federated Farmers and NZVA.	Agree	The Programme is working on ways to better connect and work with key stakeholder agencies. This includes linking them regularly into discussions about response progress and emerging issues and having the response communicate directly with their membership	In progress. DairyNZ is considering how they might provide more resource to the Programme. The weekly National Management Call and fortnightly communications call provide opportunities to collaborate with key stakeholders.	

10	Report achievements against	Agree	Agreed.	In progress.
	standards as part of regular reporting			Once Tiaki is fully rolled out reports will be produced, both
	cycle.			regularly and on an ad hoc basis as required, to inform on the
				Programme status.
11	Adopt metrics as identified in Table 5	Agree	There are number of metrics behind the proposed reporting in Tiaki, which are are then consolidated to produce the Tiaki dashboard.	In progress.
	of the review report to report against			The programme is cross-referencing to check that all of the
	as part of regular reporting cycle.			metrics suggested are being considered.

			Roger Paskin's report	
Reference	Recommendation	Governance position	Commentary	Actions to address
12.1.1 Recor	mmendations regarding structure			
	The National Control Centre be downsized with a shift of resources and decision-making to Regional Control Centres	Agree	There is existing work underway to decentralise more decision-making and capability to the regions. In order to minimise risk, decentralising capabilities to the regions will require a staged approach, so the degree of decentralisation recommended will not be achieved in the short term. However increased decentralisation continues to be a long term objective of the programme.	In progress. A proposed restructure was presented to Governance on 25 June and was agreed in principle. Once the Governance Committee has approved the consultation paper it will be sent to Programme staff. There are new positions and competencies that can be appointed in the regions, and recruitment is already underway for some of them (such as additional veterinarians). In other cases, decentralisation impacts peoples current jobs and this needs to be carefully considered.
2	The NCC's functions be determined as co-ordination of and support to regional centres, the setting of standards and norms, strategic analysis, and support for decision-making when specific cases are referred by RCCs.	Agree	As above. This is a national response and therefore there needs to be central overview and control of the programme, balanced with the local ability to make practical and pragmatic decisions that support the overall programme and minimise the impact on individual farmers impacted by eradication. The programme is moving to increase the ability of regional staff to make those decisions.	
	The RCC functions be determined as identification of infected premises, tracing, casing, imposition of legal restrictions, liaison with farmers, property decontamination, assistance with resumption of BAU for affected farmers and provision of advice to NCC.	Partial Agree	The Programme agrees with this recommendation but not to the same degree as has been recommended. The proposed restructure mentioned above Some of these are regionally based, such as recovery (resumption of BAU), liaison with farmers and other operational tasks.	
	The direction of the response be guided by a management team with the high-level presence of experienced veterinary epidemiologists and livestock sector specialists in NCC and a Chief Operating Officer.	Agree	The Programme acknowledges the important role vets play in animal disease management responses.	As above, a proposed restrucutre was presented to Governance on 25 June and once the consultation paper has been approved it will be sent to staff. This restructure will establish a Programme manager role and has identified roles where more veterinary expertise is required, including putting a veterinary epidemiologist into the Programme's senior leadership team.
	A full review of programme structure be undertaken on an annual basis to ensure that deployment of resources, allocation of functions and reporting lines evolve in tandem with progressive management of disease.	Agree	While the Programme is not intending to set dates for regular reviews, there will be points where the need for a review arises, such as when budgets are approved, when epidemiological advice changes and when the TAG report and SSAG research is shared. Disease management programmes will always be subject to change as the epidemiological advice changes. The structure at the beginning of the programme will not always be appropriate in the future as the eradication programme progresses. Currently, all staff employed by the Programme are on a fixed-term contract or secondment so the structure will be considered in 2020 to prepare for the next phase of the programme.	
12.1.2 Recor	mmendations regarding data managem	ent		
	Development and implementation of the new Tiaki common platform proceed as soon as possible in order to ensure transparency and improved communication and collaboration across the programme.		Phase 1 is expected to be delivered in late July and will provide for farm case management and legal instructions. Phase two is in planning and will cover more indepth disease management and recovery and welfare aspects. It is expected to be delivered by September. NB – Tiaki is searchable and the reporting capability is flexible. Regular reports will be set up to give accurate information to key decision-makers.	In progress. The implementation plan remains on track. There is critical security and technical work underway which needs to be completed ahead of implementation.

