

**MASTER CODE OF PRACTICE**

Public Consultation Draft

11 August 2025

CONSULTATION

Feedback is invited on this draft Code of Practice from any stakeholder with an interest in heavy vehicle safety.

PROVIDING FEEDBACK

This draft Code of Practice will be available for feedback from 11 August 2025 to 19 September 2025. Feedback should be provided in writing, using the feedback form available on the NHVR website.

Feedback should be submitted to [codes@nhvr.gov.au](mailto:codes@nhvr.gov.au)

All feedback will be considered by the NHVR as part of the assessment process to determine whether the draft Code of Practice is suitable for registration.

##### Further Information

If you require further information about the process for developing Codes of Practice, or about how to provide feedback, please see the NHVR website at [Industry-Codes-of-Practice](https://www.nhvr.gov.au/safety-accreditation-compliance/industry-codes-of-practice)[[1]](#endnote-1).

PREFACE

Heavy vehicles are an essential part of the Australians economy and our way of life, but their use brings risks to workers in the sector, and to the public who share roads with them.

In all Australian states and territories, except Western Australia and the Northern Territory, the use of heavy vehicles is regulated by the Heavy Vehicle National Law (HVNL).

The Master Code is designed to assist participants in the transport industry to comply with duties, imposed by the HVNL, to eliminate public risks associated with the use of heavy vehicles.

This code was developed and registered in accordance with [Guidelines](https://www.nhvr.gov.au/files/202202-0460-guidelines-for-industry-codes-of-practice.pdf)[[2]](#endnote-2) published by the NHVR under s706 HVNL. The substance of the code is based on comprehensive advice, recommendations and assistance from members of the heavy vehicle industry.

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HEAVY VEHICLE NATIONAL LAW REQUIREMENTS

The HVNL applies to the use of all vehicles with a GVM or ATM over 4.5t and has many detailed requirements including mass and dimension limits, prescribed work and rest hours, vehicle standards, and loading requirements. A large portion of those requirements apply to drivers and operators of heavy vehicles. Some provisions apply to other persons such as record keepers, employers and loaders.

One chapter of the HVNL creates a separate legal obligation, called the primary duty, which applies to parties in the chain of responsibility (CoR) for heavy vehicles. This duty, which is modelled on WHS law, creates a different kind of legal obligation from the rest of the HVNL. It is a requirement to eliminate or minimise public risk associated with the use of heavy vehicles. This duty focuses on safety as an outcome, rather than requiring compliance with detailed rules. Meeting the duty requires safety risk management.

Executives of CoR parties also have a duty, based on WHS or OHS principles. Their duty is called the executive duty and also focuses on safe outcomes rather than compliance with prescriptive law. Executives must use due diligence to meet this duty.

PURPOSE AND SCOPE OF THE CODE

The Master Code has been developed to assist parties in the chain of responsibility and their executives to achieve those safety outcomes. It does so by consolidating industry knowledge and experience about factors that cause and contribute to public risk and the measures that can be used to eliminate or minimise risks.

The code is relevant to every sector of public transport, agriculture, industry or business that uses heavy vehicles, including utilities, construction, mining, import and export, car carrying, manufacturing, retail, commodities, livestock, feed, grain, timber, waste and recycling, emergency services, towing, energy, bulk tankers, landscaping, and container transport.

The code is relevant to operators of heavy vehicles, and to each level of the freight and logistics supply chain. However, it also relevant to individuals and businesses that don’t own but do rely on heavy vehicles to transport goods or to carry out works from time to time. Persons who only work intermittently with heavy vehicles might find the code to be particularly informative.

Owner drivers of heavy vehicles *are* parties in the CoR. They fall within the definition of “operator”. This code is relevant to them, and to any other driver or employee who performs one of the CoR functions.

Employed heavy vehicle drivers are *not* parties in the chain of responsibility and the primary duty does not apply to them. Drivers have many other obligations under the HVNL, including a duty not to drive while fatigued, and from 1 July 2026, a duty not to drive while unfit to drive.

Guidance in the Master Code is nonetheless useful for any employee or person associated with the heavy vehicle industry or related sectors. It may protect them. It may help them understand why businesses operate as they do, and what good practice looks like. A shared appreciation of risk is one of the foundations for good safety management.

Parties in the CoR may use the code in different ways: to update their risk register and consider alternative controls; to reassess their own practices and look for ways to continuously improve; to develop a Learning Management System; or as the basis for an internal or external audit. Content in the Master Code might also be the starting point for negotiations between two businesses about how they will work together. In short, the code is an information resource and risk management tool.

The code is organised around a list of separate but interconnected activities, each with its recommended controls. It is the combination of those controls, with each party making their own unique contribution, that will result in a safe system. Parties can look at the controls that they should implement and also see what to expect from others.

THE PRIMARY DUTY – KEY TERMS AND PRINCIPLES

The primary duty requires a party in the CoR to ensure, so far as is reasonably practicable, that it carries out its transport activities in relation to a heavy vehicle in a way that ensures safety.

This is a duty to eliminate public risk so far as is reasonably practicable, and to the extent it is not reasonably practicable to eliminate public risk, to minimise public risk. It also requires a party to ensure that its conduct does not cause or induce a driver to speed, or a driver or any other person to breach the HVNL.

### Who or what is a party in the CoR?

A business or an individual is a 'party in the Chain of Responsibility’, when they, or their employees perform any of these functions in relation to a heavy vehicle:

* employ a heavy vehicle driver (**employer**)
* engage a self-employed driver to drive a heavy vehicle under a contract for services (**prime contractor**)
* direct the control and use of a heavy vehicle (**operator**)
* schedule the transport of goods and passengers in a heavy vehicle, or schedule a driver’s work and rest hours (**scheduler**)
* consign goods for transport by a heavy vehicle (**consignor**)
* receive goods delivered by a heavy vehicle (**consignee**)
* pack or assemble goods for transport in a heavy vehicle (**packer**)
* manage premises where five or more heavy vehicles are loaded or unloaded each day (**loading manager**)
* load a heavy vehicle (**loader**)
* unload a heavy vehicle (**unloader**)

(Full legal definitions of each term can be found in the Glossary)

Individual employees can be parties in the CoR, but the business that employs them is expected to take the lead in ensuring that the primary duty is discharged. This is because employers generally control hiring, procurement, training, work practices and resources.

### Meaning of public risk

“Public risk” includes a risk to drivers, passengers, other road users and members of the public in the vicinity of roads and public places. It also includes the risk of damage to property, including vehicles and loads, damage to road infrastructure and harm to the environment.

### Meaning of transport activities

A party’s “transport activities” are anything it does that is associated with the use of a heavy vehicle on a road. The term would include, for example, business practices, facilities maintenance, human resource management, sales and procurement, policy development and review, safety systems, and board decisions, as well as the activities typically associated with heavy vehicles such as loading, maintenance, scheduling etc.

### Meaning of reasonably practicable

Doing what is “reasonably practicable” is the standard for complying with the primary duty. The definition is very similar to the equivalent WHS definition. Put simply, it describes what is reasonably able to be done, in relation to a duty, weighing up all relevant matters.

It requires a proportionate response to a risk or hazard, after an assessment of the degree of risk, including the likelihood of potential outcomes, and their seriousness.

Assessment of what is reasonable also considers the existence, availability, suitability and effectiveness of control measures.

Generally, more controls, or more effective controls would be expected to be implemented to eliminate or minimise the most serious risks. However, this does not mean that a low overall safety risk can be ignored, particularly if there are suitable controls available.

The cost of implementing controls is one of the factors mentioned in the definition, including whether the cost is grossly disproportionate to the likelihood of the risk.

A party would not be expected to implement a control if its cost would be grossly disproportionate to the risk, but this will not be an excuse for failing to implement any control. Another control, or a different way of performing an activity may be warranted.

There may be some risks that are so serious that if there are no available, effective, or affordable controls, then the activity that creates the risk should be avoided altogether.

What would be reasonably practicable requires objective assessment, i.e., what an independent person with the same information would conclude, not an assessment based on the duty holder’s opinion or preference.

See the glossary for the definition of “reasonably practicable” or follow the links to find more information about the term on the NHVR website, or to read Regulatory Advice about the topic.

### What is the Executive Duty?

If you are an executive of a business that is a party in the CoR for a heavy vehicle, you have a duty to exercise due diligence to ensure the business complies with its primary duty. If the business fails to do so, then you could be personally liable for a breach of s26D of the HVNL.

The term “executive” includes an executive officer, a manager or another person who takes part in the management of a business. It includes a company director or a partner in a partnership.

Exercising due diligence requires among other things, that you actively acquire and maintain up-to-date knowledge about conducting transport activities safely. If your business is a party in the CoR for a heavy vehicle, then as part of your duty you should be familiar with the contents of this code, and use it to identify hazards and risks, and consider (or re-assess) appropriate controls.

More information about the [Executive Duty](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/executive-due-diligence-duty)[[3]](#endnote-3) can be found on the NHVR website.

### The importance of information

The HVNL primary duty is based on WHS and OHS laws but ensuring the safe use of heavy vehicles presents distinct challenges. Under occupational safety laws, a duty holder’s area of concern is generally a workplace, which they substantially control and can see or visit and inspect at any time. They also have a say in who is employed there, how they are trained, and the policies and procedures of the business.

By contrast, a party in the CoR must concern themselves with hazards or risks that may manifest many hours or kilometres distant from their place of work. Some parties won’t see a heavy vehicle at all, only interacting through multi layered contractual arrangements or some ad-hoc communication. That vehicle might be loaded, scheduled, driven, unloaded by people they’ve never met, at a place they’ve never been.

Managing safety across this whole network depends therefore on information; the right information, at the right time, to the right person. Information is required in advance to plan and optimize a journey. Exchanging information during the journey is critical for responding to changing conditions – and in heavy vehicle transport, change tends to be the rule rather than the exception. At the end of the journey, information enables all parties to review, adjust and improve.

### Working with other parties

Each party in the CoR has its own primary duty to ensure safety, but no party acts in isolation. Transport and logistics businesses are inextricably linked. Recognition of that connectedness is the reason CoR came about in the first place, and the origin of the term.

The earlier form of CoR laws made businesses liable when others breached prescribed offences. That form of liability is no longer part of the law, but many businesses still fear being liable when another party or driver does something wrong. This concern often emerges when businesses enter arrangements to work with each other, and it can be counterproductive. Excessive pre-qualification paperwork, disproportionate responses to policy breaches, and a preoccupation with policing other businesses and drivers, can all divert attention and resources from a business examining its own safety management.

A common approach is for a larger company to take on the role of monitoring the compliance of a smaller business. There is nothing wrong with this approach, particularly when the larger company is better qualified for that role. (It may also prefer to do so, for commercial reasons or to protect its reputation.) But it’s important to note that this is not an explicit requirement of the HVNL.

Rather, the Law requires that when parties work together, they share responsibility for the same matters. This does not require each of them to do the same thing. Differences in resourcing and contract bargaining position may affect the opportunity each business has to monitor safety, but each of them must still do what is reasonably practicable.

For a larger business that has cameras that capture number plate data and staff on site who can inspect each load, then monitoring a percentage or transport operators or loads may in fact be reasonably practicable. For the smaller business, it may be reasonably practicable for it to monitor average waiting times and the skill of loading or unloading employees.

In summary, safety monitoring is not just the responsibility of one party. It is something that all parties should be doing, as a regular part of safety management. They should be monitoring how well their own systems are being followed, and their effectiveness. They should be monitoring how they impact other businesses, and how other businesses impact them.

Recommendations in this code propose ways that consignors, consignees and loading managers can report on their performance to transport operators, particularly in relation to delay. These suggestions are consistent with the shared legal obligation between parties, as well as being practical measures for enhancing efficiency of all parties involved.

Liability for the failings of sub-contractors is frequently the subject of WHS and OHS case law. Those cases indicate that a principal contractor must take care in engaging, guiding and instructing a sub-contractor, but is not automatically liable for their negligence.

However, care should be taken in applying WHS law principles to the HVNL. There are important differences between them. For example, the concept of “shared responsibility” is part of each law but may be applied differently under the HVNL where it may be shared among many duty holders, none of whom is necessarily in charge.

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| **Note:** There is potential to confuse the WHS term “principal contractor” with the HVNL party definition “prime contractor”. They are not the same thing.  A “prime contractor” refers to an individual or business that engages a self-employed driver under a contract for services. (The provision prevents businesses from escaping responsibility by contracting drivers, rather than directly employing them.)  The term “prime contractor” does not mean a company that hires a transport company to carry out work for it, or the main business at the top of a multi-layered contract. Those businesses may meet other definitions of CoR parties but are not prime contractors.  Care should be taken to avoid taking WHS or OHS case law about principal contractors and attempting to apply it to situations involving prime contractors. |

Although CoR parties aren’t directly liable for other parties’ breaches, the way they work together with other businesses is still a part of their transport activities and must be managed safely. This is relevant when businesses choose to work with each other, when they set terms and expectations, and in the way they work together, communicate and cooperate.

ABOUT THE MASTER CODE

### Legal status of the Master Code

The Master Code does not create new legal obligations or replace existing requirements in the HVNL or its regulations. It is primarily guidance material for CoR parties.

However, the code may be used by a court as evidence in relation to a breach of the primary duty or the executive duty. (See s632A, HVNL)

Specifically, its content may be used as evidence of what CoR parties and executives know, or ought to know, about hazards, risks, risk assessments and controls relevant to the safe use of heavy vehicles. Knowledge of these is relevant to the question of what is reasonably practicable.

### How a code of practice assists duty holders

The primary duty and executive duty require duty holders to achieve a safety outcome – eliminating or minimising public risk - but the Law doesn’t state exactly how they should achieve this. There are good reasons for this.

Firstly, there is extraordinary diversity in the ways CoR parties operate, and in their working environments. There would be substantial hurdles to prescribing the detailed requirements for each and every situation. Secondly, the nature of their legal obligation is a recognition that duty holders are the experts in their own operations and accordingly are tasked with finding the best ways to manage risk in their own circumstances.

The Master Code goes some way to filling in the gap between the overarching duty, and the detail of day-to-day operations. It does not prescribe how every party should operate. Rather, it is a tool to help parties manage risk, by identifying hazards and risks that arise in the use of heavy vehicles and proposing options for eliminating or minimising public risks.

### Other hazards and risks

It’s important to note that the Master Code does not capture every single hazard and risk but concentrates on those that are widespread and most serious. Nor does it identify every possible control. There may be controls in use or under development that were not known at the time the code was developed, or that are only effective in limited cases.

Duty holders have a duty to identify all hazards and eliminate or minimise all risks associated with their transport activities, regardless of whether those hazards or risks are identified in a registered code of practice.

### Other legal obligations

The Master Code aims to give comprehensive guidance, to assist parties comply with the primary duty and executive duty, but it is not a guide to compliance with prescriptive elements of the HVNL or any other law.

It should be read in conjunction with the HVNL, the Load Restraint Guide, WHS law, relevant Australian Standards, and other industry specific guidance. To be clear, all those materials may be relevant in a consideration of whether a CoR party had done what was reasonably practicable to ensure safety and to eliminate (and, to the extent it was not reasonably practicable to eliminate, minimise) public risks.

### Adopting code recommendations

It is not obligatory to use controls recommended by the Master Code, so long as there is effective risk management in place, that meets the standard of reasonable practicability.

There may be good reasons why a business uses different controls, for example, customised controls due to local conditions or equipment or contract requirements.

The primary duty and the executive duty have been in place since October 2018, so businesses should already have safety measures in place. If those measures were ensuring safety so far as reasonably practicable, then substantial change may not be necessary.

In any case, regular review is an essential component of risk management, and revision of a code of practice is a good occasion for businesses to review their own risk management systems, to confirm that relevant hazards and risks have been identified, and to consider whether different controls or combinations of controls may be more effective.

### Currency of technical standards and references

Note that references in this code to technical standards and information resources were current at the time of publication. If you refer to any of them, you should ensure that you are consulting the current version.

USING THE MASTER CODE FOR RISK MANAGEMENT

### Key components and terms

Key components of risk management are:

1. Identifying hazards
2. Assessing risk
3. Selecting control measures
4. Implementation and training
5. Monitoring and reporting on the effectiveness of controls
6. A process for periodic review of the system and a process for responding to incidents, lead and lag indicators, and new risks

The term “*hazard*” refers to anything with the potential to cause harm or damage, this could be an activity or behaviour, a physical object, a situation or a management practice.

The term “*risk*” refers to the possibility of harm or damage occurring when a person or thing is exposed to a hazard.

The term “*control*” refers to measures which can be used to eliminate or minimise public risks. Some controls do not reduce risk but do minimise the potential injury or damage that may be caused.

