Ministry for Primary Industries
Manatū Ahu Matua

Ensuring Appropriate Controls around Container Seals to Support Official Assurances

Options Paper

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1 Background information

1.1 Purpose

The purpose of this paper is to review the current legislation around, and use of, high security container seals[1] for export of animal products with official assurance. It considers whether the current regime has sufficient and appropriate levels of control to support official assurances, and presents options for further enhancing controls.

1.2 Introduction

In order to protect the reputation of the Ministry for Primary Industries (MPI) as the competent authority and to maintain and grow exports of New Zealand primary products, it is necessary to ensure that Official Assurances issued by MPI are supported by underlying systems, records, processes and procedures that ensure the integrity and compliance of products exported.

There is increased international concern around food fraud and an increase in the number of incidents reported through systems such as the Decernis Food Fraud Database and the Food Fraud Network of the European Commission.

The risk of fraudulent use of official devices and misrepresentation of goods as "Product of NZ" is an ongoing concern for the reputation of MPI and New Zealand producers. The remoteness of New Zealand and the value of the NZ brand are both factors which may motivate fraud. High security container seals for the closing of shipping container are a useful tool in preventing food fraud but where used they must be accompanied by appropriate systems and controls to ensure they offer the control intended.

1.3 Controls Necessary

High security container seals (container seals) are one tool for preventing food fraud and inclusion of the seal identifier on the Official Assurance further deters fraudulent behaviour. In order to maintain the reputation of MPI as the competent authority it is necessary that:

- where the identifier displayed on container seals is given as part of the official information on export documentation, MPI is able to demonstrate that there is sufficient control over the type of seals used and the security around manufacture, distribution and use; and
- MPI can show consistent processes and control across all animal product sectors.

The elements of the system that need to be controlled are:

- the quality and fitness for purpose of the container seals, to ensure they are consistent and resistant to breaking or destruction by prolonged exposure at sea; and
- the numbering of container seals, to ensure uniqueness and clear traceability to an appropriate responsible party; and
- the security of container seals throughout manufacture, distribution and use, to prevent access by unauthorised persons and therefore inappropriate or fraudulent use.

To ensure security of container seals there must be clearly defined processes that limit distribution to authorised parties and ensures appropriate inventory control and storage at all premises.

[1] A high security seal is a seal that is constructed and manufactured of material such as metal or metal cable with the intent to delay intrusion.

1.4 Current Legislation

The instruments setting requirements for the use of container seals are:

- The *Animal Products (Export Requirements for Branding, Marking and Security Devices) Notice 2012*; and
- The *Official Devices Programme: Interim Requirements, and Guidance for Operator Seal Use (2006)*; and
- *Manual 15: Approvals Brands – Inspection – Legend – Material – Container Seals.*

The *Animal Products (Export Requirements for Branding, Marking and Security Devices) Notice 2012* (the Export Notice) requires that all sea freight containers packed for export with animal products for human or pet food, that may be subject to an official assurance, must be sealed with an official container seal where the animal product is from mammals, avian species or fish.

The Export Notice permits the continued use of operator seals in place of official container seals where they were used as part of the official assurance system prior to the commencement of the notice.

Prior to the issue of the Export Notice operator seals were routinely used in the dairy industry to secure shipping containers of dairy products for export as part of the official assurance system. Thus the export notice effectively permits the continued use of operator seals for dairy products, unless an OMAR prohibits their use.

Allowing the ongoing use of operator seals was in response to the dairy industry's wish to continue this practice in 2005 when they were first regulated under the Animal Products Act.

The Export Notice states in the definitions that official container seals must displays the letters MAF, NZFSA or MPI in association with a unique serial number; while operator seals have a unique alpha-numeric serial number that does not bear the letters MAF, NZFSA or MPI.

The *Official Devices Programme: Interim Requirements, and Guidance for Operator Seal Use* (Interim OFDP) clarifies details of the sequential alphanumeric identifier required for operator seals. It set out the requirement for the sequential alphanumeric identifier to have 2 elements; the first being the registered exporter or RMP identifier, or other unique element of the exporter or operator name, and the second a sequential alphanumeric.

Additionally the Interim OFDP permits a group of operators to use seals with the same identifying element "provided this element's uniqueness is as assured as using an exporter or operator ID, and the seals are distributed among the different operators in sequential lots." The intent of this was to allow small exporters to use the seal of another animal product operator for reasons of cost and efficiency.

