



## **Economic benefits of MRA-AEOs**

### **Part 5 – Industry insights on time saving and wider benefits**

NZIER report to New Zealand Customs Service

April 2021



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## Key points

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### Trade facilitation

Trade facilitation is one of the benefits from New Zealand's mutual recognition arrangements (MRAs) with eight partner economies.

The Secure Export Scheme (SES) of the New Zealand Customs Service (NZCS) is an MRA arrangement for New Zealand exporters.

The MRA arrangement produces time saving of between 0.5 to 3.5 days depending on commodity and bilateral trade partner that, in the long term, has an economic value for New Zealand (of about US\$ 310 million annually) and for its MRA partners.

### Firms' views on trade facilitation benefits

We asked New Zealand export firms about the value from MRA arrangements of:

- time saving benefits that we reported previously
- other benefits.

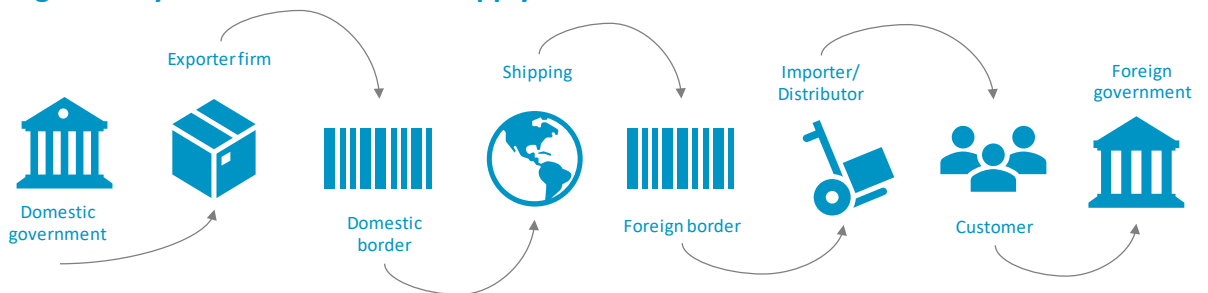
### MRA benefits

Firms provided evidence and explanation of trade facilitation benefits from:

- time saving
- being trusted by other firms in the supply chain because they voluntarily comply with universal standards of quality, business practice and customs protocols
- being trusted because they voluntarily adhere to security standards of foreign governments
- a form of insurance that this trust provides to them
- being generally well supported by NZCS in achieving and maintaining SES accreditation
- high potential value in lower costs in NZCS granting them AEO accreditation as importers of inputs to production.

Figure 1 below is our graphical illustration of stages in a supply chain where different trade facilitation occurs.

**Figure 1 Stylised illustration of a supply chain**







Source NZIER





















Table 1 (below) shows the types of trade facilitation that occur at each stage of the supply chain.

The following key to Table 1 describes the symbols we use:

 Time saving	 Insurance for trade facilitation
 Universal standard of compliance	 Supply chain security

**Table 1 Time saving and wider benefits and where they occur**

Supply chain								
	Domestic government	Exporter firm	Domestic border and customs clearance	Shipping	Foreign border and customs clearance	Importer firm /Distributor	Customer	Foreign government
1. Time saving								
2. Insurance for trade facilitation								
3. Universal standard of compliance								
4. Supply chain security								

Source NZIER

# Contents

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- 1 Background .....1
  - 1.1 Prior quantitative analysis .....1
  - 1.2 This study .....1
  - 1.3 Outline of this report .....2
- 2 Methodology and data.....2
- 3 Time saving .....2
  - 3.1 Introduction .....2
  - 3.2 A generic level of time saving – Scenario 2 .....2
  - 3.3 Specific levels of time saving – Scenario 3.....4
- 4 Economics of trust in supply chains .....5
  - 4.1 What does the literature say? .....5
- 5 Insurance for trade facilitation .....7
- 6 Universal standard of compliance .....8
- 7 Supply chain security .....10
- 8 MRA benefits across supply chains .....11
- 9 Benefit to firms if accredited as AEO importers .....12
- 10 SES for small firms or multiple production sites .....13
- 11 References .....14

## Appendices

- Appendix A Case study interview notes ..... 15
- Appendix B Interview questions..... 31

## Figures

- Figure 1 Stylised illustration of a supply chain ..... iv
- Figure 2 Stylised illustration of a supply chain .....11

## Tables

- Table 1 Time saving and wider benefits and where they occur ..... v
- Table 2 Time saving and wider benefits and where they occur .....12

# 1 Background

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We are investigating global macroeconomic impacts from New Zealand's bilateral mutual recognition arrangements (MRAs) for authorised economic operators (AEOs) in a customs setting. These are known as MRA-AEOs. The Secure Export Scheme (SES) of the New Zealand Customs Service (NZCS) is an MRA-AEO. MRAs facilitate trade through reducing time in transit at a border. This time saving is valuable to firms and to nations. There are also wider benefits.

## 1.1 Prior quantitative analysis

Recently we investigated and reported economic impacts using actual estimates by firms of time saving to produce our:

- 'Scenario 2' (Williams et al, 2021a): a time saving of 0.5 days to update Scenario 1 (Williams and Maralani, 2019a, 2019b).
- 'Scenario 3' (Williams et al, 2021b): a refinement of Scenario 2, containing the time saving of 0.5 days plus additional time saving advised by firms specifically for:
  - vegetables and fruit
    - China, an additional 3.0 days
    - non-China, an additional 1.0 day
  - manufactured computer, electronic and optical goods
    - China, an additional 1.0 day
    - non-China, zero additional days.

## 1.2 This study

In this study we report the advice that led us to revise the estimates of time savings. In addition, our consultation also revealed many other trade facilitation benefits of MRAs that are:

- additional to the time saving benefit
- occurring in supply chains and not necessarily at a border
- generally more valuable to firms than time saving at a border.

We also report that advice here. In summary, trade facilitation from MRAs reduces transaction costs in supply chains. Some of this trade facilitation is due to trust between parties in a supply chain. The MRA is a trusted relationship between customs agencies and trader firms. Within this trust relationship, firms we interviewed identified values in:

- a form of insurance to them that this trust provides
- trustworthiness with other firms in the supply chain because they voluntarily comply with universal standards of quality, business practice and customs protocols

- trust placed in them because they voluntarily adhere to security standards of foreign governments.

### 1.3 Outline of this report

In section 2 we outline the methodology and data used.

In section 3 we report results for two scenarios of time saving. In section 4 we provide a brief review of the economics of trust in supply chains. In sections 5 to 7 we present a synthesis of key insights from case studies of 11 firms on the wider benefits. We reference these to accounts of individual firms in an anonymised knowledge base from firm interviews (Appendix A). Appendix B presents an outline of interview questions.

## 2 Methodology and data

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We interviewed seven SES export firms, one non-SES firm and three freight forwarding/logistics firms. Firms were selected in consultation with NZCS. We interviewed firm representatives in person on site. Our questions in these interviews were focused on identifying the benefits including time saving from MRAs. We assembled an anonymised knowledge base of data and insights (Appendix A). We refer to insights of specific firms throughout the text using the relevant firm number and paragraph number. Our interview question guide is presented in Appendix B.

Using these firm insights, we constructed two scenarios for time saving (section 3 below). We previously reported the quantitative analysis to estimate economic impacts of the two scenarios for Scenario 2 (Williams et al. 2021a) and Scenario 3 (Williams et al. 2021b).

## 3 Time saving

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### 3.1 Introduction

In this section we report our analysis of case study data for time saving (Appendix A) for two scenarios that we have previously modelled (Williams et al. 2021a, 2021b).

### 3.2 A generic level of time saving – Scenario 2

We consulted firms to understand broadly the amount of time saving from MRA-AEOs. This broad-brush level is the time saving we applied to estimate economic impacts for Scenario 2 (Williams et al. 2021a).