As noted above, the definition of “*public risk*” in the HVNL includes risks other than to human safety. It includes damage to vehicles, loads, property and road infrastructure, and harm to the environment.

For guidance on the principles of risk management, the NHVR recommends [AS/NZS ISO 31000:2018 Risk Management — Principles and Guidelines](https://www.iso.org/standard/65694.html)[[4]](#endnote-4). You might also find [AS/NZS ISO 45001: 2018 Occupational Health and Safety Management Systems](https://saiassurance.com.au/iso-45001)[[5]](#endnote-5) useful.

More information about risk management is available from Safe Work Australia, or your state or territory’s workplace health and safety regulator.

### 1. Identifying hazards

Consider all the hazards described in the Master Code to see whether they are present in your transport activities.

This includes considering whether your activities create hazards or contribute to risks to other parties and their employees, as well as the impact of other parties’ practices upon your employees’ safety, and your business’s ability to operate safely.

Codes of practice document known hazards and risks in an industry, but they may not capture every one of them. As a party in the CoR, your duty is to identify and eliminate or minimise all risks to public safety associated with your transport activities, so you also need to look for hazards and risks besides those mentioned in this code.

There are several useful methods of identifying hazards. For example:

* Brainstorming and consulting with employees and business partners and clients
* Employee surveys and questionnaires
* Review available information (incident reports, near miss reports, inspection records)
* Analysing historical safety papers, articles and investigations
* Internal and external safety assessments and audit reports
* Using conceptual models (ICAM, HFACS, STAMP, AcciMap, Bow tie analysis)

Best practice is to create and maintain a hazard or risk register. You may wish to incorporate public risks and hazards into an existing WHS register or use a template.

### 2. Assessing Risk

Assess the risk that arises from each hazard you identify whether from the code, or from your own investigations or enquiries. Consider the possible outcomes, their likelihood and the gravity of the harm that could result. The same hazard may create a different degree of risk in one business compared with another, because of differences in the way they operate, their location, staffing, equipment, work hours etc.

Your risk assessment should also consider the effect of any existing controls.

Many of the risks associated with heavy vehicles, particularly risks to persons, will be measured in the most serious category of risk.

A common practice is to use a risk assessment matrix to assign an overall risk measure for comparing different kinds of risks – for example an event that almost never happens, but that has grave consequences compared with an event that happens often but has little impact.

Assigning a measure to each risk allows you to compare them and prioritise implementing controls for the most serious risks.

Include risks and their assessed level in your hazard or risk register.

### 3. Selecting control measures

Choose controls, or a combination of controls, that will eliminate each risk that has been identified, or where it is not reasonably practicable to eliminate the risk, to minimise it so far as reasonably practicable.

Choose controls that will work and be effective in your business. It may be necessary to use a combination of controls of different kinds. For example, to deal with one risk, you may need to purchase or adapt equipment, change procedures, and re-train employees. Another risk may be eliminated by assigning employees to a new task and hiring a new staff member.

Prioritise controls that eliminate a risk altogether, where possible. For example, if two-way traffic at loading premises creates a hazard, redesigning traffic flow so that vehicles only travel in one direction would be a preferred control. If that were not reasonably practicable, then measures such as imposing speed limits, signage and site induction could be used to minimise the risk. To take another example, if night driving creates a fatigue hazard, changing the schedule to daytime would be a preferred control, but if it is not feasible, or introduces other risks, then alternative control measures would need to be implemented to manage the risk of driver fatigue.

Engineering controls – such as safety features on vehicles – can be highly effective ways to manage risks to do with vehicle or driver performance, however for many of the hazards identified in this code there are no suitable engineering controls.

A large proportion of the controls recommended in this code are administrative. This is because many of the factors that contribute to hazards and risks are associated with interactions between parties. Therefore, effective controls frequently involve communication and coordination. If properly implemented, supported and monitored, administrative controls can be highly effective.

Selecting appropriate controls, monitoring their implementation and monitoring their effectiveness is part of CoR parties’ and executives’ duty. Where controls are not effective, then alternative or additional control measures must be implemented.

Record proposed controls into your hazard and risk register.

It is recommended that you document the assessment process, including its scope and timing, personnel involved, sources of information and the reasoning supporting each decision. You should also document decisions, timing, costs, and actions relating to the implementation of each control measure. These records will be useful to your business in future.

##### Is it compulsory to use controls recommended in the Master Code?

You do not have to use every control recommended by the Master Code. You only need to implement sufficient controls to ensure safety so far as reasonably practicable.

You may use different controls altogether - ones not mentioned in the Master Code – if they eliminate or minimise risk just as effectively. A control measure from outside the Master Code might be more readily available, or more effective in your business because it suits your circumstances better. You can also use a combination of controls from the Master Code and other controls.

If available controls will not be sufficient to eliminate or minimise a risk, you must find another way to achieve the same outcome, or cease carrying out the activity that creates the risk.

##### Other sources of information about hazards, risks, and controls.

You can find more information about managing risk by referring to codes of practice or other publications produced by safety regulators, such as [Safe Work Australia](https://www.safeworkaustralia.gov.au/)[[6]](#endnote-6) and its state equivalents, or in relevant Australian and International Standards (AS/NZS, ISO, ECE Regulations).

Your industry and its networks may be another source of advice and data. An example of organised information exchange is the [Safer Together](https://www.safertogether.com.au/)[[7]](#endnote-7) initiative in the oil and gas sector whose regular working groups develop bulletins and safety alerts that are sent to members and subscribers.

### 4. Implementation and training

Once you have identified hazards, assessed each risk, and determined the appropriate control measures, you need to ensure that they are implemented in your business. It is critical that executives are involved in the process, for this to be successful and because it is part of an executive’s duty to exercise due diligence. An executive must be aware of the outcome of the assessment process and should be leading the process of integrating control measures into the systems of the business or ensuring that this occurs.

To implement new controls, your business will have to review its existing policies, procedures, equipment, premises, staffing, contracts, and business practices and make appropriate updates. If it is not possible to implement all suitable control measures immediately, then you should prioritise measures that eliminate or minimise the most serious risks.

Executives should be involved in decisions about which control measures will be implemented and their timing. They must also ensure the availability of the resources necessary to put controls in place.

Training will be an essential component of implementing new measures. In some cases, training will itself be one of the control measures, but training about all the new measures will be required. Develop all-staff training to introduce the overall changes, including an explanation of the risk assessment process and the business’ legal obligations, so that staff understand the importance of the training.

Identify and deliver specific training for staff according to the functions they perform, where and how they work, and the equipment and resources they use. Include sales, human resources, and public relations staff in the training program. Deliver training in a way that suits the working environment and gives trainees enough time to learn and adapt. Provide training support during the change period and ensure that staff know how to access training documentation.

You should also identify training needs of your business partners and clients. In some cases, e.g., when you change procedures at your premises, it may be necessary to include their employees in on-site training with your own employees. Otherwise, it may be sufficient to know that those employees have received comparable training. For your clients, it may be sufficient to provide written information or update web content.

### 5. Monitor and report on the effectiveness of controls

You will need a way to monitor whether the control measures you implement are effective. If you have already been monitoring appropriate safety indicators, you may be able to compare outcomes after the controls have been implemented and assess whether they are improving your business’ safety.

Care needs to be taken in choosing what you measure or monitor. Some measures based on outcomes – e.g., number of crashes – may not provide useful insights. For example, there may be long periods where, by good fortune there are no crashes despite the existence of a hazard, so this measure would provide no information.

Use what you learned from the risk assessment process, and your detailed knowledge of your own business, to identify indicators that will inform you whether the measures are being implemented consistently across your business, and what effect they are having on known hazards and risks. You may need to combine different kinds of information and information from several sources to achieve this, e.g., driver surveys, absenteeism rates, engine data, technical reports, near misses, maintenance records, customer complaints, audit reports etc.

It may be possible to perform continuous monitoring. If not, you should establish a monitoring cycle that’s appropriate for the level of risk associated with your activities. Decide what should be considered normal variation in the indicators that you measure, and what changes warrant further investigation or intervention.

Monitoring the effectiveness of controls, ensuring that employees can report issues and be heard, and making necessary changes are all part of an executive’s duty.

### 6. Review

Your controls and their implementation should be reviewed if your monitoring demonstrates that the measures in place are not effective at eliminating or minimising public risk. There are also other events that might trigger a review, for example:

* concerns raised by employees
* a serious incident or near miss
* control failures
* audit results
* data showing increased risk based on operational outcomes
* changes to business operations e.g. new client, business expansion, new staff
* emerging hazards and risks
* changes to the physical or regulatory environment

You should also establish a cycle of periodic review. A combination of minor and incremental changes over time can escape notice but create a substantially different risk environment, which may catch a business off guard.

Regular review allows a business and its executives to confirm that systems are still fit for purpose. They are also an opportunity for executives and staff to re-focus on safety and avoid complacency. The frequency of review should depend on the overall risk. If the risk is higher, then reviews should be more frequent.

Your business may have the resources to conduct its own review. You may also consider engaging external experts from time to time, or to review some parts of your system.

The review process should follow the same steps as the initial assessment, and the same requirements for implementation and documentation apply.

If the outcome of the review is that changes should be made, then training should be developed and delivered for employees, business partners and clients.

### A single system

By following the recommendations in this code, your business will develop new documents such as risk and hazard registers, schedules, records, and documented policies and procedures. Applying and adapting those into your existing systems and setting priorities and timelines will require attention and coordination, particularly at the start of the change process.

NHVR recommends that businesses adopt a Safety Management System (SMS) to better integrate all their safety management processes into a single system. Having an SMS is a legislative requirement for many transport sectors, but not for road transport. Nonetheless it is recommended as best practice.

An SMS provides an organisation with a systematic approach to continuously monitor and improve safety performance. It manages risk through setting goals, capturing data, measuring performance and system refinement for managing safety risks.

An SMS is integrated into the way the organisation operates, to enable effective risk-based decision-making processes across the business where risks are identified and continuously managed to an acceptable level. There is no one size fits all SMS that caters for all organisations; therefore, the resources applied to an SMS can be scaled to suit the size, nature and complexity of the operation to ensure the hazards and associated risks are effectively managed.

For more information, guides and templates about SMS, refer to NHVR’s webpage about [Safety Management Systems](https://www.nhvr.gov.au/safety-accreditation-compliance/safety-management-systems)[[8]](#endnote-8).

OVERVIEW OF HAZARDS AND RISKS

The following lists summarise the risks and hazards that stakeholders have identified within the heavy vehicle sector. The listed hazards are grouped into categories for ease of reading. Risks have been described in very general terms. The following sections of the code recommend a range of control measures which can be implemented.

No attempt has been made to map the connections between hazards, risks, and controls. This is because collisions often have complex causes and multiple contributing factors. Attempting to map all possible causal pathways is beyond the scope of this code. Instead, the code is intended to assist duty holders to do their own risk assessments of their own circumstances. The code proposes a risk management framework, highlights hazards and risks and suggests controls that may be effective. It is hoped that this methodology may be a useful guide, even in relation to novel or unique hazards and risks.

One of the categories of hazards are industry wide hazards i.e., things that are generally beyond the control of parties in the CoR to eliminate or to minimise. However, there are still opportunities to minimise the harm that they will cause. For example, training drivers to expect, and how to respond to bad driving by other road users.

The lists of hazards and risks include harm or injury that might also fall within the ambit of the WHS or OHS duty. Those items have been deliberately included, either because they are emerging issues, or because the controls for them sit largely with a party other than an employer.

### Hazards

**Hazards to heavy vehicle drivers – other than vehicle crashes**

Hazard: Aggressive bus passengers

Hazard: Powerlines at loading or unloading premises

Hazard: Equipment / machinery at loading or unloading premises

Hazard: Traffic near stopping places on roadways

Hazard: Auxiliary vehicle equipment

Hazard: Remote or isolated work

Hazard: Vehicle fumes in vehicle cabin

Hazard: Vehicle fumes in loading or unloading premises

**Deliberate driving behaviour**

Hazard: Heavy vehicle driver defies speed limits or recommendations

Hazard: Heavy vehicle driver consumes alcohol or other drugs

Hazard: Heavy vehicle driver drives while fatigued

Hazard: Heavy vehicle driver drives recklessly

Hazard: Heavy Vehicle driver disables safety technology

**Driver ability**

Hazard: Driver not competent or supported to drive well

Hazard: Driving at wrong speed for conditions

**Driver performance or impairment**

Hazard: Driver is impaired by Fatigue

Hazard: Driver’s mental health impacts fitness to drive

Hazard: Driver’s physical health impacts fitness to drive

Hazard: Driver is impaired by alcohol or other drugs

Hazard: Driver attention diverted from driving task.

Hazard: Driver habituated to task

**State or condition of vehicle**

Hazard: Vehicle poorly maintained

Hazard: Vehicle not designed or equipped to protect driver or passengers in crash

Hazard: Vehicle design limits driver’s view of vulnerable road users

Hazard: Vehicle emissions, fuel and oil leaks

Hazard: Tampering with vehicle systems or components

Hazard: Vehicle lacks appropriate auxiliary equipment

Hazard: Safety systems in trailers and prime movers not integrated due to configuration

Hazard: Combination of prime mover and trailers is not safe

**Load restraint equipment**

Hazard: Lashings and tensioners inadequate for loads

Hazard: Attachment points, blocking structures, curtains are not adequate for forces

Hazard: Equipment (pumps, hoses, outriggers, etc.) lack locking mechanisms.

Hazard: Containment equipment not adequate for load

Hazard: Loose items or luggage inside driving or passenger compartments of vehicle

Hazard: Storage compartments not adequately secured

**Load restraint**

Hazard: Load not adequately restrained

Hazard: Goods are poorly packaged or consolidated

Hazard: Remainder of load not adequately restrained after partial delivery

Hazard: Goods inside import containers not packed or restrained appropriately

**Nature of load**

Hazard: Hazardous contents in load are not known or identified

Hazard: Load contains lithium batteries

Hazard: Load contains hazardous materials

Hazard: Load contains environmental contaminants

Hazard: Load contains exotic vertebrates or invertebrates

Hazard: Load contains parasites, weeds, seeds, infectious material

Hazard: Load contains materials harmful to human health

**Oversize Loads**

Hazard: Over dimension vehicle

Hazard: Overloaded vehicle

**Loading and Unloading Premises**

Hazard: Traffic congestion or queuing vehicles outside premises

Hazard: Loading and unloading machinery

Hazard: Heavy Vehicles and loads

Hazard: Bullying, harassment, threats, abuse

**Organisational or Commercial Hazards**

Hazard: Drivers are paid in a way which encourages unsafe behaviour.

Hazard: Safety is not prioritised in commercial arrangements

Hazard: Businesses with different standards, systems, procedures working together

Hazard: Inconsistent requirements and lack of transparency in multi-layered contracts

Hazard: Contract terms not adjusted when operating conditions change

Hazard: Criminal infiltration or blackmail

**Industry Wide Hazards**

Hazard: Driving behaviour of other road users

Hazard: Negative interactions or conflict with other road users

Hazard: Road condition

Hazard: Level crossings

Hazard: Traffic congestion

Hazard: Lack of space in built up areas

Hazard: Natural disasters, weather, animals on roads

### Risks

**Risk:** Loss of vehicle control causing fatality or injury to drivers, passengers or road users

**Risk:** Loss of load resulting in fatality or injury to one or more road users

**Risk:** Driver hit by vehicle on roadside resulting in fatality or injury

**Risk:** Driver or individual hit by vehicles, loading machinery or loads, causing fatality or injury

**Risk:** Driver or individual injured by auxiliary vehicle equipment, causing fatality or injury

**Risk:** Collision or near miss causing fatality or injury to one or more road users

**Risk:** Electrocution causing fatality or injury

**Risk:** Assault on bus driver causing fatality or injury

**Risk:** Road users collide with queuing or reversing vehicles causing fatality or injury

**Risk:** Fire or explosion

**Risk:** Damage to human health from vehicle emissions

**Risk:** Loss of vehicle control causing damage to vehicles, loads or property, or harm to environment

**Risk:** Loss of load causing damage to vehicles, road infrastructure or property

**Risk:** Damage to Loads; injury to livestock

**Risk:** Damage to road infrastructure

**Risk:** Damage to vehicles or loads during loading or unloading

**Risk:** Introduction of invasive species

**Risk:** Spread of livestock diseases

**Risk:** Contamination of environment, livestock feed or food chains

**Risk:** Traffic disruption or obstruction

ACTIVITIES AND CONTROLS

Having identified the hazards and risks relevant to your operations, you need to select suitable control measures. The following sections of this code propose many control measures for eliminating or minimising risk, or for mitigating consequences.

