1 Executive Summary

This strategy covers new and used vehicles and machinery imported into New Zealand. It outlines the characteristics of the import pathways; identifies desired outcomes and objectives for the biosecurity management of the segment; and outlines priorities for meeting these objectives.

New Zealand imports a large number of used vehicles (122,913 in 2007), new vehicles (76,437 in 2007), and used machinery (3,254 in 2007). These comprise up to 25% of the total value of annual imports into New Zealand (i.e. approximately $10.1 billion for year ended June 2007). The segment utilises approximately 15% of MAFBNZ’s frontline cargo staff. There has been a rapid decline in the number of imported used vehicles since 2007. Future trends in volume are uncertain due to the influence of a wide range of external factors. The number of imported new vehicles has stayed relatively steady. The proportion of new compared with used vehicle imports has risen.

The segment is dominated by imports from Japan, facilitating off-shore risk management programmes in Japan. This dominance is less pronounced for new vehicles and is predicted to change if imports from China and other countries increase.

Pathway risk analysis has identified this as a high risk segment. The likelihood of any one high impact risk organism occurring on any one imported item is low, but the high volumes and large number of high impact risk organisms multiply the risks. There are numerous high impact risk organisms associated with vehicles and machinery which would negatively affect New Zealand’s economy, natural environment, human health status and socio-cultural well-being. These include Asian gypsy moth, fall webworm, red imported fire ant, Asian tramp snail, pine pitch canker, Asian tiger mosquito, and widow spiders.

Risk status depends on the usage and storage conditions of the vehicle or machinery prior to export and on-arrival in New Zealand, making it difficult to target risk management effort. The risk from used vehicles is deemed higher than that from new vehicles, although information on the risk from new vehicles and machinery is less comprehensive. Some types of used machinery, such as forestry machines, are a higher risk than that used in factory conditions.

The current biosecurity management of this segment is based on visual inspection. An assessment of the risk organism biology, slippage surveys and analysis of post border records indicates that visual inspection alone has limited effectiveness for detecting the mobile or hidden organisms associated with this segment. Many of the high impact risk organisms associated with this segment fall into this category. This is exacerbated by the structural complexity of vehicles and machinery.
There are currently no import health standards for new vehicles and new machinery. However, evidence that new vehicles and machinery can transport risk organisms (including ants, venomous spiders and reptiles) to New Zealand means that new interventions to manage these need to be considered.

The stakeholders involved in the supply chain for imports of vehicles and machinery are generally committed to, and are actively involved in, mitigating the biosecurity risks from the segment, even when they are not usually those who benefit directly from successful biosecurity management of the pathway.

Preventing harmful organisms crossing New Zealand’s borders and establishing, whilst maintaining trade are the strategic outcomes for the future management of the vehicles and machinery segment. We have identified a range of supporting objectives and priorities to help us to achieve these outcomes.

The highest priorities for the imported vehicles and machinery segment include:
- Developing and consulting on a new Import Health Standard to address non-visible biosecurity risks that are not currently managed well, and to address the risks from new vehicles and machinery;
- Focusing on intervention at the pre-border and border parts of the system because of the limitations of surveillance and eradication for risk organisms associated with this segment;
- Facilitating the sharing of biosecurity management with industry and other supply chain participants;
- Better data management systems and organism identification and recording;
- Implementing clear decision-making and prioritising to determine when and where MAFBNZ intervenes in the segment;
- Developing alternative treatments and determining their efficacy for high impact risk organisms.
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3 Document Purpose

This segment strategy outlines the characteristics, specific objectives, priorities, and key biosecurity and environmental risks of the vehicles and machinery pathways. It also outlines some high-level options for managing risk in the future and engaging with domestic and international stakeholders involved with imported vehicles and machinery.

This strategy will inform the review of the Import Health Standard for sea containers and will form the basis of business and other work plans associated with the segment, as well as assisting with MAFBNZ’s allocation of resources. It covers a five year span but should be reviewed periodically, particularly if risk patterns in the vehicles and machinery pathway change significantly.

4 Comparison of Biosecurity Risks across Segments

Some of the biosecurity risks associated with the vehicle and machinery segment are similar to other inanimate biosecurity segments (e.g. sea containers) in the following respects:
- High volume pathways, involving complex logistics;
- Some stakeholders in common (e.g. shipping companies, ports, stevedores, forest industry, environmental interests etc);
- Dominated by hitchhiker risk organisms\(^1\), some of which are high-consequence;
- Soil and plant debris are significant contaminants in these segments. The risk from these is difficult to define;
- The impacts of associated organisms establishing in New Zealand cross the core values MAFBNZ is mandated to protect: New Zealand’s health, environment, and cultural and economic wellbeing;
- Many risk organisms in common. This makes it difficult to trace back incursions to specific pathways. It also increases the likelihood of risk organisms establishing through repeated arrivals;
- It is difficult to predict the risk posed by any individual unit because the risk relates to use and storage conditions for which information is rarely available;
- Inanimate pathways are generally not recognised as a biosecurity priority by many other quarantine authorities, making it harder to obtain international cooperation on these segments.