We were initially surprised that, in general, firms attributed small importance to the time saving at the border from MRAs for various commodities. The notable exceptions (Appendix A, 1e) were: (i) perishables such as vegetables and fruit, (ii) first to market and repeat orders such as manufacturers of computer, electronic and optical goods and (iii) high risk goods.





Firms explained their view in terms of:

- Automation of customs compliance procedures (Appendix A, 1d, 1e) and the availability of the Trade Shared Window (see Box 1 below) mean that non-MRA customs compliance is almost as fast as MRA customs compliance.
- MRA accreditation is a small factor influencing time saving and only provides another “layer of comfort” to exports (Appendix A, 2a).
- Customs inspections are random (Appendix A, 5b) and infrequent for low risk non-MRA traded goods, hence overall time saving was small.
- Time delays associated with sanitary and phytosanitary inspections are more material to time delays than those for customs clearance (Appendix A, 1e, 3g, 9b).
- One day of time delay was not material to some firms (Appendix A, 10e), but one week of time delay would be.

### Box 1 SES speeds up trade single window processes for New Zealand

A trade single window is a single point of contact between foreign traders and all relevant government agencies to fulfil their requirements for trade, including Customs protocols. From a practical standpoint, it is an electronic channel for the cargo and excise industries to submit a profile of information to and receive responses from all the border agencies (NZCS, Ministry for Primary industries, Maritime NZ and Ministry of Health).

Trade single windows:

- provide a **portal** for compliance of many agencies (NZCS, MPI, Maritime NZ, Ministry of Health).
- allow border agencies to use **shared information** to process craft and cargo data.
- allow **early lodging** of customs documentation, so that compliance is generally achieved prior to the cargo landing at destination port.

Trade single windows require freight forwarders to create a profile for each consignment. Profiles include information about:

- the HS10 level characteristics of the commodity.
- country of origin.
- country of manufacture.

**The SES accreditation provides much essential data for any given profile. This reduces time in creating profiles which can be from 30 minutes to four hours per profile.**

Notwithstanding this view of immateriality to exporters, we further asked firms for an order of magnitude estimate that was reasonable on average for all commodities taken together.

Such an informed view would be an improvement on our nominal one day of time saving used for Scenario 1 (Williams and Maralani 2019b).

- To this request, one freight forwarder opined that overall, while small, as an order of magnitude, the MRA-AEO status could be attributed with one half day per annum of time saving in transit (Appendix A, 2d).
- Another firm provided us with another order of magnitude estimate with anecdotes of time saving at the border such as from the trusted load system (Appendix A, 3a) where MRA partners would continue to have their cargo processed even if there was some small issue that could be resolved later. That firm said that the SES scheme and its associated MRA-AEO activities globally cost the firm about 0.5 percent of total export costs (not revenue). We considered that this represents a cost to the firm of accreditation. If we approximate total costs as occurring over a whole year, then 0.5 percent of 365 days of costs is about 1.8 days of cost per year in time. This is our second estimate of overall time saving.
- Another firm (Appendix A, 7a) exporting non-perishables noted how its SES status had led to reduced inspection of its cargo from 2 percent of cargo to a very small level. Inspection could have a consequential delay of 1 week on cargo. Assume we can equate 2 percent of cargo delayed for 7 days to 28 percent delayed for one half day per year. This is about one third of all cargo delayed for 0.5 days. We take this to be a third estimate of overall time saving of about 0.2 days.
- One firm (Appendix A, 5a) pointed out that membership of the trusted trader RACA (regulated air cargo agent) scheme for air freight produced a time saving of about three hours, though this would not necessarily apply to sea freight. This is close to 0.5 (working) days.

In conclusion, we decided to use 0.5 days as a summary measure for Scenario 2 (Williams et al. 2021a) based on the advice from firms. It sits in the mid-range of the four estimates and is supported by industry knowledge. In our view it is a conservative estimate since it does not include known higher values of time saving for perishables, high value manufacturing and high-risk goods.

### 3.3 Specific levels of time saving – Scenario 3

Two firms we interviewed provided estimates of the amount of time saving provided by SES status for their respective commodities:

- fruit
- high technology manufactured goods.

A fruit producer (Appendix A, 11c) noted that compared to SES status the time delay at the China border for non-SES exports amounted to an extra 3.5 days. For non-China exports, the extra delay was 1.5 days.

A manufacturer of high technology equipment (in the commodity group of manufactured computer, electronic and optical goods) provided advice about inspection times at Chinese

borders. They experience a 5 percent rate of inspection for exports to China. This is down from 15 to 100 percent for a non-MRA exporter. Inspection duration is 2 to 3 days.

If we assume a 52 percent (average of 15 and 100 less the remaining 5 percent) reduction in inspections due to MRA status taking 2 days, that is roughly equivalent to a time saving of one day for 100 percent of the cargo.

Based on the above, we produced Scenario 3 (Williams et al. 2021b) by adding the following specific time saving components to the generic level of 0.5 days per year as follows:

- vegetables and fruit:
  - China, an additional 3.0 days
  - non-China, an additional 1.0 day
- manufactured computer, electronic and optical goods:
  - China, an additional 1.0 days
  - non-China, zero additional days.

We say quite clearly that we took advice from a very limited sample and also that we have manipulated the information provided to produce data that is used for the modelling.

We can conclude we have been cautious and that basing the work on knowledgeable advice is superior to the earlier investigations which were more arbitrarily based.

## 4 Economics of trust in supply chains

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In this section we outline strands of current economic thought, about trust in social relationships, underpinning the wider benefits of MRAs in supply chains, that we report in sections 5 to 7.

These ideas provide a general framework to understand the way trust works and thus to interpret the remarks made by our informants.

### 4.1 What does the literature say?

The literature on trust in organisations has developed from recognising no trust in relationships that were purely contractual and that therefore involved transaction costs. These relationships arose from parties needing to include contractual terms to proscribe unfavourable opportunistic behaviour on the part of counterparties.

Subsequently, literature developed that recognised trust as a lubricant that would obviate the need for such contractual terms.

In a further development trust is seen as an asset that builds competitive advantage in supply chains.

#### 4.1.1 Transaction costs

We can think of trade facilitation as reducing transaction costs in supply chains. Some of this trade facilitation is due to trust between parties in a supply chain.

Dyer and Shu (2006) (citing Williamson, 1985, Hennart, 1993, North, 1990) and others, define **transaction costs**:

*Transaction costs involve all of the costs associated with conducting exchanges between firms and can be decomposed into ex ante transaction costs, or search and contracting costs, and ex post contracting costs, or monitoring and enforcement costs. (Dyer and Shu, 2006)*

Lorenz (1998) describes **trust as a lubricant** that reduces the friction of transaction costs. In transactions, contracting parties will act opportunistically sometime to the detriment of the other party. The presence of trust can avoid the expense of drafting comprehensive agreements to avoid such opportunistic behaviour.

#### 4.1.2 Risk

Zhang and Huo (2013) say that trust is valuable for **reducing risk**:

*As an important relational capital, trust is critical for mitigating exchange hazards and engendering cooperation among the supply chain partners since it reduces the uncertainty of a partner's actions and other relational risks. (Yeung et al. 2009, Wang et al. 2011, cited in Zhang and Huo. 2013)*

Zhang and Hou (2013) further find that researchers widely see that trust relationships as crucial for **supply chain integration**:

*Researchers have realized that economic action is not independent from the social relationships surrounding the economic actors and suggested that supply chain management should incorporate on-going inter-organizational relationships among exchange partners (e.g. Zhao et al., 2008, Narasimhan et al., 2009, McCarthy-Byrne and Mentzer, 2011, Zhao et al., 2011). Based on different theoretical perspectives, such as social exchange theory (Zhao et al., 2008, Narasimhan et al., 2009), social capital theory (Krause et al., 2007, Villena et al., 2011), resource dependency theory (Crook and Combs, 2007, Yeung et al., 2009), and transaction cost economics (Wang et al., 2011, Zhao et al., 2011), studies have found that relational capital and assets, such as trust, power, commitment, and dependence, play crucial roles for the companies in achieving SCI [supply chain integration] goals and competitive advantage. (All references cited in Zhang and Huo 2013)*