Reflecting that safety relies on contributions from many sources, the controls are divided up among different activities – actions or decisions carried out at different times and places, by different duty holders. Each activity presents different opportunities for eliminating or minimising risk and if combined, should produce better safety outcomes.

Note that the activity descriptions have been used to make the code easier to digest, but too much shouldn’t be made of the fact that an action could be described as more than one different activity. The important thing is to choose and implement controls measures that will be effective.

Parties should look through the list of activities to see which of them their business is involved in, then start to consider the full suite of controls that can be implemented in their business. Some businesses or individuals will only need to consider a handful of activities that they carry out. A larger business may need to consider many more. Parties may also consider what controls they expect other businesses to implement.

FOUNDATION ACTIVITIES

1. Activity: Fostering a strong safety culture

Safety culture is an element of an overall organisational culture. Safety culture can be described as the collective beliefs, perceptions, and values that a business and its workers share regarding safety. Safety culture is evident in patterns of behaviour and work practices within a business as well as in leadership, individual, and group attitudes towards safety.

Safety culture is not about compliance to legislation or policies and procedures. Instead, it is about the business, leadership, and worker commitment to positive safety practices and effective safety risk management.

In simple terms, a business with a positive safety culture has their primary focus on conducting business safely, understanding that safety will also lead to compliance, productivity and profitability.

Establishing such a culture will assist leaders and managers to carry out their Executive Duty.

Beyond their own businesses, leaders can influence or encourage business partners to do the same, resulting in improved safety for each business, their employees, and the public.

* 1. Control: Demonstrate a commitment to safety throughout the business.

It is the responsibility of executives to lead the development of a safety culture. They do this by showing their genuine commitment through their words, attitude and behaviour. They also demonstrate it by their actions such as looking for and responding to safety issues, setting organisational policy and objectives, implementing changes to equipment, systems and training to manage safety, by continuing to provide necessary resources, and through communicating with and supporting employees.

* 1. Control: Establish clear expectations of acceptable and unacceptable behaviour for all employees, including managers and executives, to promote accountability and support a positive safety culture.

Acknowledge and learn from mistakes due to lack of training, inexperience or human error, and act decisively on deliberate, reckless, or repeated rule breaking, gross negligence or turning a blind eye to serious safety breaches.

Policies should make it clear that serious or repeated breaches will be subject to disciplinary action, and these policies should be followed.

* 1. Control: Encourage employees to take personal responsibility for their own safety and that of their co-workers and the public.
  2. Control: Keep employees informed and focused on risks associated with heavy vehicles, and the principles of safety management.

For example: by informal talks, guest speakers, email messages, online learning modules, forums or conferences.

* 1. Control: Promote open discussions about safety amongst all employees and executives of the business and create opportunities for communication from top-down, bottom-up and between employees.

Manage obstacles to open communication such as:

* differences in status or authority
* fear of blame or punishment
* lack of privacy protection
* cultural and linguistic diversity
  1. Control: Train and empower workers to identify and promptly report safety issues.

For example:

* new hazards, near misses, inadequate controls
* changes in circumstances which create new risks or exacerbate risks
* obsolete, cumbersome, inconsistent or ineffective procedures
* missing, faulty or inadequate equipment, systems that lack resources
* failures to follow procedures or communicate information
* inadequate training or information
* failure of coordination or communication
* threats, bullying, harassment, blackmail or duress
* issues arising from the ways other businesses work
* issues arising from interactions with employees of other business
* hazards or risks that may arise due to personal circumstances, health or wellbeing.
  1. Control: Establish channels for directly reporting safety issues to the business, by any person. Instruct all employees, executives, and others how to use them.

For example: a dedicated phone line, or email address, a nominated employee or health and safety representative, a QR code connected to a web-form, a suggestion box.

* 1. Control: Provide support, including counselling or access to legal advice to employees who fear repercussions from reporting.
  2. Control: Assess and investigate reported issues promptly and thoroughly, seeking input from the whole of the business, and other relevant persons.
  3. **Control: Inform all employees about reported issues, proposed solutions, interim measures and timelines for implementation**.
  4. Control: Monitor, measure and report on how well the business identifies and rectifies safety issues.
  5. Control: Train and empower all workers to stop working and speak up immediately when they become aware of a safety risk.
  6. Control: Engage with local organisations and businesses to promote public safety and to allow employees to meet the community affected by the way the business carries out its transport activities.
  7. Control: Demonstrate and explain your business’ approach to safety to your business partners and clients and encourage them to provide input and feedback.
  8. Control: Incorporate procedures into agreements with other businesses for identifying and resolving safety issues together.
  9. Resources for Fostering a strong safety culture:
* NHVR Regulatory Advice on [Developing a positive safety culture](https://www.nhvr.gov.au/safety-accreditation-compliance/human-factors/developing-a-positive-safety-culture)[[9]](#endnote-9) provides more information about how a positive safety culture offers numerous benefits for businesses that utilise heavy vehicles in their operations.
* NHVR Regulatory Advice on [Discrimination against or victimisation of employees](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/discrimination-against-or-victimisation-of-employees)[[10]](#endnote-10) provides guidance on employee protections against discrimination and victimisation under section 699 of the HVNL.
* The [*Model Code of Practice: Work health and safety consultation, cooperation and coordination*](https://www.safeworkaustralia.gov.au/doc/model-code-practice-work-health-and-safety-consultation-cooperation-and-coordination)[[11]](#endnote-11) from SafeWork Australia provides practical guidance on how to effectively consult with workers about work health and safety and may provide useful information about worker engagement.

1. Activity: Training executives in the business

Because of their personal, non-delegable duty, executives (including senior managers and directors) should be acutely aware of the importance of effective training of all employees in a business.

Training is often seen as a top-down activity, where more senior employees provide training to newer or junior employees. This is partly true but obscures the fact that if a business is to operate safely, executives and managers themselves also need training.

* 1. Control: Ensure executives are provided information to enable them to understand the executive duty and how to carry out due diligence.
  2. Control: Ensure executives have training in risk identification and safety management.
  3. Control: Ensure executives have, or have access to, comprehensive, detailed knowledge of the business’ activities, how it works with other businesses, and the operational environment.
  4. Control: Regularly involve executives and managers in employee training sessions so they learn what their employees know and do.

1. Activity: Recruiting and employing (all employees)

Recruiting and employing staff is an important activity in every business. Employing drivers requires particular attention (see Activity 9), but every business can improve the safety of its operations in the way it attracts, screens and employs its staff.

* 1. Control: Recruit for attitude and behaviour as well as skills.

For example, look for employees who:

* show a commitment to safety
* accept responsibility
* collaborate with others
* follow policies and procedures
* show respect and consideration for workmates, customers and public
* like learning and adapting
  1. Control: Ensure referee checks ask specific questions about the applicant’s commitment to safety and adherence to safety policies.

For example: compliance with safety-related laws such as those relating to speeding, fatigue, and use of drugs.

1. Activity: Training employees

Effective training is at the heart of safety management and is an explicit requirement under WHS or OHS laws. It requires substantial investment in time and money but pays off in improved safety and efficiency which in turn means reduced downtime and legal costs, and greater customer confidence and satisfaction.

It is well understood that training is necessary for safety critical roles such as driving, loading and unloading, operating machinery, working with animals and restraining loads. Training is also essential for employees who do desk work or administrative work. The decisions, communication, actions and inactions of these employees can have a flow-on effect that creates or eliminates public risks.

* 1. Control: Allocate appropriate time and resources for training.

Training should be regarded as a fundamental ongoing business investment, not an optional extra. Because of their personal, non-delegable duty, executives (including senior managers and directors) should be acutely aware of the importance of effective training. Not only will this assist in protecting the executive from personal liability and protecting employees and the public, but it should also avoid downtime and reduce expenditure on worker’s compensation insurance and legal support. It may also make a business more likely to attract customers.

* 1. Control: Set aside time in individual employees’ rosters, and in the whole-of-business calendar, for employees to participate in all kinds of training – whether as trainer or trainee.
  2. Control: Assess training needs and training resources.

Work out the training necessary for each role in your business, according to the type of task, the operating environment, equipment and procedures, and the people the employee will interact with.

Verify the competence of new employees and assess their training needs, based on demonstrated skill and expertise. Regardless of skills, all new employees will need to be trained in the business’ own procedures so that their skills can be applied in the new environment.They should also be introduced to key elements of the business’ safety culture and strategies.

Consider the full range of skills that employees will need not just technical skills or system skills. For example:

* communication skills
* problem solving
* decision making
* teamwork
* stress management
* prioritizing tasks
* managing time

Work out the best way to provide each kind of training, whether it be formal training, in person or online, on the job training, mentoring or supervision.

Assess the need for additional training or refresher training in response to organisational changes which affect employees. This could include the introduction of new equipment or infrastructure, new policies, processes or procedures. Prioritise providing critical safety training, ahead of administrative requirements.

* 1. Control: Identify the best external resources for delivering formal training, and the most effective way to train within the business.

Consider implement a learning management system (LMS) that identifies training needs, records training, assesses the effectiveness of training and schedules refresher or new training.

* 1. Control: Put training into practice.

Recognise that for an employee to retain what they learn, a substantial part of their training should be done on the job, where their knowledge and skills can be applied and embedded. Practical training is also necessary for the employee to apply their knowledge to the actual working environment – their working conditions, the people and equipment they work with, their employer’s procedures and clients, and the available time to perform tasks.

Look for ways to reinforce formal training through resources, discussions, and examples in the work environment. Identify the employees with knowledge and experience and encourage newer employees to learn from them. Treat this informal training as a valuable part of the work performed by experienced employees, rather than as a distraction from their real jobs, or time wasting.

Deliver training in smaller blocks, followed by implementation, before starting each new topic. As well as providing the content, provide the rationale. Explain why things are done in a particular way. Explaining why this matters helps the employee understand the value and purpose of a procedure or a rule.

* 1. Control: Cater to the learning needs of employees.

Provide training using language and materials that suit employees’ literacy levels. Provide training in a language in which employees are fluent, and in a way or a setting that aligns with cultural values or practices.

Use different training materials or approaches for different topics and for different employees. For example: videos or storytelling, group or individual sessions, classroom or in-situ training, weekly question and answer sessions, apps or visual aids or reminders in the workplace or inside or on a vehicle, as well as written material such as a driver’s manual etc. Use the material or channels that employees are familiar with. For example, a drivers’ message group for “frequently asked questions”, a video app for sharing “how to” clips.

Consider the order in which to provide training. Train easier activities earlier in the program to provide a skills basis for more difficult or complex tasks. Allocate more time and emphasis to training activities which carry a higher safety risk. For some trainees, the standard approach of classroom instruction first, and practical training second will be most effective Others who learn by doing will benefit from understanding the problem in context, before more formal instruction to consolidate the solutions.

Consider the attention span – and available time – of employees and adapt training accordingly. One employee might learn well in longer sessions once per month; for another employee, a series of short sharp bursts, delivered by a co-worker, and followed by practice, might be more effective at building competency.

Encourage and reward employees to direct their own learning, and to help other employees. Provide access to learning resources, tools and personnel to assist and support them. Observe what works well and continue to adapt or develop ways to provide training.

* 1. Control: Conduct on-the-job supervised training and assessment of competency.

The benefit of formal training using in-house trainers is that it can be customised to the actual tasks that employees are doing and will be easier to implement and retain. Trainers should have suitable skills and verified qualifications and must be able to communicate effectively with trainees.

* 1. Control: Supervise inexperienced workers.

Allocate skilled or experienced workers to accompany or monitor new employees, or employees using new skills or doing new tasks in different environments

For example:

* employees operating new machinery
* employees working at a new location
* employees using a new software program
  1. Control: Provide ongoing training.

Plan to provide refresher training on a range of topics throughout the period of employment.

Establish a refresher training calendar for all employees, focusing on a different topic each month.

Provide training updates when there are changes in personnel, technology, laws, equipment, software, procedures, premises, customers, networks, the size of the business etc.

Review safety data to identify procedures or skills that require further training.

* 1. Control: Maintain training records.

Document the skills and competencies necessary for each role in a business.

Document the training each employee receives and when.

* 1. Control: Involve business partners in training your employees and vice versa.

Employees of different businesses might have done the same formal training, but it’s not unusual for businesses to implement requirements in different ways. The result may be conflicting approaches, miscommunication, lost time, confusion or aggravation.

Particularly when collaboration is likely to be ongoing, make time to exchange information with other businesses before working together. Find out about their employees, fleet, premises, equipment, procedures or policies. Provide information about your own business and employees.

Ways to provide information include: a leaflet, a QR code linked to web content, contact details for a training manager, site visit or induction, information pack etc.

Try to identify differences in advance and then work with the other business, and your employees, to agree on a common approach or procedure. Encourage employees to note and report on issues or inconsistencies when working with other businesses, locations, equipment, practices etc., and compile the information to address with the other parties.

Arrange joint training sessions with employees of other businesses, to ensure that they are getting the same training. Invite employees from other businesses to attend your training sessions and send your employees along to theirs. Understanding the questions and concerns of employees from other businesses may improve all trainees’ understanding of their impact on others.

* 1. Control: Provide training to all employees about the impact of delay or time pressure on drivers’ fitness to drive, and the effect of fatigue upon driver competence.

Employees who may unwittingly contribute to fatigue or speeding risks include:

* sales staff who overbook time slots, or promise early delivery times
* loaders and unloaders who disrupt the order in which vehicles are loaded
* employees managing the movement of vehicles on a site
* recruiters who don’t appreciate the importance of a loader’s speed and efficiency
* clients who order goods at the last moment, and ask transporters to make up lost time
  1. Control: Provide training or information to other CoR Parties about how their actions and inactions can affect the safe operation of heavy vehicles.

Document and provide case studies or examples of how certain actions or inactions, poor system or premises design, or insufficient employee training have produced unfavourable or unsafe outcomes.

* 1. Resources for Training employees:
* NHVR Regulatory Advice on [Managing the risks of undertrained workers](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-of-undertrained-workers)[[12]](#endnote-12) provides guidance on identifying and managing the safety risks associated with insufficiently or inadequately trained workers in the heavy vehicle industry.
* NHVR Regulatory Advice on [Operating in the agricultural sector](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/operating-in-the-agricultural-sector)[[13]](#endnote-13) provides guidance for individuals and businesses who operate in the agricultural sector about seasonal workers, inexperienced and underprepared staff.

1. Activity: Working with other businesses

Working with other businesses who are not on the same page as your business in relation to safety, or who do not understand their safety duties, can expose your business to potential risks. A weak link, such as a partner who pressures drivers to meet unsafe schedules or fails to maintain vehicles, can undermine safety across the transport task.

Carefully selecting and collaborating with businesses who are equally committed to safety, will strengthen your ability to meet your primary duty.

* 1. Control: Choose a business partner that demonstrates a commitment to safety, collaboration and communication.

For example, businesses that:

* proactively share information that improves safety
* encourage workers to speak up and to stop working or driving when unsafe
* communicate well internally and with others
* value training and experience
* ae accredited in the National Heavy Vehicle Accreditation Scheme or another scheme.
* retain their employees for long periods
  1. Control: Choose a business partner that monitors its own operations and the effectiveness of its procedures.
  2. Control: Choose a business partner that offers employment terms conducive to safety.

For example: paying drivers based on hours worked, rather than distance or task.

* 1. Control: Take sufficient time to find out in detail how your business partners operate.
  2. Control: Determine the resources or services your business needs and choose business partners with the capacity to provide them safely.

For example:

* has the operational capacity to undertake the transport task (vehicles, drivers, loading bays etc)
* has the necessary premises and equipment
* has experience and skilled employees
* factor in margins to allow for breakdowns, leave, repairs etc. For example, if you need to send ten loads per day, a business with only ten vehicles may not be suitable.
  1. Control: Review the business’s risk assessment for its own operations and the control measures it has implemented.

Work with them to identify new hazards or changes in risk levels that will result from the interaction.

* 1. Control: Reassess your own risk and consider whether existing controls will be adequate or what new controls will need to be integrated into your own procedures.
  2. Control: Consider safety and other factors, not just price, when deciding which other businesses to work with.

1. Activity: Assurance – other businesses

Assurance is what a duty holder needs, to be satisfied that things are operating safely, and that processes and procedures are working as intended. This may be in relation to the duty holder’s own employees and operations; it may refer to confirmation that a business partner is meeting expectations.

CoR parties aren’t automatically liable for everything their business partners do or don’t do, but their primary duty, and their own business interests require them to be doing what’s reasonably practicable to ensure the safety of the shared activities. This includes a requirement to be paying attention, making reasonable enquiries, verifying information, and monitoring how their partners manage safety.

