



A project to develop biosecurity system  
health monitoring and reporting

November 2018

**KO TĀTOU THIS IS US**

**BIOSECURITY 2025**

## Biosecurity 2025 | Project to develop biosecurity system health monitoring and reporting

The first stage of this project is underway to develop biosecurity system health monitoring and reporting to enable focused action to strengthen the integrity and performance of the system.

**You're invited to provide feedback on the draft system key performance indicators (KPIs).**

- Do you think they sufficiently cover what should be addressed?
- Is anything missing?

*Please send your comments to [Biosecurity2025@mpi.govt.nz](mailto:Biosecurity2025@mpi.govt.nz) by 31 January 2019.*

### What this project is about

System monitoring and public reporting on the performance of the biosecurity system is an important objective for Biosecurity 2025 as it will contribute to assessment and strategic analysis to support transparent and accountable system stewardship.

We are aiming to identify what aspects of system health should be monitored so we have a good idea of how well the system is performing. This project is still at an early stage in identifying possible KPIs. The KPIs should be considered as a group and will help us tell a story about whether we are delivering effectively and efficiently against the system outcomes.

This stage of the work draws on the considerable work already done under the Biosecurity 2025 programme during the past three years, including a workshop held in August 2018. This workshop, to identify key aspects of the system to monitor and report on, was attended by stakeholders from across the biosecurity system.

The whole-of-system outcomes for the biosecurity system – set out in this paper – provide a starting point for further development of the KPIs. They reflect the engagement that has been done by the Biosecurity 2025 programme, and incorporate the mission, values, principles, goals, outcomes and targets from the Biosecurity 2025 Direction Statement.

### Next steps

Feedback on the draft KPIs will be taken into account and further analysis will be done.

It is expected that the total number of performance measures will be refined and limited to what will be meaningfully useful and practicably achievable.

As part of this process, performance measures for each KPI will be developed. The challenge will be to determine measures which, when taken together, provide a sufficiently comprehensive picture of system performance so that people have trust and confidence in what is being reported on.

The measures will be refined in the context of issues such as practicability and cost of collection of the information, and the anticipated value and contribution the information. It may be that some of the information is already being collected and could be made available for Biosecurity 2025 system monitoring. In other cases, new monitoring and data collection processes may need to be established to obtain the information.

## Some key terms

The definition of the ‘biosecurity system’, who its participants are, and what it is designed to protect, are set out in the [Biosecurity 2025 Direction Statement](#):

*Mission: The biosecurity system protects New Zealanders, our way of life, our natural and productive resources and our biodiversity from the harmful effects of pests and diseases.*

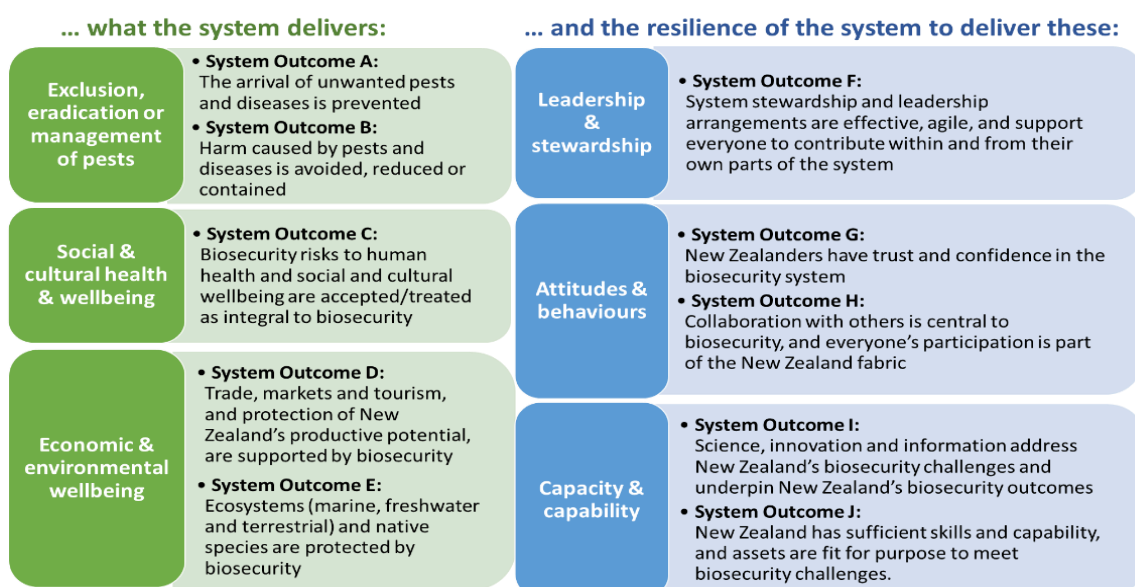
*Biosecurity is implemented through a risk management system that involves many participants. The ‘biosecurity system’ can be defined as – the interconnected activities, processes and responsibilities which deliver biosecurity.*