Differences between vehicles and machinery and other inanimate segments include:
- Risks are not the same. For example, the risk from painted apple moth is higher on containers than used vehicles (due to trade volumes from Australia), while the risk from Asian gypsy moth is higher on used vehicles.
- The complex structure of vehicles and machinery provide more opportunities for risk organism concealment than for other inanimate biosecurity risk goods such as containers.
- Overall volumes of the segments differ but risk relates to volume from individual countries.
- Frequency of contamination differs. Biosecurity risk management for sea containers is based on focusing MAFBNZ intervention on identified high risk containers, as a high proportion of sea containers are not contaminated (low risk containers are managed by accredited persons through the Approved Transitional Facility system). But all imported used vehicles are inspected by MAFBNZ because a very high proportion of used vehicles are presented to MAFBNZ in a contaminated condition.

\(^{1}\) An organism that has an opportunistic rather than a biological host relationship with the commodity.
5 Profile of the Vehicle and Machinery Segment

5.1 Description of the segment

The vehicle and machinery segment includes:

- **New vehicles** – this includes commercial and non-commercial vehicles. It also includes boats, jet-skis and other means of transport arriving as cargo on another vessel. “New” means the vehicle has not yet been used for its manufactured purpose except to move from point of manufacture to storage to port of departure, but includes vehicles that may be stored for periods of time prior to shipment.

- **New machinery** – Mechanical devices that transmit or modify energy to perform or assist in the performance of human tasks, whether self-propelled, drawn, pushed or fixed in position. These products are generally “factory-new” and may have spent time in storage. They may have been field trialled.

- **Used vehicles** – as for new vehicles, but the vehicles have had some time in use before being exported and are more likely to be dirty or contaminated. Includes accident-damaged vehicles that are imported for car parts and repairs.

- **Used machinery** – as for new machinery, but the goods have had some time in use before being exported. They are more likely to be contaminated (depending on their use).

5.2 Nature of the trade

Vehicles imported into New Zealand arrive either in a dedicated car transporting ship (often described as break-bulk imports – 93%), or in containers (7%). Of these, 75% of vehicles pass through the biosecurity pre-clearance process offshore. Most containerised imports, however, are not pre-cleared because it is cheaper and easier to do it on arrival. Around 60% of vehicles are landed at Auckland port, followed by Lyttleton (20%) and Wellington (12%).

5.2.1 Current volume of imports in the segment

Because New Zealand has no car manufacturing capability, the segment is dependent on imports and therefore heavily influenced by changes in the New Zealand economy, national policy, exchange rates and other factors that have little direct link to biosecurity.

Due to a number of regulatory and global impacts, such as emission requirement changes, fuel price increases and exchange rate changes the imported vehicle market has been in a severe state of flux for 18 months. There have been significantly decreased volumes of used vehicles imports, declining used vehicle sales, and an increase in the percentage of newer used vehicles and fuel-efficient and smaller model imports.

The forecast for 2008/09 is for the volume of used vehicle imports to continue declining. Total volumes are down from approximately 176,000 used vehicles in 2005 to an estimated 59,000 in 2008/09 (48,000 were imported over the period June 2008 – March 2009). The volume of new vehicles has stayed relatively steady at around 100,000 a year (including commercial vehicles). The proportion of new compared with used vehicle imports has risen. Japan is the main exporting country for new and used vehicles and used machinery but available records do not provide information on where a vehicle has been during its life.

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2 Figures are derived from QuanCargo and CarShips databases and relate to the 2007 calendar year.
3 New Zealand Customs Service statistics
Most used machinery recorded in MAFBNZ’s QuanCargo database arrive as break-bulk, with excavators/bulldozers comprising 26%, boats/jet-skis arriving as cargo (24%), forklifts (12%) in 2007.

5.2.2 Value of imports across segment
For the year to June 2007 the total value of vehicles imported was $4.9 billion and machinery $5.2 billion, comprising 12% and 13% respectively of New Zealand’s imports (NZ Statistics, 2007). However because of declining import volumes the total value is expected to significantly decrease over the current financial year. The average value of imported used vehicles was reportedly $7,000, to which a distributor’s mark-up is added. New Zealanders have benefited from a supply of cheap, relatively late model vehicles over the last decade.

Whilst the volume of imported machinery is relatively low, there is significant benefit in being able to import one-off used machinery for specialist purposes that exceeds the dollar value of the machinery.

5.3 Likely future trends for the segment
Future trends of volumes and value in this segment are uncertain. A study undertaken by NZIER in 2007 suggested that import numbers will grow until a natural maximum limit is reached based on New Zealand’s population growth. However, changes in national policy have an effect. For example, the tightening of emissions standards for used vehicles, the overall state of the New Zealand economy and exchange rate fluctuations have an impact on the total number.

The impact of the cost of biosecurity clearance on this segment is deemed relatively small and as not directly influencing the volume or value of imported used and new vehicles and machinery. Broader economic factors have a greater influence.