Each party also needs to look at the combined effect of the two businesses working together. Each business might operate safely on its own, but a failure to coordinate and communicate might create new hazards.

Some assurance about a business can be gained in the pre-contract stage, but it is essential to obtain ongoing information and oversight.

* 1. Control: Include provisions in agreements that facilitate assurance.
  2. Control: Use a combination of methods to obtain assurance.

For example:

* obtain information about the business’ monitoring processes
* request a sample of monitoring reports that can be verified against independent data.
* identify parameters to monitor, obtain regular updates and identify trends or changes.
* conduct random spot checks of specific requirements.
* compare performance measures before and after commencing work with the other business.
* seek feedback from your own employees about interactions with the other business.
* note changes in employee morale, absenteeism, frequency of customer complaints.
* require the business to undertake an audit, conduct your own audit, or request a copy of a recent audit report. Ask the business to disclose any prior associations with the auditor. Note that an audit may only show the compliance with administrative procedures, rather than measure the content or effectiveness of control measures.
  1. Control: Vary or add methods of obtaining assurance as circumstances change.

1. Activity: Sharing information

Transport and logistics is a complex and dynamic sector. It involves multiple parties, in different places, constantly adapting to changing conditions. As much as anything, ensuring safety in the sector is a communications task.

Businesses do communicate all the time, to get goods or passengers from origin to destination, or to get work done, but the information they need to ensure safety isn’t the same as commercial information.

Managing safety across this whole network depends on useful information reaching the right person at the right time.

|  |
| --- |
| **Useful information is:**  **Complete** – contains everything recipients need, includes time and date, identifies source and contact details.  **Clear** – unambiguous, uses common terminology, explains acronyms or new terms, has a logical structure.  **Concise** – repetition and irrelevant information are removed.  **Timely** – provided as soon as available, at a time useful to the recipient, and is accurate at the time.  **Targeted** – sent directly to the people who need it, who are identified; not broadcast  **Accessible** – in a form the recipient can readily use or read; uses plain language; uses the right language  **Transferrable** – serves multiple purposes and can be readily shared with others.  **Recordable** – receipt can be acknowledged, and information can be readily stored or converted to a record. |

Determining the information another business needs and optimising how it is provided requires consultation between businesses. Much of the safety information a business needs might already be contained in commercial documents but is not likely to be readily available to the person who needs it. It may also be lost in irrelevant information, that distracts from the critical safety information and makes it harder to verify that key information is present.

Workers with limited literacy or who speak English as a second language may find it more difficult to find the relevant information, increasing the risk of error, and requiring more time. This is an example of where too much information can be a problem. The same principle applies in communications. Too many messages can result in important messages being missed or ignored.

Send specific information only to the people who need it, rather than to all parties, or all employees.

Ensure all employees know how information is circulated and stored, and how to retrieve it, so that critical information can still be readily obtained even when some staff are not working.

**Uses of Information**

Different kinds of information are critical at different times and are used for different purposes. Broadly speaking they could be described as:

**Pre-contract information**: information about other businesses’ resources and procedures

**Task information**: details of a job, origin, destination, load, route, vehicle, time and date.

**Dynamic information**: critical or changing information during a journey.

**Feedback or monitoring information**: enabling review, adjustment and improvement.

**Sharing information within a business**

It is also important to share information within a business, for different purposes, at different times. It should not be assumed that information exchange within a business is easier than sharing externally. Within a business, differing priorities, business structures, physical separation, software resources and record keeping practices can all be obstacles to timely sharing of information.

For example:

* executives aren’t alerted to issues about new equipment
* safety staff aren’t included in contract or procurement processes
* sales and marketing staff are in a different office from warehouse and scheduling staff
* contract staff do not have access to vehicle maintenance records or schedules
* trainers are not consulted prior to the purchase of new equipment
* some employees do not have time to attend training about new procedures

Current technology makes it very easy to transmit information quickly, but sharing useful information requires forethought, consultation and planning.

Effective information sharing is one of the most important control types for managing safety.

* 1. Control: Determine the information you need to carry out your transport activities safely.
* assess your own transport activities to determine information you require
* consider the purpose and importance of each kind of information your business requires, and determine how it should be received, in what form, and when
* consider information required from other businesses or persons
* consider information your own business has, and what needs to be shared between employees
  1. Control: Consult with other businesses to work out what information they require from you, so that both businesses can carry out their transport activities safely.

Consider the type of information, in what form, when required and who it should be directed to.

Work out the source/s of the information they need and the best way to provide it to them.

* 1. **Control: Develop resources and processes for sharing useful information**.

Develop pre-contract information packages to provide to other businesses. For example:

* information about premises, locations, opening hours
* contact details of operational staff
* specifications about products and packaging
* skills, qualifications and training records of employees
* fleet information
* performance reports and data

Obtain consent before sharing personal information

Extract relevant information from commercial documents and provide it in a succinct form, tailored for different purposes or needs, at different times or places or stages in a journey.

Use a single set of data but provide different views of the data for different purposes.

Use available means to share information with other parties. Smaller businesses may use phone calls, emails, signage or documents to share information. Larger businesses may use more sophisticated systems.

Find ways to share real time information such as telematics, on board mass, or automatic number plate recognition (ANPR) camera data. Consider APIs (application programming interfaces), software platforms, social media etc.

* 1. Control: Provide dynamic information to other parties as soon as possible.

Develop a way to immediately share or transmit real time information that could affect driver schedules or work and rest hours. For example:

* delays at other businesses
* road closures, weather or traffic events
* changes in load or destination
* equipment breakdown or delays at loading or unloading premises
* number of vehicles in a queue and average wait time
* time until a driver needs to rest or stop working
* availability of planned locations for rest breaks
* changes to deadlines, schedules, opening hours

Develop a way to immediately share or transmit real time information about a driver’s location and estimated arrival time at other businesses.

* 1. Control: Ensure that information which is time critical for safe operations has been received by the relevant party.

For example:

* set up read receipts on emails
* use software that logs access to every record
* require recipients to confirm receipt in another way
  1. Control: Find a way that multiple parties can share information in real time.

Consider mobile applications; sending information to a central point for dissemination via multiple channels; using a software platform etc.

* 1. Control: Share information about trips and loads with multiple parties.

Businesses that work together can share information relevant to each of their transport activities. For example:

* number of vehicles in a queue
* vehicle arrival and departure times
* time loaded
* weight when loaded
  1. Control: Review and analyse information, in consultation with other parties, and find ways to improve planning and address safety breaches.
  2. Control: Store information in ways that allow it to be readily accessed for monitoring and review.
  3. Resources for Sharing information:
* NHVR Regulatory Advice on [Providing false or misleading information](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/providing-false-or-misleading-information-to-the-nhvr) explains why providing false or misleading information about your heavy vehicle transport activities is prohibited by law.

1. Activity: Making agreements

The process of making agreements - whether formal or informal - is an opportunity for businesses to put things in place that will help each of them to improve safety outcomes, comply with their primary duty and to collaborate effectively.

**Note**: under the HVNL, a party in the CoR cannot use a contractual agreement or arrangement to delegate all or part of their primary duty to another person or business.

* 1. Control: Ensure agreements do not contribute to safety risks.

Agreements should:

* afford drivers the right to stop driving if fatigued or unfit to drive without penalty
* afford employees the right to refuse to perform tasks that create public risk
* afford flexibility in scheduling, to accommodate safety delays or unexpected delays

Agreements should not directly or indirectly induce or encourage:

* the use of unsafe vehicles
* shortcuts in safety procedures
* driving whilst impaired by fatigue or unfit
* lengthy queuing or circling in traffic
* speeding

For example: punitive or tight slot booking times, sending a vehicle to the back of a queue, excessive demurrage fees, limited access at delivery sites.

* 1. Control: Ensure the terms of an agreement will enable your business to operate safely and productively.

For example:

* factor in time for employees to attend medical assessments and treatment, to obtain mental health care and to attend to personal matters
* factor in time off-road for regular maintenance. delaying maintenance in favour of maximising haulage capacity can lead to unsafe vehicles or vehicles out-of-service for lengthy repairs
* factor in time and resources for performing business support functions, training and consultation
  1. Control: Ensure payment amounts reflect the cost of undertaking the transport task safely.

Use your understanding of the cost of similar transport tasks to assess whether the other party may be failing to invest in safety, for example by skipping vehicle maintenance.

Discuss any concerns with the other party to understand how safety related costs are being met under the proposed agreement terms.

* 1. Control: Afford rights or obligations necessary for safe operations.

For example:

* driver’s right to stop driving if fatigued or unfit to drive
* right or obligation to direct a driver to exit a vehicle if they appear fatigued or unfit to drive
* right or obligation to detain a vehicle at premises if the vehicle, driver or load is unsafe
  1. Control: Create obligations to share or report information.

For example: operational data, incident or near miss reports, compliance data, safety research, expert reports.

* 1. Control: Afford rights to be provided with information and documentation, to visit sites, to speak to workers, to inspect vehicles or loads, and obligations to meet reasonable requests.
  2. Control: Establish clear expectations of how work will be done and what functions employees of each business will perform.
  3. Control: Agree on common terminology, communication channels and contingency plans.
  4. Control: Include terms that will improve the safety of operations.

For example:

* how goods are packaged or prepared for loading
* provision of fatigue awareness training to all employees
* safety or monitoring equipment
* limits on waiting, loading or unloading times
* provision of rest facilities
* participation in public safety education
  1. Control: Include scheduled contract review dates, or state conditions, such as changes in the economic or operating environment, in which performance of the contract may be reviewed or varied.

For example:

* goods are heavier now due to new requirements
* the bridge has closed, and the detour adds an hour
* we no longer operate on Saturdays
* drivers now must do their own loading
* average mass of containers has increased
* new bridge only has a 4.5m height clearance
* now using a new data system that requires updates of all truck GPS
  1. Control: Establish common standards, information sharing mechanisms and access to information for each business in a multi-layered contract arrangement.
  2. Resources for Making agreements:
* NHVR Regulatory Advice on [Prohibited requests and contracts under the HVNL](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/prohibited-requests-and-contracts-under-the-hvnl)  provides guidance on how to comply with obligations under section 26E of the HVNL.

MANAGING DRIVERS

1. Activity: Recruiting and employing heavy vehicle drivers

Australia faces a significant truck driver shortage of over 26,000 unfilled positions, with road freight projected to increase by 77% from 2020 to 2050.[[14]](#endnote-14) Driver shortages in Australia, are expected to double in the next five years.

The average age of a truck driver in Australia is 49, with 47% of drivers aged 55 or older[[15]](#endnote-15). This is a considerable challenge for supply chains, and the availability of goods.

Unskilled or inexperienced drivers (including those returning to the industry) may not be accustomed to working with or around modern heavy vehicles or may not have received any relevant training. e.g., working holiday makers. Other factors to consider when recruiting are driver experience and non-technical attributes such as communication skills and attitudes towards safety.

* 1. Control: Provide incentives to attract and retain the best drivers.
  2. Control: Plan career pathways and transition options to retain drivers long term and keep their knowledge and experience within the business.

For example: roles in training or mentoring new drivers, scheduling, allocating, operations manager.

* 1. Control: Recruit for non-technical skills and personal traits as well as driving skills

For example, look for employees who:

* value safe driving, in themselves and others
* communicate effectively in a range of settings
* collaborate effectively with their team and other businesses and customers
* take responsibility for their actions and show leadership
* follow policies and procedures and accept feedback or guidance
* are proactive about safety concerns
* can maintain concentration and situational awareness
* respond well and adapt to dynamic or complex circumstances
* maintain a healthy lifestyle
  1. Control: Verify experience, skills, licenses and accreditation during the recruitment process.
  2. Control: Require referees to disclose any personal connection with the applicant and ensure that they directly supervised or worked with the applicant and that they are authorised to speak on behalf of the previous employer.
  3. Control: Research other information sources to understand the applicant’s employment history and lifestyle choices.

For example:

* social media accounts
* previous customers
* previous coworkers
  1. Control: Include contract terms preventing or limiting secondary employment.
  2. Control: If secondary employment is to be permitted, include contract terms requiring the driver to inform the employer of any other employment undertaken by the driver.
  3. Control: Include contract terms requiring a driver to notify the employer of any criminal history, driving offence, infringement, loss of points, or changes to condition of any licence or authorisation immediately the driver becomes aware of them.
  4. Control: Maintain records of each driver’s traffic history and license throughout the course of their employment. Verify its accuracy at regular intervals.
  5. Control: Offer employment terms conducive to safety.

For example:

* offer payment terms based on hours worked, rather than distance or task
* ensure that non - driving requirements are counted as work:
* pre-trip and post-journey checks,
* loading, unloading, washing, getting fuel
* attendance at induction sessions at new premises
* consultation with other workers, including from other businesses.

**Health assessment of drivers**

All Australian states and territories have regulations and standards for assessment of commercial drivers by medical professionals. This framework has an important role in improving safety in the industry, but duty holders cannot rely on this system alone for ensuring that drivers are fit and remain fit to drive.

* Each jurisdiction recommends the frequency of assessments, based on driver age, and licence category, but there are notable differences between them, indicating that the recommendations are general, and provide no guarantees in relation to individual drivers.
* Each jurisdiction creates an obligation for drivers to notify licencing authorities of illness or injury that would affect their fitness to drive, but only two participating jurisdictions in the HVNL place a similar duty on healthcare professionals to make notifications[[16]](#endnote-16).
* Although these assessments are carried out by health professionals, their reliability still depends on the time taken to do the assessment, whether the assessment was thorough, the driver’s relationship with the medical professional, and whether the driver disclosed all relevant matters.
* Finally, there is no guarantee about the period for which an assessment will provide an accurate picture of the driver’s health.

In summary, the fitness to drive assessment should be understood as a licence requirement, but not as complete assurance that a driver is fit to drive. Employers and other CoR parties should use a range of measures to promote and monitor driver fitness and should implement more or more effective measures according to the driver’s age and health risk, and the nature of the driving task.

* 1. **Control: Require a medical assessment in accordance with** [Austroads Assessing Fitness to Drive (AFTD) Guidelines](https://austroads.gov.au/publications/assessing-fitness-to-drive/ap-g56/regulatory-requirements-for-driver-testing)[[17]](#endnote-17) **as part of the recruitment process.**

For example: Require an assessment by a practitioner familiar with the Austroads Guidelines or request a report of a recent assessment.

* 1. Control: Include contract terms requiring a driver to undergo medical assessment by a medical practitioner nominated by the employer.

For example:

* at intervals prescribed by the AFTD, or
* at more frequent intervals nominated by the employer, or
* if the employer has reasonable concerns about the employee’s fitness.
  1. **Control: Include a contract term requiring a driver to maintain their fitness to drive at all times and to immediately notify their employer if they are not fit**.
  2. Control: Include contract terms requiring a driver to provide written authority enabling the employer to discuss the driver’s fitness for work with their medical practitioner(s) and obtain copies of relevant records from the practitioners (including for any relevant previous condition or ailment), and that such authority will not be withheld.
  3. Control: Include contract terms requiring a driver to consent to the provision of samples for drug and alcohol testing throughout the employment period.
  4. Control: Ensure that time is afforded to manage a driver’s ongoing fitness to drive and wellbeing:
* training
* health care, fitness to drive assessments
* access to counselling and support
* accommodation of family and other commitments
  1. Control: Include contract terms requiring employers to implement policies and procedures, training and resources to ensure the privacy of employees’ medical and other records.
  2. Resources for Recruiting and employing heavy vehicle drivers:
* NHVR Regulatory Advice on [Fitness to drive: Mental health](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/fitness-to-drive-mental-health)[[18]](#endnote-18) provides guidance on mental health and wellbeing in the heavy vehicle transport industry.
* NHVR Regulatory Advice on [Fitness to drive: Physical health](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/fitness-to-drive-physical-health)[[19]](#endnote-19) provides guidance on the management of known and unknown medical conditions of drivers and other workers in the heavy vehicle industry.
* [Austroads Assessing Fitness to Drive (AFTD) Guidelines](https://austroads.gov.au/publications/assessing-fitness-to-drive/ap-g56/regulatory-requirements-for-driver-testing)[[20]](#endnote-20) details the regulatory requirements for driver testing in each state and territory.

1. Activity: Managing fitness to drive

An employee who is unfit for work presents a significant safety risk to themselves, other employees and the public and can impact the safety of a business’ transport activities. It is essential that an individual is fit to safely carry out their duties when they sign on to work and remains fit throughout the duration of their shift.

