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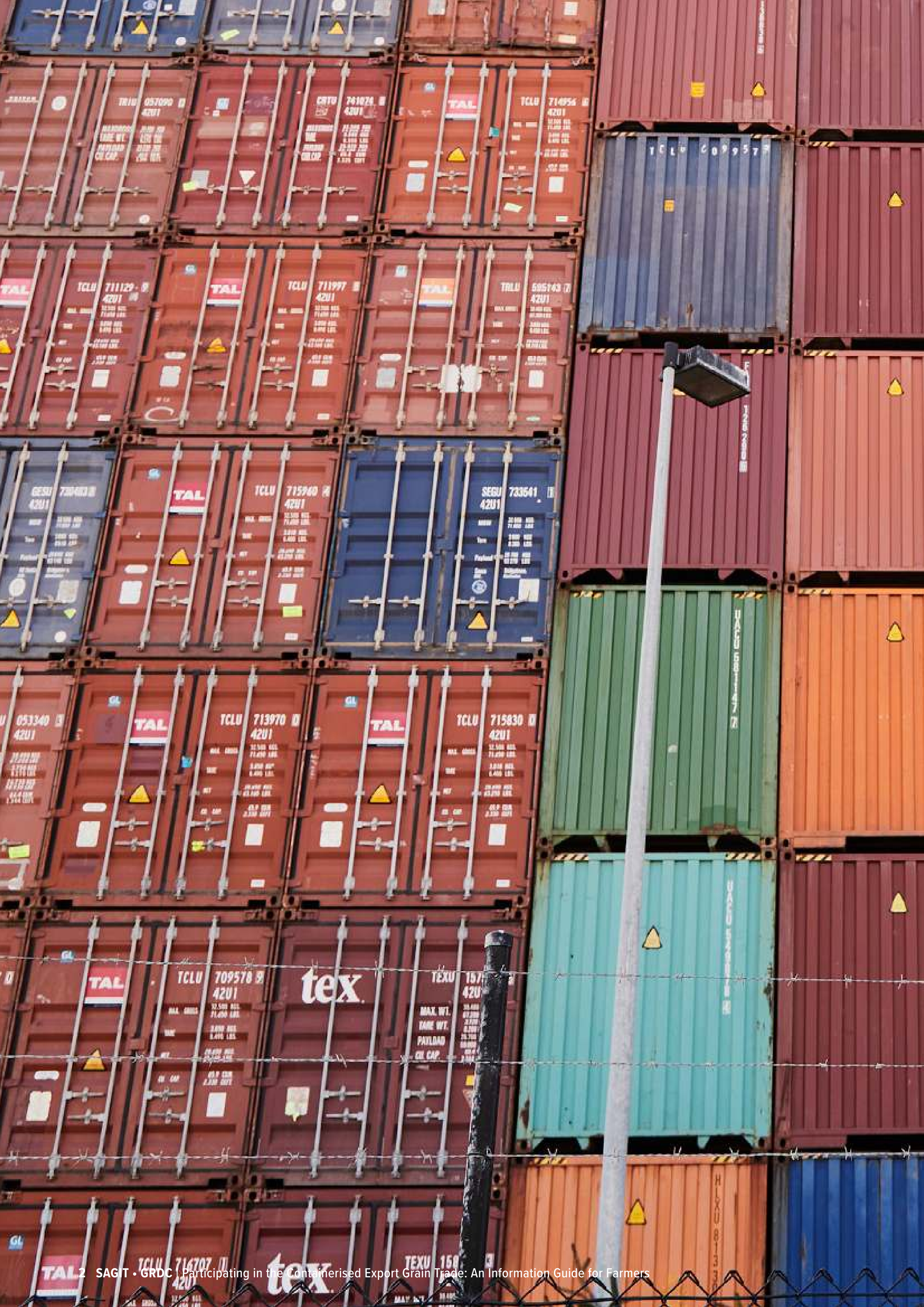
Participating in the Containerised Export Grain Trade:

AN INFORMATION GUIDE FOR FARMERS

SCOTT MCKAY | LOGISTICS EXPERT



Preface

This information guide outlines the suite of issues and tasks likely to face a farmer considering involvement in the containerised trade of grain, fodder or seed. The practice of placing these farm products into containers sounds practically simple. However, as described in the following pages, several issues must be addressed, and a range of risks and technically important requirements must be met in order to lessen the likelihood of commercial losses.

The breadth of issues described in this guide, the myriad of tasks and the many entities, special terms and acronyms encountered when engaging in the export of containerised grain, fodder or seeds reveal that the venture is complicated. To be successful and avoid the many potential pitfalls associated with containerised exports requires due diligence, competence, adherence to the detail of processes and for newcomers, reliance on advice and skills of those already engaged in and proficient in the export of containerised grain.

Nonetheless, being positive, containerisation is one way of connecting farmers and their produce to a wider array of potential new buyers and markets, and thereby potentially enriching and diversifying farm businesses.

Contents

Main Issues and Key Steps in Exporting Containerised Grain

In some grain-growing regions of Australia, supply chains are increasingly fragmented, changing the nature of price competition and making the choice of where to store grain and where and when to sell grain more important decisions for farm businesses.

1. Selling principles for containerised grain

- For growers considering selling grain in containers, the selling process starts before planting the crop by researching potential buyers and developing relationships. There is a wide range of potential buyers including traders, container packers, local stock feeders and local and overseas customers. Hence, a key first step is to identify who your customer is.
- To command more money from the grain they produce a farmer must provide more value; so it is important to identify what is the source of the additional value that containerisation will deliver. Is it desired small parcels, price certainty, segregation with traceability and provenance, consumer demand for sustainability or sustainable grown grains, consistent quality, or flexible supply?
- Observe the market conditions for bulk and containerised grain. The market dictates what is most desired and what should be stored on farm or sold off at any point in time.
- Supply chains include “farm to end user” (direct or via storage) and “farm to packer” (direct or via storage) and from the “packer to port” (via road or rail transport). Know the nature and cost of these supply chains to the extent that those costs are transparent.
- Having the right grain in the right place usually requires access to stored grain. Hence, storage choices and investments by growers need to maintain as much flexibility as possible and growers should aim to lessen their supply chain costs. Once grain has started to move down a certain stream of the supply chain it is costly to change its path[1].
- Consider the impact of liquidity risk. This is the risk that buyers will reach their accumulation requirements and then step out of the market. Subsequently, the price may fall sharply or buyer appetite to acquire grain may dry up completely.
- Growers seeking to market grain in containers should consider their access to grain packing facilities as part of their overall marketing plan.
- On-farm segregation and storage of grain can support supply capability, ensure grain quality, ensure timeliness of delivery and accuracy of information supplied as part of the transaction process.
- All costs, risks and rewards should be considered when comparing containerisation and on farm storage with alternative storage and marketing options.