Vehicles
Research undertaken on behalf of the Ministry of Transport on the social, economic and environmental impacts of proposed emissions standards for imported used vehicles predicts:
- reductions in the total number of imports;
- increases in the average import prices;
- increases in the value of vehicles already in the fleet; and
- longer lives for existing vehicles to offset reductions in import numbers.

The impact of emission standards on demand may be offset in part through a substitution of older vehicles for later model new vehicles with improved technology. This may have already started.

A growing number of alternative sources of new vehicles are emerging, for which less information is known in respect of biosecurity status. Limited imports of new vehicles from China have commenced and are anticipated to increase. It is expected that these vehicles will be priced competitively and may further reduce the number of used vehicles imported and/or will eat into the new vehicle market from Japan.

Machinery
A projection is not currently available for new and used machinery imports. Because imports are related to primary economic activity, it is assumed that import volume growth will follow the fortunes of the New Zealand economy.

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4 NZIER Used vehicle import health standard options Cost-benefit analysis of proposed changes to import arrangements. Report to Biosecurity New Zealand 6 June 2007
5 Feedback from stakeholder workshops, 2006
6 Cove (2006) Socio-economic impacts of emissions standards on used imported vehicles. Report to the Ministry of Transport
5.4 Relevant stakeholder groups associated with the segment

The process by which used vehicles and machinery are imported into New Zealand is complex and involves many stakeholder groups. A list of stakeholders and their current roles is included in Appendix 1.

5.4.1 Industry stakeholders
Stakeholders involved with the importation of vehicles are committed to and actively involved in mitigating the biosecurity risks from the segment. While they may be financially impacted by the costs of biosecurity risk mitigation, they usually do not bear the costs associated with incursions of risk organisms or diseases.

Machinery stakeholders tend to import in small numbers and are therefore not as familiar with biosecurity system requirements.

5.4.2 Government agencies
Government agencies, including MAFBNZ and the New Zealand Transport Agency, set the regulations and standards to be met to import vehicles and machinery. The agencies may be directly involved in the segment at an operational level (e.g. inspections), or to ensure compliance with standards.

Government agencies from other countries do not currently have a role in managing the biosecurity risks to New Zealand. However, MAFBNZ and the Australian Quarantine Inspection Service (AQIS) are investigating mutual recognition of each others systems and assurances. One of the initiatives under development is MAFBNZ inspection and assurance of used vehicles from Japan due for import into Australia.

5.4.3 Stakeholders likely to benefit directly from risk management in this segment
There is a diverse group of stakeholders (forestry, agriculture, environment, people affected by incursion response, etc) who are not directly involved in importation, but could be adversely affected by any incursions or establishment in New Zealand of risk organisms associated with the segment. As they are not directly responsible for biosecurity compliance at the border, they are likely to have a lower acceptance of the risks at the border, and will have a strong interest in the interventions and costs if an incursion occurs, or may not accept the impacts of a response.
6 Biosecurity Risks Associated with Vehicles and Machinery

Vehicles and machinery are not themselves a biosecurity risk, but their potential to harbour hitchhiker risk organisms is great. As such, this segment is considered high-risk.

We have a good understanding of the risks associated with used vehicles, but information on new vehicles and on machinery is less complete, since detailed surveys have not been completed for these parts of the segment. There are few records of biosecurity contamination of new vehicles as they are not currently assessed as risk goods and therefore are not subject to biosecurity inspection.

6.1 Key biological risks

The information in this section has been taken from the ‘Import Risk Analysis: Imported vehicles and machinery’ published by Biosecurity New Zealand on 7 February 2007.

Most of the recent costly and controversial incursions have been hitchhiker risk organisms, which have a documented association with this segment. Examples of high impact hitchhikers in this segment include Asian gypsy moth, fall webworm, white-spotted tussock moth, nun moth, red imported fire ant, giant African snail, Asian tramp snail, pine pitch canker, Asian tiger mosquito, widow spiders and khapra beetle. Identified risk organisms include those with high environmental, socio/cultural and human health impacts as well as those with high economic consequences.

Whilst hitchhikers enter via multiple pathways and incursions can rarely be traced to a specific entry pathway, this segment is the most likely pathway for some high impact hitchhikers. For example, Japan is a risk country for Asian gypsy moth and there are many more used vehicles than containers imported annually from Japan.

Soil and plant debris are frequent contaminants. They can contain a range of risk organisms including seeds, insects, nematodes, fungi etc. The likelihood of exposure and establishment of these organisms is lower than for more mobile organisms, particularly when the contamination occurs within the structure of the vehicle.

6.2 Risk multipliers

The change in the status of the imported vehicle market, particularly the significant decrease in import volumes, changes the risk profile of the pathway. While the frequency of contaminants remains unchanged, the number is reduced and therefore this reduces the likelihood of arrival and establishment.

6.3 Likelihood and impact analysis

Many high impact hitchhikers occur at low frequency. Whilst the likelihood of any individual vehicle being contaminated with any one individual organism is low, the volume of the segment and many high impact risk organisms multiply the risk (low frequency + high volume + multiple high impact = high risk). Additionally, although unlikely to happen often, there are some species whereby the entry of a single organism could result in establishment. A giant African snail can wait up to a year after mating before laying eggs, for example7.