Fitness to work means an employee is physically, mentally and emotionally able to carry out their work in a manner that does not endanger the health and safety of themselves or others. Being fit to work is more than not being impaired by fatigue or by alcohol or other drugs. When considering if someone is fit to work you need to consider a range of factors including behaviour, mood, knowledge, experience, training, safety awareness, and their mental and physical wellbeing.

Employers and other CoR parties already have a duty to ensure driver fitness. It’s a part of their primary duty. From 1 July 2026, heavy vehicle drivers will also have an explicit duty to avoid driving a heavy vehicle when unfit to drive. The HVNL currently includes a definition of “fit to drive” (see HVNL Definitions in the Key Terms and Definitions).

* 1. Control: Empower a driver to stop driving when unfit.
  2. Control: Provide training about:
* fitness for duty expectations
* alcohol and other drug use policies
* reporting procedures when observing impairment in themselves or others
  1. Control: If a driver identifies that they are unfit to drive, or will become unfit, substitute another driver.
  2. Control: Train drivers and employees to assess their fitness for duty before and during shifts and to observe others who may be unfit for duty.

For example:

* drivers and employees should be supported to notify their supervisor if they feel unfit for duty due to lifestyle, health, or medical issues
* drivers and employees are trained to recognise impairment in others (by substance, alcohol, fatigue or other causes)
* drivers and employees are empowered to report observed or suspected impairment in others, and there is a process in place to do so

See Resources for Managing fitness to drive (10.13) for physical signs that a person may be unfit to drive or affected by alcohol or other drugs.

* 1. Control: Empower drivers and other employees to speak up about issues which may affect their performance over the length of a scheduled shift.
  2. Control: Implement measures supporting employee mental health.

Consider a range of options:

* mental health first aid training to a nominated person or persons
* peer support programs or Employee Assistance Program (EAP)
* demonstrating acceptance of mental health issues
* opportunities to de-brief before and after a shift, or if involved in an incident
* access to counselling services, particularly where someone is involved in or witnesses an incident
* a “right to disconnect” policy in consultation with all drivers and employees
  1. Control: Promote a healthy lifestyle.

Provide employees with educational resources around nutritious food, exercise and avoiding drugs, alcohol and smoking. For example, using resources such as [Healthy Heads - Better Nutrition for Truck Drivers](https://www.healthyheads.org.au/wp-content/uploads/2025/01/Image-Amended-14012025-Healthy-Heads-Better-Nutrition-for-Truck-Drivers.pdf)[[21]](#endnote-21) or NRSPP [Toolbox Talks](https://www.nrspp.org.au/product-category/heavy-vehicles/)[[22]](#endnote-22).

* 1. Control: Require drivers to undergo periodic or triggered medical examinations.

In addition to periodic medical assessments required by licensing authorities, consider scheduling more frequent assessments where:

* the driver reports health concerns
* changes in the driver’s overall health are observed
* there is an underlying health condition that requires monitoring
* the driving task is high risk (e.g., transporting dangerous goods, driving on regional or remote roads)

**Note**: For drivers nominated in [NHVAS fatigue management modules](https://www.nhvr.gov.au/files/media/document/35/202206-1215-nhvas-fatigue-management-accreditation-guide.pdf)[[23]](#endnote-23), examinations must be conducted at least once every three years for drivers aged 49 or under, and yearly for drivers aged 50 or above. This may be a useful general guide for an appropriate assessment frequency.

* 1. Control: Require an appropriate form of assessment.

A driver’s usual medical practitioner may be able to provide a more comprehensive assessment than an occupational assessor, because of their knowledge of the driver’s medical history over a longer period. They may also provide more useful recommendations about managing the driver’s mental and physical health, because they know the whole person. Against this, the family doctor may be biased in favour of the driver retaining his job and may not be well versed in the requirements of the AFTD standards.

These are matters to consider when choosing how assessments should be carried out.

Other considerations are whether a question-and-answer assessment is sufficient, or whether an actual examination is warranted. For example: screening for sleep disorders and other high-risk conditions.

* 1. Control: Require medical clearance after an incident.

Ensure drivers do not return to work after an incident, injury, or illness without clearance from a medical practitioner, and only if they feel fit to do so.

* 1. Control: Conduct random testing to detect and deter substance use.

Ensure confidentiality about the outcome of any tests.

Ensure a lack of predictability about when random tests will occur.

* 1. Control: Conduct targeted testing of a driver if there are indications of unsafe driving, or unusual behaviour.

For example:

* telematics indicates periods of driving above speed limits
* repeated detections by fatigue and distraction detection technology (FDDT)
* mood swings
* customer complaints
* observations from co-workers
  1. Resources for Managing fitness to drive:
* NHVR Regulatory Advice on [Managing the risks of employees impaired by alcohol and other drugs](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-of-employees-impaired-by-alcohol-and-other-drugs)[[24]](#endnote-24) provides guidance on managing the risks associated with alcohol and other drug use impairment in the workplace.
* NHVR Regulatory Advice on [Fitness to work](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/fitness-to-work)[[25]](#endnote-25) provides guidance on how Human Factors and organisational performance impact a worker’s fitness to work.
* NHVR Regulatory Advice on [Fitness to drive: Mental health](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/fitness-to-drive-mental-health)[[26]](#endnote-26) provides guidance on mental health and wellbeing in the heavy vehicle transport industry.
* NHVR Regulatory Advice on [Fitness to drive: Physical health](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/fitness-to-drive-physical-health)[[27]](#endnote-27) provides guidance on the management of known and unknown medical conditions of drivers and other workers in the heavy vehicle industry.
* NHVR Regulatory Advice on [Bus and Coach Driver Fatigue and Health and Wellbeing](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/bus-and-coach-driver-fatigue-and-health-and-wellbeing)[[28]](#endnote-28) provides guidance on the management of fatigue and driver health and wellbeing in the bus and coach industry.
* [Healthy Heads - Better Nutrition for Truck Drivers](https://www.healthyheads.org.au/wp-content/uploads/2025/01/Image-Amended-14012025-Healthy-Heads-Better-Nutrition-for-Truck-Drivers.pdf)[[29]](#endnote-29) is a resource to support drivers in making practical changes to improve their nutrition and overall health and wellbeing.
* NRSPP [Toolbox Talks](https://www.nrspp.org.au/product-category/heavy-vehicles/)[[30]](#endnote-30) provide information and resources on a range of health and wellbeing related topics relevant to heavy vehicle drivers.
* [NHVAS fatigue management modules](https://www.nhvr.gov.au/files/media/document/35/202206-1215-nhvas-fatigue-management-accreditation-guide.pdf)[[31]](#endnote-31) provides information about the requirements to qualify for fatigue management accreditation as part of NHVAS, including the requirement for medical examinations for drivers participating in the scheme.
* More information about fatigue and distraction detection technology (FDDT) is available on the [NHVR website](https://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/fatigue-distraction-detection-technologies)[[32]](#endnote-32).
* More information on the “[right to disconnect](https://www.fairwork.gov.au/employment-conditions/hours-of-work-breaks-and-rosters/right-to-disconnect#right-to-disconnect)[[33]](#endnote-33)” is available on the Fair Work Ombudsman website.
* Physical signs that someone is unfit to drive include:
* symptoms of short-term physical illness (pale/flushed skin, breathlessness, sweating, swelling or rashes)
* dizziness (difficulty walking or maintaining balance, involuntary rapid eye movement)
* physical injury (pain or discomfort, inhibited movement)
* management of long term or chronic medical conditions, which require medical equipment or medicines (CPAP machine or taking ongoing medications which may have side effects)
* psychological factors (anxiety, depression, stress, feeling overwhelmed, or impaired coping skills)
* external factors (family & relationships, adverse life events, economic or social issues)
* organisational factors (understanding policies and procedures, rosters and work requirements)
* changes in general fitness
* changes in diet and nutrition
* Physical signs that someone may be affected by alcohol or drugs include:
* glassy or bloodshot eyes
* smell of alcohol or drugs (for example, marijuana) on the breath or clothes
* slurred or incoherent speech and talking too loud or too fast
* lowered inhibitions – doing or saying inappropriate things
* impaired coordination or motor skills – poor balance and clumsiness
* sense of confusion, appears lethargic or “spaced out”
* memory problems or problems concentrating
* general personality changes or mood swings, irritability or outbursts
* Additionally, for drugs:
* periods of hyperactivity (“wired”), agitation or giddiness
* appears fearful, anxious or paranoid.

1. Activity: Managing driver fatigue

Driver fatigue is a factor in a significant proportion of accidents and near misses. The worst possible outcome of driver fatigue is a driver falling asleep at the wheel, but well before that might happen, fatigue can impair a driver’s focus, perception, decision making and reaction times. Over time, fatigue also affects drivers’ physical and mental health. Managing fatigue is rightly recognised as one of the most important measures for reducing harm to drivers, and public risk when heavy vehicles are used on the road.

Chapter six of the HVNL creates a detailed set of obligations to ensure that drivers of fatigue regulated heavy vehicles (FRHVs) comply with prescribed work and rest hours and that they and their employers or record keepers maintain records of those hours. In addition, the chapter includes a provision that imposes a duty on drivers not to drive a heavy vehicle whilst impaired by fatigue.

The primary duty is a broader overarching duty to ensure safety. It applies in relation to all heavy vehicles, not just FRHVs, and requires a risk management approach, rather than compliance alone. Meeting the requirements of chapter six is not a guarantee of compliance with the primary duty, although it is certainly a strong foundation.

To understand the difference between these two obligations, consider the following example. A driver spent all weekend fighting bush fires with their local volunteer fire brigade, suffered from smoke inhalation and slept badly on Sunday night. They returned to work on Monday, drove to prescribed hours and finished their shift. They told their employer they were starting to feel tired and unwell, but with no relief driver available, the employer asks them to work their usual hours for the rest of the week.

At this point, neither the driver nor the employer has committed an offence against chapter six or s228 of the HVNL, but it appears that the employer has not done what’s reasonably practicable to ensure safety. There has been no proper assessment of the risk of fatigue, and no measures have been implemented to eliminate or minimise the risk. Those failures are a primary breach of the duty, even if no incident has occurred. (The driver may well be in breach of s228 after they start driving on Tuesday morning.)

This section focuses on measures that will help CoR parties meet their primary duty. Managing driver fatigue can be complex. Most businesses will need to implement a combination of controls, or different parts of multiple controls, to build a system which will adequately manage driver fatigue.

* 1. Control: Provide training for all employees about the factors that cause fatigue.

Factors to be included in such training may include:

* the quality of rest
* recognising mental health wellbeing
* physical health and diet
* the importance of properly preparing for work
* the potential impact of medication
* responsible use of alcohol and other drugs
* medical conditions, including sleep apnoea and other sleeping disorders
* exposure to environmental factors such as heat, cold, noise, vibration, dust
* lifestyle factors, other work, recreational activities, or family demands
  1. Control: Provide training for all employees about the risks of drivers being impaired by fatigue and the importance of procedures and systems to eliminate or reduce fatigue.
  2. Control: Provide training for all employees about how to identify signs of fatigue impairment and steps to take at any time when a driver is assessed as impaired by fatigue, by themselves or another.

See Resources for Managing Driver Fatigue (11.23) for the definition of “sign of fatigue”, and information about training modules available under the Australian Skills Quality Authority (ASQA) framework in relation to fatigue.

* 1. Control: Ensure the driver’s schedule allows sufficient opportunities for rest including long rest breaks.

See the NHVR website for more information on [Work and Rest Requirements](https://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/work-and-rest-requirements)[[34]](#endnote-34) for heavy vehicle drivers.

* 1. Control: Ensure the daily driving schedule accounts for non-driving work.

Examples of non-driving work include:

* travel to or from a work site in a non FRHV
* pre-journey vehicle checks
* completing and checking paperwork
* loading, unloading and load restraint
* interception by authorised officers
* refuelling or recharging a vehicle
* washing vehicles and equipment
* attending to passengers
* spelling livestock
* health screenings or declarations
* alcohol and drug testing
  1. Control: Choose business partners who implement measures to minimise delays and improve drivers’ opportunity to rest.

For example, businesses that:

* schedule timeslots to reduce queuing
* provide off-street parking and rest facilities for drivers
* provide early notification of delays
* monitor and manage waiting, loading and unloading times
  1. Control: Implement a system for drivers to be alerted to pending delays or changes.
  2. Control: Adjust a driver’s schedule when non-work activities have caused the driver to be fatigued.

Activities such as driving to work, work done in another part of the business, work done for another employer, weekend activities or volunteer work may all contribute to a driver’s fatigue levels. Although these activities may not count as “work” for the purpose of chapter 6 of the HVNL, they should still be taken into account in when drivers’ working hours are rostered.

* 1. Control: Where possible, avoid rostering driving between midnight and dawn.
  2. Control: Where driving between midnight and dawn is necessary, implement extra fatigue risk management controls.

For example:

* reduce the driver’s total weekly driving hours
* require a second person fatigue risk assessment before commencement of driving
* require further fatigue risk assessments throughout the shift and at the end of the shift
* welfare checks throughout the shift
* use of fatigue and distraction detection technology (FDDT)
* schedule medical assessments more frequently
* check work diary records more often
* periodically review GPS or in-vehicle monitoring system (IVMS) data for indications of impairment
  1. Control: Roster drivers to work similar patterns each week.
  2. Control: Avoid rostering drivers with split shifts.
  3. Control: Where split shifts are unavoidable, implement additional controls to manage the risk of drivers being impaired by fatigue.
  4. Control: Use a staged approach or allow an extended interval between shifts if it is necessary to change a driver’s work pattern.

For example, swapping from night to day shifts or vice versa. For more information on managing this risk, refer to [Guide for Managing the Risk of Fatigue](https://www.safeworkaustralia.gov.au/system/files/documents/1702/managing-the-risk-of-fatigue.pdf)[[35]](#endnote-35) from Safe Work Australia.

* 1. Control: Maintain a register of relief drivers who can replace a driver impaired by fatigue.

Relief drivers are also at risk of impairment by fatigue if they have not had sufficient rest before commencing driving or if they are asked to start driving at different times on successive days.

Best practice is to assign each relief driver to an agreed work pattern. For example, the night shift relief driver is contacted to replace a night driver, the day shift relief driver is called to replace a day driver.

Relief drivers should be given as much advance warning as possible and should have a second-person fatigue assessment before commencing driving.

Consider whether relief drivers are at greater risk of fatigue impairment and implement other fatigue risk management measures as appropriate. For more information on managing this risk, refer to [Guide for Managing the Risk of Fatigue](https://www.safeworkaustralia.gov.au/system/files/documents/1702/managing-the-risk-of-fatigue.pdf)[[36]](#endnote-36) from Safe Work Australia.

* 1. Control: Develop and implement a procedure to assess a driver’s fatigue level.

Measures that prevent drivers becoming fatigued are preferred, but drivers may nonetheless experience fatigue during their work hours, and this is a hazard that must also be managed. Therefore, it may be necessary to use a procedure to assess the fatigue of a driver at multiple points during a driver’s work period.

The procedure should be adapted to the specific circumstances in which the business and employees operate, and consider the following principles:

* Numerous factors affect fatigue, including the nature of the work and the work environment, shift start times and duration, and the work performed by the driver over previous days. The driver’s age and overall health will also impact the risk of fatigue. For example, undiagnosed sleep apnoea is a recognised risk for professional and casual drivers alike. Other health conditions may also alter a person’s sleep requirements.
* Self-assessment of fatigue levels is a basic element of fatigue management. It begins before the worker starts work and should continue throughout the shift. It is also part of a worker’s own duty to keep themselves and others safe. Self-assessment is most effective when workers are trained about the causes, indicators and consequences of fatigue and where there are procedures in place that support them to stop driving when they identify that they are at risk of being impaired by fatigue. A properly trained worker may have the earliest opportunity to detect that they are at risk of fatigue.
* Fatigue risk management can be improved by also using objective fatigue assessment methods to support self-assessments. These include second-person assessments and the use of fatigue risk evaluation tools. Objective fatigue assessments reduce the risk that bias, or fatigue impairment, affects the assessment outcome.
* Assessments by a second person are preferred because that person is better able to identify physical signs of fatigue such as slow blinking, unsteadiness or lack of balance, or inattention to conversation/details. Where there is no other person present, a second-person assessment could be conducted via video call or phone call, though this may reduce the opportunity to observe non-verbal cues. An in-person, second-person assessment could also be conducted at the next sensible opportunity.
* A fatigue risk evaluation tool asks for information about factors which cause fatigue and uses this as the basis of an objective assessment. There are a variety of tools available, for example, online tools, smart phone applications, or paper-based tools that include calculations. There are some freely available software applications that perform this function. You should verify for yourself which tools are suitable, or whether a similar tool should be adapted for your operations.

