

Future of Biosecurity Surveillance: Needs Analysis 2010

Context

1. In 2009, MAF Biosecurity New Zealand launched the Biosecurity Surveillance Strategy 2020 to guide the way all surveillance participants lead, plan, deliver and communicate surveillance activities across the biosecurity system. The Strategy addresses the surveillance needs for New Zealand's total biosecurity system, and includes activities conducted by MAF and those carried out by other surveillance participants.

Update

2. The Ministry of Agriculture and Forestry (MAF) has completed a series of stakeholder workshops in Christchurch, Wellington, and Auckland to determine New Zealand's surveillance needs overall. MAF also provided a survey to workshop participants to any capture further thoughts and information about surveillance needs and priorities after the workshops.

Purpose of this document

3. This document summarises the feedback generated during the workshops and via the surveys (see Appendix 1 and 2), and presents MAF's responses to issues raised. Stakeholders raised a number of issues during the surveillance needs process. Some issues were relevant to a small group of stakeholders while other issues and views were common to a wide range of stakeholders. This document focuses on issues held by a large number of stakeholders; as they represent the key areas stakeholders see require improvement across the surveillance system.
4. This document does not analyse the feedback relating to the proposed prioritisation process, as this forms part of another workstream.

Summary of issues raised during stakeholder consultation

5. Feedback showed that overall stakeholders were happy to engage with MAF to share their surveillance needs and concerns, and the majority of stakeholders were happy to be involved in further evaluation of New Zealand's surveillance needs. MAF will be in touch with these people as the work progresses.
6. The most common shared feedback related to the need for a whole-of-system approach to biosecurity management, with people highlighting gaps in the pre-border/border area as examples of this. A large amount of feedback also centred on the need for profiling and intelligence and pathway surveillance, and problems with surveillance infrastructure. Stakeholders also raised concerns about the role of education and communication in passive surveillance, and how we work together and who should be involved when it comes to surveillance decision-making.

Key issues and MAF's response

Whole-of-system biosecurity management

7. A primary theme that emerged during the process was the growing need for increased alignment of all activities across the biosecurity system. Overwhelmingly, stakeholders felt that we should treat surveillance as a component of a bigger system and surveillance activities should align with offshore, border, response and pest management activities for maximum effectiveness.

MAF's response

- We agree with stakeholders. Biosecurity risk management is a complete and complex system in which risk can be managed at different points. These points include offshore, en-route, at the border itself, and through biosecurity activities within New Zealand including transitional facilities, surveillance, incursion response, and pest management.
- Many of our current work programmes involve strengthening the links across the system to make sure our post-border activities are informed by what is happening at the border, and vice versa.

Profiling and intelligence

8. There is also growing demand for using risk profiles and intelligence to inform surveillance activities. Many people felt that we need better understanding of the types of pests that are crossing the border, and the means by which they are arriving so we know what to look out for, and where to look for it. The general view is that MAF currently has limited understanding of what is threatening the borders, which has resulted in several unpredicted incursions (e.g. Hadda beetle).

MAF's response

- We agree with our stakeholders and we are already working on a number of initiatives, particularly at the border, to boost our capability in this area. In the near future, MAF will use intelligence and risk profiling, supported by sophisticated technology, to identify and assess the level of risk posed by different goods, craft, and people crossing our borders. This will allow us to target resources to the areas of highest risk or where greatest benefits can be realised.
- We are also working on increasing the linkages between the border and post border areas to ensure that we are prepared for a successful response if something does get in.
- We are also engaging closely with targeted research programmes in order to ensure that we can more effectively identify future biosecurity risks and opportunities.

Pathway surveillance

9. A number of stakeholders felt that the traditional (organism-only) approaches to surveillance limit the flexibility of the system, as we do not always know what we

should be looking for or where. A large number of stakeholders suggested moving toward a pathway-focussed model in which trade pathways and associated risk sites are targeted because these are the most likely areas where exotic organisms will enter and establish in New Zealand.

MAF's response

- We agree with stakeholders, and Goal 8 of the Surveillance Strategy, Efficient Surveillance Delivery, echoes this approach. We want biosecurity surveillance to deliver multiple benefits as efficiently as possible. While organism-specific surveillance has its advantages, and will remain appropriate in some cases, the pathway approach will make it easier to find a range of known and unknown pests and diseases, not just those we expect to find.
- Pathway surveillance will also provide better quality data about what is crossing our borders. This will tell us about the effectiveness of MAF's border interventions and become a benchmark that we can measure our surveillance activities. This information will also become a key input into the work planning process for post border activities (i.e. focus surveillance resources to high-risk pathways).
- Currently 25% of our domestic biosecurity surveillance activities are primarily focused on pathway-based programmes.

Infrastructure, information sharing, and performance measurement

10. This issue came up numerous times in the workshops, and a number of people raised it again as an issue during the survey process. Many stakeholders shared concerns about the current approach to collating, sharing, and accessing surveillance information across the system, and that this lack of surveillance infrastructure directly affects their ability to learn about new surveillance methods and tools, and their knowledge of populations at risk, their locations, vector movements, and pest population densities.
11. This lack of surveillance infrastructure results in incomplete reporting data. This makes it difficult to measure the efficacy of existing surveillance programmes and the system performance overall.