#### 4.1.3 The economic value of trust

Dyer and Shu (2008) in a study of automakers and their suppliers, identify **the economic value of trust** (we have split out the text for emphasis):

*the fact that trustworthiness was strongly linked to low transaction costs, and low transaction costs strongly linked to performance suggests that a reputation for trustworthiness improves performance.*

*...trust appears to lead to certain value-creating behaviors (i.e. information sharing)*

*and these value-creating behaviors in turn lead to higher levels of trust.*

*This phenomenon makes trust unique as a governance mechanism because the investments that trading partners make to build trust often simultaneously create*



*economic value (beyond minimizing transaction costs) in the exchange relationship. (Dyer and Shu 2008)*

Widdowson (2016) opines that maintaining good relationships with the United States following the 2001 terrorist attacks was a prime motivation for other governments accepting and complying with stricter security protocols:

*There is, of course, general agreement around the international table that security is a key issue and that the principles of the SAFE Framework should be observed, including advance manifest reporting. That does not mean, however, that mitigation of the security risks expressed in the SAFE Framework genuinely reflects the national priorities of individual economies. For example, for some countries, the primary reason for implementing the CSI [Container Security Initiative] initiatives following 2001 had very little to do with mitigating the risk of terrorism attempts but was **more concerned with maintaining a healthy trading relationship with the US.** (Widdowson 2016)*

## 5 Insurance for trade facilitation

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The MRA is a trusted relationship between customs agencies and trader firms. Within this trust relationship, firms reported a value in the form of insurance for them that this trust provides.

One firm (Appendix A 9g, 9h) has the view that SES status insures against several potential hold ups that are likely in large markets such as in the United States.

This assurance is valuable to the stability of business on an ongoing basis. One logistic firm (Appendix A, 2a) agreed and described this insurance value as an “extra layer of comfort” for exporters.

Many firms (Appendix A, 3h, 5h) reported infrequent events which risk costly delays including political events, geographical events, events diminishing reputation of exports, port action or strike action that create queues of unprocessed cargo on ships in port. In the view of some, SES membership means that:

- NZCS helps to resolve the issue and allow the resumption of trade because it is a partner to SES firms.
- Customs agencies of MRA partners actively assist in efforts to resume trade.

The value to firms arises because:

- Without swift resolution, management processes would need to be shifted and re-directed to resolve these, incurring some material costs if only in terms of opportunity costs of the management time.
- Material impacts would occur for high volume trade such as with China.

Swift resumption in trade is especially important for:

- A sequence of multiple orders of trade throughout the year. A delayed shipment may be unwanted once the next shipment arrives.
- Seasonal merchandise, which can lose value immediately the season ends.

- ‘First to market’ sales where the advantage of being the first to market is extinguished if a delay allows other suppliers to enter the market.
- Perishables are a good case study of the importance of time delay.

### Box 2 Trusted load system facilitates trade

One firm reported that a major value of the SES is the “trusted load system”. This means that even if there are issues in loading SES cargo, cargo will still get loaded. The issue will be resolved subsequently.

This is especially important for trade with China, where excessive delays are costly. By comparison, occasionally and prior to SES accreditation, the business had to substitute a current order with a delayed order.

## 6 Universal standard of compliance

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The MRA is a trusted relationship between customs agencies and trader firms. Within this trust relationship, firms reported a value in the trust in them by customs agencies and other firms, with other businesses because they voluntarily comply with universal standards of quality, business practice and customs protocols.

The MRA-AEO accreditation is a:

- Quality signal to customers.
- Sign of adherence to business standards within supply chains.
- Certificate of satisfaction of other (and future) accreditation requirements.

The value of quality accreditation from MRAs is similar to the value from technical accreditation that creates efficiency from shared knowledge through the growth of trust:

*It allows economic agents to go about their normal activities without having to constantly suspect and therefore, to conduct (or ask an appropriate expert to conduct) tests on counterparties. (Ballingall et al. 2017)*

The MRA-AEO trust relationship places an onus on firms to have specified standards of technology in their sites and to provide worker training. The reward to firms is the confidence of customers and other firms in their supply chains. Similarly, the loss of such confidence, should they be found to fail to meet the required standard, is loss of such confidence and its associated value.

Williams and Maralani (2019a) previously noted reports citing AEOs as an appropriate compliance standard for accreditation with MRAs because the AEO is a specific kind of certification.

### 6.1.1 Quality signal to customers

SES accreditation provides a quality signal such as an ISO rating, (Appendix A 1b, 7g) to potential customers. One firm noted that:



*Potential new offshore retailers of the firm's products have quality compliance protocols. An SES arrangement would be a quality signal that the firm's products are accredited with some or all of these compliance protocols.*

### 6.1.2 Business standards of supply chains

The SES status is a quality standard for participation in supply chains of MRA countries.

Some firms in the United States only deal with accredited exporters for this reason. One firm (Appendix A, 10e) said it expected its SES accreditation to be useful to support any future entry into the United States market.

One logistics firm (Appendix A, 1c) explained that the MRA-AEO protocols represent an established set of high-quality protocols that can be the basis for a firm to establish links with new supply chains in non-MRA countries.

One firm (Appendix A, 2e) commented that: there is huge value for trade with the European Union in particular, in being SES accredited. They noted that it is very likely that such accreditation will be a requirement for exports to EU in future.

Without such accreditation (Appendix A, 5c):

- It can take 3 weeks to establish new supply chain relationships in the first year of trade in a new supply chain that is not an MRA partner.
- Approximately, this reduces to about 2 weeks in year 2 and one week in year 3, with no further establishment time required thereafter.
- Some firms in the United States would not deal with a foreign exporter.

One logistic firm commented (Appendix A, 2e) that:

*The benefits of SES accreditation can occur upfront at the commencement of participation in global supply chains. For example, one wine exporter required 18 months of compliance testing to get its exports approved for the EU market.*

One firm (Appendix A, 11e) saw a significant value where certification provided by SES status is noted on the MPI declaration of conformity documentation for exports. New Zealand is the only country that has this double certification. This facilitates the biosecurity testing at the port of entry.

### 6.1.3 Set-up costs to meet new protocols

The SES accreditation satisfies the requirements of many other current and future accreditation criteria and is valuable for this reason.

This is very valuable when a firm exports to many countries and they are simultaneously introducing new protocols. For example, one firm (Appendix A, 4g) noted that for sales it:

*Looks at all offices and 18 distribution centres, plus anywhere that wants production over 116 countries.*

Another firm (Appendix A, 7h) noted that SES accreditation has benefits if the firm seeks different freight forwarders, since it signals that the firm already complies with required security and customs protocols. Further, audits of the firm's procedures are easily done with SES arrangements already in place.

One example of the applicability of SES protocols is for the RACA protocols for air freighted cargo.

According to one logistics firm (Appendix A 5a):

- SES exporters already satisfy many RACA protocols and so there is a cost saving for SES exporters who wish to become RACA accredited for air freight and a very large cost saving in staff training costs.
- SES exporters have something similar to a mitigation of against prolonged delays if cargo is held up in supply chains, because many protocols that need checking are already satisfied from SES accreditation.

## 7 Supply chain security

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The MRA is a trusted relationship between customs agencies and trader firms. Within this trust relationship, firms we interviewed identified a value in the trust placed in them because they voluntarily adhere to security standards of foreign governments.

Because of heightened global security risks, the United States and other nations are placing greater emphasis on supply chain security. Customs agencies are becoming concerned with raising the standard of their security protocols in addition to the traditional gatekeeper role at the border.

One firm (Appendix A, 8a) commented that the United States is its third biggest customer and has been the main driver in raising the importance of cargo security, particularly from the perspective of food security under the Food Security Act (2011). SES status is a quality signal for security compliance.

One firm noted an increase in security checks by customs agencies in China and Korea. They want to do additional inspection of facilities before security clearance for trade items – such as to ensure that there has been no interference with goods.