Also consider that a person’s fatigue level changes over the course of a shift and should be re-assessed from time to time using objective fatigue assessment measures. Appropriate times to re-assess may include:

* before the driver commences or recommences driving
* when there are indications of fatigue
* at the time at which a fatigue risk evaluation tool predicts there will be an increased level of fatigue related risk

The implementation of the procedure should include the development of relevant documentation and training for employees about how the procedure operates and how information is recorded and shared.

* 1. **Control: Enlist business partners to monitor and immediately report a driver who is impaired by fatigue or otherwise unfit to drive**.
  2. Control: Ensure a driver who is assessed as impaired by fatigue or assesses themselves as impaired by fatigue, does not drive a vehicle.
  3. Control: Have a procedure in place for taking practical actions to support a fatigue impaired driver to rest immediately.

For example:

* maintain a register of potential relief drivers with necessary experience, health and fitness.
* establish protocols with customers and business partners that afford flexibility
* send a relief driver to take over
* arrange for the driver to rest where they are or be taken home or to accommodation
* reschedule the task
  1. Control: Assess the circumstances of the driver’s impairment and determine whether fatigue risk management measures need to be adjusted, or other changes made.
  2. Control: Consider the overall risk associated with the task and adjust risk tolerance accordingly.

For example:

* drivers transporting dangerous goods should have more, and more effective controls in place
* the degree of risk may vary
* arrange for the driver to rest where they are or be taken home or to accommodation
* reschedule the task
  1. Control: Regularly monitor the fatigue impairment risk of all drivers, using all available information and adjust control measures where appropriate.

Sources of information:

* work diaries for drivers of FRHVs and work schedules for drivers of non-FRHVs.
* in-vehicle monitoring systems, fatigue and distraction detection technologies, and GPS data
* driver and employee notifications
* driver and employee surveys
* reports from business partners or members of the public
* observable changes in driver’s mental or physical health, behaviour or mood
  1. Resources for Managing Driver Fatigue:
* NHVR Regulatory Advice on [Fitness to drive: Fatigue](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/fitness-to-drive-fatigue)[[37]](#endnote-37) provides guidance on fatigue in the heavy vehicle transport industry and outlines obligations under the HVNL.
* NHVR Regulatory Advice on [Bus and Coach Driver Fatigue and Health and Wellbeing](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/bus-and-coach-driver-fatigue-and-health-and-wellbeing)[[38]](#endnote-38) provides guidance on the management of fatigue and driver health and wellbeing in the bus and coach industry.
* NHVR Regulatory Advice on [Operating in the agricultural sector](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/operating-in-the-agricultural-sector)[[39]](#endnote-39) provides guidance about fatigue to individuals and businesses who operate in the agricultural sector.
* The HVNL provides a definition for a “sign of fatigue” (s221 HVNL) – means any sign that a person was, is or will be fatigued while driving a fatigue-regulated heavy vehicle on a road (whether the sign manifests itself before, during or after the driver drove the vehicle).

For example:

* lack of alertness
* inability to concentrate
* reduced ability to recognise or respond to external stimuli
* poor judgment or memory
* making more mistakes than usual
* drowsiness, or falling asleep, at work (including microsleeps)
* finding it difficult to keep eyes open
* needing more frequent naps than usual
* not feeling refreshed after sleep
* excessive head-nodding or yawning
* blurred vision
* mood changes, increased irritability or other changes to the person’s mental health
* changes to the person’s health or fitness
* The [Guide for Managing the Risk of Fatigue](https://www.safeworkaustralia.gov.au/system/files/documents/1702/managing-the-risk-of-fatigue.pdf)[[40]](#endnote-40) from Safe Work Australia provides practical guidance on how to manage fatigue to ensure it does not contribute to health and safety risks in the workplace
* Training modules are available under the Australian Skills Quality Authority (ASQA) framework in relation to the management of fatigue. To find nationally recognised training and trainers accredited to provide this training, visit [training.gov.au](https://training.gov.au/)[[41]](#endnote-41).

Relevant units of competency include:

* TLIF0005 – Apply a fatigue risk management system
* TLIF0006 – Administer a fatigue risk management system
* TLIF0007 – Manage a fatigue risk management system
* NHVR’s [Guidance on Fatigue and Distraction Detection Technologies (FDDTs)](https://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/fatigue-distraction-detection-technologies)[[42]](#endnote-42) provides good practice guidance to support industry uptake of FDDTs.

1. Activity: Managing distraction and inattention

Driver distraction has emerged as a key factor in crashes involving heavy vehicles, with NTI/NTARC reporting a substantial increase in inattention and distraction related incidents from 2022-2023.[[43]](#endnote-43).

For a heavy vehicle driver, distraction is the diversion of attention away from critical driving tasks to competing events, objects or conditions, either inside or outside the vehicle.

Attention can be diverted by things both inside and outside the vehicle, such as:

* phone calls
* devices and screens inside the cabin, alarms and alerts
* moving objects inside the cabin
* other vehicles or activity alongside the road
* troubles at home or personal struggles
* workplace conflicts, aggravation from clients
* pressure to meet deadlines
* concern about where to stop
* pain, discomfort, hunger

Any of these can prevent drivers giving their full attention to how they are driving. The effect can be multiplied when drivers are fatigued or stressed. The most effective controls remove the sources of distraction but removing too many stimuli can have the opposite effect, where monotony and repetition start to decrease a drivers’ alertness and focus.

For example, driving a new route could involve distraction such as looking for a landmark or address. Travelling the same route a hundred times can cause a driver to stop paying conscious attention to their driving and rely on learned and practiced behaviour to get them to their destination. Drivers who fail to stop at level crossings, or who hit low bridges, may be operating in this mode.

Other controls will help drivers maintain situational awareness.

How drivers respond and behave throughout a journey will depend on the person, and their mental and physical state on any given day. Control measures that improve fitness to drive will also improve drivers’ ability to pay attention to the driving task.

* 1. Control: Reduce the number of audio and visual devices in the cabin of each vehicle to the necessary minimum.
  2. Control: Reduce the number of separate systems that bus drivers use for ticketing and navigating.
  3. Control: Restrict radio or phone calls to drivers to times when they are not driving.
  4. Control: Attend to mechanical issues early, to prevent warning lights being displayed on the dashboard.
  5. Control: Restrict the use of mobile phones during driving and install phone mounting equipment for drivers to receive calls while driving.
  6. Control: Train drivers to stop at a safe place before making mobile phone calls.
  7. Control: Make time to speak to drivers at the end of each shift, so that work issues can be resolved or addressed before their next shift.
  8. Control: Install compartments, boxes or holders in vehicle cabins to restrain items that could move during travel. Train drivers to secure all loose items in the cabin, before starting to drive.
  9. Control: Train drivers in the safe use of driver assist technologies, to reduce their cognitive load while driving.
  10. Control: At the start of a journey, remind drivers about hazards on the route to bring them to the driver’s attention.
  11. Control: Use visual prompts inside the cabin to remind drivers to pay attention to hazards, places or times on the route.

For example: a sticker displaying the vehicle’s height, the location of a detour, a recommended speed limit through roundabouts.

* 1. Control: Check in on drivers throughout longer journeys or use in-vehicle monitoring systems to gauge their attention throughout the day.
  2. Control: Use GPS geo-fencing to set alerts at key parts of a journey, to remind drivers of hazards ahead.
  3. Control: For complex or hazardous journeys, allocate a person to accompany the driver and help them navigate the route and its hazards.
  4. Control: Swap drivers’ shifts or route from time to time to relieve monotony and reduce complacency.
  5. **Control: Provide training to drivers about dealing with stress or provide access to a confidential counselling service**.
  6. Resources for Managing distraction and inattention:
* NHVR Regulatory Advice on [Driver distraction](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/driver-distraction)[[44]](#endnote-44) provides guidance on managing the safety risks associated with driver inattention and distraction.
* NHVR’s [Guidance on Fatigue and Distraction Detection Technologies (FDDTs)](https://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/fatigue-distraction-detection-technologies)[[45]](#endnote-45) provides good practice guidance to support industry uptake of FDDTs.

1. Activity: Training drivers

Driving a heavy vehicle is a complex and ever-changing set of tasks and problems to be solved, usually a long way from home, and often without support. It’s not possible to train a driver once, at the beginning, and expect that training to equip them to deal with every situation.

Drivers need many different types of training. They need to know how to drive each vehicle, on each route, with each load, in all weather and at every time of day. They need to know how to work with each business they visit, where the gate is, who’s in charge, where to wait and what the rules are.

They need to know their legal obligations and rights, and what to do when things don’t go to plan. They need to understand their own health and well-being and how it affects their own survival, community safety, and their loved ones’ happiness.

Employers can ensure that drivers are trained to do all those things, but it can’t be done overnight, and it doesn’t all come from one source.

Drivers play a critical role in ensuring heavy vehicle safety. Executives, including senior managers and directors, should be keenly aware of the value of investing in appropriate driver training. Failure to provide the support could be seen as a failure of due diligence, and therefore a breach of the executive duty.

* 1. Control: Allocate appropriate time and resources for driver training.
  2. Control: Assess the competency of drivers to operate a particular vehicle before permitting them to do so.

Provide training and the opportunity for drivers to gain experience before permitting them to drive the vehicle.

* 1. Control: Supervise inexperienced workers.

Allocate skilled or experienced workers to accompany or monitor employees using new skills doing new tasks or working in different environments. For example:

* new drivers
* drivers upgraded to a larger vehicle, on a different route, or a different load
  1. Control: Maintain a register of regular drivers and their skills and experience.

Keep a record of:

* which vehicles each driver is licensed and competent to drive
* how much experience they have had with different vehicle and combination types
* other skills or qualifications that they have
  1. Control: Ensure drivers have appropriate training for general and specialised driving tasks they may perform.

For example:

* safe speeds for different driving conditions – rough surfaces, narrow roads, tight bends
* operating laden and unladen vehicles
* operating vehicles over 4.3m high or vehicles with a high centre of gravity
* techniques for transporting unfamiliar or specialised loads – slosh in bulk tankers
* navigating steep descents
* how to recognise changes in a load during the journey, and how to respond
* operation of auxiliary equipment fitted to the vehicle
  1. Control: Train drivers to identify hazards before they start driving.

For example:

* they or someone else is, or appears unfit to drive
* the vehicle is not rated or suitable to carry the required load
* the vehicle has a defect, or a component that does not function correctly and which poses a serious risk if the vehicle continues to be used
* the vehicle does not have necessary load restraint equipment
* the load is not safely restrained
* containerised freight is not properly distributed or restrained
* the vehicle exceeds a dimension limit or is over mass
* the vehicle is not authorised to travel on a route
* packaging materials and methods are unsuitable
* livestock is unwell or not fit to load
* vehicle or load is leaking
* the contents of a load are suspicious or unknown
* vehicle or load is unsafe for any other reason
  1. Control: Provide training for drivers about the risks of driving around overhead electrical infrastructure and safe clearances to be maintained.

For example: use resources such as the [“Look up and Live”](https://www.byda.com.au/look-up-and-live/) website[[46]](#endnote-46) and WHS regulator codes.

* 1. Control: Provide training to drivers to always apply the park brake when stationary at a loading or unloading facility.

Further information about managing the risk of vehicle roll-aways is available from [Safe Work Australia](https://www.safeworkaustralia.gov.au/sites/default/files/2023-09/Prevention%20of%20vehicle%20roll-aways%20-%20Fact%20Sheet_0.pdf)[[47]](#endnote-47) and [WorkSafe Queensland](https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0009/122202/6558-safe-immobilising-of-vehicles-self-assessment.pdf)[[48]](#endnote-48).

* 1. Control: Provide training to drivers about how to respond in an emergency.

For example:

* collision
* runaway lithium battery fire
* system or equipment malfunction
* extreme weather event
* medical emergency
* dangerous goods or hazardous substance spill
  1. Control: Train drivers to immediately submit defect notices.
  2. Control: Empower and support drivers to refuse to drive a vehicle if it is unsafe.
  3. Control: Create a procedure for drivers transporting un-weighed goods.

For example:

* provide verified information about the mass of the vehicle and the mass limits applying the vehicle, to CoR parties who load, receive or weigh vehicles
* if the goods are weighed at the point of unloading, retain or record a copy of any mass information provided
* communicate any comments or information about the load mass back to the operator, loader, or other relevant CoR Party
  1. Control: Provide training to drivers about checking loads for the presence of invasive pests such as fire ants, particularly when transporting soil, landscaping products, earth moving machinery etc.
  2. Control: Require drivers to provide feedback and ensure it receives a response.

Ask for feedback on topics such as:

* concerns with vehicle safety or roadworthiness
* unsafe behaviour they observe in others
* the suitability of the route
* delays at loading or unloading premises
* delays affecting trip time, e.g., congestion, detours, roadworks, weather.
* other factors that impact on their or others’ safety, either positively or negatively
  1. Resources for Training Drivers:
* NHVR has published Regulatory Advice on [Seatbelt use compliance in the heavy vehicle industry](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/seatbelt-use-compliance-in-the-heavy-vehicle-industry)[[49]](#endnote-49).
* NHVR has published Regulatory Advice on [Managing the risks associated with heavy vehicles travelling down steep descents](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-associated-with-heavy-vehicles-travelling-down-steep-descents)[[50]](#endnote-50), especially steep descents which requires the use of low gear.

1. Activity: Equipping drivers

Providing drivers with the right equipment, in good working order, allows drivers to operate safely, respond to emergencies, and meet their legal requirements.

* 1. Control: Provide drivers who work in remote areas with communications equipment, such as satellite radios, emergency position indicating radio beacons (EPIRBS), or fall alerts.
  2. Control: Provide drivers who work at night with lighting equipment they can carry or fit to their person.
  3. Control: Provide drivers who carry loads of variable dimensions with measuring devices such as height sticks, lasers, tape measures.
  4. Control: Provide all drivers with suitable personal protective equipment (PPE) work outside the vehicle.

1. Activity: Using monitoring devices and safety systems

In-vehicle monitoring systems (IVMS) including telematics and other safety technologies can help transport operators identify areas for improvement, including in relation to risky driver behaviour and operational inefficiencies, such as at partner facilities.

In this section, monitoring devices refers to any safety system or technology which generates data or information about a vehicle’s performance or the way it is driven. It includes systems like telematics, fatigue and distraction detection technologies (FDDTs), or engine management systems.

* 1. Control: Provide information and engage with drivers and other employees about the decision to introduce or use monitoring devices.

Considered engagement will promote participation and instil confidence in the new system and technology.

Before new technology is used, explain to drivers and other employees:

* what the system is and how it works
* why the decision was made to implement the system
* how the system will improve driver safety, as well as public safety
* what data or information will be produced by the system
* how the data or information will be used by the business
* what other changes to processes and procedures will be required to make the system operational
  1. Control: Implement systems and adjust processes to integrate monitoring devices into the business.

Considerations include:

* information generated by monitoring devices must be collected and interpreted to have value.
* ensure competent employees are available to analyse data and information from monitoring devices.
* commit to the timely analysis of data and information.
* for systems that generate alerts and incident reports in real time, procedures are required to action these, as soon as possible, and to guide appropriate operational responses.
* excessive false positive alerts can cause distraction and then complacency unless systems and settings are recalibrated. This may be an iterative process and take time.
* use collected data to inform safety decisions and influence change to policies and procedures
  1. Control: Provide support and training to drivers and other employees about the use of new monitoring devices.

This includes during on-boarding of new employees and may necessitate the off-boarding of existing employees who are unwilling to engage with safety monitoring devices.

* 1. Control: Develop procedures and training about interference, tampering or disengaging systems and address immediately if detected.

For example:

* repositioning fatigue detection cameras away from the face
* covering cameras
* failing to connect the trailer Anti-Lock Braking System (ABS)/Electronic Braking System (EBS) pass-through wiring rendering the technology ineffective
* disengaging autonomous cruise control or lane departure warnings
* falsifying electronic work diary (EWD) entries
  1. Control: Debrief with drivers following events detected by monitoring devices.

For example:

* show footage of micro sleeps to drivers after a fatigue incident
* encourage and reinforce correct driver use of monitoring devices
* review driver incidents with a safety-first mindset rather than a disciplinary approach
  1. Control: Make use of monitoring device data to identify gaps in safety, and to inform training and processes. Combine data sets to generate new insights.

For example:

* Compare data for individual drivers at different times of multi-day trips or points in the roster to understand patterns that may increase risk. For example: more fatigue events at the end of a trip or at certain hours of the day or night.
* Compare data between drivers undertaking the same routes to recognise points where a risk may be higher. For example: sharp corners or steep descents. These high-risk locations can then be highlighted to drivers or geofenced (a virtual boundary marked on a GPS) to help reduce the risk of incidents occurring.
* Compare vehicle speeds with speed limits, including limits for particular vehicles (e.g., speed limiters)
* speed compared to engine performance or braking or acceleration
  1. Control: Conduct regular safety meetings to discuss telematic events and implement learnings to improve safety.