2. Where are the markets for my product and who is my buyer?

- Find buyers through government trade offices, food and grain associations, grain marketing advisers, and own networks and personal research.
- Carefully assess the credentials of the buyer(s)
  - Is the buyer an agent/distributor/importer/retailer?
  - How long have they been in business? i.e. what is the evidence of their existence and trading history?
  - Have they worked with Australian exporters previously?
  - Is the buyer approved to import the product you are exporting?
  - Is the buyer licenced to import your product?
  - Who will be using the product and how?
  - How will they value the traceability and provenance of containers?
  - Has the buyer determined the import duties and requirements?
  - Does the buyer require the product's Harmonized Systems (HS) code[2]
  - How will the buyer declare the import and where?
  - What documents does the buyer require the exporter to provide?
  - How and when is the buyer looking to pay for the product? Is this a trustworthy form of payment?
  - When is the product required to be received?
  - What import port works best for the buyer?
  - Has the buyer a freight forwarder (and who) to manage the import? You can engage your freight forwarder (Figure 1) to investigate the import trade agent network and determine the export processes that are applicable.
  - Has the buyer considered marine insurance for the cargo?
  - Does the buyer have preferred INCO terms[3] for the sale and purchase?
    - These are not legally binding but should be considered in drafting the sale and purchase agreement.

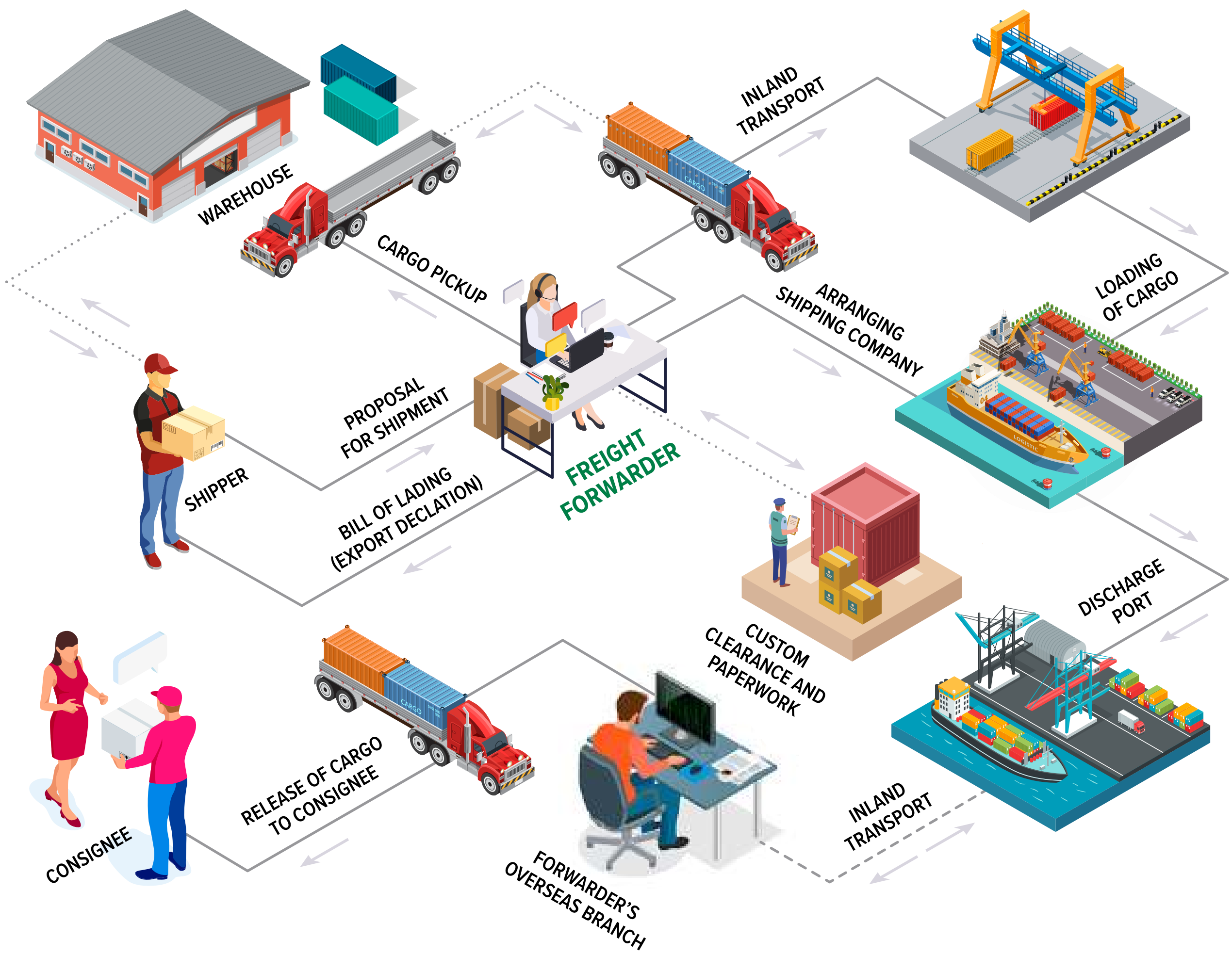


Figure 1: The role of a Freight Forwarder

3. Grain selling principles

The key selling principles and decision drivers are summarised in Table 1.

- Who to sell to?
  - Grower sells to buyer (end consumer or trader) and grower (i.e. farmer) packs.
  - Grower sells to buyer (end consumer or trader) and a third party (e.g. contract packer) packs.
  - Grower sells to a trader who packs.
- When to sell?
  - The objective of a grain selling program is to achieve a profitable average price (the target price) across the entire business[4]
  - requires managing or accepting unknowns. Some events that affect grain prices are beyond the grower's control or knowledge, yet they will affect achievement of the target price.