2	Other similar emergency management software (such as MAX in Victoria) be compared with Tiaki in order to ascertain whether the addition of new functions/capabilities should be considered.	Agree	This was done during the discovery phase of the project. Tiaki was selected because it is an off-the-shelf product and therefore is easier to adapt/update as required, whereas MAX is a bespoke product developed for Victoria. The phase two roll out includes integrated mapping capability as stated in the Paskin report. Tiaki will become the database for all MPI-led biosecurity responses, however the M. bovis modules are being prioritised.	
3	All response staff be thoroughly trained in the use of Tiaki from the outset in a programmed manner.	Agree	This is an important part of the Tiaki implementation plan. The training will initially be delivered to all M. bovis programme staff as the first phases of Tiaki have been developed for the M. bovis response. As Tiaki gains further functionality and is able to have wider application, all response staff will be trained in its use.	In progress. The implementation plan, which includes staff training, remains on track.
4	In the interim, all Excel spreadsheets in use be consolidated and placed on a widely accessible SharePoint site to ensure visibility to all.	Agree	Spreadsheets were used in the absence of a functional response management system and Tiaki will make the use of spreadsheets redundant.	In progress. Work is underway to collate the existing spreadsheets and store them on Piritahi (a shared application). This is expected to be done in late July (coinciding with the Tiaki roll-out).
5	The use of individual spreadsheets for holding data and response management be strongly discouraged.	Agree	It is existing MPI policy that information is saved onto Piritahi (Sharepoint) - MPIs document management system. This has been reinforced as part of both reviews (Roche and Paskin).	
6	A dedicated Data Manager be appointed to the programme to design and implement procedures to manage data quality and data flow across the system.	Agree	This is the role of the Intelligence function which was stood up late last year.	In progress. The proposed structure raises the the profile of the Intel function within the programme's leadership team.

12.1.3 Recor	mmendations re traceability and NAIT			
1	Awareness creation of traceability in	Agree	There is ongoing and urgent work underway to improve NAIT.	In progress.
	the farming community continue in		There is work underway to strengthen the ties between the M. bovis programme and OSPRI, improve usability for NAIT users and remove barriers	A comprehensive program of work to strengthen NAIT is being
	concert with compliance and		for compliance.	progressed with urgency.
	enforcement actions.		Communication to farmers from OSPRI, MPI, levy-bodies and other stakeholders on the importance of NAIT compliance has increased significantly	MPI is advancing a suite of legislative and regulatory changes while
			over the last 12 months.	OSPRI is making changes to operations, business processes and
			Awareness and usability of the NAIT system is OSPRI's role and MPI works alongside them to achieve this.	standards.
			In December 2018 MPI hired 27 new NAIT compliance officers and 600 NAIT compliance notices have been issued since 1 Jan 2019.	MPI is also working on NAIT compliance and enhancing their
				strategic stakeholder relationship with OSPRI.
			With all the strands coming together it is anticipated that by mid to late next year the NAIT system will be much more robust tool for livestock	The legislative changes are due to be introduced to the House this
			tractability.	year and there will be a high profile education campaign rolled-out
				to farmers following the Bill's passage. Last year urgent legislation
2				increased the penalties for non-compliance.
2		Agree	In New Zealand there is no one database with complete property information, therefore the Programme needs to source data from a variety of	
	identified for use nationally and other		databases. The introduction of Tiblician behavior all groups and this billion of forms are not information in NZ and forms of fortal by NA. Basis. The Tiblician state of the NA. Basis. The NA.	
	databases be discontinued.		The introduction of Tiaki in July will give all programme staff visibility of farm property information in NZ and farms affected by M. Bovis. The Tiaki system is underpinned by LINZ parcel and ownership data which is updated when property titles are transferred.	
2	Regular updating (annually or	Partial Agree	This would be ideal but in New Zealand there is no one database with complete information.	
3	biannually) of all property data in the	Fai tiai Agree	Once Tiaki is introduced it will draw on the most current and accurate data (LINZ parcel and ownership data). NAIT also uses LINZ data.	
	national database be mandated.		once makins introduced it will draw on the most current and accurate data (tinz parcer and ownership data). Warr also uses tinz data.	
4	The possibility of incorporating		This recommendation will be referred to OSPRI.	
4	elements of 'Blockchain' technology		This recommendation will be referred to OSPRI.	
	in NAIT (to improve robustness and			
	transparency) be investigated.			
	mmendations re technical decision-mak	l king		
		Agree	There are two existing veterinary managers based in the Regional Control Centres, one in Hamilton and one in Ashburton. The Programme is	In progress.
	experienced veterinarians be placed		recruiting additional veterinarians in Oamaru, Invercargill and Christchurch.	Recruitment is underway for a further three veterinarian
	in all RCCs to guide, and assist with			epidemiologists to bring the number up to five.
	the implementation of, all property-			
	based disease management.			
2	The position of veterinary	Agree	This is underway, and was part of the 10 point plan the Programme partners agreed to in April.	In progress.
	epidemiological expertise in the NCC		There is a small market worldwide for suitably experienced veterinary epidemologists. Additionally, the fact that the programme can only offer short	-The proposed restructure will increase the veterinary expertise,
	be elevated by placing suitably		term contracts makes the potential applicant pool even smaller. The Programme is considering how to get input from expereinced vets.	including veterinary epidemological expertise, in the programme.
	qualified and experienced individuals			Recruitment for the necessary roles will commence as soon as the
	in key senior positons including IMT.			restructure is finalised.