The Interim OFDP was published to give clarity about what requirements for distribution and inventory were considered satisfactory by the Director General. This was done by reference to *Manual 15: Approvals Brands – Inspection – Legend – Material – Container Seals.*

Additionally the Export Notice requires recognised agencies to carry out regular performance based verification of operator and exporter use and control of official devices and, when used in an official assurance capacity, operator container seals.

The existing instruments attempt to replicate the controls around official container seals to the use of operator seals however there are some noticeable differences both in requirements and in the implementation of requirements. Table 1 below illustrates differences in controls between official container seals (NZMPI seals) and operator seals.

Table 1: Controls for Official Container Seals and Operator Seals

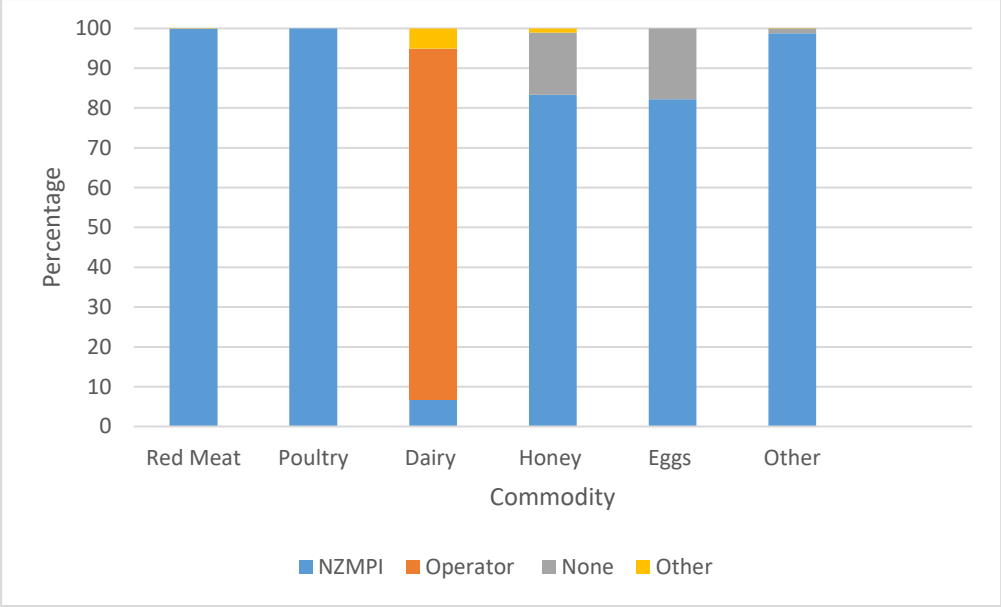
Control	Official Container Seals (NZMPI Seals)	Operator Seals
Manufactured by approved manufacturers / suppliers only	Y	N
Bulk supplies secured by	MPI Verification Services	RMP Operators
Seals order authorised by	MPI Verification Services	RMP Operators
Party managing supplies at premises: • Maintain register • Store securely • Check compliance with seal specifications • Dispense seals to operational staff. • Check register of seals against load out information.	Recognised agency	RMP Operators
Recognised agencies carry out PBV of operator and exporter use of the seal	Y	Y
Change of format / seal assessed by	MPI	Recognised agency

2 Current Situation

2.1 Use of Seals

Data from AP E-cert for the year ending 30 June 2018 has been reviewed to consider the type of container seals being used in association with official assurances. Figure 1 below shows seal types used on sea freight containers by commodity. The official container seal is indicated as seal type NZMPI in the figure and the following discussion.

Figure 1: Seal Use by Commodity Type (Year ending 30 June 2018)



The data is Figure 1 shows that:

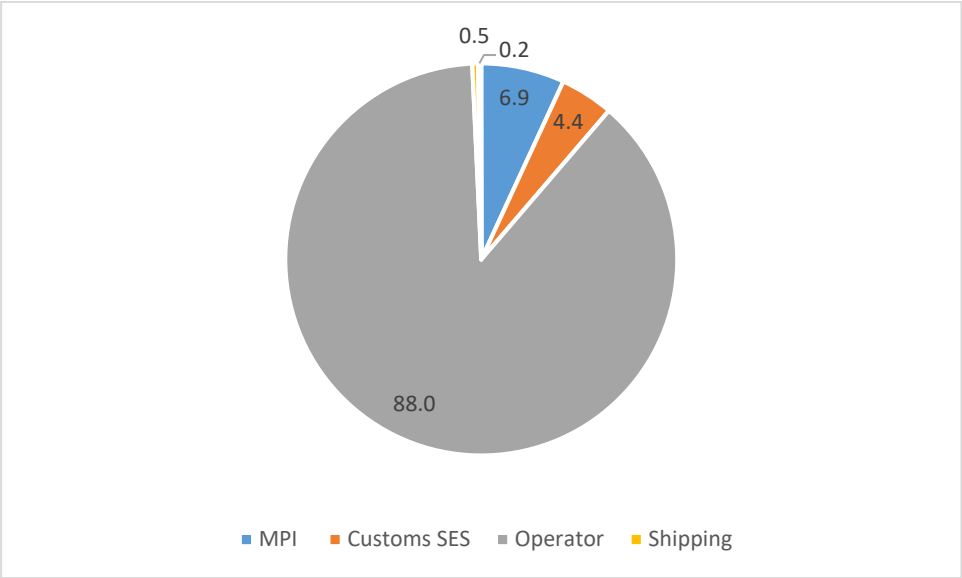
- For red meat and poultry and NZMPI seals are used for all containers.
- For seafood 99% of containers are sealed with NZMPI seals.
- For honey and eggs, where NZMPI seals are only required where specified in the OMAR, over 80% of containers are sealed with an NZMPI seal.
- For dairy products, where operator seals are permitted for all markets other than the EU, 88% of the containers are sealed with operator seals and only 7% with NZMPI seals.
- Over 98% of containers of other products for human or pet food are sealed with NZMPI seals (The other category includes offal, crustaceans, fats and oils, and pet food products and ingredients.)

Further consideration of the data for dairy exports shows that while 88% of containers are exported using operator seals[2], the majority of dairy companies use NZMPI seals for **all** product, and less than 10 companies are using operator seals. This apparent discrepancy is due to the fact that the largest dairy companies are using operator seals.

[2] In the analysis an operator seal was considered to be a seal which complies with the requirement that the first characters of the seal identifier uniquely reflects an element of the exporter or operator name.

In addition to NZMPI seals and operator seals with unique identifiers, other types of seals are also being used by the dairy industry. Figure 2 illustrates this.

Figure 2 – Type of Container Seals Used by % of Containers Exported – Dairy Products (Year ending 30 June 2018)



During the year ending 30 June 2018 4.4% of containers for dairy product were sealed with a device with prefix SEP, NZ, T or SAL. These devices are approved under the NZ Customs Secure Exports Scheme (SES) a scheme which facilitates customs clearance at international borders. In addition to the 4.4% shown in Figure 2, MPI is aware of other companies that have transitioned to the SES scheme over the last few months.

A number of companies are also using:

- Container seals supplied by shipping companies such as COSCO and Maersk Line. In Figure 3 this equates to only 0.5%.
- Container seals with single digit prefixes not clearly unique to the exporter or RMP.
- Container seals with no alpha digits.
- Operator seals with an identifier that reflect one exporter across multiple exporters.

2.2 Verification and Noncompliance

Control and use of NZMPI and operator seals are verified at the following frequencies.

Table 2: Current Verification Frequencies

Premises type	Verification Ceiling Frequency
Premises with a full time verifier - meat of mammals	Monthly
Premises without a full time verifier - meat of mammals, avian species, fish, poultry and eggs	3 monthly
Dairy Premises	No standard - varies between 3 monthly and annually depending on verification agency.

MPI has become aware of some compliance issues concerning container seals over the review period. These non-compliances have been related to transfer of seals inappropriately between premises and failure to use the correct seals at third party stores.

3 Issues

There are a number of concerns with the current controls around official devices. These are discussed below.

3.1 Insufficient security around manufacture and distribution

A Systems Audit carried out in 2016 identified a number of non-compliances by approved manufacturers of official devices. These included:

- Subcontracting without documentation and appropriate security arrangements.
- Lack of documentation around overseas manufacturers' operations.
- Accepting orders from persons not formally authorised and notified to the supplier.
- Manufacture being in excess of that delivered to MPI, surplus being stored by supplier.

The findings of the audit clearly indicate that the current control of approving manufacturers is insufficient to ensure security around manufacture and distribution of devices. The behaviours found offer many opportunities for devices to come into the possession of unauthorised persons.

Additionally, the SAT auditor raised concerns that the current processes do not require any review of manufacturer's compliance with requirements.

While the SAT audit was of approved manufacturers of official seals (NZMPI seals), it is highly likely that the issues identified will also be relevant to non-approved manufacturers supplying operator seals.