Firms generally recognised that non-MRA countries are also increasing compliance criteria for firms participating in supply chains. This extends to inspections beyond the border of entry as well as requiring certification of security. One logistics firm (Appendix A, 1c) said:

*Even if not ranking high for reducing compliance time, SES has importance as a quality signal for security compliance. MRA partners are tending to raise the standard for security and border protection.*





Another firm (Appendix A, 3e) commented that it takes food security incredibly seriously. It said that:

*Food safety and security is paramount. Security applies from point of packing to point of loading.*

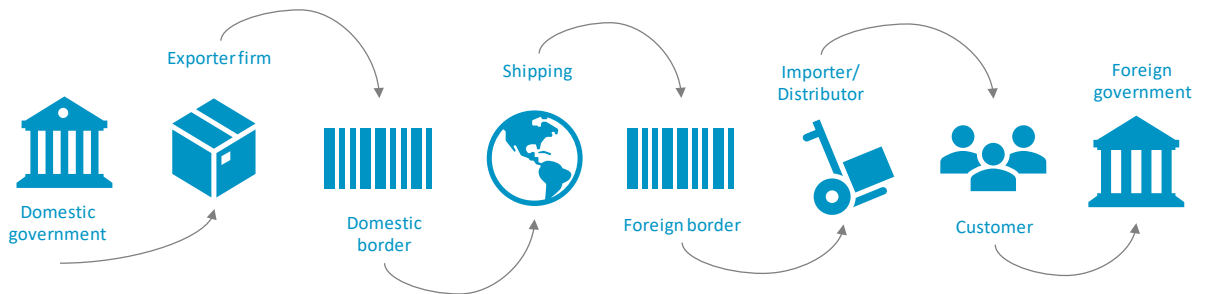
Many countries have multi-tiered systems that rank firms exporting to them on, the basis of security, risk etc. The European Union and China are two examples. China has 4 tiers. There are high quality (Tier 1) benefits for New Zealand MRA SES firms. Non-SES New Zealand firms can only get lesser benefits. Tier 1 benefits include reduced compliance costs.

## 8 MRA benefits across supply chains

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We designed a stylised diagram of a typical global supply chain shown in Figure 2 Stylised illustration of a supply chain below.

**Figure 2 Stylised illustration of a supply chain**



Source: NZIER

Table 2 shows the types of trade facilitation that occurs at each stage of the supply chain.



The following key to Table 2 describes the symbols we use:



Time saving



Insurance for trade facilitation



Universal standard of compliance



Supply chain security

**Table 2 Time saving and wider benefits and where they occur**

Supply chain								
	Domestic government	Exporter firm	Domestic border and customs clearance	Shipping	Foreign border and customs clearance	Importer firm /Distributor	Customer	Foreign government
1. Time saving								
2. Insurance for trade facilitation								
3. Universal standard of compliance								
4. Supply chain security								

Source: NZIER

## 9 Benefit to firms if accredited as AEO importers

Most of the firms we consulted said there would be benefits to them as importers of raw materials if AEO status was granted to them as importers. One firm (Appendix A, 11i) highlighted the brand value this would confer to them. This had clear economic value according to the firm. This firm also said that AEO importer accreditation would speed up supply of time sensitive materials such as “hailstone heroes” plastic bags for packing hail-damaged produce which are required immediately after a hailstorm event.

In the main, firms (Appendix A, 2g, 3g, 4d, 7f, 9d, 11i) said sanitary and phytosanitary protocols from the MPI resulted in the largest delays at ports. This is often exacerbated in seasons with high volumes of high-risk goods such as fruit and vegetables (Appendix A, 10h).

They advocated AEO status as an importer conferring them with:



- Fast-tracking through non-customs clearance processes such as SPS inspections.
- Authority to fumigate their cargo at the port of origin with no inspection at a New Zealand port due to the AEO status.

One firm believed there should be no further cost to NZCS in granting them this status because they were already SES compliant as exporters.

## 10 SES for small firms or multiple production sites

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Some firms (Appendix A, 11h) noted that NZCS is generally supportive for helping firms achieve and maintain SES status. Any further support might become excessively bureaucratic and slow production.

One firm (Appendix A, 2g) opined that generally, there is not a huge amount of complexity about SES compliance for supply chains for small firms. In such cases the effort is required to cover such items as site plans, manuals, secure facilities, security of personnel.

These are reasonable straightforward requirements and not too onerous.

Potentially a better understanding of the costs and benefits would encourage more small firms to join the SES programme.

One non-SES firm with three production sites said getting SES accreditation would be too cumbersome, since it would have to get compliance accreditation for each site. In any event its exports are delivered FOB and it is confident in cargo security.

One fruit producer (Appendix A, 11b) said the requirement for SES accreditation on a site-by-site basis can be extra work for its exports of other growers' goods, since the SES container seals cannot be attached at distant sites unless they are also SES accredited. The SES container seal is particularly robust as it has a bolt and a wire.



## 11 References





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- Ballingall, John, John Yeabsley and Daniel Pambudi. 2017. 'IANZ: the economic side Examining the way IANZ supports the New Zealand economy.' NZIER final report to IANZ.
- Dyer, J.H and Wujin Shu. 2006. 'The Role of Trustworthiness in Reducing Transaction Costs and Improving Performance: Empirical Evidence from the United State, Japan and Korea.' in Roderick Kramer. (Ed) *Organisational Trust A Reader*. Oxford University Press.
- Lorenz, E.H. 1988 'Neither Friends nor Strangers: Informal Networks of Subcontracting in French Industry.' in Gambetta, D. (Ed.): *Trust*. Basil Blackwell, Inc., New York, pp.194–210.
- Widdowson, David. 2016. 'Managing the border: a transformational shift to pre-export screening'. *World Customs Journal*, Volume 10, No. 2.
- Williams, Julian and Milad Maralani. 2019a. 'Economic Benefits of MRAs for Authorised Economic Operators Part 1: Literature Scan.' NZIER report to New Zealand Customs Service.
- 2019b. 'Economic Benefits of MRAs for Authorised Economic Operators Part 2: Quantitative Modelling.' NZIER report to New Zealand Customs Service.
- Williams, Julian, Milad Maralani and Mieke Welvaert. 2021a. 'Economic Benefits of MRA-AEOs Part 3: Focus on SES exports and 0.5 days' time saving.' NZIER report to New Zealand Customs Service.
- . 2021b. 'Economic Benefits of MRA-AEOs Part 4: – Focus on SES exports and time saving for fruit and electronics.' NZIER report to New Zealand Customs Service.
- Zhang, M and Baofeng Huo. 2013. 'The impact of dependence and trust on supply chain integration'. *International Journal of Physical Distribution & Logistics*.



# Appendix A Case study interview notes

This appendix contains highlights of interview notes from our face-to-face interviews with firm representatives. These notes reflect the actual discussion and, in some cases, contain verbatim comments. They should be treated as the notes of the interviewer, Julian Williams. We have categorised these notes into thematic areas that broadly underpin the interview questions (Appendix B).

Firm 1	
<b>Firm type:</b>	<b>Freight forwarders/logistics</b>
	<p><b>a. Monetary benefits of SES</b></p> <p>In general, there was no material direct monetary advantage for SES firms compared with non-SES firms. A dairy company exporter client reported that they struggled to find any direct economic benefit.</p>
	<p><b>b. Quality signalling</b></p> <p>There was a benefit from SES status as a quality mark, similar to an ISO standard in respect of secure supply chains. This looks good to customers.</p>
	<p><b>c. Supply chains and customs compliance</b></p> <p>For most international customs agencies, imports are riskier than exports. Customs compliance for both imports and exports are dealt with at the border. AEO/SES firms have a higher level of customs compliance. In general risk of delay from customs compliance is much less than risk from biosecurity compliance.</p>
	<p><b>d. Trade single window (TSW) and consignment profiles</b></p> <p>TSW provides a portal for compliance of many agencies (NZCS, MPI, Maritime NZ, Ministry of Health). TSW allows border agencies to use shared information to process craft and cargo data. TSW allows early lodging of customs documentation, so that compliance is generally achieved prior to cargo landing at a destination port. 'Profiles' are required to be created for each consignment. This is the task of the freight forwarder. Machine readable invoices are created. Profiles include information about:</p> <ul style="list-style-type: none"> <li>• The HS10 level characteristics of the commodity:           <ul style="list-style-type: none"> <li>- Country of origin</li> <li>- Country of manufacture.</li> </ul> </li> </ul> <p>The time to create a profile can be up to 4 hours for one consignment of 5 containers. Any benefits from reduced customs compliance such as for SES firms really amounts to reducing the time to assemble data to develop the profiles. Correct data is essential to create the right profile. The SES accreditation provides much essential data.</p>



## Firm 1

SES accreditation is one factor of many that reduces the time (up to 4 hours) to construct a profile.