4. How to sell?

The main options are fixed, floor or floating price strategies:

- Fixed price strategies
  - Fixed price strategies provide the most price certainty (e.g. cash, futures and bank swaps).
- Floor price strategies
  - Floor price products limit price downside but provide exposure to future price upside (e.g. options on futures and floor price pool products).
- Floating price strategies
  - Floating price strategies are subject to both price upside and downside (e.g. some pool products and doing nothing).

TABLE 1: KEY SELLING DECISIONS

Decisions[5]	Decision Drivers	Guiding Principles
When to sell *(often internal farm factors)*	Production risk – estimate tonnages Target price – know your cost of production Know your cash flow requirements Know local and international price trends and forecasts	Don't sell what you don't have Don't lock in a loss Don't be a forced seller
How to sell *(often external market factors)*	Fixed price – maximises certainty Floor price – protects against downside Floating price – minimal certainty	If increasing production risk, take price risk off the table Separate the pricing decision from the delivery decision
Which markets to access	Storage and logistics – on farm, packers Costs of storage/carry costs Freight[6] – farm to packer/which port/shipping line	Harvest is the first priority Storage is all about access to markets Pack on farm or use a 3rd party Road and or rail, decide which port and shipping line is best Carrying grain has risks
Executing the sales	Contract negotiations and terms Counterparty risks Relative commodity values Contract (load) allocations Read market signals (liquidity)	Seller beware Sell valuated commodities Sell when there is a buyer appetite Don't leave money on the table

5. How does the buyer want to buy?

- Price, quality, specification, and quantity
- Schedule and destination
- Contract
  - What exactly is required by the parties?
  - What are the terms of sale (INCO terms) e.g. typically delivered container terminal (DCT) or cost, insurance and freight (CIF) or cost and freight (CFR)[7]?
  - What is the required documentation, traceability and provenance?
  - What is the best contract type i.e. Grain Trade Australia (GTA), forwarder-prepared contracts?
  - What are terms and conditions including default and dispute resolutions
  - What are the clearance charges, duties, and other fees?

6. How do I know if I'll make money?

- What margin (revenue less costs) do I need to sell my product to the buyer?
  - How do I contract the best price?
  - How can I provide and recover traceability provenance benefits received by the buyer?
- Know your contract
  - Buyer, specification, price and delivery.
  - Contract form, its terms and conditions.
  - INCO terms and insurance.
  - Export payment methods and documents required.
- Storage and grain preparation
  - Storage options
    - Store on farm.
    - Deliver to packer/processor.
  - Grain preparation
    - Screening and grading.
    - Determine grain quality to meet contract specifications.
    - Know grain yield and full costs of production.
    - Fumigation in storage – adhere to phytosanitary requirements (biosecurity obligations).
- Calculate the costs, risks and returns[8]. Refer to Figure A1 - Packing and Logistics Cost sheet in the Appendix.

7. Export preparation:

- The Export Control Act is administered by the Department of Agriculture, Water and Environment (DAWE) and imposes various obligations on parties involved in the export of grain, fodder and sed from Australia.
  - Prescribed goods include grains and pulses that are regulated under Australian plant export law.
  - Prescribed goods are controlled by DAWE and may require an export permit, inspection for compliance and certification by an accredited Plant Export Authorised Officer (AO), before they can be exported.

- Gain export registration
  - Register with DAWE if you are exporting grains, fodder or seeds that are prescribed goods.
  - When you register, your details are added to DAWE's electronic export documentation system (EXDOC) which is now called the Enhanced Certification Modernisation Program (ECMOD).
    - This enables electronic documentation (such as export permits and phytosanitary certificates and documents requested by importing countries) to be generated with your exporter details.
    - Exporters register for Customs or the Department of Immigration and Boarder Protection (DIBP) on the Integrated Customs System (ICS) to assist exporters in obtaining an Export Declaration Number (EDN) for their intended export.
    - The NEXDOC and ICS are integrated through a Single Electronic Window (DEW).
  - As an exporter, there are steps in the process that you can choose to either do yourself or use government department or industry services to undertake, including:
    - submit documentation yourself or use an agent.
    - become a registered establishment to pack and prepare your own products or use a thirdparty industry registered establishment[9]. Biosecurity Australia fees apply to the initial application and then registration of currently $3000 (non-bulk grains and seeds category) per financial year and then a per tonne charge of currently $0.11 per tonne for an export permit charge annual and $50 per phytosanitary certificate required for each export where that is required by the importing country.
    - become (or request an employee to become) an Authorised Officer (AO) to inspect your products, or use a departmental/self-employed industry AO. Note: to become an AO involves an application fee of $250[10], undertaking self-paced learning and being assessed by a DAWE supervisor of $1750. Allow at least a 3 month gap between making the AO application and then qualifying to be an AO. An annual AO fee of $750 and each AO is subject to regular audit by DAWE supervisory staff at $36/hr is circa $700. The level of involvement you choose to have in the process will depend on the scale and nature of your business.

- Pack and inspect grain, fodder or seed intended for export.
  - The products must be packed, treated (if required) and inspected at a registered establishment, known as an ER (i.e. export registered establishment) or RE (registered establishment).
  - Instructions for the export process, such as the transport, inspection, treatment, storage and documentation are set out in the Plant Export Management System (PEMS) that is an IT system used by DAWE to capture and store information relating to the export of grain.
  - PEMS allows:
    - AO's to enter and submit inspection results and any supporting documentation to DAWE.
    - exporters and EDI users to view their Request For Permits (RFPs) in PEMS and upload documents into the system.
    - export ER's to view and download inspection records from all inspections conducted at their establishment.
  - Before you export, obtain information on the importing country's requirements, by accessing the Manual of Importing Country Requirements (MICOR) system[11].
  - Obtain official notification in writing from the importing country's National Plant Protection Organisation (NPPO) regarding their import permit or instrument.