For example: events may impact future route planning and scheduling.

* 1. Control: Systematically review the effectiveness of the monitoring devices and the relevant policies and procedures used by the business to ensure they remain effective.
  2. Resources for Using monitoring devices and safety systems:
* NHVR Regulatory Advice on [Heavy vehicle safety technology and telematics](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/heavy-vehicle-safety-technology-and-telematics)[[51]](#endnote-51) provides guidance on best practice for using safety technologies and telematics to improve the safety of transport activities.
* NHVR’s [Guidance on Fatigue and Distraction Detection Technologies (FDDTs)](https://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/fatigue-distraction-detection-technologies)[[52]](#endnote-52) provides good practice guidance to support industry uptake of FDDTs.

VEHICLES AND EQUIPMENT

Selecting and maintaining vehicles, and decisions about fittings and modifications directly influences the safety, efficiency, and compliance of transport activities.

The following activities provide practical guidance for parties to help them meet their safety duties when procuring vehicles, managing fleets, and undertaking additions or modifications. It outlines how to assess vehicle suitability, integrate safety technologies, and manage maintenance.

This activity is relevant to any individual or business that owns or operates heavy vehicles, including vehicle hirers. It is also informative for parties to make decisions about which businesses to work with.

1. Activity: Vehicle procurement and fleet management
   1. Control: Assess suitability for planned use before purchasing or hiring a vehicle.

For example:

* the distance and duration of trips
* route characteristics (topography, rough roads, temperatures, remoteness)
* the types of loads to be carried, mass and dimension
* driver comfort and requirements for sleeper berths
* special requirements for the task or environment
* availability and suitability of fuels, including alternate fuels and EV chargers
* emissions control system
* availability of parts and repair services
  1. Control: Consider safety systems and technology that are part of the vehicle or able to be fitted.

For example:

* electronic stability control
* autonomous emergency braking
* lane departure warning systems
* GPS-based telematic systems
* in-cab driver (fatigue and distraction) monitoring systems
* vehicle immobilisation technology
* encapsulated driver compartment made of non-reflective material (for buses)
* fault detection systems which notify the operator of problems with vehicle components that develop during journey (e.g., wheel ends, tyre pressure, tyre temperature, air pressure systems)
* high-efficiency particulate air filters to remove particulate matter
* filters containing activated charcoal to absorb volatile organic compounds
* automatic engine shutdown or neutral idle systems to reduce fuel consumption
  1. Control: Consider how vehicle features will affect driver fatigue and health.

For example: excessive noise or vibration, seat design and comfort, glare, cabin noise, air conditioning.

* 1. Control: Assess intended use before purchasing or specifying rigid vehicle body.

Considerations include:

* freight to be carried
* restraint points
* rated headboards / tie rails / tail gates
* driver/loader access aids
* loading and unloading equipment
  1. Control: Choose the safest vehicle and body that meets business requirements.
  2. Control: Manage the life cycle of the vehicle fleet.

Considerations for fleet life cycle include:

* changes to the transport task which require a different vehicle to be used
* different or more effective vehicle safety systems become available
* newer vehicles are more efficient and better for the environment
* older vehicles are more expensive to maintain
* a fleet of vehicles of the same make can streamline maintenance and driver training
* staggering the purchase and retirement of vehicles in the fleet to take advantage of incremental improvements in vehicle design, and to spread the expenditure over a longer period.
  1. Resources for Vehicle procurement and fleet management:
* NHVR Regulatory Advice on [Managing the safety risks of light to medium heavy vehicles](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-safety-risks-of-light-to-medium-heavy-vehicle)[[53]](#endnote-53) provides guidance about identifying and managing the safety risks and legal obligations for the use of light to medium heavy vehicles under the HVNL.

1. Activity: Maintaining vehicles and equipment
   1. Control: Create a service, inspection and maintenance schedule for each heavy vehicle and its auxiliary equipment, at a frequency appropriate for their use.

Considerations include:

* OEM specifications and service schedules in the operator manual
* recommendations from engineers, mechanics, or installers who fitted auxiliary equipment
* operating conditions which require more frequent servicing. For example: frequently operating on unsealed roads, regularly transporting over size over mass loads, exposure to harsh environments
* intermittent or seasonal use of the vehicle
* safety critical components prone to sudden failure if not regularly inspected, such as leaf springs or couplings

Examples of auxiliary equipment that requires service, maintenance or calibration include:

* fire extinguishers and fire-retardant systems
* telematics, record-keeping and communications equipment
* load restraint equipment including container twist locks, curtains, bins, cages and vessels
* on-board mass and other weighing devices
* vehicle mounted cranes, outriggers and other moveable plant

Service schedules should be established by a suitable qualified and experienced person.

* 1. Control: Schedule a combination of regular focused inspections and less frequent but more thorough inspections.
  2. Control: Ensure that operational schedules allow for maintenance to be undertaken in accordance with the service schedule established for the vehicle.
  3. Control: Use skilled and qualified mechanics to carry out all work. Confirm that they comply with OEM recommendations and use parts of suitable quality.
  4. Control: Arrange for specialist inspection and servicing of auxiliary equipment.
  5. Control: Ensure that vehicles are thoroughly washed prior to mechanical inspection so that latent defects such as cracking or metal fatigue are visible.
  6. Control: Perform additional inspection and maintenance of vehicles that have travelled through flood water.
  7. Control: Develop shut down and start up procedures for managing the maintenance of vehicles used intermittently or for seasonal work, paying attention to those systems and components which can deteriorate during storage.

For example:

* tyres – check for flat spots, cracking and ensure correct pressures
* battery – check charge levels, fluid levels and general condition
* brakes – components may have seized due to surface rust (auto slack adjusters, brake calliper pistons, etc.)
* air system – look for water and/or oil contamination in air tanks
* fuel – degradation of diesel which has been sitting in a tank for extended periods
* diesel exhaust fluids – additives such as AdBlue can degrade over time
* communications system still works when network changes
* vehicle systems or electronics which may be damaged by rodent infestation or attack
  1. Control: Develop pre-start and post-operation inspection procedures for drivers to use before and after a driving shift.

Provide a template or list of items that should be looked at including lights, windows, wipers and tyres, as well as other items recommended by maintenance staff, or OEMs, and items on or in the vehicle such as:

* load restraint equipment including tensioners, curtains, rails, headboards. twist locks
* latches, guards or mechanisms securing equipment such as outriggers, pumps, hoses etc.
* hydraulic, lifting, opening or closing mechanisms

The purpose of the procedure is to immediately identify obvious faults, to highlight priorities for upcoming maintenance or to ground vehicles if required. The emphasis should be upon gaining useful information, rather than asking a driver to pass or fail something. If in doubt, a driver should be able to obtain advice.

Provide space on a form or app for drivers to make observations such as changes in condition, leaks, stains, cracks etc. Ask drivers to send photos of problem areas to a nominated person.

The benefit of post shift inspections is that they allow more time to arrange immediate repairs, or to arrange an alternative vehicle before the next shift. The driver might also have useful indications of where to look for faults based on the vehicle’s performance during the shift.

**Note**: These procedures are not a substitute for regular inspection by trained mechanics. They are part of regular monitoring and potentially an early warning system when vehicle condition deteriorates.

* 1. Control: Ensure drivers’ pre-start and post-operation checks are part of their paid work time.
  2. Control: Provide training to drivers and other employees about the vehicle maintenance procedure.
  3. Control: Create an information channel between drivers and mechanics for sharing performance and diagnostic information including feedback about pre-start or post-operation checks.
  4. Control: Implement a system for ensuring that vehicle maintenance issues, defects or defect notices are recorded, and actioned and that defective vehicles that pose an imminent safety risk are removed from service and not returned to service until repaired.

For example: implement a tag out and remove from service system or keep the vehicle keys in a secure location such as a locked key box or lock out trailing equipment airlines.

* 1. Control: Encourage other parties to observe, record and report vehicle maintenance issues or defects to the driver or vehicle operator.
  2. Control: Use information from multiple sources to regularly assess the effectiveness of the vehicle inspection and maintenance program including fault monitoring.
  3. Control: Adjust and improve the effectiveness of the program.

For example:

* increase the frequency of inspection and maintenance
* allow more time for inspection and maintenance
* provide additional training to drivers about detecting and reporting faults
* randomly conduct audits or pre-start and post-operation inspections
  1. Resources for Maintaining Vehicles and Equipment:
* NHVR Regulatory Advice on [Maintenance of heavy vehicles used in agricultural or seasonal work](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/maintenance-of-heavy-vehicles-used-in-agricultural-or-seasonal-work)[[54]](#endnote-54) provides guidance on managing the risks associated with poorly maintained or unroadworthy heavy vehicles used in agricultural or seasonal work, such as harvest or snow activity.
* Original equipment manufacturer (OEM) specifications provide detailed instruction for the frequency with which routine maintenance should be carried out on each part of a vehicle and recommend appropriate spare parts or replacements. If OEM specifications are not available, a suitably qualified and experienced person should be engaged to develop a pre-start inspection checklist for the heavy vehicle.
* The NHVR’s [National Heavy Vehicle Inspection Manual (NHVIM)[[55]](#endnote-55)](https://www.nhvr.gov.au/safety-accreditation-compliance/vehicle-standards-and-modifications/national-heavy-vehicle-inspection-manual)provides pass/fail criteria that assist a person maintaining a vehicle to systematically check all vehicle systems. It also contains a pre-start inspection checklist. For further information about vehicle standards and modifications, refer to the NHVR website.
* NHVR’s [Creating-heavy-vehicle-daily-checks](https://www.nhvr.gov.au/files/media/document/474/202405-0434-creating-heavy-vehicle-daily-checks.pdf)[[56]](#endnote-56) provides guidance and suggestions for creating a suitable daily check procedure.
* NHVR’s [Post-flooding-safety-check](https://www.nhvr.gov.au/files/202202-1303-post-flooding-safety-check.pdf)[[57]](#endnote-57) provides advice and suggestions for checking vehicles exposed to water.
* NHVR’s [NHVAS Maintenance Management Accreditation Guide](https://www.nhvr.gov.au/files/202106-1213-nhvas-maintenance-management-accreditation-guide.pdf)[[58]](#endnote-58) provides information about the requirements to qualify for maintenance management accreditation as part of NHVAS. It may contain useful information for a business establishing a maintenance management system.

1. Activity: Equipping and modifying vehicles
   1. Control: Understand the requirements of the transport task and the fit-out of existing vehicles in the fleet, when deciding what auxiliary equipment is required.
   2. Control: Identify and install systems and technology that improve safety.

For example:

* fatigue and distraction detection technologies (FDDTs), telematics systems
* communication equipment or emergency beacons that function in remote areas
* cameras or sensors that detect and warn of vulnerable road users
* sensors for detecting infrastructure hazards (low bridges or tunnels, level crossings)
* air pressure system monitors and suspension management systems
* baffles inside tanks
* onboard mass measuring systems
* warning devices for secure restraint of crane outrigger legs or similar
* in-cabin air quality monitoring
* tyre temperature and pressure monitoring systems
* compartments, boxes or holders to restrain items in the vehicle’s cabin or saloon
* high visibility markings or lights for emergency or recovery vehicles
  1. Control: Install vehicle immobilising technology.

Examples of vehicle immobilising technologies are a park brake alert system, or a fail-safe automatic braking system that instantly applies the vehicle park brake if it is not applied by the driver or operator before they exit the cabin.

* 1. Control: Identify and install auxiliary equipment required for the transport task.

For example:

* emergency response equipment (extinguishers, fire detection, fire suppression systems, first aid kits)
* driver device restraints (phone holders)
* load restraint equipment
* rated headboards, tailboards, cab guards
* toolboxes or fittings to contain loose items
* baffles in vehicles for transporting liquid
* tarpaulins for vehicles that transport fine particulate matter or agricultural produce
* load handling equipment, remote controls for truck-mounted equipment
* effluent tanks, rubber matting to reduce livestock falls
* height marking inside tippers or on stanchions for estimating mass
* air-conditioning for buses or prisoner transport
  1. Control: Follow manufacturers’ recommendations, VSB6 and Australian Standards when fitting auxiliary equipment or designing and planning modifications.

All modifications, including the fitting of auxiliary equipment, must:

* not affect the safety of the vehicle or its components
* be performed in such a way that any new hazards are minimised
* meet the code of practice for vehicle modifications
* be fit for purpose
* be carried out by suitably qualified mechanics, engineers or fitters
* be undertaken in accordance with good engineering practice
  1. Control: Engage an approved vehicle examiner to assess all modifications other than minor modifications.
  2. Control: Ensure storage compartments, frames and brackets have secure access doors/hatches and fastenings that are durable enough to withstand the forces applied to them.
  3. Control: If storage compartments are retrofitted to a heavy vehicle, design access doors/hatches to open from the top, or if opening from the side have a design which resists unplanned opening.

Proper design will minimise the risk of storage compartments opening during travel, or if a latch or lock malfunctions, it will be less likely that items will fall out.

* 1. Control: Establish the total mass of a vehicle after additions and modifications.
  2. Control: Identify service or maintenance requirements and replacement intervals for all auxiliary equipment and include in maintenance schedules.
  3. Resources for Equipping and modifying vehicles:
* NHVR Regulatory Advice on [Heavy vehicle safety technology and telematics](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/heavy-vehicle-safety-technology-and-telematics)[[59]](#endnote-59) provides guidance on best practice for using safety technologies and telematics to improve the safety of transport activities.
* The [Heavy Vehicle (Vehicle Standards) National Regulation](https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2013-0076)[[60]](#endnote-60) establishes uniform national standards for the safety, performance, and environmental compliance of heavy vehicles.
* NHVR’s [Code of Practice for the Approval of Heavy Vehicle Modifications](https://www.nhvr.gov.au/files/201812-0136-code-of-practice-approval-heavy-vehicle-modifications.pdf)[[61]](#endnote-61) outlines the requirements and approval processes to ensure that heavy vehicle modifications comply with safety and regulatory standards of the HVNL.
* [Vehicle Standards Bulletin 6](https://www.nhvr.gov.au/safety-accreditation-compliance/vehicle-standards-and-modifications/vehicle-standards-bulletin-6)[[62]](#endnote-62) (VSB6) provides clear guidelines and technical requirements for modifying heavy vehicles in compliance with the Australian Design Rules (ADRs) and the Heavy Vehicle National Law (HVNL) to ensure safety and consistency.
* NHVR’s [Guidance on Fatigue and Distraction Detection Technologies (FDDTs)](https://www.nhvr.gov.au/safety-accreditation-compliance/fatigue-management/fatigue-distraction-detection-technologies)[[63]](#endnote-63) provides good practice guidance to support industry uptake of FDDTs.

PREMISES

Well-designed loading and unloading premises need to support safe interactions between vehicles, drivers, and site personnel. This includes minimising delays, managing congestion, supporting driver wellbeing, and enabling safe load handling. Effective premises management also involves clear communication, coordinated scheduling, and robust traffic and safety systems. Together, these control measures should help reduce risks, improve operational performance, and allow parties to meet their safety duties.

The following sections provide guidance for any business that operates premises where vehicles are loaded or unloaded. It will be relevant to businesses like distribution centres, manufacturers, stevedores, warehouses, saleyards, freight forwarders, or other businesses where goods or commodities are regularly picked up, loaded or unloaded.

1. Activity: Design and characteristics of loading / unloading premises
   1. Control: Situate, design, build, lease or adapt premises to minimise delays to drivers, and avoid congestion outside the premises.

For example:

* ensure there are sufficient loading / unloading docks or ramps, storage capacity, and other facilities or equipment, for the expected throughput of goods and vehicles.
* ensure that stationary vehicles will not prevent other vehicles from moving in or out of the premises, or from moving from place to place within the premises.
* situate the entry point to premises having regard to effects on local traffic and connections to present and future heavy vehicle networks.
* install cameras to monitor queues.
* install ANPR cameras to record the times when vehicles arrive in the vicinity of the premises, and the times when vehicles arrive and depart different locations within the premises.
  1. Control: Implement a queuing system that allows drivers to park, or park and leave their vehicles, while waiting, without losing their place in a queue.

Consideration for premises where waiting times exceed fifteen minutes.

* 1. Control: Situate, design, build, lease or adapt premises to allow drivers to rest while waiting.