12.1.5 Rec	ommendations re staff levels, training an	d appointments - see als	so wider MPI recommendations	
1		Agree	We have reviewed the proposed restructure by Roger Paskin, John Roche and feedback from a previous consultation sent to staff. As a result of these, a new staffing struture with increased staffing levels was presented to the Governance Board on Tuesday 25 June for intial discussion. This was agreed to in principle and a consultation document is now being prepared, in line with MPI's HR procedures.	In progress.
2		Agree	MPI has an existing HR recruitment framework which ensures all staff appointments have appropriate experience and qualifications. While we have confidence in MPIs recruitment systems, the early phase of a response can involve the acquisition of a large workforce in a short space of time. For this reason responses need to have more flexibility around their recruitment procedures. However all of the workforce taken on during the response phase has been, and will continue to be, reassessed for suitability as we move to the Programme phase.	
3	Staff appointments be conducted in strict compliance with MPI's Capability Framework and that adherence to this framework is monitored.	Agree		
4	Emergency training for MPI staff be developed, standardised and that all such training courses and material are subject to accreditation standards. Training must be developed for all functions within a typical control centre.	Partial Agree	It is likely that in the first 12 months, especially before the eradication decision was made, people received limited training due to the rapid growth and demands of the programme. However, over the last 12 months this has improved and staff are routinely put through existing MPI training on a variety of topics. MPI has a strong capability network where field work for biosecurity responses is contracted out, however the scale of M. bovis meant this was quickly exhausted. At the beginning of the M. bovis response CIMS was the appropriate operating model as a heavily structured operating model was required to tightly manage the response, including the third party involvement such as the Police. The operating model has moved to a bespoke CIMS-based operating model. This means that while staff are employed on longer fixed-term contracts, the teams still form typical CIMS teams such as Operations, Planning, Intel, PIM and Liaison. The Disease Management team has been customised to suit the needs of the Programme (such as tracing, casing and surveillance). The operating model should have evolved as the programme developed but did not do so sufficiently. Steps are now being taken to address this, most notably the proposed new structure. Wider MPI response capability: See the Response People Capability and Capacity Programme report attached. MPI has a comprehensive Response People Capability and Capacity Programme in place. This is guided by a working group of managers and is based on assessments and evaluations of Response performance carried out over the last five years. There are also eight ongoing projects to build and improve MPIs response capability. MPI works closely with DPMC and others on the National Security System Training Development Group. MPIs expertise in response learning and development is well-recognised within the group and the whole of governement capability frame work is based on work done in MPI. Between May 2017 - June 2019; MPI has facilitated training for staff at all levels of CIMS	This is partially out of scope of the M. bovis Programme and will be addressed seperately.