- Request approval to export.
  - An Export Clearance Declaration is issued for prescribed goods being exported from Australia, where an approved inspector has conducted an inspection in an establishment with Approved Arrangements (see Figure A4 in the Appendix).
  - The export permit is valid for 28 days from the date the goods pass the AO's inspection[12] (export validity period).
  - For an export permit to be issued, the following requirements must be met:
    - the Notice of Intent (NOI) must be valid.
    - the consignment/vessel/container must:
      - have passed a phytosanitary inspection.
      - be within the export compliance period.
      - comply with the importing country requirements and with the Export Control Act 2020, and subordinate legislation.
    - supporting documents must be valid.
  - Export permits must be issued
    - prior to the export of the consignment.
    - electronically through the department's EXDOC system.

- Obtain a phytosanitary certificate[13] which:
  - indicates that your products were inspected or assessed and are free from pests and signs of disease. They will only be issued if requested by the importing country.
  - is issued when the products pass inspection and all supporting documentation has been validated.
  - provides evidence that plants and plant products for export:
    - have passed a phytosanitary inspection
    - comply with importing country requirements and with the Export Control Act 2020, and subordinate legislation.
    - must always be requested by the exporter (or their agent) in the electronic documentation system (EXDOC) that is now called the Enhanced Certification Modernisation Program (ECMOD).
- Obtain any other necessary certificates issued through EXDOC. These certificates include:
  - Sack Inspection Certificate (GL1) requirement
    - for grain and plant products packaged in sacks
    - if the sacks have passed the inspection as being clean and new.
  - Empty Container Inspection Certificate (GL2) requirements
    - for grain and plant product consignments loaded into empty containers[14]
    - if the empty container/s have passed inspection[15]
    - if it is an importing country requirement or requested by the client.
  - Sack and container Inspection Certificate (GL3) requirements
    - for grain and plant product packaged in sacks and loaded into empty containers
    - if the empty containers have passed inspection and the sacks have passed inspection as being clean and new.
- The Grain and Plant Product Inspection Record details the information required to satisfy an export. An example of this record is given in Figure A3 in the Appendix.

8. Commercials – payment and transactions

- Export Payment methods:
  - should align the risks between buyer and seller
  - normally are Letters of Credit (LC's) or Cash against Documents (CAD).
    The fees for a letter of credit are normally circa 1% of the value of the trade[16].

TABLE 2: PAYMENT METHODS AND RISKS TO SELLERS AND BUYERS

Payment Methods[17]	Risk to the Seller	Risk to the Buyer
Documentary Letter of Credit A guarantee from your buyer's bank stating the buyer will pay you according to the terms in the letter. If they are unable to pay, their bank must cover the full or any remaining amounts payable	**Low/Medium** You have a guarantee of payment and protection against buyer insolvency. Your buyer cannot hold funds or refuse payment based on objections to the quality of your goods. Check that all paperwork is correct and matching. Spelling mistakes or other small errors can invalidate the letter of credit.	**Medium** If you do not meet the terms and conditions of the letter, the bank holds on to the buyer's funds until the date agreed on in the letter. This affects their cash flow and delivery times.
Documentary Collection Documentary collections are the middle ground between Letters of Credit and Open Accounts. The banks hold the shipping documents until the buyer pays or agrees to pay at a future date. Buyers do not need to make advance payments before the goods are shipped.	**Medium** The buyer does not receive the goods until they have paid you. Receipt of payment is quicker, and you hold the title of goods until you receive payment. The bank does not guarantee payment. If the buyer cannot or does not pay, you may need to cover the cost of return of your goods	**Medium** The buyer has some confirmation that you have shipped their goods before they have to pay for them.

- Set a realistic delivery date and confirm all LC details.
- Only pack when the LC is opened by the buyer's bank.
- Obtain insurance.
  - Undertake credit checks through reputable international credit risk agencies and get credit insurance. This will give you the confidence to progress negotiations and make sure you are paid.
- Obtain currency cover with your bank.
  - Payment risks include late or non-payment from the buyer and changes in currency value through exchange rates. These risks affect cash flow and profitability.
  - Foreign exchange hedge. A foreign exchange hedge is organised by your bank. You agree to a fixed exchange rate which helps you avoid fluctuations in the market. The amount you invoice for is the amount you receive.[18]
- A trade or trade finance loan is a short-term working capital loan to help finance your trade commitments. You can apply for a trade loan at any stage of the export or trade transaction depending on your needs at the time.
  - This includes:
    - when you are awaiting payment from a buyer.
    - if a buyer defaults or becomes insolvent.
    - to finance shipment under documentary collections, payment post-shipment, or open account terms.
    - to support an increase in production volumes of your product.

    It is generally provided as an advance of funds in either the domestic or foreign currency. Export Finance Australia[19] may help where your bank cannot.

9. Logistics

- Arrange shipping.
  - Access shipping services with the required schedules and routes to desired export ports.
  - Book slots with appropriate sailing windows.
    - create a new vessel and new vessel voyage for customer orders in the booking system.
    - All vessels have an individual Lloyd number applied to a vessel as required for the PRA's. The Lloyd's number is obtained from the Stevedore Master Schedule.
    - Vessel cut off dates and times vary between shipping lines and are updated on a daily basis from the link here?
  - Shipment options may include:
    - Deliver (i.e. Delivered Container Terminal (DCT)). This requires organisation with a packing plant/company to get a rate to pack, stock and deliver the containers to the container yard.
    - Alternatively, the container could be freighted at the seller's cost to the final port.

- Gain access to appropriate containers.
  - Export containers must be food quality/grade.
  - The empty container must be assessed as food quality for each export event.
  - A 20ft container provides the best freight cost to density for grain and is easier to pack and is more readily accepted by importers versus 40ft containers.
  - Use empty container parks and approved premises
    - Obtain bookings and shipping line releases
    - Know the days and hours of access to these facilities
    - Ensure inspection, cleaning and repairs to empty containers, where necessary.
    - Use liners and bulkheads when a container is less than food quality grade.
  - Transfer the empty containers to the exporter
  - Pack, fumigate and seal the container
  - A packed container must be Gross Mass weight verified (SOLAS[20])

- When packing the decision is:
  - Either ensure others do the packing, or pack yourself. However, both options require:
    - Site requirements – Use of a Registered Establishment (RE), storage, handling, grading, packing equipment, testing, AO staff and other biosecurity systems (Plant Export Operations Manual); and
    - Ability to fit liners to containers to achieve food quality

- Freight of packed grain, fodder or seed to port (road and/or rail)
  - Obtain freight bookings.
    - If using road transport, the packing site must comply with the Road Transport Chain of Responsibility[21] to manage risks such as driver log book hours and over weight loads.
    - If using rail, the rail operator and terminal must comply with regulations administered by the Office of the National Rail Safety Regulator[22].