3.2 Loss of control around operator seals

In many cases the alphanumeric identifier on operator seals no longer clearly identifies the exporter or RMP premises, and in some cases actually represents the shipping company.

The variety in seal identifier and colour along with a lack of clear connection to a responsible party - either the competent authority, the exporter or RMP premises - makes it extremely difficult for officials in importing countries to, on visual inspection of containers, have confidence in the authenticity of the seal, and subsequently the product.

While there is an argument that the match of the seal identifier with that shown on the certificate is what is important, overseas competent authorities frequently refer to experiencing fraudulent certification throughout the supply chain, so in some cases both the certificate and the seal may be fraudulent.

Sourcing operator seals from a number of different suppliers that are not legislated or verified presents a number of risks. There is no certainty that the:

- seals adhere to specifications to ensure fitness for purpose.
- seals are not supplied to, or due to poor security, come into the possession of persons with the intent to cause fraud.
- uniqueness of seal identifiers is maintained.

3.3 Confusion as to what the presence of an operator seal means

Section 158(2) (b) of the Animal Products Act 1999 requires the Director-General when determining whether to approve a device, to regard the need not to create confusion with any other generally used device. The use of operator seals for exports both with and without Official Assurance is considered a situation where confusion may arise. Officials in the importing country may consider the presence of an operator seal implies some guarantee by MPI as the competent authority.

4 Options

This section considers the advantages and disadvantages of the status quo and of two options to further improve the control around container seals used to support official assurances of animal products exported by sea for human food or pet food. The two options for further improving controls propose a consistent approach across all animal product sectors. Consistency of approach is considered necessary as it reduces the risk of challenge by overseas competent authorities.

The following table summarises key differences between each of the options. Each option is then discussed in more detail below.

Table 3: Summary of Options

	Option 1 **Status Quo**	**Option 2** **NZMPI and Operator Seals Permitted for All Sectors with Increased Controls**	**Option 3** **NZMPI Seals Required for All Animal Products Exported as Food with Official Assurances**
Permitted seal types	Dairy sector: • NZMPI seal or • Operator seal Other animal product sectors: • NZMPI seal	All animal product sectors: • NZMPI seal or • Operator seal	All animal product sectors: • NZMPI seal
Source of seals	NZMPI seals • Approved manufacturer Operator seal • Any manufacturer	NZMPI seals • Approved manufacturer Operator seal • Approved manufacturers	NZMPI seals • Approved manufacturer
Verification of approved manufacturer	None	Annual	Annual
Verification of RMP operator	Dairy sector • Annually Other animal product sectors • 1 monthly for RMP premises with full time verifiers • 3 monthly for RMP premises other than dairy without full time verifiers; and	All animal product sectors • 1 monthly for RMP premises with full time verifiers; and • 3 monthly for all RMP premises without full time verifiers	All animal product sectors • 1 monthly for RMP premises with full time verifiers; and • 3 monthly for all RMP premises without full time verifiers

4.1 Option 1 – Status Quo

Under this option there would be no change from the current situation.

Where animal products are exported for human food or pet food, in a sea container, and are supported by an official assurance the type of container seal required is as shown in Table 2.

Table 2: Type of Container Seal Required Currently

Product Type	Type of Container Seal
Meat of mammals, avian species and fish	NZMPI seal
Dairy Product	NZMPI seal; or Operator seal unless NZMPI Seal is specified in the OMAR
Honey and Eggs	No seal required unless NZMPI seal specified in the OMAR

Operators and exporters would be required to have procedures around use and control of official devices and, when used in an official assurance capacity, operator seals.

Verification frequency of RMP premises would continue to be:

- 1 monthly for RMP premises with full time verifiers; and
- 3 monthly for RMP premises other than dairy without full time verifiers; and
- annually for dairy premises.

Operator Seals

The operator seals could either:

- Have a sequential alphanumeric identifier with 2 elements; the first the registered exporter or RMP identifier, or other unique element of the exporter or operator name, and the second a sequential alphanumeric; or
- Be a seal used by a group of operators, which has the same identifier element providing that the element's uniqueness is as assured as using an exporter or operator ID and the seals are distributed among the different operators in sequential lots.

Operator seals could be sourced from any supplier as long as they meet the specification.

NZMPI Seals

NZMPI seals would be sourced from approved manufacturer(s). MPI will tender for supply and contract manufacturer(s) of NZMPI seals once every 3 years.

Official Assurance verifiers would be required to order seals from MPI bulk stores.