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7 MAFBNZ 2007 Import Risk Analysis: Vehicles and Machinery
Post border interception records show that risk organisms regularly enter New Zealand via this segment, despite the current risk management measures. These include high impact risk organisms (MAFBNZ 2009).

Risk factors are organism specific but all relate to the prior use of the used vehicle or machinery and storage conditions of the vehicle or machine prior to export, and to its distribution and use on arrival in New Zealand. For example, whether it was parked under a streetlight during the Asian gypsy moth flight season, parked under a host tree, or parked close to long grass etc. in the country of origin will determine the likelihood of it harbouring a particular risk organism. Vehicles and machinery remain permanently in New Zealand and can go anywhere. This means the likelihood of exposure and establishment of risk organisms associated with this segment is higher than others: for instance those associated with sea containers or vessels.

Biosecurity risk organisms associated with vehicles and machinery have the potential to negatively affect New Zealand’s economy, natural environment, human health status and socio-cultural well-being. Examples include:

- The costs of Asian gypsy moth establishing in New Zealand were estimated to have a Present Value to 2045/46 between $62 million and $393 million. Once full annual impacts were reached the annual cost was estimated to range from $9 million per annum to $88 million\(^9\). These figures do not include human health and indigenous flora impacts.
- Red imported fire ant is predicted to affect agricultural and horticultural systems, natural ecosystems and people’s quality of life; incur medical and risk organism control costs and cause damage electrical equipment\(^{10}\). Evaluation of selected impacts estimated the full annual cost of living with red imported fire ant would be at least $318 million.

Other observations from the risk analysis indicate that:

- New vehicles pose a biosecurity risk, but the risk is lower than for other parts of the segment;
- Some types of machinery are higher risk for some risk organisms: for example, agricultural and forestry are high risk for pathogens associated with soil and plant material, while machines with water containing cavities are higher risk than passenger vehicles for mosquitoes;
- Given the mobile nature of many of the risk organisms, offshore risk management is preferable for this segment. However the logistics and the risk factors mean that there are opportunities for vehicles to be re-contaminated prior to shipment which need to be managed;
- Storage of the commodity in New Zealand prior to biosecurity clearance, poses risks;
- While it is not possible to scientifically define a minimum contamination level, a greater tolerance of soil and plant debris is possible because there is a lower likelihood of exposure and establishment;
- Repeated entry of organisms across single or multiple segments increases likelihood of establishment;
- The risks associated with seeds in air filters are uncertain, but there is some evidence that they have a lower viability than seeds elsewhere in a vehicle;
- Once vehicles and machinery are imported, they can be used and distributed anywhere in New Zealand, rapidly dispersing beyond established surveillance networks. Subsequent reporting by the public is generally limited to certain types of organism, thus reducing the likelihood of early post-import detection.

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8 MAFBNZ (2009) Interception Database
10 MAF Biosecurity Authority (2002) Risk organism identification and import release assessment: the introduction of red imported fire ants into New Zealand via the importation of goods and arrival of craft from Australia, the Caribbean, South America and the USA.
7 Current Risk Mitigation

7.1 Regulatory requirements

The following MAFBNZ regulatory requirements are currently in place for imported used vehicles and machinery, although when finalised, the revised Import Health Standard for Imported Vehicles and Machinery will replace these:

- ‘Import health standard for used buses, cars, motor cycles, trucks, utility vehicles and vans from any country’ (dated 11 September 2001)
- ‘Import health standard for forestry and agricultural equipment from any country’ (dated 18 March 1998)

They require vehicles/machinery to be free of contamination and provide for inspection by MAFBNZ of every unit, followed by decontamination if biosecurity contamination is found.

There are currently no import health standards for new vehicles and new machinery. There are no conditions on the importation of new vehicles into New Zealand, unless, upon arrival an inspector considers that a vehicle has been contaminated, in which case it will be treated as a used vehicle. Border interception records are therefore largely lacking for new vehicles and machinery.

There is no international standard relating to vehicles or machinery and little scope for international agreements to be made in respect of imported vehicles. Inanimate risk goods fall between the international frameworks for managing risks to animal and plant health. This means that some risk organisms carried by plant commodities or inanimate pathways that impact on human or animal health such as mosquitoes and spiders are not directly covered by these frameworks. In New Zealand, they are managed under the World Trade Organisation’s Agreement on the application of Sanitary and Phytosanitary measures and the Biosecurity Act, 1993.

There is a separate standard for used tyres (Import health standard for importing used tyres from any country (BMG-STD-TYRES, 2 April 2002)).

7.2 Current biosecurity interventions in this segment

For used vehicles and used machinery, visual inspection is the main intervention. Inspection and/or decontamination and treatment can occur off-shore or on arrival in New Zealand. There is provision for visual inspection undertaken offshore by the source country’s National Plant Protection Organisation coupled with audit inspection against certification and clearance on arrival in New Zealand by MAFBNZ. This option has not been used. There is an option for visual inspection, and treatment as necessary to remove any visible contamination, followed by heat treatment at MAF- approved facilities on arrival in New Zealand, or prior to shipment with audit inspections and clearance by MAFBNZ on arrival in New Zealand. Inspection of machinery involves a greater degree of dismantling.