### e. Time delays and physical inspections

The greatest time delays in border control are associated with MPI inspections which can last for days due to long queues of cargo.

Customs inspections are random and are for a small percentage of total trade, particularly high-risk trade.

High risk trade such as that involving merchandise that might be prohibited or breach disclosure and excise requirements can require customs delays of up to a week, particularly if from high risk origins.

SES accreditation cannot be said therefore to materially reduce the overall time of Customs inspection for cargo generally, but it can for high risk trade.

In fact, TSW (enabling lodgement of profiles prior to cargo reaching port) replaced the previous system (requiring 24 hours by air freight, 48 hours for trans-Tasman trade and 5 days for non-trans-Tasman sea freight).

## Firm 2

**Firm type:** Freight forwarders/logistics



### a. Impact of SES on time delay for customs compliance

For full container load exports, lots of volume goes into North Asia, US and Australia.

Any SES benefit occurs at the foreign border and is difficult to quantify.

Often customs delays are taken care of by the exporter rather than the freight forwarder.

If door-to-door transport is required, the freight forwarder will get more involved.

Generally, there are very few hold-ups in trade for exports covering such diversity as: meat, milk, fruit, alcohol, beverages, pharmaceuticals, health supplies, honey.

NZCS inspections are low in frequency for both SES and non-SES exporters, hence the value of actual time difference for physical inspections is low.

As compliance becomes more rigid in some countries then SES accreditation could make transit smoother.

SES status is another level of comfort.



### b. Opinions of a non-SES firm

Firm 2 reported that one non-SES firm which was a significant timber exporter could see no material advantage of SES status.

This view however, makes the point that different exporters may have different views on the benefits for time saving from SES status – for example, with perishables. One example is exported honey which benefits from going through fast green lanes at destination.

Otherwise most shipments are efficient.



### c. SES is only one (small) component of customs compliance



There are many customs compliance requirements – e.g. for the US:

- Power of attorney
- Importer security file
- Advanced manifest screening – prior notification to agencies
- FDA requirements

SES ranks below all of these.

Delay from congestion at port is much larger than the reduction in delay from SES status.

### d. Value of SES in time saving (approximately)



As a rule of thumb, the SES accreditation reduces customs compliance time by about ½ day for trade generally.

Even if not ranking high for reducing compliance time, SES has importance as a quality signal for security compliance.

MRA partners are tending to raise the standard for security and border protection.

### e. Future compliance standards



There is huge value, particularly for EU trade, in being SES accredited. It is very likely that such accreditation will be a requirement for exports to the EU in future.

The freight forwarder (interviewed) is a RACA approved organisation and is very aware of having to meet the required high standards and is willing to work with customers to achieve them.

The benefits of SES accreditation can occur upfront at the commencement of participation in global supply chains. For example, one wine exporter required 18 months of compliance testing to get its exports approved for the EU market.

### f. Should there be a programme for AEO status for importers in New Zealand?



For imports, in general, minimalist intervention is required by NZCS. The supplier is generally known, the importer is known, and physical documentation and check are made.

Most time delay is associated with MPI inspection and certification, such as concerning foodstuffs and Brown Marmorated Stink Bug.

However, NZCS does perform clearance interventions.

If an AEO programme for importers could reduce the number of clearance interventions, then this would be a win-win for NZCS and for importers.

Hence an AEO programme for importers would have value to this extent.

### g. Benefits for small firms



Generally, there is not a huge amount of complexity about SES compliance for supply chains for small firms. In such cases the effort is required to cover such items as site plans, manuals, secure facilities, security of personnel.

These are reasonable straightforward requirements and not too onerous.

Potentially a better understanding of the costs and benefits would encourage more small firms to join the SES programme.



## Firm 2



### h. SES as a quality signal

The SES role in reducing customs compliance time is important, but there are so many other factors that are more important for efficient working of the supply chain.

There is significant value in recognition as a responsible exporter:

- Some firms in the US only deal with these types of accredited responsible exports.
- Hence in these cases, the SES status is a quality standard for participation in the supply chain.
- There needs to be more profiling of this value of quality signal to show value to exporters and how this value can be conveyed.



### i. Compliance standard

There is value in SES representing a universally accepted standard of compliance:

- Different countries have different requirements for customs compliance outside of an MRA arrangement.

SES status amounts to compliance with these different regimes and is therefore time saving in this respect.

## Firm 3

Firm type:

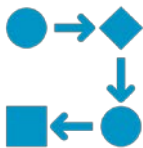
Food processor



### a. Benefits of SES

Major factor in SES is the trusted load system – even if there is an issue in loading, cargo will still get loaded.

This is especially important given the reduced FTA compliance period in China, where delays beyond this are costly.



### b. Firm 3 supply chain

3 business units

- Ingredients – planning to become SES
- Food products - SES
- Consumer brands – e.g. infant formula – only recently met criteria to be SES.

Firm 3 controls everything including the freight forwarder.



### c. SES helps with typical occasional supply chain issues

E.g. IT, planning, wrong container.

- With SES these types of issues can be resolved later
- Occasionally, previously without SES, the brands business had to roll an order.

Catastrophic events are extremely rare.



### d. SES as a quality signal

Hard to put a quantitative estimate of monetary value

- On a cost basis - auditing 19 times annually of business for SES amounts to about 0.5% of export business costs.

Firm 3 is a CTPAT member in the US and is looking to join similar groups in EU/China/Malaysia.

SES is beneficial as it can be a recognisable quality signal to facilitate joining these other groups.





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#### e. Food security



Membership of SES is also a signal to NZCS that Firm 3 takes tampering issues seriously. It is a signal of good corporate citizenship. In this context:

- Firm 3 takes food security incredibly seriously
- Food safety and security is paramount
- Security applies from point of packing to point of loading
- Firm 3 has its own Food Security Unit protocols
- It has decided to incorporate SES/AEO protocols into its FSU protocols
- Firm 3 has decided to incorporate SES/AEO protocols in offshore sites.



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NZCS is therefore encouraged to intervene in cases of issues:

- One example of freight issue involved drugs attached to a Firm 3 container seized in Barbados
- As a result of NZCS intervention via SES, the whole shipment was not seized.



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Another example in Algeria about 10 years ago involved a media scare about reports of white milk powder being mixed with cocaine.

- For Firm 3 this meant 20 containers seized by authorities
- NZCS went directly to authorities, advocated for Firm 3 and all 20 containers were released.

In Firm 3's view, NZCS would not likely have done this without the partnership duties of the SES.

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#### f. Customs clearance times



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No real advantage in customs clearance times for being a Customs Trade Partnership Against Terrorism (CTPAT) member, even if there are other benefits:

- NZ company with CTPAT accreditation exporting to the US has about same clearance time as Australian company without CTPAT accreditation exporting to US
- Japan and Korea have said similar things as well.

Customs clearance times now minimised from:

- Pre-shipment border analysis and modernisation
- For NZ exports to China this has reduced overall inspection rate
- Similarly ,for Australian exports.