More Detail

An illustration of the typical flow chart of processes that underpin the export of containerised grain is shown in Figure 2.

GRAIN LOGISTICS

RECEIVE ORDER

- Import / Enter Order(s) into Container Terminal System (CTS)
- Ensure orders are market against valid vessels and have clear cut-offs

RECEIVE PACKING SCHEDULE

- Update Next Action Date in CTS
- Plan empty containers from Stevedore
- Advise Stevedore of Loading Plan

RECEIVE CONTAINERS (EX STEVEDORE)

- Import / Verify Consist
- Confirm / Update Transfer Containers
- Gate Containers In
- Plan yard Blocks / Positions

PREPARE FOR PACKING

- Perform DPI Inspection / Record DPI Seal
- Generate DPI List
- Create Daily Packing Schedule for Indvidual Customers

PACK CONTAINERS

- On Site Customers – Place Containers to Customer Blocks via Tablet
- Off Site Customers – Send Containers out via Road Transport / Office

RECEIVE PACKED CONTAINERS

- On Site Customers – Place Containers back to yard via Tablets
- Off Site Customers – Receive Containers via Road Transport / Office
- Update Container Weights in CTS

PREPARE FOR FUMIGATION

- Allocate Seal Number for Individual Orders in CTS
- Hand Out Seal Numbers to Staff with List of Seals and Containers to Match

COMPLETE FUMIGATION

- Perform Physical Fumigation
- Seal Container with allocated Seal
- Place container into yard stack, record stack position
- Record Details on Inspection Sheet and email to Paul for PRAs

PREPARE TRAIN LOADING

- Ensure all PRAs have been accepted by Stevedore, mark off in CTS
- Pre-Plan containers onto Train depending on their position in yard

LOAD CONTAINERS ON TRAIN

- Load all containers onto train using Tablet / Queues
- Generate Rail Consist
- Generate Stevedore Rail Consist
- Gate Out All Containers

BILLING / INVOICING

- Check all Charges on Container invoicing Summary
- Run / Generate Invoices via Invoicing Template
- Email invoices to Customers
- Upload Invoices to Financial System

Figure 2: A flow chart of actions in exporting containerised grain

More detail and explanation of particular terms or facets of the export of containerised grain, fodder or seeds include the following:

Pre Receival Advice (PRA)
– see Figure A6 in the Appendix.

- The packer or exporter:
  - must manage the empty and full export container movements receive the empty containers on site in accordance with their packing schedule.
  - must monitor the packing schedule of our customers to ensure all export orders are completed in time to make vessel cut off and export compliance when applicable.
  - must manage the Pre Receival Advice (PRA) for the export container prior to the container travelling by road or rail to the port so that the container can be received at the port and allocated to the container staging area and be received for shipment.

Shipper's Letter of Instruction (SLI)

- The SLI is a document that the export shipper completes using a template provided by the freight forwarder.
- The shipper must communicate the details and a copy of the Letter of Credit (LC) to the freight forwarder, for documentation purposes
- The commercial terms agreed between the buyer and seller must form part of the discussion with the freight forwarder to:
  - Clearly defining who will be responsible for providing insurance.
  - Not rely on the ambiguities of INCO terms that are not legal.

Letter of Credit (LC)

- A LC is issued by a bank as a guarantee of payment to the seller from the buyer.
- Any default from the buyer's side is met by the bank.
- The shipper must communicate the details of the LC to the freight forwarder and provide a copy for documentation purposes.

Insurance Certificates

- An insurance certificate is essential for exports to protect the goods against natural calamities and accidents.
- The buyer may agree to insure the goods in the case of CFR terms (cost and freight) or the insurance cost may be borne by the seller as in the case of CIF terms (cost, insurance, and freight).
- The commercial terms agreed between the buyer and seller must form part of these discussions with the freight forwarder.
  - It is important to define who will be responsible for providing insurance. Do not just rely on the ambiguities of INCO terms[23] that are not legal.

Commercial Invoice

- This invoice is issued by the seller showing the details of goods to be shipped.
- It shows the individual quantities and costs and the total amount that is charged to the customer by the seller.
- It is a binding customs document that mainly contains information about the contents of the package and the agreements made (i.e. INCO terms), such as who pays the customs costs.
- Based on the commercial invoice, the customs authorities determine whether import duties have to be paid on the goods.
- It is imperative that the shipper receives clear instructions from the buyer on how this must be executed.
- It is important that draft exchanges occur between the buyer and seller to ensure the final commercial invoice is consistent with the terms of the LC.

A packing list

- This list shows the complete physical details of the goods to be exported.
- It contains the serial numbers, dimensions of the cargo, weight, Harmonized Systems (HS) code, etc.
- It helps identifying the cargo and each package by all the parties receiving it – the carrier, the transporter, the consignee, etc.

Certificate of Origin

- It is the Chamber of Commerce of the exporting country that usually issues a Certificate of Origin.
- The exporter should be a member of such a relevant association to ensure provision of Certificates of Origin documents.
- For exporters to Arab countries, the Australian Arab Chamber of Commerce and Industry (AACCI) is authorised by the Australian Chamber of Commerce and Industry, under its authority from the provisions of a series of international conventions to issue documentary evidence to:
  - issue documentary evidence of origin for goods originated in and exported from Australia.
  - certifies the country of origin of the product that is exported.

Bill of Lading (See Figure A5 in the Appendix)

- A Bill of Lading (BL) is proof that the export cargo has been received onboard the ship and is the title to the goods being transported.
- A BL is issued by the shipping company and has details of the consignor, the consignee, the cargo, etc.
- The shipping company may also authorise a forwarder or an NVOCC (an organization that can issue a BL, if not a forwarder) to issue the BL.
- The BL is only available once the vessel has sailed, and you have contracted a freight forwarder regarding this vessel.
- The information used to fill out a BL comes from the Shipper's Letter of Instruction (SLI) document
- The SLI is a 'letter' from the exporter instructing the freight forwarder on how and where to handle the export shipment.
- The exporter grants permission for the forwarder to act as the authorised forwarding agent for export control and customs.
- The forwarder uses the information in the SLI, along with any nuances mentioned in the LC (if applicable) to add them to the BL for the shipper to check and approve.