Impact, Advantages and Disadvantages

Advantages:

- There would be no disruption to current practices.

Disadvantages:

- The variety of seals used makes it difficult for importing country border officials to, on visual inspection of containers, have confidence in the authenticity of the seal.
- There are insufficient controls to ensure unique seal identifiers.
- There are insufficient controls around security of devices throughout manufacture and distribution.
- There is no consistency of controls across all sectors.

4.2 Option 2 – NZMPI and Operator Seals Permitted for All Sectors with Increased Controls

Under this option where **any animal product** is exported for human food or pet food, in a sea container, and are supported by an official assurance the container seal required could be either:

- A MPI official container seal (NZMPI seal); or
- An operator seal unless a NZMPI seal specified in the OMAR

All container seals would be required to be sourced from an approved manufacturer.

Manufacturer(s) would be approved for a maximum of three years and would be required to undergo annual verification.

All container seals must be ordered, stored and used only by RMP operators.

RMP operators and exporters would be required to have procedures around use and control of all container seals used in an official assurance capacity.

Use and control of all seals by RMP operators would be required to be verified under performance based principals in line with *The Animal Products Notice: Export Verifications Requirements* with an initial verification interval of 1 week and a ceiling step of 5 (3months). Clause 4.2 applying to premises with full time verifier presence.

Verification of some exporters, who elect to use an operator seal but do not own an RMP premises, may be required if issues are identified.

Operator Seals

The operator seals would be required to have a sequential alphanumeric identifier with 2 elements; the first the registered exporter identifier, and the second a sequential alphanumeric. Where a company has multiple exporter identifiers they must elect one as the seal identifier for all product exported by that company. Note: Limiting the alphanumeric identifier for operator seals to that of the exporter will reduce the number of different seals that could be presented to border officials.

RMP operators could order operator seals directly from the approved manufacturer(s). Orders would need to be authorised by the Official Assurance verifier.

Where the exporter does not operate a RMP premises they may nominate a third party RMP premises to order, store and distribute operator seals. (The nominated third party RMP premises).

The RMP premises of the exporter, or the nominated third party RMP premises, may distribute operator seals to other stores, including third party stores, for use on the product of the company that owns the seal.

NZMPI Seals

NZMPI seals would be sourced from approved manufacturer(s). MPI will tender for supply and contract manufacturer(s) of NZMPI seals once every 3 years.

Official Assurance verifiers would be required to order seals from MPI bulk stores.

Impact, Advantages and Disadvantages

It is estimated that this option will impact 93% of dairy consignments, due to a change in alphanumeric identifier on operator seals, and 20% of honey and egg consignments due to the requirement that these be sealed with a high security container seal.

Additionally there will be an increase in verification costs for RMP premises and Approved Manufacturers. The increase for RMP premises is dependent on their current verification frequency. Estimated verification costs for RMPs for both option 2 and 3 are the same and outlined in Appendix 1.

The estimated costs of verification per annum for each approved manufacturer are $2000 plus travel.

Advantages:

- All animal product sectors would operate under the same controls, minimising risk of challenge by overseas competent authorities.
- Limiting approval of manufacturers to 3 years and requiring verification of approved manufacturers will improve controls around security during manufacture and distribution.
- Uniqueness of seal identifiers can be assured through the controls over approved manufacturers.
- Increasing the verification frequency across the dairy sector will improve confidence of compliance.
- Limiting the alphanumeric identifier for operator seals to that of the exporter will reduce the number of different seals that could be presented to border officials.

Disadvantages:

- There could be considerable variety in seals and not always a visible connection with MPI or New Zealand.
- There are market access risks, if countries used to NZMPI seals are sent containers of meat with operator seals they may be unwilling to accept them.
- Market access issues may result in significant work (and cost) to update OMARs to specify a need for NZMPI seals.
- The need to approve and verify multiple manufacturers of seals will add cost which the manufacturer will look to recover from customers.
- Increased verification of some RMP operators will add cost.
- Increased cost if exporters need to be verified.

4.3 Option 3 – NZMPI Seals Required for All Animal Products Exported as Food with Official Assurances

Under this option **all animal product** exported for human food or pet food, in a sea container, and supported by an official assurance would be required to be sealed with an NZMPI seal.

NZMPI seals would be sourced from approved manufacturer(s). MPI will tender for supply and contract manufacturer(s) of NZMPI seals once every 3 years.

Official Assurance verifiers would be required to order seals from MPI bulk stores.

The manufacturer(s) would be approved for a maximum of three years and would be required to undergo verification annually.