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#### g. Sanitary and phytosanitary (SPS) compliance is more time consuming and increasingly so

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Customs clearance times are much less exacting than SPS /quarantine:

- SES accreditation has not decreased the MPI inspection time
- If anything, customs clearance has become less exacting, while MPI inspections have become more exacting.

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#### h. Catastrophic events



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These are rare.

Would have a big impact for high volume trade such as with China.

Realistic examples are port action or strike action – in these cases without swift resolution, management processes need to be shifted and re-directed to resolve these.



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**i. Value proposition for MRA**

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Many countries have multi-tiered systems that rank exporters to them on basis of security, risk etc.

Examples are EU and China:

- China has 4 tiers
- There are Tier 1 benefits for NZ MRA SES firms

For example, exporters need to do 'wash-ups' of transactions with tax and customs authorities.

Tier 1 benefits – mean that exporters can be allowed end of year involving cash deferred entries (no immediate declaration required).

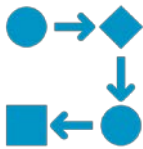
Non-MRA SES NZ firms can only get Tier 2 benefits.

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**Firm 4**

**Firm type: High-tech technology manufacturer**

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**a. Supply chain impacts**

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Distribution in the final mile is covered by sales and marketing team, these will have the interactions in global supply chain.

The SES accreditation is important since customers are global corporates and part of global supply chains and are members of similar AEO systems (such as CTPAT).

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**b. Quality value of MRA SES**

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Regulatory team will likely see a value in MRA recognised compliance with country regulations, licensing requirements etc.

Marketing team is likely to present SES compliance as indication that Firm 4 is fully compliant of a high standard of customs accreditation.

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**c. SES and MPI systems overview**

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Camera surveillance full time.

Increased gate control.

Secure servers for data.

Secure personnel.

Firm 4 facility is an accredited MPI facility.

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**d. Firm 4 as an importer**

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Firm 4 is a significant importer of raw materials.

Seasonal stink bug – Firm 4 tries to ensure that imports are in good/secure condition, majority of countries have BMSB risks.

Firm 4 takes biosecurity risks very seriously. In other countries, biosecurity risks (e.g. BMSB) have produced substantial delays that extended from days to week to many months. In one instance ships were stalled in port for many months.

Subsequent processing of cargo occurs in a queue system and so can take a very long time. Potentially therefore an MRA arrangement for importers with such fast track provisions would be a very valuable accreditation for importers.

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**e. Time saving from MRA**

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MRA arrangements can enable fast processing.

Firm 4 has very established supply chains with well-known freight forwarders.

Delays (if any) are generally at port of destination.

US:

- a Normal border cross, save 30 min on average
- 



- b Reduced number of examinations
- c Front of line for inspection.

China:

- d Reduced number of examinations by customs – Firm 4 experiences less than 5% of examination from customs (historically it had only 2% of total shipments examined by customs). Time spend for examination is around 2-3 days. 2-3 days lead time is 2-3% of WACC.

Normal exporter imported into China will experience from 15% to 100% examination of total shipments.



**f. Sea and air freight**

Firm 4 export about 90% by sea with a 10% air freight top up – air freight is used as an absolute minimum.



**g. Distribution system**

Firm 4 has an ERP-SAP system (changed to this 4 years ago).

Looks at all offices and 18 distribution centres, plus anywhere that wants production over 116 countries.

Looks at sales demand to supply to offices.

Main methods of transport are trucks.

Main forwarders are: SIVA, DHL, Expedite and Kuehne + Nagel.



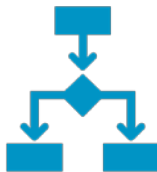
**h. Skills and capabilities**

SES membership has meant upskilling of all staff in the supply chain.

In distribution centres this is particularly evident for workers using IT infrastructure.

**Firm 5**

**Firm type:** Freight forwarders/logistics



**a. Protocols of SES**

SES protocols were modelled on Regulated Air Cargo Agent (RACA) protocols.

In an air freight context, if RACA accreditation was lost, the cost delays would be quite significant.

[RACA protocols](#) from 1 March 2019 in Australia mean that approved RACA agents must inspect all cargo unless it originates from an accredited known supplier.

Cargo inspection results in a delay of about 3 hours with an associated cost.



**b. Estimate of time delay saving from less inspection of SES cargo**

Hence this 3 hour time delay and associated cost is a possible indication of the time delay saved by possession of SES accreditation for air freight.

But it must be recognized that customs only randomly and infrequently inspect sea freighted cargo of non-SES exporters. Hence the relative overall saving in time delay from customs inspection for SES sea freighted cargo compared with non-SES exporters is probably quite small.

Time delays are material compared with when non-first tier freight forwarders and operators are used to transport cargo.



## Firm 5



### c. Estimate of time delay saving from having MRA-AEO protocols in place

It can take 3 weeks to establish new supply chain relationships in the first year of trade in a new supply chain that is not an MRA partner.

Approximately, this reduces to about 2 weeks in year 2 and one week in year 3, with no further establishment time required thereafter.

The SES and other MRA AEOs represent established high-quality protocols that can reduce the time to establish new supply chains.

This impact can be seen as occurring for the first three years as above.



Further, subsequent to establishment, the MRA-AEO arrangement is helpful in resuming trade after unforeseen events such as from:

- Political events
- Geographic event
- Reputational events.



Reduction in the time to resume trade is especially important for:

- Repeat orders of trade – which are generally unwanted by customers if the first shipment is yet to arrive
- Seasonal merchandise, which can lose value immediately the season ends
- First to market sales which can be destroyed if merchandise is not available
- Perishables, especially seasonal goods are a good case study of this importance of time delay.

Loss of value from time delay for perishables is particularly relevant to air cargo.

### d. Intangible benefits of SES protocols



SES exporters already satisfy many RACA protocols and so there is:

- a cost saving for SES exporters who wish to become RACA accredited for air freight
- a very large cost saving in staff training costs.

SES exporters have something similar to an insurance against prolonged delays if cargo is held up in supply chains, because many protocols that need to be checked are already satisfied from SES accreditation

## Firm 6

Firm type:

Wine producer (non-SES firm)



### a. Potential saving in time delay if firm were an SES member

Globally, Firm 6 ships FOB to customers and door to door to warehouses.

Normally allows 3 days for freight forward processes.

No time saving from reduced customs compliance is expected.

One day in the supply chain is not relevant.

Inventory is held at offshore sites to meet any unforeseen delay in new supplies.

Port delays have more of an impact than compliance protocols.

Most material delays are vessel delays not delays from customs compliance.

Biosecurity delays are also material, but these are not customs delays.



**b. Firm imports**



Glass bottles from China by air.  
 Bulk wine from Australia by sea.  
 These are most affected by time delays from a quality perspective.  
 Delay of one week is unlikely.  
 Caps from China by air.  
 Labels from Australia by air and sea.

**c. Intangibles**



Wine export certification process – each batch has to be certified, but this only takes 15 minutes – overall the whole certification of the wine exporters takes about 4 to 5 working days for each shipment.  
 Customs invoices are prepared by the freight forwarder.

**d. Sources of delays**



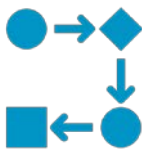
Based on the number of containers to be loaded.  
 Not down time – just part of business.  
 Odd random X-ray – 10 per year – for US destination.  
 Exports to Canada, UK, Ireland, China and the USA.

**e. View of SES programme**



Compliance too cumbersome – Firm has 3 sites and would have to get compliance accreditation for each.  
 All exports are delivered FOB – hence would not see customers valuing SES accreditation.

**f. Supply chain**



Almost all exports are entirely sea freight. The supply chain steps are:

- 1 bulk manufacture of wine (NZ, Australia) glass, caps, labels (China), cartons (local)
- 2 bottle and pack wine
- 3 wine export certification
- 4 little truck
- 5 2 warehouse facilities
- 6 Empty container delivered to warehouse
- 7 Load container
- 8 Full container picked up
- 9 Taken to port
- 10 Complete documentation (China requires more than others)
- 11 Export entry
- 12 Freight forwarder completes documentation
- 13 CIF
  - a To FOB
  - b To Door to Door
- 14 Export destination
  - a Once cleared, container is collected & delivered to warehouse
  - b Empty container is returned to port.