The following treatments are currently available:

1. Fumigation: effective against arthropods anywhere in a vehicle/machine, but not against seeds and micro-organisms at concentrations suitable for vehicles. It is logistically difficult and costly

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11 New Zealand imports substantially more used vehicles than other countries except United Arab Emirates and Russia (Source: Autofile, 2006), for whom the biosecurity issues are quite different.
to fumigate large quantities of vehicles due to the time taken to fumigate and vent the gases (more than 36 hours). Public reaction to involuntary exposure to chemicals treatments is often negative. Methyl bromide is the only fumigant currently available that is suitable for use on vehicles. It is an ozone depleting gas and New Zealand is committed to reducing its use.

2. **Heat treatment**: Treatment at 60°C for 10mins is aimed at arthropods, molluscs and vertebrates anywhere in the vehicle/machine and will kill some but not all fungi and soil borne risk organisms such as nematodes. It is relatively rapid and does not leave chemical residues. A unit has been operating on Auckland wharf for 2 years at about the same cost per vehicle but at a fraction of the processing time required for fumigation. No facilities are available elsewhere.

3. **Treatments for soil, seeds and plant debris**: removal either by hand or by machine (vacuum, water blasting or automated washing). Cleaning to biosecurity requirements is a costly component of clearance (NZIER, 2007), but some cleaning would occur without the biosecurity requirement.

### 7.3 Cost of biosecurity interventions

#### Used Vehicles

Two reports estimated the total cost of clearance for used vehicles to be $212 per vehicle\(^\text{12}\) and $200 per vehicle\(^\text{13}\). Of this, the MAFBNZ inspection fee is $25 (12.5%) and $25 for re-inspection. The $212 figure includes the cost of pre-cleaning vehicles (35% of the total) which may be considered to be a grooming rather than a biosecurity cost. The cost of delays caused by biosecurity interventions are difficult to quantify and may not be adequately accounted for in these figures. The most costly components of the clearance process after pre-cleaning vehicles in Japan were steam cleaning and vacuuming.

#### Machinery

Because there is a broad range of complexity of types of used machinery imported, inspection time and costs vary. The average cost is estimated at approximately $350 per item (PWC 2005).

There is a levy (currently 65 cents per unit) charged under section 137 of the Biosecurity Act, on all shipping containers and used cars imported into New Zealand. This funds a nationwide network of pheromone-baited surveillance traps for Asian gypsy moth.

#### 7.3.1 MAFBNZ Resources for segment

**MAFBNZ Staff**

In 2008, 72% of imported vehicles were inspected offshore prior to shipment. Up to 15 MAFBNZ Quarantine Inspectors are based in Japan at any one time working exclusively on vehicle clearance. The offshore inspection programme has been scaled down to 8 staff in 2009 due to declining volumes of vehicle imports.

Inspectors in New Zealand work on the segment across all ports to varying degrees. They are not dedicated to the segment. It is estimated that about 15% of the Cargo Clearance Directorate’s resources were spent on this segment in 2008. The resource required is directly related to the number of imported vehicles and machinery and this is outside of MAFBNZ’s control.

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\(^\text{13}\) Costs of Compliance for achieving Biosecurity clearance, MAF Information Paper 2005/03 prepared for MAF Biosecurity Strategic Unit by PricewaterhouseCoopers.
**Databases**
Information relating to used vehicles and machinery is recorded in two databases – CarShips (for break-bulk imports) and QuanCargo (for container based imports). There are no requirements to identify or record contaminants, their location in the vehicle or the reasons for required treatments against a particular inspection. The usefulness of the data in understanding patterns of association and developing more effective risk management is limited. Electronic data capture has been improved by handheld PDAs, but there are remaining issues with speed, availability and reliability of current technology tools.

### 7.4 Effectiveness of current risk mitigation measures
Findings from risk analysis and survey work on this segment indicate:\(^\text{14}\):
- Current measures appear to be reasonably effective in managing visible contamination;
- Visual inspections are not effective in detecting mobile or hidden organisms. Many of the high-consequence risk organisms associated with this segment fall into this category. Some 6% of vehicles have live animals (including insects, spiders and reptiles and comprising all life stages) present that are not detectable through visual inspection. The complex structure of machinery exacerbates this issue;
- The current import requirements make little distinction between the biosecurity risks posed by different types of contaminants. Requirements to remove dead leaves can appear overly bureaucratic;
- The effectiveness of any biosecurity measure will depend on the biology of the organism it is directed against and a package of measures is needed to mitigate the biosecurity risks;
- Imports from other countries than Japan tend to be containerised and are currently primarily managed following arrival in New Zealand. Some inspection facilities at transitional facilities are less good than those off shore and not all have treatment facilities;
- Risk profiling to identify high risk vehicles on which to focus mitigation effort is not very useful for used vehicles because a high proportion of used vehicles are contaminated when presented to MAF for clearance, and even if contamination was lower for some vehicles, information on use and storage conditions that would allow profiling for specific high-risk organisms is not available. The profiling approach has more potential for new vehicles and machinery where contamination rates are expected to be lower and/or problems can be linked to particular pathways.