RMP operators would be required to have procedures around use and control of all container seals used in an official assurance capacity.

Use and control of NZMPI seals would be required to be verified in line with *The Animal Products Notice: Export Verifications Requirements* under performance based principals with an initial verification interval of 1 week and a ceiling step of 5 (3months). Clause 4.2 applying to premises with full time verifier presence.

Impact, Advantages and Disadvantages

It is estimated that this option will impact 93% of dairy consignments, due to the need to change from an operator to a NZMPI seal, and 20% of honey and egg consignments, due to the requirement that these be sealed with a high security container seal.

Additionally there will be an increase in verification costs for RMP premises depending on the current verification frequency of each RMP. Estimated verification costs for RMPs for both option 2 and 3 are the same and outlined in Appendix 1.

NZMPI currently source the two tone green and white NZMPI bolt seal at a discounted price of $0.95 + GST. The standard price being $1.10 + GST. $0.95 is also the standard price from Security Seals of a single coloured bolt seal which some companies are using as an operator seal. MPI is not aware of actual prices being paid by companies for operator seals however under this option the volume of NZMPI seals needed will increase significantly and MPI will look to tender for the business so a reduction in price is likely.

Advantages:

- All animal product sectors would operate under the same controls, minimising risk of challenge by overseas competent authorities.
- Limiting approval of the manufacturer(s) to 3 years and requiring verification of approved manufacturers will improve controls around security during manufacture and distribution.
- Increasing the verification frequency for the dairy sectors will improve confidence of compliance.
- There would be a single visually identifiable seal which clearly links to MPI as the responsible party. This would assist officials in importing countries to have confidence in the authenticity of the seal and hence product.
- There would be no confusion for officials in importing countries where operator seals are used with product not accompanied by an official assurance.
- As NZMPI seal has the extra security of a dual colour design which further hinders forgery this option further reduces risk of fraud.
- Additional manufacturers of high security container seals would not need to be approved (although for logistical reasons MPI may choose to).
- RMP operators would not need to manage the logistics of multiple seal types.

Disadvantages:

- Dairy operators would be required to phase out operator seals and transition to use of NZMPI seals.
- Increased verification of some RMP operators will add cost.
- There is additional cost for sectors that have not historically been required to seal sea containers with high security container seals.

5 Preferred Option

It is clear that option 1, the status quo, fails to ensure the appropriate controls around manufacture, distribution and use of high security container seals. Both option 2, permitted operator and NZMPI seals and option 3, requiring NZMPI seals for all animal product sectors, can be designed to give the appropriate level of controls to protect trade and MPI's reputation.

Option 3 however ensures the appropriate controls in a less complex manner and with lower administrative cost than option 2. There is no need to approve and verify multiple manufacturers of seals or verify exporters and no increase in costs to maintain OMARs.

While MPI is aware that some companies are purchasing operator seals at a lower cost than the NZMPI seals it is likely that if option 3 is implemented the cost per unit price of NZMPI seals will be able to be reduced due to the increased numbers required and the planned tendering process.

Option 3 also has the advantage that it results in a single seal that is less likely to be replicated and clearly links to MPI as the competent body, thus assisting officials in importing countries to have confidence in the authenticity of the seal and hence the product.

In summary option 3 offers a simple, consistent and cost effective approach to ensuring the appropriate level of control around manufacture, distribution and use of high security container seals to maintain the reputation of MPI and of NZ primary produce. For this reason it is the preferred option.

It should also be noted that both formats of NZMPI seals, the bolt seal and the bolt-and-cable seal may be used under the customs SES scheme.

Appendix 1 – Additional Costs of Verification

Type of Business	Impact	Estimated Cost (GST exclusive)
RMP premises currently undergoing Official Assurance verification and verification of container seal use at a ceiling of 3 monthly	None	None
RMP premises currently undergoing Official Assurance verification at a ceiling of 3 monthly and of container seals annually.	Additional half hour 3 x per year (on existing audits)	$300 per annum
Export stores undergoing Official Assurance verification at a ceiling of 6 monthly where container seals only verified annually.	Additional half hour 1 x per year (on existing audit) Additional 2 verifications / site visits per year	$100 per annum $400 - $600 per annum Plus travel time and cost for 2 visits.
Export stores undergoing Official Assurance verification at a ceiling of 6 monthly where container seals verified at each audit.	Additional 2 verifications / site visits per year	$400 - $600 per annum Plus travel time and cost for 2 visits.