### Biosecurity system participants:

- **Central government agencies** that have a range of statutory roles and responsibilities for decision-making and operations
- **Regional councils** that lead pest management in their regions
- **Industry organisations** under the Government Industry Agreement that share responsibility for decision making and funding of agreed readiness and response activities, and are involved in wider engagement across the system
- **Māori/iwi** who are partners with the Crown through Te Tiriti o Waitangi, kaitiaki of New Zealand’s taonga, and have statutory roles in management of natural resources
- **Organisations** that implement national plans to manage significant pests
- **Industries and businesses** that have a role and responsibility to manage the risks to and caused by their businesses
- **Scientists, and research organisations** and collaborations, that develop knowledge and tools for managing biosecurity risks
- **Landowners and occupiers**, including agencies that manage public lands, that have a responsibility to manage pests on their land
- **Community groups**, non-governmental organisations, and other groups of people who come together to protect what they value
- **Every individual**, including in their capacities as travellers, educators and consumers.

## Whole-of system outcomes

Assessing the health of the biosecurity system is the combination of looking at:



The draft KPIs (key performance indicators) below explain aspects of what success looks like if we're delivering effectively and efficiently against the system outcomes. Effectiveness is getting the right results. Efficiency is doing so in the best possible way, for example at the least cost and/or the easiest way.

Your feedback is invited on these draft KPIs. Email [biosecurity2025@mpi.govt.nz](mailto:biosecurity2025@mpi.govt.nz) by 31 January 2019

Taken together, the draft KPIs are not intended to cover the full breadth of what is covered by the outcomes, but they should present a meaningful signal or indication of important elements of the outcomes.

They will be supported by performance measures that will drill down into what is important and can be quantified and reported against.

**Assessing the health of the biosecurity system is the combination of looking at: ...what the system delivers (end results):**

<b>Exclusion, eradication or management of pests</b>
<b>System Outcome A - The arrival of unwanted pests and diseases is prevented</b>
<b>KPI A1.</b> Risk management interventions for “significant” [ <i>yet to be defined</i> ] pests and diseases, and plans for key risk pathways, are in place, adequately resourced, fit for purpose, and aligned across the biosecurity system.
<b>KPI A2.</b> Effective monitoring and intelligence systems identify new risks to New Zealand and opportunities to keep risk offshore.

<b>System Outcome B - Harm caused by pests and diseases is avoided, reduced or contained</b>
<b>KPI B1.</b> Incursion response efforts are prioritised taking into account risk, cost:benefit, feasibility, practicability, and acceptability.
<b>KPI B2.</b> Substantially reduce the cost of managing a “significant” established pest. This will be achieved through greater efficiencies and innovative science and new tools and approaches to pest management. [ <i>“significant” defined for KPI A1</i> ].
<b>KPI B3.</b> Improved and/or reversed trends in five high priority environmental or plant/animal health flagship indicators [ <i>tbd</i> ] by 2025.

<b>Social and cultural health and wellbeing</b>
<b>System Outcome C – Biosecurity risks to human health and social and cultural wellbeing are accepted/treated as integral to biosecurity</b>
<b>KPI C1.</b> Biosecurity risks to human health and social and cultural wellbeing are specifically identified and addressed in key plans and activities in the biosecurity system.



<b>Economic and environmental health and wellbeing</b>
<b>System Outcome D - Trade, markets and tourism, and protection of New Zealand's productive potential, are supported by biosecurity</b>
<b>KPI D1.</b> Biosecurity risk management decisions recognise international trading obligations and commitments, and the need to facilitate safe imports, safe travel, and support assured exports.
<b>KPI D2.</b> Biosecurity supports New Zealand to maintain/increase access to international markets for our primary product markets including apiculture, aquaculture, and marine, agricultural, horticultural and forestry products.
<b>KPI D3.</b> Biosecurity supports tourism by mitigating adverse impacts on the environment from pests and diseases.
<b>Also draws on above KPI B3.</b> Improved and/or reversed trends in five high priority environmental or plant/animal health flagship indicators [tbd] by 2025.