12.1.6 Recor	mmendations re response information			
		Agree		This recommendation has been referred to the M. bovis director.
	created to cover all details of the M.			
	bovis response, including an			
	authoritative and balanced			
	description of the disease, the			
	response strategy and			
	epidemiological principles and			
	operation details pertinent to every			
	aspect of the response. This			
	document will serve as a single point			
	of truth for the response and replace			
	all current response documents. In			
	order to avoid confusion, it will be			
	updated infrequently.			
10.1 = -				
	mmendations regarding the role of the		The December of the Language of the Company of the	lu
	A local farmer be drawn into every	Agree	The Programme agrees that farmer voices, views and expertise are heard as directly as possible and are putting steps in place to facilitate this.	In progress.
	RCC as a direct and knowledgeable		Farmer voices are represented via multiple channels, including in each of the RCCs, with locals rural professionals employed in a number of roles.	
	liaison with the local farming		Roles which are filled by rural professionals of people with farming experience include ICP managers, operations staff and recovery & welfare staff.	
	community.		The Programme considers partners DairyNZ and Beef + Lamb New Zealand also contribute to farmers having a voice at the table. Both levy bodies have significant links into farming communities.	
			Recovery staff employed by the Programme are seconded/nominated by DairyNZ and/or Beef + Lamb New Zealand, or are skilled rural professionals with good operational knowledge of farming operations.	
			In addition to the rural expertise specifically employed, there are three pilots underway in the South Island to incorporate a wide range of voices to	
			look at specific cases. In Ashburton, the group is led by the Mayor and she is joined by representatives from MPI, Federated Farmers, Dairy NZ, Beef	
			& Lamb NZ, Rural Support Trust Mid Canterbury, Vet Ent, and the Ashburton Hospital. Similar groups are to be established in Waitaki and Waimate.	
			The Programme has also worked to develop a proposal with Federated Farmers to have presence in the regional office. This was presented to the Governance Group on Tuesday 25 June and involves Federated Farmers supplying people with extensive rural experience on a part-time basis to	
			assist and advocate on behalf of farms under active surveillance.	
			assist and advocate on benan of farms under active surveinance.	
2	The farmer liaison attend IMT	Agree	In addition to the comments above, through our workshops in regions we have identified farmers who 'sense-check' communications and regularly	
	meetings, control centre briefings and	ľ	provide feedback.	
	assist response partners with direct			
	communication where necessary.			
3	A number of suitable farmers be	Agree	As above	
	identified in each region for this role			
	and they be rotated through control			
	centres on a weekly/fortnightly basis.			

12.1.8 Reco	ommendations re external comms			
1	A single senior scientist be identified	Partial Agree	Dr John Roche is the spokesperson for all technical matters, for media and also videos produced for the programme.	In progress.
	as the spokesperson for the		We also consider there is value in having an additional spokesperson who can talk about the programme overall. This is currently Geoff Gwyn as	Regional Managers are receiving training, including media training,
	programme to ensure one		Director.	so they can be spokespeople at a local level.
	authoritative and trusted 'voice' and			
	that all external enquiries re the			
	programme be directed to this			
	person.			
2	At the RCC level, technical	Agree, in progress	There is already work underway to recruit more veterinary epidemiologists in the regions. They will be the conduit to the local vet community and	In progress.
	communication to both farmer		will be supported by regional comms/liaison advisers.	Recruitment is underway for three additional regional veterinary
	groups and individual farmers be			epidemiologists.
	entrusted to the centre's vet.			
12.1.9 Reco	ommendations re the future			
1	The programme be re-designed as a	Partial Agree	The longer term structure of the programme will be guided by advice from the Technical Advisory Group (TAG).	In progress.
	farmer-empowered, farm-based (but			Programme partners will work together to review TAG
	government-supported) programme.			recommendations and ensure their full support is provided to any
	It would be advantageous to begin			programme re-design.
	planning for a new-look programme			
	as soon as possible involving			
	industry/farming partners with a view			
	to implementation once initial			
	eradication activities are complete.			