**Firm 7**

**Firm type:** Plastic products manufacturer



**a. Customs compliance**

Freight forwarders deal with customs compliance.  
Prior to SES – delayed about 2% of total cargo annually, about 50 containers.  
After SES – random checks on about 0.2% annually, about 5 containers.



**b. Delays that occur without SES**

Containers go to port 1 day prior to container cut-off.  
Then if screening occurs, container cannot meet vessel documentation cut-off.  
Then need to “roll” container for one week plus pay additional demurrage and penalties for non-delivery to some consumers.  
Also get loss of reputation with some consumers.

**c. SES avoids these delays**

The above does not happen with the membership of the SES programme.



**d. Compliance protocols**

Certain areas on the firm’s site are under SES compliance protocols.  
Containers are checked.  
Mostly automatic loading.  
Cargo is put in a special dedicated area for transport.  
Trucking company is part of the SES arrangement.  
After the cargo reaches port, cargo is sent to the firm’s warehouses and some to distributors.



**e. Less clearance issues for non-perishables**

Firm 7 items are non-perishable and shipped to UK, the US and EU mostly.  
Perishables have a lot of compliance protocols for inspection prior to shipment.  
Export destinations are all pre-cleared and it’s rare that there are clearance issues offshore.  
Not sure about the AEO status of exporters of raw materials, sources are mostly Korea and the US.



**f. Benefits of an AEO arrangement for importers in NZ**

MPI clearance is the most time consuming.  
There is often a queue of imported cargo requiring inspection and clearance.  
Any benefit from an AEO that would prioritise imports in the queue would be valuable to importers.



**g. Potential benefits of SES to firm in accessing new customers**

Potential new offshore retailers of the firm’s products have quality compliance. Protocols.  
An SES arrangement would be a quality signal that the firm’s products are accredited with some or all these compliance protocols.



## Firm 7



### h. Benefits for participation in supply chains

SES accreditation has benefits if the firm seeks different freight forwarders, since it signals that the firm already complies with required security and customs protocols.

For example, airline authorities are satisfied with SES procedures.

Audits of the firm's procedures is easily done with SES arrangements already in place.



### i. Development of firm capabilities to provide SES requirements

The firm created training processes for new people.

It provides induction for workers (permanent and temporary) involved with loading and supervising SES shipments.

On induction, all workers are shown SES secure areas and are informed on the special SES processes.

The firm continually updates its procedures with NZCS.



### j. Development of technology

The firm does not compromise on the quality of technology and is constantly updating technology for SES arrangements.

## Firm 8

Firm type:

Wine producer



### a. Benefits of SES

Customs do random inspections at port and the SES accreditation is valuable for facilitating these. However, this time saving is small compared to the time delay due to MPI inspections.

Most benefits arise from the assurance of security of cargo.



Security is very important for EU and UK customs.

UK, EU, China and Korea are the main countries where customers have been interested in SES status.

EU and UK are major customers.



The US is the third biggest customer and has been the main driver in raising the importance of cargo security, particularly from the perspective of food security under the Food Security Act (2011).



Now China and Korea want to do additional inspection of facilities for security clearance of trade – such as to ensure that there has been no interference with goods.



## Firm 8

The firm has not marketed its SES status.  
It has promoted SES status with selected transport operators.



### b. SES helps with other compliance aspects in supply chain

For parts of the supply chain subsequent to processing at the port, China is developing random inspection and requiring market certification, such as information on the product and how it was produced (mainly in a biosecurity, food security context).

SES accreditation fulfils compliance for other accreditation:

- the GFSI maintains a scheme to benchmark food safety standards for manufacturers as well as farm assurance standards
- the GFSI is interested in ensuring security across all the supply chain
- the firm demonstrated to GFSI that its SES compliance already delivered part of the compliance sought by the GFSI.



### c. Firm capability and upskilling

Doing the “why” – the firm had to look from a procedural point of view to address the purpose of the SES compliance protocols.

Recently the firm has been looking at 3 transport firms and is concerned with such actions as revising the supply chain by:

- restricting IT access in certain cases
- keeping the loading area under scrutiny.

## Firm 9

**Firm type:** Wine producer



### a. Customs compliance

Freight forwarders are agents for the firm in interacting with NZCS.

However, the freight forwarders appreciate that the firm gets better preference from its SES status.

Customs inspections (resulting in time delay) are rare – on the odd occasion 2 containers have been X-rayed.

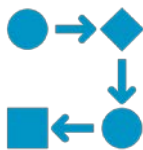


### b. Border clearance

MPI compliance is more time consuming than Customs compliance.

Some non-MRA countries (such as in the EU, Malaysia and Taiwan), require VI 1 import documents for product safety.

This usually presents no clearance issues.



### c. Supply chain

Affixing the container seal number is the key Customs compliance step.

This is usually done by the bottling plant on a different site.

There is usually no time delay involved.

On a very odd occasion a wrong seal may be put on a container.





Firm 9



**d. Benefits to firm if it had AEO status as an importer**

Barrels are imported – there would be a benefit to the firm if barrels could be cleared more quickly from compliance processes of all agencies.  
Wine is imported – this has a 5-day clearance time involving many agencies.  
Potentially if the firm had AEO status for customs clearance, one benefit the NZ government could confer on the firm is prioritisation in clearance by other agencies.  
There is likely no extra cost to the firm or to NZCS from granting AEO status for importers that are already SES firms. This is because these firms already meet the compliance standards required for AEO accreditation.



**e. Benefits to firm of retailers' and warehouse's trust**

SES has real benefits because these organisations know they are getting merchandise that have been secure in the supply chain.



**f. Unforeseen circumstances example**

Oakland port went on strike and there was a large amount of wine that was delayed.  
It was a slow process to resume transport.  
Don't know if resumption was assisted by SES status.



**g. SES as an insurance asset**

SES status is not directly marketed.  
It is however an asset that ranks the firm with other global firms who have AEO status.  
The firm has the view that SES status insures against several potential hold ups that are likely in large markets such as in the US.

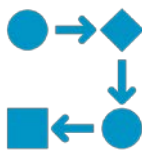


**h. Time and resources spent to achieve SES status**

The firm has the view that the assurance of smooth trade that SES accreditation provides, far outweighs the cost of time and resources spent.

Firm 10

Firm type: Metal products manufacturer



**a. Supply chain**

By road from production site to port (cost very comparable to rail).  
All direct supply to customers, not warehouses, in NZ and Australian centres.  
July 2019 – new management structure – focus on strategy.





**b. SES processes**

All done by freight forwarder – booking and organizing.  
 Production site is SES compliant – container seals are attached on site.  
 SES processes on site are audited and freight forwarder is audited.  
 Audits provide a good check for the firm’s own standards for personnel and activity on the site.



**c. Impact of SES**

No knowledge of impact of not having SES arrangements, since all trade is with Australia.



**d. Firm capabilities**

Firm had to upskill personnel for certain processes.  
 Changes were made to the site and buildings to achieve the required surveillance and security requirements.



**e. Potential benefits of SES**

Expected to be useful to support any future entry into the US market. Would be more focused on strategy.



**f. Time delay**

One day time delay does not materially affect business.  
 One-week time delay would affect business.



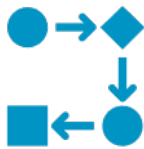
**g. AEO status for importers**

In the apple season, apple imports get priority for MPI clearance.  
 This means delays for imports of scrap metal, also subject to fumigation.  
 If AEO status for importers was granted, one potential valuable benefit that agencies could provide to AEO accredited importers would be prioritisation for MPI clearance. This would amount to a time saving of many days and be valuable to the firm.  
 If the import supply chain was made secure, with AEO status. Possibly this might be sufficient for MPI to allow fumigation at a port, before being put on board.  
 This would also amount to a time saving - and could apply to produce such as apples as well as scrap metal and other goods.  
 Firm is able to provide an estimate of the value of this time saving for its import processes.