Freight Forwarder

- Freight forwarders specialise in all components of international freight and logistics.
- They have experience and understanding of the complex transport and logistics arrangements involved to ensure goods are delivered to international customers.
- They need to validate many things when assessing the buyer during the sales investigation process and when establishing the sales contract *(even on a consulting basis if the sale does not proceed).*
- When goods leave the seller's warehouse, there are many processes to:
  - get goods cleared through the port,
  - comply with all regulations,
  - supply the correct documentation,
  - deliver goods to the correct container yard and then ensure goods are loaded onto the correct vessel.
- Freight forwarders specialise in integrated modes of transport, so can easily arrange the movement of freight between road, rail and sea.
- Freight forwarders have vast experience dealing with complex customs regulations, different port services, quarantine/inspection services, stevedores, and shipping lines.

In selecting a freight forwarder any prospective containerised grain exporter should:

- carefully conduct research and then deal with a forwarder who takes the time to come out and meet at your premises to clearly understand your business and reviewing the business case and being aware of all costs and time requirements.
- not just deal with a freight forwarder based on price as often it is worth paying for experience to overcome any obstacles and potential delays and provide a high level of service.
- work out exactly what services you need:
  - container pickup at your farm or packer,
  - delivery through the port and loading onto the vessel.
  - local representatives that also provide international shipping rates to get goods shipped to the destination country.
  - leverage from the large volumes of shipments through several different shipping lines handled by the forwarder that enables them to provide better shipping rates than if the farmer/exporter was trying to deal with shipping lines directly.
- Be able to provide all the correct shipment details and documents so the freight forwarder can organize the export process.

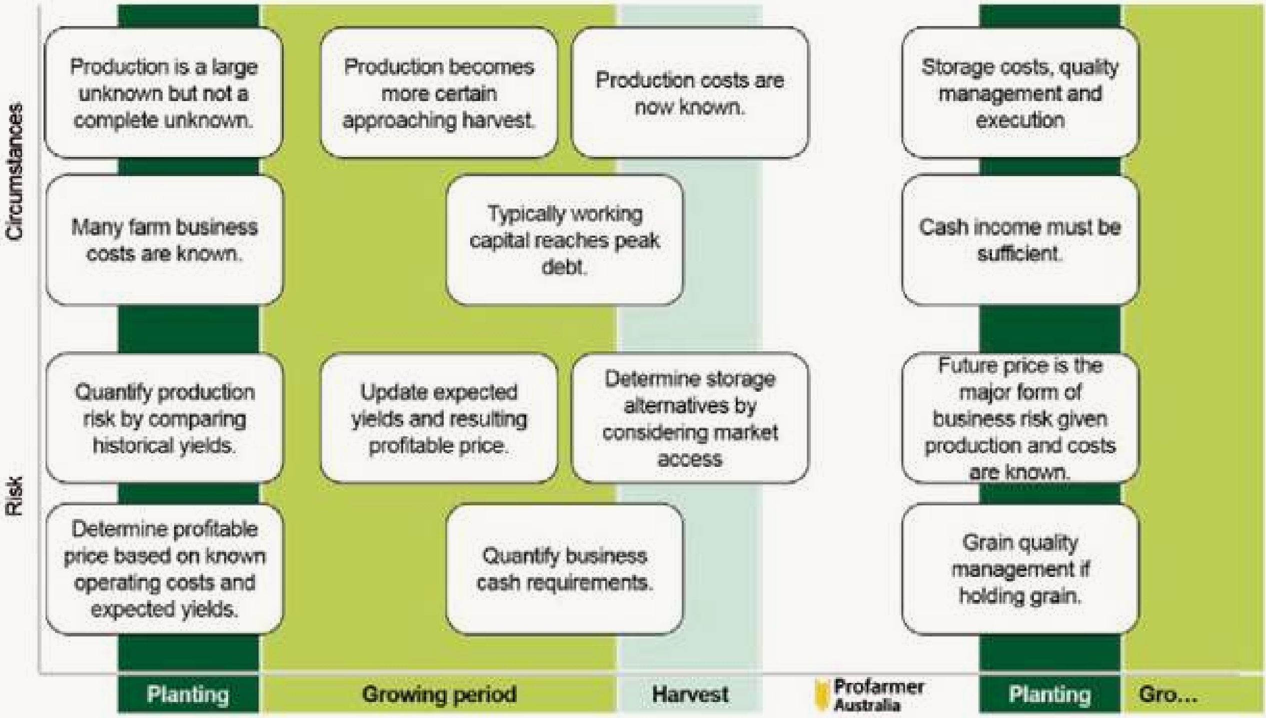
Appendices

Figure A1 – Packing and Logistics Cost Sheet

By costing the export supply chain and undertaking "what if's" the net price per tonne can be compared to other crop, buyer price, packing and freight options.