<b>System Outcome E – Ecosystems (marine, freshwater and terrestrial) and native species are protected by biosecurity</b>
<b>KPI E1.</b> Biosecurity risk management decisions recognise international environmental obligations and commitments.
<b>Also draws on above KPI B3.</b> Improved and/or reversed trends in five high priority environmental or plant/animal health flagship indicators [tbd] by 2025.

**...and the resilience of the system to continue to deliver the above end results:**

<b>Leadership and stewardship</b>
<b>System Outcome F - System stewardship and leadership arrangements are effective, agile, and support everyone to contribute within and from their own parts of the system</b>
<b>KPI F1.</b> Māori/iwi actively participate as partners in system stewardship arrangements, and as kaitiaki and leaders at all levels of the system.
<b>KPI F2.</b> System stewardship arrangements support six core system-wide functions needed to strengthen the biosecurity system: future-focused strategic oversight, monitoring system performance, identifying gaps, reporting on performance, building awareness and understanding, and facilitating engagement.
<b>KPI F3.</b> System stewardship arrangements result in ongoing demonstrable improvements to New Zealand's biosecurity system and outcomes.
<b>KPI F4.</b> Decision-makers respond with agility and speed to new information, changed circumstances and emerging risks.

<b>Attitudes and behaviours</b>
<b>System Outcome G - New Zealanders have trust and confidence in the biosecurity system</b>
<b>KPI G1.</b> New Zealanders have confidence in biosecurity system risk management, and see their values have been taken into account as part of priority setting.
<b>KPI G2.</b> Current and historic information about system performance is easily accessible to the public, to enable them to assess performance over time, discern trends and emerging risks, identify opportunities for innovation and system improvement, and consider implications regarding system performance.
<b>KPI G3.</b> The special relationship between the Crown and tāngata whenua and the unique contribution that Māori make to biosecurity are recognised by all system participants.

**System Outcome H - Collaboration with others is central to biosecurity, and everyone's participation is part of the New Zealand fabric**

**KPI H1.** Networking, collaboration and coordination is undertaken by New Zealand organisations (including NGOs, philanthropic organisations, industries, local and central government agencies and Māori/iwi) with each other, and with their international counterparts, to increase knowledge, improve the quality of science, strengthen capacity and deliver improved biosecurity outcomes.

**KPI H2.** The public, businesses, Māori and community groups feel empowered to participate.

**KPI H3.** Biosecurity is part of the social norm, culture and attitudes of the public, including businesses, and is regarded as an essential part of the New Zealand story.

**KPI H4.** New Zealanders, as individuals, in communities and organisations, demonstrate shared responsibility for biosecurity outcomes, by responding with agility and speed to new information, changed circumstances and emerging risks, and taking appropriate action.

**Capacity and capability**

**System Outcome I - Science, innovation and information address New Zealand's biosecurity challenges and underpin New Zealand's biosecurity outcomes**

**KPI I1.** Activities and investment in science and knowledge for biosecurity are prioritised and reviewed regularly to ensure they are aligned with and deliver to whole of system needs.

**KPI I2.** Biological collections, supported by taxonomic expertise, provide the evidence base for New Zealand to respond effectively to present and future challenges.

**KPI I3.** Data for New Zealand's fundamental datasets [*note: datasets still tbd*] is collected, maintained and stored using agreed consistent standards to support easy sharing of the data.

**KPI I4.** Use of fundamental datasets adhere to tikanga and sovereignty protocols [*note: still tbd*].

**KPI I5.** There is timely, sustainable investment and deployment of technology, including investment in development and management of an innovation portfolio.

**KPI I6.** The role of mātauranga Māori is recognised and provided for in science for biosecurity.

**System Outcome J - New Zealand has sufficient skills and capability, and assets are fit for purpose to meet biosecurity challenges**

**KPI J1.** Careers available in biosecurity-related fields are well understood and sought after.

**KPI J2.** Biosecurity education and training is building the necessary knowledge and skills for all ages across the system.

**KPI J3.** Robust, resilient and enduring infrastructure supports biosecurity system functions. "Infrastructure" includes laboratories, institutions (MPI, MoH, regional councils, etc.), networks (of people, information, etc.), and tools (e.g., biological agents and chemicals, and permission to use them).

**KPI J4.** Critical policy infrastructure, such as legislation and standards, is fit for purpose and supports agile biosecurity risk management.