## Firm 11

**Firm type:** Fruit producer



### a. Supply chain

All cargo is sea freight.

All cargo is exported via CentrePort, Wellington.

The distribution channels are completely integrated from growing, packing and marketing.

All cargo is carried to port on trucks.

From the foreign port the cargo is trucked to a distribution centre and then sent directly to retailers.



### b. SES compliance

Starts at the packhouses.

The whole area meets SES security criteria.

The locational requirement for SES standards can be extra work for exports of other grower's goods, since the container seals cannot be attached at distant sites. The SES container seal is particularly robust as it has a bolt and a wire.



### c. Time saving value of SES status

With SES status the time for customs compliance is about 36 hours.

Without SES status, this would increase to about 3 days, longer for India and 5 days for China.

The cost of 3 days' time delay is about \$500 per day, mostly due to electricity and monitoring required for a refrigerated container.

The value of a container of produce is between \$35K and \$80K.



### d. Marketing value of SES

SES status has value for marketing and Firm 11 advertises this as a signal of quality.

Potential customers are looking for:

- easy people to deal with
- food safety
- assurance of regulatory compliance.



### e. Accreditation value of SES

Certification provided by SES status is noted on the MPI declaration of conformity documentation. NZ is the only country that has this double certification. This facilitates the biosecurity testing at the port of entry.



### f. Firm capabilities

Induction provided to staff includes training about SES protocols and about site security.





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**g. Wider benefits of SES**

Customers, such as foreign supermarkets know the “insurance” value provided by SES status.



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**h. Support by NZCS to small SES firms**

NZCS is generally supportive for helping firms achieve and maintain SES status  
Any further support might become excessively bureaucratic and slow production



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**i. Imports in production**

The firm imported netting and imports packaging.  
AEO accreditation as an importer would speed up production.  
AEO importer accreditation would speed up supply of time sensitive packaging (such as “hailstone heroes” plastic bags for packing hail damaged produce) which are required immediately.  
An AEO accredited import scheme would provide good brand value to New Zealand.  
This represents a clear economic value to firms.

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## Appendix B Interview questions

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This Appendix presents the interview questions for the face-to-face firm interviews at firms' offices. They were questions for guidance and not all questions were asked. Some questions were relevant for some firms and not others. We interviewed three freight forwarder/logistic firms, seven SES exporter firms and one non-SES exporter.

Prior agreement for interviews was sought through NZCS. Interviews took place in December 2019 and January 2020.

In all cases the interview notes were sent to the interviewees following the interview and firms were invited to provide feedback on them. This was incorporated into the final summary highlights presented in Appendix A.

### 1 Introduction statement

New Zealand Customs Service (NZCS) commissioned NZIER, a leading New Zealand-based economic consultancy, to estimate the benefits of trusted trader status for members of the Secure Export Scheme (SES) who achieve reduction in customs compliance time, through mutual recognition arrangements (MRAs), that New Zealand has with other countries.

Dr Julian Williams, Principal Economist is leading a project team to deliver this to NZCS. The team provided a prior study to NZCS in March 2019. This measured benefits in terms of the value to exporters of a reduction in customs compliance time, using a well-established methodology. It also used data measured in global studies. The team now seeks to:

- use current and real New Zealand data to make the results more representative of New Zealand
- develop some case studies of exporting practices and experiences in global supply chains to identify specific barriers into overseas markets and/or benefits from MRAs.

All information you provide will be confidential and anonymized, unless you expressly agree otherwise. Following the meeting Julian will send you an outline of the discussion for your review and comment. You can thereby see/edit the information to be used in the report to NZCS.

### 2 Background

#### a. Purpose

Part of time in transit for exports is spent on customs compliance. New Zealand has 8 bilateral MRA arrangements for recognition of respective customs authorisations. These arrangements provide trade facilitation that lowers customs compliance costs for authorized firms. In New Zealand these firms are members of the Secure Export Scheme (SES). As a logistics operator you have valuable knowledge and experience in the value to SES of such trade facilitation and the opportunity it provides for non-SES firms.

The eight economies are: Australia, Canada, China, Japan, Korea, United States, Hong Kong, and Singapore.

We are interested in understanding the approximate cost saving for the main merchandise exports from **reduced customs compliance time as a percentage of export value**. That is, because your exports can reach market without this delay, what extra value does this



provide to exporters, such as from being fast to market and possibly increasing shipments each year?

We are interested in the “big picture” configuration of supply chains for the main merchandise exports, so we can understand the places **where savings of time delays can occur** due to reduced customs compliance.

We are also interested in:

- insights you may have about the value to exporting firms from **reducing customs compliance times for key imports they use**
- your views on the value to you of **intangible benefits** from SES status, potentially such as the signal of quality and trust that SES status can provide in global supply chains
- your views on the extension of trusted trader status to **importers** as well as SES exporters.

#### **b. Big picture estimates and not precise detail**

The kind of detail we need is “**big picture**” **not precise**. We’d like to apply your big picture estimates in an economic model of many industry sectors. I can discuss by telephone with you prior to the meeting. Our discussion and any data or information you provide to us is strictly confidential and will be stored in a secure restricted access file. We propose to use your information jointly with that from other representative firms in other industry sectors.

To ensure you are happy with how we present our findings, we will provide you a draft report of our findings for your review prior to finalizing for NZCS. Our findings will be anonymous and reported in confidence to NZCS. NZCS may subsequently decide to share our overall anonymous results with you and other firms.

### **3 Questions for Guidance**

#### **A. Onshore processing to FOB status**

1. What are the main merchandise groups that you freight in export to MRA partners
2. What proportion of this is exported by:
  - a. Sea
  - b. Air.
3. What are the main NZ port/airport facilities for these exports
4. What are the main distribution centres for these ports/airports
5. What are the main processing sites prior to distribution for these exports
6. What are the main modes of transport for these exports from processing site to ports/airports
7. What are the main stages of onshore supply to FOB status of these exports
8. Please draw/provide a diagram of stages (at our 1:1 meeting)
9. What stages of supply involve customs compliance for these exports
10. What time duration is associated customs compliance at these stages
11. For exporters that are not SES accredited, what is the extra time incurred for the main merchandise groups for customs compliance
12. What is the approximate value to exporters, for the different merchandise groups from saving this extra time as a percentage of total production value
13. At what stages of the supply chain would this extra time occur for exports by:
  - a. Sea



b. Air.

**B. Imports used in production**

14. In your experience what are main important imports used in New Zealand production, including plant and machinery and raw materials
15. If the time of transit for these imports is reduced by 1 day, what is the approximate value to importers (such as from reduced production time) as a percentage of total production value.

**C. Offshore delivery from CIF status**

16. What are your main destinations for exports to MRA partners
17. What are the main distribution centres for these MRA ports/airports
18. What are the main supply centres for your products
19. What are the main modes of transport from ports/airports to supply centres
20. Please draw/provide a diagram of stages (at our 1:1 meeting)
21. What stages of supply involve customs compliance for trade by:
  - a. Sea
  - b. Air.
22. Approximately, what time duration is associated at each stage for customs compliance.
23. For MRA related trade what is the approximate time saving at each stage from reduced customs compliance due to your SES status by:
  - a. Sea
  - b. Air.

**D. Overall**

24. What are the time savings for different merchandise groups from SES status for trade with MRA partners by:
  - a. Sea
  - b. Air.
25. What is the approximate value of this time saving as a percentage of export value of different merchandise groups by:
  - a. Sea
  - b. Air.

**E. Intangible benefits**

26. What are the main intangible benefits (such as a signal of quality in global supply chains) you see from SES status.

**F. Extension of trusted trader status to imports**

27. What are your views on extending trusted trader status to New Zealand importers. What value could this add to your business.

**Next steps**

Please reply and let me know a convenient time for a meeting and whether you would like to meet in person, by Skype or by telephone.