1. Assumptions	Category	Unit	Qty		Commentry
	Volume	Tonnes (pa)	6000		
	Tonnes	Per TEU	24		
	Grower Packing	Investment	$ 1,200,000		Area establishment, Silos, Cleaning, Tubulators, Container Straddle
		Term (Yrs)	10		
	Packing				
	DPI Fee				
	On Farm	Per Container	$ 30.00		Done by AO on Farm (materials only)
	At 3rd Party Packer	Per Container	$ 45.00		Done by AO in Intermodal (labour and materials)
	3rd Party Packing Grain				
	At 3rd Party Packer	Per Container	$ 720		Receive grain, inspect, grade, cleaning, fill container & documentation
	Liner bag & bulkheads				
	On Farm	Per Container	$ 140		Purchase, store and fit liner and bulkhead
	At 3rd Party Packer	Per Container	$ 200		Purchase, store and fit liner and bulkhead
	Fumigation				
	On Farm	Per Container	$ 180		3rd Party on site (as required)
	At 3rd Party Packer	Per Container	$ 135		3rd Party on site (permanent)
	Transport				
	Bulk - Tipper to Packer	cents/ tonne/km	$ 0.12		Triple(Bulk grain 62t Grs) - loaded direction
	Container to Port by Road	cents/ tonne/km	$ 0.15		Trailer or Sideloader (grs Containers 53 tonnes) - loaded direction
	Container to Port by Rail	cents/ tonne/km	$ 0.07		Multi user /product port rail shuttle - loaded direction
	Intermodal Charges				
	Lifts		$ 70.00		Rail only (All empty & full lifts and transfers)
	Weighing		$ 15.00		Rail only (Container weigh to certify SOLAS not exceeded)
			$ 85.00		
	Port Charges (Land side)				
	Vehicle Booking Charge (VBS)	Per Container	$ 23.00		Road only
	Container Weighing	Per Container	$ 15.00		Road only (Container weigh to certify SOLAS not exceeded)
	Lifts	Per Container	$ 92.00		Rail only
	Infrastructure Access	Per Container	$ 75.00		Road & Rail (Port infrastructure levy on exports and imports)
	Container Chain fee	Per Container	$ 40.00		Road & Rail (Online booking system to manage bookings of MT containers)
	Total Port Charges		$ 153.00		Road
	Total Port Charges		$ 207.00		Rail
	Documentation				
	PRA per container	Per Container	$ 4.00		Road & Rail
	Shipping Line Doc Fee	Per B/L	$ 60.00		Road & Rail
	EDN / Handling Fee	Per B/L	$ 75.00		Road & Rail
2. Options to Pack	Option				
	A	Grower Packs			
	B	Grower Sends to Packer			
			Distances (km)		
	A	Grower to Port	300		
	B	Grower to Packer	100		
	B	Packer to Port	200		
	Freight		Mode/Unit		
	A	Container to Port	Road (Double Skel Container)		
	B	Grower to Packer	Road/ Double Tipper		
	B	Packer to Port	Road		
	B	Packer to Port	Rail		
3. Calculations					
	Sales Volume	Containers pa	250		20 ft Food Grade Containers
			A. Pack on Farm Cost pa	B. Bulk to Packers Cost pa	
	Fixed Costs				
	Facility Costs	Facility Costs	$ 120,000		As above assumption
	Plant & Process	Site Compliance	$ 20,000		Pest Control, Biosecurity (AO, RE)
	People	Packing Costs	$ 100,000		
	Variable Costs	Packing Costs		$ 180,000	Receive grain, inspect, grade, cleaning, fill container & documentation
		DPI	$ 7,500	$ 11,250	Empty container inspection, cleaning and repair by AO
		Liners	$ 17,500	$ 25,000	Assume 50% require liners
		Fumigation	$ 45,000	$ 33,750	3rd Party Contractor
		Transport			
		Bulk - Tipper to Packer		$ 72,000.00	100 km
		Intermodal Charges		$ 21,250.00	Road Rail Terminal with Packer collocated
		Container to Port by Road	$ 278,906.25		300 km
		Container to Port by Rail		$ 84,158.42	200 km
		Port Charges	$ 38,250.00	$ 51,750.00	
	Total DCT Costs	per annum	$ 627,156	$ 479,158	
		Per Container	$ 2,508.63	$ 1,916.63	
		per tonne	$ 104.53	$ 79.86	
	Shipping Costs				Assumes CFR, Ho Chi Minh Vietnam, 17 day transit, weekly service
	Ocean Freight (US$)	4050	$ 1,446,428.57	$ 1,446,428.57	At A$1.00 to US70 cents
	Includes:				
	BAF & ISPS (US $)				
	Export THC per Container (AUD)				
	Port Fees (AUD)				
	Total Logitics Costs delivered to Vietnam		$ 2,073,584.82	$ 1,925,586.99	
		Per Container	$ 8,294.34	$ 7,702.35	
		per tonne	$ 345.60	$ 320.93	
	Sensitivities				
	On 150 Containers	per tonne	$ 372.26	$ 320.93	
	On 100 Containers	per tonne	$ 558.40	$ 320.93	

Figure A2 - Typical Farm business circumstances and risks



Source: Profarmer Australia

Figure A3 - Grain and Plant Product Inspection Record

Australian Government

Grain and Plant Product Inspection Record

Chapter 9 Part 2 of the *Export Control (Plants and Plant Products) Rules 2021*

Department of Agriculture, Water and the Environment

GPPIR – 10/20 (Version 1.0)

Prescribed Grain, Seeds, Nuts, Hay and Straw, Baled Cotton, Forest Products, and Growing media

RFP Number	AO Name	AO Number	Establishment Name	Establishment Number	Exporter Name

Original RFP No. (Reinspection only)	Total Quantity	Unit	Inspection Start Date and Time	Inspection End Date and Time	Destination Country

Import Permit No.	Flow Path Result (Pass/Fail/Pass after rectification) (include comments if necessary)	Flow path Date and Time	Outcome type	2.25 L / 33.33 T

RFP line No.	Container Number	Source	Commodity	Package				Sub-Totals		Sampled	Result (Pass/Fail)	Remarks
				Number	Type	Weight	Unit	Line Weight	Unit			

Additional Declaration	Comments	Total Passed	Unit
		Total Failed	Unit

Note for Exporters	Authorised Officer Signature and Date
Where an authorised officer records a consignment of plants or plant products as passed on this record, the plants or plant products are taken to have passed an assessment of goods under Chapter 9 Part 2 of the *Export Control (Plants and Plant Products) Rules 2021* (Plant Rules 2021). Under section 9-12 of the Plant Rules 2021, the validity period for passed plants or plant products is 28 days from the date of inspection or as otherwise approved by the Secretary. If an authorised officer records a consignment of plants or plant products as failed on this record, the client must advise an authorised officer if the goods are being resubmitted and must have complied with the additional requirements set out in section 9-11 of the Plant Rules 2021. This record is the approved record for an assessment of goods under section 9-14 of the Plant Rules 2021.	

Figure A4 - Export Clearance Declaration

Name and address of exporter

No.

Australian Government

Department of Agriculture, Water and the Environment

Plant Protection Organisation of the Australian Government

EXPORT CLEARANCE DECLARATION

Declared name and address of consignee

Quality assurance certificate number	Place of issue if additional certificate required
Local vessel or conveyance	Port of loading
Ship or aircraft	Date of departure
Port of discharge	Final destination

Country of final destination

Handling/processing establisment number	Packaging/processing date(s)

Marks, container and seal numbers	Number and kind of packages submitted	Description of goods	Net contents

Other relevant information or comments

I being an **authorised signatory** of registered establishment number declare that,

(a) the conditions or restrictions prescribed under the *Export Control Act* and applicable
to the goods have been complied with;
(b) the estblishment is approved to issue Export Clearance Declarations for the goods described; and
(b) the information supplied on this form is true and correct.