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8 Objectives for the Segment

The objectives for imported vehicles and machinery take into account the characteristics of the segment, MAFBNZ’s strategic outcomes and the border sector principles\(^{15}\). Other considerations include the high value of the segment, the large number of high impact risk organisms associated with the segment.

8.1 Desired outcome

To manage the vehicles and machinery segment so that:
Harmful organisms are prevented from crossing New Zealand’s borders and establishing, with the assurance that trade and tourism are maintained. \(^{16}\)

Performance of biosecurity management across the segment in achieving this outcome will be measured against performance criteria. These will be determined, recognising that zero risk is not achievable; that not all contaminants pose an equal biosecurity risk and taking account of the limitations of monitoring and audit systems in detecting many risk organisms.

8.2 Supporting objectives

The supporting objectives (not in priority order) are to:
1. Achieve continuous improvement in performance of risk management of the segment in meeting the desired outcomes.
2. Maintain or increase the proportion of units for which offshore management occurs (72% in 2008).
3. Increase the level of engagement from importing industry stakeholders so that they fully understand, support and share in the management of risks.
4. Reduce the reliance on visual inspections by developing more effective and efficient tools, technology and risk management systems.
5. Ensure that supporting Information systems enable biosecurity information (e.g. interception records) to be captured and used efficiently.
6. Target biosecurity risk management resources at the highest risk areas of the segment.

These objectives will be further developed to include timeframes. Appropriate performance measures will be identified as part of MAFBNZ’s performance management framework. Performance measures will be monitored through MAFBNZ’s business and service delivery plans.

\(^{15}\) Border Directions Statement (2008)
\(^{16}\) MAFBNZ Strategic Plan 2007-2011
9 Future Risk Mitigation

This section outlines the preferred approaches for mitigating risks in the vehicles and machinery segment. These approaches take account of border sector principles\(^{17}\), MAFBNZ’s strategic outcomes, specific segment outcomes outlined in this document, and characteristics of the segment.

9.1 High level approaches

A range of approaches to be developed include those that:

- Mitigate biosecurity risks that are not detectable through visual inspection, many of which are high impact;
- Share responsibility for risk management with industry and other supply chain participants, for instance through the use of approved systems;
- Focus on the pre-border and border elements of the biosecurity system because of the limitations of surveillance and eradication for risk organisms associated with this segment;
- Recognise that new vehicles present a biosecurity risk, but the level of intervention should be appropriate for the level of risk relative to other segments and other components of this segment;
- For new vehicles, approved systems that focus on storage times and conditions prior to export and for used vehicles/machinery (where this information is not available) focus on technologies to identify and treat contaminated vehicles;
- Identifying and developing new treatments that singly or as a package are effective against the full range of biosecurity risk organisms;
- Recognise that some types of used machinery are higher risk due to their use prior to export and on arrival in New Zealand and therefore merit greater intervention;
- Encourage off-shore risk management because of the mobile nature of many high impact risk organisms associated with the segment. Mechanisms will be needed to prevent re-contamination prior to arrival;
- Develop data management systems that facilitate recording and use of information, including interception records, and performance of approved systems.

9.2 Co-management

MAFBNZ is developing a co-management framework that will enable consistent decision making within the segment and allow MAFBNZ to share some aspects of the management of biosecurity risk with other stakeholders. Co-management aims to increase industry awareness of biosecurity and allow all parties involved in a segment to look for alternative risk management approaches.

Co-management should not be not confused with a requirement set out in an import health standard that all must comply with. It will not be a compulsory programme or even an option for everybody to become involved in. It will target areas of greatest benefit to the biosecurity system.

\(^{17}\) Border Directions Statement (2008)
10 Summary of Priorities for the Segment

10.1 High, medium and low priorities
Though the following areas are all important, they are prioritised in recognition of strategic fit, resource availability, area of greatest risk, and overall benefit to New Zealand Inc.

High priorities
- Develop and consult on a new Import Health Standard that addresses the non-visible biosecurity risks that we are not currently managing well and the risks from new vehicles and machinery;
- Focus on intervention at the pre-border and border parts of the system because of the limitations of surveillance and eradication for risk organisms associated with this segment;
- Facilitate sharing of biosecurity management;
- Develop better data management systems and organism identification and recording;
- Develop alternative treatments and determine their efficacy for high impact risk organisms;
- Implement decision-making and prioritising to determine when and where MAFBNZ intervenes in the segment.

Medium priorities
- Identify incentives so we can maintain current stakeholder engagement and increase it for those that are not currently involved in mitigating biosecurity risks in this segment
- Identify the compliance issues associated with the whole segment

Lower priorities
- Analyse the comparisons between this and other inanimate segment strategies to improve implementation of efficient systems across the pathways

10.2 Assumptions, constraints, dependencies and impacts
This segment strategy assumes that:
- Stakeholders will continue to accept some level of responsibility for managing the biosecurity risks posed by imported vehicles and machinery;
- Opportunities for offshore risk management activities increase;
- MAFBNZ moves, in most situations, away from an inspection-focused to an audit and compliance/enforcement role across a number of segments;
- The total volume of this segment will continue to fluctuate as a result of economic factors and the regulatory environment. Volumes are not expected to reach previous highs;
- Alternative effective decontamination regimes will become available.