			Roger Paskin's recommendations out of scope of the M. bovis Programme	!
Reference	Recommendation	Position	Commentary	Actions to address
1	Emergency training for MPI staff be developed, standardised and that all such training courses and material are subject to accreditation standards. Training must be developed for all functions within a typical control centre.	Partial Agree	It is likely that in the first 12 months, especially before the eradication decision was made, people received limited training due to the rapid growth	This is partially out of scope of the M. bovis Programme and will be addressed seperately.
			Mider MPI response capability: See the Response People Capability and Capacity Programme report attached. MPI has a comprehensive Response People Capability and Capacity Programme in place. This is guided by a working group of managers and is based on assessments and evaluations of Response performance carried out over the last five years. There are also eight ongoing projects to build and improve MPIs response capability. MPI works closely with DPMC and others on the National Security System Training Development Group. MPIs expertise in response learning and development is well-recognised within the group and the whole of governement capability frame work is based on work done in MPI. Between May 2017 - June 2019; MPI has facilitated training for staff at all levels of CIMS response, including training staff from a number of external agencies in CIMS level Two, and has ran five different Response simulations. In addition, there are number of active Responses underway at any one time and MPI has successfully eradicated a number of pests in the past, some multiple times.	
2	All MPI personnel receiving emergency management training participate in mandatory simulation exercises annually. These should centre on biosecurity emergencies and may be desktop, field or full function exercise.	Partial Agree	MPI is actively managing a number of responses at any one time giving real-life on-the-job experience, and regularly undertakes simulation exercises in preperation for a response. See the People Capability and Capacity Programme Report for more information.	This is out of scope of the M. bovis Programme and will be addressed seperately.
3	MPI be accepted as the lead agency in biosecurity emergencies and that all MPI staff be encouraged to participate in emergency responses and emergency training whenever possible. This will create a 'battle ready' cadre of of staff to act as first responders.		Biosecurity New Zealand is the lead agency in every biosecurity response underway in New Zealand. MPI staff receive training and have a requirement to assist with responses if necessary. The idea of having a "battle ready" cadre of staff available within MPI has financial implications the report author will not be aware of. This is outside the scope of the M. bovis programme and discussions would need to be had with industry and GIA partners on the cost recovery of MPI building this cadre of staff. Under the current Response model MPI is the lead agency and, when there are such agreements in place, works closely with industry and GIA partners to respond to biosecurity incursions. MPI also works closely with other government agencies in emergency responses and is on the National Security System Trainin Development Group to assist with the development of the 3rd edition of CIMS. MPI provides Response emergency training to a number of external agencies and is seen as the local experts in Response emergencies. In addition, the job descriptions of most staff at MPI include a clause saying that they can be deployed to assist with a response if necessary. For this reason, all MPI staff are encouraged to undertake training in CIMS and response management. The level of training suggested depends on a person's position and likelihood that they will be needed for a response. See attached Response People Capability and Capacity Report for further information.	
4	External efficiency audits be conducted regularly on all response and be incorporated into work plans as a routine activity.	Agree	MPI's Assurance and Evaluation Team has developed a draft 3 year M. bovis Assurance Plan. This looks at issues beyond just the efficiency of the response. It will also give assurance around effectiveness, performance, conformance and risk management. It will be presented to the Governance Board for approval at an upcoming meeting. There is an assurance programme for all responses built into the Assurance and Evaluation Team's 3 year assurance plan.	

5	A single comprehensive document or	Partial Agree	This recommendation refers to MPIs wider response processes and is out of scope for the M. bovis Programme. It will be referred to the Head of	This recommendation is out of scope for the M. bovis programme
	manual be created to detail control		Biosecurity NZ.	and will be addressed seperately.
	centre structure and management for		Biosecurity NZ uses the CIMS model for biosecurity emergencies which is well documented and used both nationally and internationally in	
	animal biosecurity responses. This will		emergency situations.	
	include the various response		At the beginning of the M. bovis response CIMS was the appropriate operating model as a heavily structured operating model was required to	
	functions, reporting lines, position		tightly manage the response, including the third party involvement such as the Police. This has evolved to a bespoke CIMS-based operating model.	
	descriptions and role cards completely		The operating model should have also evolved as the programme developed but did not do so sufficiently. Steps are now being taken to address	
	describing the duties attached to each		this, most notably the proposed new structure.	
	position in the response programme.			
1				
1				