Signed (authorised signatory) Date

Figure 5 - Bill of Lading

Date **BILL OF LADING – SHORT FORM – NOT NEGOTIABLE** Page 1 of 1

SHIP FROM	**Bill of Lading Number:**
[**Name**] [**Street Address**] [**City, ST ZIP Code**] SID No.:	BAR CODE SPACE
SHIP TO	**Carrier Name:** Trailer number: Serial number(s):
[**Name**] [**Street Address**] [**City, ST ZIP Code**] CID No.:	
THIRD PARTY FREIGHT CHARGES BILL TO	**SCAC:** Pro Number: BAR CODE SPACE
[**Name**] [**Street Address**] [**City, ST ZIP Code**]	
Special Instructions:	**Freight Charge Terms** **(Freight charges are prepaid unless marked otherwise):** Prepaid ❑ Collect ❑ 3rd Party ❑ ❑ Master bill of lading with attached underlying bills of lading.

CUSTOMER ORDER INFORMATION

Customer Order No.	# of Packages	Weight	Pallet/Slip (circle one)		**Additional Shipper Information**
			Y	N	
			Y	N	
			Y	N	
			Y	N	
Grand Total					

CARRIER INFORMATION

Handling Unit		**Package**					**LTL Only**	
Qty	Type	Qty	Type	Weight	HM (X)	**Commodity Description** Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation with ordinary care. See Section 2(e) of NMFC item 360	NMFC No.	Class

Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property as follows: "The agreed or declared value of the property is specifically stated by the shipper to be not exceeding ______________ per ______________.

COD Amount: $ ______________

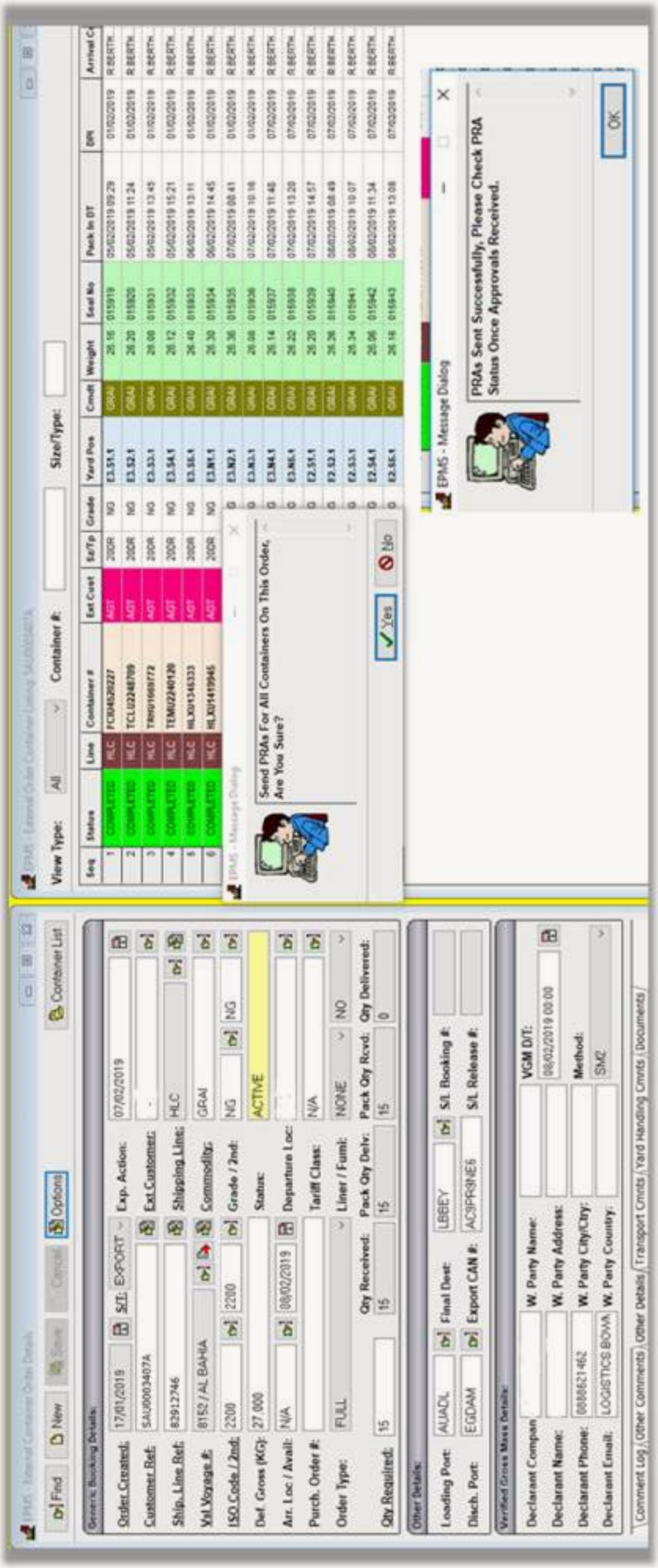
Fee terms: Collect ❑ Prepaid ❑ Customer check acceptable ❑

Note: Liability limitation for loss or damage in this shipment may be applicable. See 49 USC § 14706(c)(1)(A) and (B).

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper, on request, and to all applicable state and federal regulations.	The carrier shall not make delivery of this shipment without payment of charges and all other lawful fees. **Shipper Signature** ______________

Shipper Signature/Date	**Trailer Loaded:**	**Freight Counted:**	**Carrier Signature/Pickup Date**
______________ This is to certify that the above named materials are properly classified, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the DOT.	❑ By shipper ❑ By driver	❑ By shipper ❑ By driver/pallets said to contain ❑ By driver/pieces	______________ Carrier acknowledges receipt of packages and required placards. Carrier certifies emergency response information was made available and/or carrier has the DOT emergency response guidebook or equivalent documentation in the vehicle. Property described above is received in good order, except as noted.

Figure A6 – Pre Receival Advice



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SAGIT

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