This segment strategy is constrained by:
- Lack of information on use and storage conditions of vehicles/machinery prior to export;
- Lack of technology to support information-based decisions (or time lag to introduce this technology);
- Funding and resources, especially around change management;
- Lack of information on efficacy of other mitigation regimes against high impact risk organisms.

This segment strategy is dependent on:
- Better information management systems;
- Implementation of the MAFBNZ co-management framework.
This segment strategy, if adopted, will likely have impacts on:
- Skills (recruitment and training)
- Reliance on verification and audit
- Transition periods
- New requirements may require regulatory change

10.3 Working with others

10.3.1 Engaging with stakeholders
Existing groups will be used where possible (see table below) and methods explored to fill the gaps, such as specialised machinery importers. Given the complexity of the vehicle import supply chain and the costs of delays it is important to maintain a culture of no surprises. Many stakeholders are keen to contribute to better biosecurity in this segment and we want to foster these ideas and enthusiasm. Much of the effort to date has been expended on the used vehicle importing industry.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>How to engage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Used vehicle supply chain stakeholders</td>
<td>Industry advisory committee</td>
</tr>
<tr>
<td>New vehicle supply chain stakeholders</td>
<td>Motor Industry Association</td>
</tr>
<tr>
<td>Other Government agencies</td>
<td>Border Sector Governance Group</td>
</tr>
<tr>
<td>Stakeholders benefiting from risk management</td>
<td>Forest Biosecurity Consultative Committee</td>
</tr>
</tbody>
</table>

10.3.2 Compliance and enforcement issues
This section will be completed once MAFBNZ’s Compliance Framework and MAFBNZ Cargo Operational Compliance Model are available.

10.4 High level cost/benefit analysis
Still to come….analysis of the costs and benefits associated with the importation of vehicles and machinery to determine how much investment is required in this pathway versus other pathways.
## APPENDIX 1: STAKEHOLDERS AND CURRENT ROLES

### SUPPLY CHAIN (INDUSTRY) PARTICIPANTS

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importers</td>
<td>Order vehicles from overseas exporters and receive them on arrival in New Zealand.</td>
</tr>
<tr>
<td>Associations</td>
<td>Representatives of the industry:</td>
</tr>
<tr>
<td>• Imported Motor Vehicle Dealers’ Association (IMVDA)</td>
<td>represents most independent motor vehicle dealers, traders, importers, wholesalers and related businesses to provide legal, technical and advocacy services.</td>
</tr>
<tr>
<td>• Motor Industry Association of New Zealand (MIA)</td>
<td>represents the new vehicle industry.</td>
</tr>
<tr>
<td>• Motor Trade Association (MTA)</td>
<td>represents motor vehicle dealers and motor service specialists including automotive engineers, panel beaters, tyre shops and automotive part suppliers</td>
</tr>
<tr>
<td>Treatment suppliers</td>
<td>• Treatments include washing, steam cleaning, vacuuming, fumigation and heat treatment. Currently no fumigation or heat treatment occurs offshore.</td>
</tr>
<tr>
<td>Third party inspectorates</td>
<td>• Facilitate the movement of vehicles from one country to another assuring that regulatory requirements are met.</td>
</tr>
<tr>
<td>Customs brokers and freight forwarders</td>
<td>• Work on behalf of importers, providing the link between importers and the rest of the supply chain including government agencies.</td>
</tr>
<tr>
<td>• Handle the regulatory and administrative aspects of importing vehicles, including biosecurity clearance of used vehicles upon arrival in New Zealand.</td>
<td></td>
</tr>
<tr>
<td>• Provide information in a standardised format electronically to NZ Customs.</td>
<td></td>
</tr>
<tr>
<td>Overseas port companies</td>
<td>• Control the storage of used vehicles prior to loading the vessel.</td>
</tr>
<tr>
<td>• May have biosecurity facilities available (inspection, decontamination etc), but are commercial entities operating in a competitive market.</td>
<td></td>
</tr>
<tr>
<td>• Are efficiency focussed, often constrained environmentally and by space, given the logistics of storing and loading a shipment of vehicles.</td>
<td></td>
</tr>
<tr>
<td>Shipping lines and companies</td>
<td>• Carry vehicles and machinery on behalf of clients.</td>
</tr>
<tr>
<td>• May also act as customs brokers and freight forwarders, sourcing the vehicles and facilitating the complete importation process.</td>
<td></td>
</tr>
<tr>
<td>• Provide consolidated information to ports and government agencies about what used vehicles are carried on a particular vessel.</td>
<td></td>
</tr>
<tr>
<td>• May also offer importers customs brokerage, warehousing, &amp; distribution services.</td>
<td></td>
</tr>
<tr>
<td>New Zealand port companies</td>
<td>• Manage the entry of ships and their cargo into New Zealand.</td>
</tr>
<tr>
<td>• Facilitate the movement of used vehicles at a MAFBNZ approved ‘place of first arrival’, and make available biosecurity inspection and treatment facilities, although the latter are not necessarily at the port.</td>
<td></td>
</tr>
<tr>
<td>• Have a high level of biosecurity awareness, but like overseas, port companies are commercial entities operating in a competitive market, primarily focused on efficiency.</td>
<td></td>
</tr>
<tr>
<td>Stevedores</td>
<td>• Unload vehicles and machinery from ships; move them around the shipping yards.</td>
</tr>
<tr>
<td>• Most are ‘accredited persons’ under the Biosecurity Act.</td>
<td></td>
</tr>
<tr>
<td>• Focus is on productivity and safety rather than biosecurity, but they play a role in alerting MAFBNZ to contamination on new vehicles, which otherwise go un-inspected.</td>
<td></td>
</tr>
<tr>
<td>NZ Transport Agency registered compliance centres</td>
<td>• Record vehicle information.</td>
</tr>
<tr>
<td>• Inspect and verify on behalf of NZTA that imported used vehicles are safe for use on NZ roads. This inspection occurs after biosecurity clearance is issued. The inspections involve partial dismantling of the vehicle and provide an opportunity to supplement formal biosecurity measures.</td>
<td></td>
</tr>
<tr>
<td>Transport companies (road and rail)</td>
<td>• Deliver un-cleared used vehicles from the port of arrival to approved transitional facilities and cleared used vehicles to importers.</td>
</tr>
<tr>
<td>• Differ in size and use of information technology.</td>
<td></td>
</tr>
<tr>
<td>• Operate in a very competitive market with tight margins and timelines.</td>
<td></td>
</tr>
</tbody>
</table>
### Transitional facilities
- Hold used vehicles awaiting biosecurity clearance and treats them if required.
- Are approved under the Biosecurity Act, operate to a MAF Standard, and are required to have accredited persons present when unloading occurs.