MAF's response

- We agree with stakeholders that by improving the way we manage, share, and use surveillance information across the system, we will improve the quality of surveillance programmes nationwide. Goal 11 of the Surveillance Strategy, in which *adequate processes and systems for managing and storing data support biosecurity surveillance activities* shows MAF's commitment to this area.
- This is a key deliverable of the Future of Biosecurity Surveillance project and is due to start in 2011. Given the feedback in the workshops, MAF is considering kicking off this work earlier in response to stakeholder needs.

Education, communication, and passive surveillance

12. Many stakeholders felt there are gaps around education and communication, and that this affects people's ability to carry out quality passive surveillance. Stakeholders noted that passive surveillance is a critical part of the surveillance system but to do it well, people need to know what to look out for, and what to do when they find something.
13. As part of this, stakeholders also felt that MAF should make it easier and safer for people to accurately report suspected pests and diseases, and strengthen the consequences for failing to report any suspicious findings. At present, many people do not feel they can safely report new pests without undue penalty from MAF and often attempt to control rather than report.

MAF's response

- We have a number of initiatives underway to increase stakeholder participation in biosecurity surveillance. This includes developing the tools and skills necessary to support the delivery of surveillance activities, improving the way we communicate with surveillance participants, and reducing the barriers to reporting when people find new pests or diseases.
- High-priority aspects of this work are due for completion by the end of 2011, with other elements due to be finished by mid 2013.

Working together, roles and responsibilities

14. Several stakeholders raised issues around working collaboratively across the surveillance system to share information, educate people, and pool resources in areas of overlap. A number of people pointed out that in the current system there are many surveillance approaches undertaken by different sectors and organisations, which leads to inconsistent surveillance activities and a lack of coordination with the system.
15. These stakeholders felt that collaboration would help in areas of national coordination and oversight. One sector suggested regular meetings of central and regional government and industry representatives as one way to help achieve this goal.
16. A number of stakeholders also felt there should be greater clarity around the roles and responsibilities of participants in the surveillance systems. Some stakeholders asked questions relating to the mandate to act in situations where there are different types of risk (e.g. exotic, emerging, health-related, food-related etc). Others felt that primary industry should take more responsibility for managing their own biosecurity risks and identify changes in their activity that impact on risk.
17. Questions arose repeatedly about the role of industry, regional government, and other central government agencies in relation to decision-making, prioritisation, and funding of surveillance activities.

MAF's response:

- Working together is a vital component of the surveillance system. MAF's mandate is to deliver an effective and efficient biosecurity system, not to do it all ourselves. We want the New Zealand industry, public, and overseas visitors to take responsibility for, and manage their own biosecurity risks where possible.
- For this to be successful, it is vital that we all understand our roles in the system and those of others. It is equally vital that roles, once clear and agreed, are fulfilled by the people and agencies that hold them, as without commitment and follow-through, clearly defined roles mean little.
- We have kicked-off a piece of work in which surveillance agencies and participants define, agree, and communicate their roles and responsibilities in the surveillance system. This work is high-priority and we aim to have it finished by September 2011.
- We have already established a Surveillance Oversight Committee to represent the sectors involved or affected by biosecurity surveillance and lead the delivery of the joint outcomes detailed in the Strategy. This Committee involves representation from council, industry, Maori and research organisations.
- Two marine biosecurity partnership groups (Top of the North / Top of the South) have also been set up to prevent the introduction of, and minimise the spread of, damaging marine species.
- We are also working with central and regional government agencies, pest management experts, industry and Maori to develop a National Plan of Action to improve New Zealand's pest management system. This will likely have positive spin-offs for surveillance activities.
- Government-Industry Agreements is another MAF-led piece of work in which primary industries and MAF will define their roles and responsibilities, particularly in relation to decision-making and cost-sharing, for biosecurity preparedness and response activities.

Sector representation

18. Views on this issue were generally in two camps. A large number of stakeholders felt current sector representation was appropriate because of the contribution primary industries make to New Zealand's economy and the continued need for protection.
19. The other general view was that agricultural and economic sectors were over-represented and public good sectors were under-represented. Of this group, many felt that the marine and environment sectors were most under-represented, but that social and cultural sectors were also under-represented compared to agricultural and horticultural sectors.

MAF's response

- Government Industry Agreements will provide primary industries with a greater say in biosecurity readiness and response activities and create opportunities for industry to invest jointly with government to manage biosecurity risks through

readiness and response activities. The Agreements will only apply to activities that provide a proportion of industry benefits.

- MAF's Prioritisation System will play a vital role in ensuring the surveillance activities we do are the right ones for New Zealand, and that our decision-making processes are transparent and credible.

Next steps

MAF is grateful to all those who provided feedback about the gaps and needs for biosecurity surveillance. It is encouraging that many of the gaps identified were those that MAF is already aware of and taking steps to remedy.

The next steps are for MAF to work through the action plan in the Surveillance Strategy to make sure the timing and phasing of the actions aligns with what our stakeholders are telling us.

We will also develop a process for capturing and prioritising stakeholder surveillance needs on an on-going basis.

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