### Accredited persons
- Are appointed under the Biosecurity Act, and are trained to recognise and deal with biosecurity risks associated with sea containers, including those containing un-cleared used vehicles.
- May be a sole operator or work as part of a team
- May have varying levels of responsibility, motivation and authority to act.

### GOVERNMENT AGENCIES

<table>
<thead>
<tr>
<th>Agency</th>
<th>Role and responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFBNZ</td>
<td>General: Assesses biosecurity risks and puts in place import health standards to manage those risks.</td>
</tr>
<tr>
<td></td>
<td>Develops operational standards and procedures for frontline staff</td>
</tr>
<tr>
<td></td>
<td>Accredits authorised persons and inspectors, employees and third parties to perform activities under the Biosecurity Act.</td>
</tr>
<tr>
<td></td>
<td>Approves transitional facilities</td>
</tr>
<tr>
<td></td>
<td>Maintains capability for border activity across range of ports</td>
</tr>
<tr>
<td>NZ Transport Agency</td>
<td>Records vehicle information and approves imported used vehicles for use on New Zealand roads based on current safety standards</td>
</tr>
<tr>
<td>Ministry of Health</td>
<td>Involved in overseeing surveillance and response for exotic mosquitoes, which may be associated with this segment</td>
</tr>
<tr>
<td>Offshore quarantine agencies</td>
<td>Currently have no role in this segment, but could theoretically audit and ensure compliance with biosecurity system requirements</td>
</tr>
</tbody>
</table>

### STAKEHOLDERS LIKELY TO BENEFIT DIRECTLY FROM RISK MANAGEMENT IN THIS SEGMENT

<table>
<thead>
<tr>
<th>Sector</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry sector</td>
<td>Is impacted by some high-consequence risk organisms (e.g. fall webworm, nun moth, etc) associated with this segment.</td>
</tr>
<tr>
<td></td>
<td>Communicates with MAF through the Forest Biosecurity Consultative Committee.</td>
</tr>
<tr>
<td></td>
<td>Exports products worth $2.9 billion in 2007 (Source: MAF Statistics)</td>
</tr>
<tr>
<td>Natural environment sector</td>
<td>Is impacted by number of risk organisms (e.g. reptiles, ants) associated with this segment.</td>
</tr>
<tr>
<td>Agricultural sector</td>
<td>Is impacted by risk organisms (e.g. soil organisms, beetles, moths, etc).</td>
</tr>
<tr>
<td></td>
<td>Worth $16.1 billion in agricultural products exports and $2.6 billion in horticulture exports in 2007 (MAF Statistics)</td>
</tr>
<tr>
<td>People in vicinity of incursions</td>
<td>Will be affected (directly or indirectly) by risk organisms associated with the segment (e.g. mosquitoes, venomous spiders) or by response activity</td>
</tr>
<tr>
<td></td>
<td>Cannot be specifically identified in advance</td>
</tr>
<tr>
<td></td>
<td>Likely to have views about incursions and their management</td>
</tr>
</tbody>
</table>