For example:

* allocate waiting areas within the premises or identify nearby areas where vehicles can be parked
* locate waiting areas away from roads or machinery to reduce noise. Prefer shaded areas
* provide rest facilities for drivers, in the vicinity of waiting areas, with safe pedestrian access between them
* ensure driver comfort within the rest facility by providing bathroom and kitchen amenities and maintaining a comfortable temperature. Consider cultural and gender diversity.
  1. Control: Situate, design, build, lease or adapt premises or site to ensure the safe movement of vehicles, workers and pedestrians within the premises.

For example:

* when making decisions about where to locate premises entry and exit points, consider pedestrian safety, as well as the impacts on local roads and traffic
* consider guidance and resources from [CLOCS-A](https://clocs-a.org.au/resource-category/clocs-a-documents/vehicle-safety/)[[64]](#endnote-64)
* apply [Loading and Unloading Exclusion Zone (LUEZ) Guidelines](https://media.nrspp.org.au/wp-content/uploads/2017/03/06021817/Loading-and-Unloading-Exclusion-Zones.pdf)[[65]](#endnote-65) to the design of locations accessed by pedestrians, including public access, loading and unloading areas
* separate pedestrian paths from areas used by heavy vehicles with physical barriers or clearly marked boundaries. Use signage to draw attention to shared areas
* ensure suitable lines of sight for workers directing vehicle movement around the premises
* where possible, separate lanes for vehicles travelling in different directions
* ensure sufficient width and separation for vehicles to pass other vehicles, having regard to the dimension and swept path of vehicles that use or may use the premises
* install signage indicating position and movement around the site and the location of emergency exits and assembly points
* ensure that areas where vehicles stop are flat; identify places where the ground is not level and install warning signs
* support vehicle immobilisation practice during site inductions and by displaying reminders at unloading premises
* locate EV charging infrastructure in a dedicated area where parked vehicles will not obstruct access or traffic flow
  1. Control: Situate, design, build, lease or adapt premises to enable the safe construction and restraint of loads and safe unloading of loads.

For example:

* ensure sufficient space and lighting for safe loading and unloading
* install ramps, walkways or other structures that enable workers to safely load, restrain and inspect loads
* provide a safe vantage point for drivers to observe load construction and restraint
* ensure loading and waiting areas are level – or sloped towards the loading dock
* install rattlers, shakers or sprinklers at the exit of construction sites or quarries
* use blowers to remove chaff or trash from agricultural products as they are loaded
* install truck washes facilities or effluent dumps where livestock are loaded or unloaded
* provide waste receptacles for disposing of load restraint consumables such as wrapping or strapping
* install livestock loading equipment including loading ramps ([refer to AS 5340:2020](https://alrta.org.au/ramp-standard/)[[66]](#endnote-66))
  1. Control: Situate, design, build, lease or adapt premises to enable monitoring of the safety of vehicles, drivers and loads.

For example:

* provide height or width measuring equipment for incoming or exiting vehicles and a system to record height measurements. (height measurements marked on gantries or walls, lasers or infrared devices)
* provide weighing equipment (weighbridge, weigh in motion (WIM), container weighing stands, etc.) for incoming or exiting vehicles; or provide equipment for weighing goods prior to loading or after unloading
* install cameras to identify hazards or unsafe behaviour within the premises
  1. Control: Situate, design, build, lease or adapt premises to enable workers to deal safely with unsafe vehicles, drivers or loads.

For example:

* identify separate areas where unsafe vehicles can be taken
* provide equipment or infrastructure that will reduce the risk of harm when the vehicle is unloaded (e.g., lifting equipment, bunding, chains, elevated work platforms)
* provide ready access to third parties to address the safety risk or tow the vehicle
* supply drug and alcohol testing equipment and sick bays or waiting areas
* install boom gates to control entry to and exit from the premises
  1. Control: Situate, design, build, lease or adapt premises to prevent damage or harm to vehicles or loads.

For example: build and maintain roadways so that they retain a suitable surface and camber, despite repeated use, and in all weather conditions,

* 1. Resources for Design and characteristics of loading / unloading premises:
* NHVR Regulatory Advice on [Managing the risks associated with non-compliant heavy vehicles arriving at premises](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-associated-with-non-compliant-heavy-vehicles-arriving-at-premises)[[67]](#endnote-67) provides guidance on how to manage the risk of non-compliant heavy vehicles arriving at premises.
* NHVR Regulatory Advice on [Managing the risks of time slot bookings](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-of-time-slot-bookings)[[68]](#endnote-68) provides guidance on recognising and managing the risks associated with the scheduling of delivery or pick-up times for heavy vehicles.
* NHVR Regulatory Advice on [CoR for Owners and Operators of Weighbridges](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/cor-for-owners-and-operators-of-weighbridges)[[69]](#endnote-69) provides guidance on for parties who own or operate weighbridges and outlines expectations of what may be considered reasonably practicable actions.
* The CLOCS-A Program has a primary goal of reducing road trauma associated with construction logistics. [Case Studies](https://clocs-a.org.au/category/case-studies/)[[70]](#endnote-70), [Vehicle Safety Resources](https://clocs-a.org.au/resource-category/clocs-a-documents/vehicle-safety/)[[71]](#endnote-71) and the [CLOCS-A Standard](https://clocs-a.org.au/resources/clocs-a-standard/)[[72]](#endnote-72) are available on the [CLOCS-A website](https://clocs-a.org.au/)[[73]](#endnote-73).
* The [Loading and Unloading Exclusion Zone (LUEZ) Guidelines](https://media.nrspp.org.au/wp-content/uploads/2017/03/06021817/Loading-and-Unloading-Exclusion-Zones.pdf)[[74]](#endnote-74) provide advice on the design of locations accessed by pedestrians, including public access, loading and unloading areas.
* [AS 5340:2[[75]](#endnote-75)020](https://alrta.org.au/ramp-standard/) – Australian Standard on Livestock loading/unloading ramps and forcing pens – provides advice about one of the most hazardous areas in livestock handling, posing risks such as crushing, lacerations, and falls.

1. Activity: Managing loading and unloading premises
   1. Control: Provide access to onsite or offsite weighbridges, for loads that may need to be weighed prior to every journey.
   2. Control: Ensure mass measuring equipment used during the loading process is calibrated and operated in accordance with OEM requirements.
   3. Control: Support vehicle immobilisation practice during site inductions and by displaying reminders at unloading premises.
   4. Control: Identify the training requirements of employees at the premises, provide training and verify the competency of each employee.

Note special training requirements for particular operations, for example:

* forklift operators
* unloaders
* loaders
* animal handlers
* administration staff
* weighbridge operators
  1. Control: Ensure all employees are informed about the impact of fatigue on heavy vehicle drivers.
  2. Control: Train employees who interact with drivers to identify the signs of fatigue.

For example:

* constant yawning or falling asleep at work
* short-term memory problems and difficulty concentrating
* finding it hard to join in conversations
* poor decision-making and judgment
* reduced hand-eye coordination or slow reflexes
  1. Control: Train employees to identify and respond to or report safety issues.

For example:

* poorly restrained loads
* suitability and performance of packaging materials and methods
* animal welfare issues
* obvious vehicle defects or damage
  1. Control: Provide information that enables safe vehicle operation and planning,

For example, information about:

* height, length, width, swept path constraints at the site
* pre-requisites for vehicles to use the premises (e.g., communications systems, equipment or fittings, competency requirements for drivers)
* site rules and emergency procedures
* local traffic hazards or restrictions
* local rest areas or areas where a vehicle can park up
* system that will be used to communicate with drivers and operators in real time (e.g., UHF channel, signals or signs, phone number) and how it works
* traffic management plans or vehicle movement plans
* maps showing best entry point, hazards on site (e.g., power line location and height), pedestrian movement and safe zones, traffic direction, location of firefighting, first aid or spill containment equipment, location of duress alarms, shut off switches, emergency assembly points etc.
* hours of operation, employee contact numbers.
* site access when premises are unstaffed (e.g., light switches, gate codes)
* how to report complaints or safety issues (e.g., a hazard report form, a “suggestion box”, app, website, phone number, QR code or physical box.)
  1. Control: Provide information to CoR parties about how the premises will operate.

Information about the operation of the premises may include:

* details of the system to keep schedulers and drivers apprised of delays, and whether timeslots are operating according to schedule
* reliable estimates of average waiting, loading and unloading times for each category of vehicle and type of load
* services the centre will provide, for example assistance to load or unload
* skills and training of employees performing those services, for example trained to identify fatigued drivers, or trained to identify whether loads are properly secured
* non-driving tasks that drivers will be expected to do in relation to loading or unloading
* equipment that will be available to drivers to use for loading, unloading, load restraint or vehicle washing
* procedures to be followed when a safety issue is identified, for example, a vehicle is unsafely loaded upon arrival; a driver is fatigued; a vehicle is unroadworthy
* rules (if any) about available hours in work diary
  1. Control: Provide information in a way, and at the time, it is required by other CoR parties.
* make information available and accessible to parties loading or unloading at the premises prior to their arrival
* incorporate information about the site into open-source maps for use by drivers and CoR parties to schedule and plan journeys
* provide information using plain language; use diagrams where suitable; provide a glossary or explain technical terms or terms that have a special meaning at the premises
* where possible, provide information about the premises in languages other than English
  1. Control: Ensure a common set of requirements for persons or vehicles visiting the site to maintain safe standards.
  2. Control: Offer site inductions for drivers and CoR parties who use the site regularly.

For example:

* personal protective equipment (PPE) required
* site access, security arrangements and contact numbers
* emergency procedures: information on emergency exits, muster points, and the procedure to follow in case of an emergency (e.g., fire, spill, or medical incident
* traffic management, pedestrian routes, vehicle speed limits
* biohazard or contamination controls
* guidelines on the use of mobile phones and radios
* waste disposal and washing facilities
* on-site hazards such as moving machinery, hazardous materials, or confined spaces
* site amenities such as toilets, meal rooms, rest areas
* location of first aid stations and the procedure for reporting injuries
* following instructions from site personnel and adhering to all safety signs and notices
  1. Control: Obtain relevant information about vehicles and drivers from other parties, prior to their arrival.

Relevant Information to be obtained may include:

* mass limits of each vehicle, including gross and axle limits
* mass and dimensions of vehicles
* whether drivers have been trained and have the skills to safely restrain the load
* distance from drivers’ base
* any hazard that the visiting party may introduce to the site, along with control measures
  1. Control: Establish and implement a traffic management plan for heavy vehicle movements around the premises.
  2. Control: Implement a queuing system that allows drivers to park, or park and leave their vehicles, while waiting, without losing their place in a queue.

Consideration for premises where waiting times exceed fifteen minutes.

* 1. Control: Ensure there is an agreed method to notify drivers when it is their turn to be loaded or unloaded, as well as alerted to delays at the earliest available opportunity.

This could be an app or automated system. For smaller operations, this could be an SMS or social media group that includes all relevant parties. Communicate with drivers using the method agreed with the operator. Providing information about delays at the earliest opportunity may allow drivers to stop and rest at alternate locations and avoid queuing.

* 1. Control: Monitor average waiting and loading or unloading times and share the information with other CoR parties. Start timing from when the vehicle is stationary, whether or not it is inside the premises.
  2. Control: Provide regular information to CoR parties about vehicle movements at premises. Provide a mixture of operational data, monthly reports for trend monitoring, and real time updates that assist schedulers.

For example:

* monthly report of average waiting times
* monthly report of average time to load
* detail about vehicle arrival and departure times, time loaded
* detail about mass on arrival and on departure
* real time updates about delays, causes and estimates
* real time updates about the number of vehicles in a queue
* real time updates of changes to closing times or procedures
  1. Control: Incorporate targeted truck turnaround times into agreements with CoR parties.
  2. Control: Include terms in agreements with CoR parties about:
* obligations to provide information
* method to recalculate payment terms when waiting times exceed agreed threshold
* adjustment to booking ratios to maintain average waiting times at an acceptable level
* parties attending premises must advise of delays as soon as possible
* requirement that visitors to premises must consent to undergo drug and alcohol testing
  1. Control: Accommodate and communicate delays including adjusting or reprioritising loading or unloading times as required.

For example:

* contacting driver directly using UHF, phone or SMS; calling the driver’s employer or scheduler
* for potential or future delays use social media to raise general awareness
* providing information about delays at the earliest opportunity may allow drivers to stop and rest at alternate locations and avoid queuing
  1. Control: Allocate timeslots according to the capacity of the premises to load or unload vehicles in the allocated time.
* avoid allocating 100% of time slots, to retain capacity to respond to delays or other contingencies
* allow flexibility in booking systems to afford time for problematic loads or containers to be detected and dealt with, without penalty to transporters
  1. Control: Roster sufficient employees to load or unload vehicles within planned timeframes.
  2. Control: Adjust scheduling or staffing when turnaround times exceed targets or when truck queues on public roads create a hazard for other road users.
  3. Control: For multiple deliveries or collections, stagger when trucks arrive on site.
  4. Control: Include terms in agreements with CoR parties confirming the right to refuse to load a vehicle when, for example:
* the driver appears unfit to drive
* the vehicle is not rated to carry the required load
* the vehicle does not have the necessary load restraint equipment
* the vehicle appears unsafe for use on a road
  1. Control: Implement procedures (consistent with existing agreements) for employees to follow if a vehicle arrives at the premises and:
* the driver appears unfit to drive
* the vehicle is overloaded
* the load is improperly restrained, or leaking or falling from the vehicle
* livestock need veterinary attention
* the vehicle appears unsafe for use on a road
* also consider the available equipment and skills of employees to determine the best way to respond to the issue
  1. Control: Maintain records of each type of safety incident.
  2. Control: Provide feedback to other parties about safety issues at the earliest opportunity.
  3. Control: Report road maintenance/improvement issues in the vicinity to the relevant road owner or manager.
  4. Control: Provide public education about the site and vehicle movements.

For example:

* affix signs displaying safety information, warnings or instructions about heavy vehicles
* place signage to advise members of the public of vehicle movements
* install signs on roads in the vicinity of the premises, about the presence of heavy vehicles in the area
* highlight vehicle manoeuvrability limitations and specify minimum safe separation distances for other road users. (e.g., on signage attached to trucks)
  1. Resources for Managing loading and unloading premises:
* NHVR Regulatory Advice on [Managing the risks associated with non-compliant heavy vehicles arriving at premises](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-associated-with-non-compliant-heavy-vehicles-arriving-at-premises)[[76]](#endnote-76) provides guidance on how to manage the risk of non-compliant heavy vehicles arriving at premises.
* NHVR Regulatory Advice on [Managing the risks of time slot bookings](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-of-time-slot-bookings)[[77]](#endnote-77) provides guidance on recognising and managing the risks associated with the scheduling of delivery or pick-up times for heavy vehicles.
* NHVR Regulatory Advice on [CoR for Owners and Operators of Weighbridges](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/cor-for-owners-and-operators-of-weighbridges)[[78]](#endnote-78) provides guidance on for parties who own or operate weighbridges and outlines expectations of what may be considered reasonably practicable actions.
* The CLOCS-A Program has a primary goal of reducing road trauma associated with construction logistics. [Case Studies](https://clocs-a.org.au/category/case-studies/)[[79]](#endnote-79), [Vehicle Safety Resources](https://clocs-a.org.au/resource-category/clocs-a-documents/vehicle-safety/)[[80]](#endnote-80) and the [CLOCS-A Standard](https://clocs-a.org.au/resources/clocs-a-standard/)[[81]](#endnote-81) are available on the [CLOCS-A website](https://clocs-a.org.au/)[[82]](#endnote-82).
* The [Loading and Unloading Exclusion Zone (LUEZ) Guidelines](https://media.nrspp.org.au/wp-content/uploads/2017/03/06021817/Loading-and-Unloading-Exclusion-Zones.pdf)[[83]](#endnote-83) provide advice on the design of locations accessed by pedestrians, including public access, loading and unloading areas.

OPERATIONS

The safe operation of heavy vehicle transport relies on well-planned and coordinated activities across parties. The following sections provide guidance for parties who are involved in arranging the transport of goods, commodities, livestock or people. It is relevant to large corporations who send and receive goods all over Australia. It is relevant to a builder colleting an elevated work platform for a local job, and it is relevant to everything in between.

It outlines practical controls to ensure vehicles are suitable, loads are accurately described, and drivers are supported through clear communication, accurate information sharing, and that risks are identified and managed proactively.

1. Activity: Arranging for the transport of goods
   1. Control: Establish the mass of the goods.

For example:

* weigh the load on calibrated scales
* calculate mass based on manufacturer information plus mass of packing material
* calculate mass based on volume and density of a product
* use records of previous weighed loads to estimate the mass of similar loads
* use a vehicle fitted with on-board mass measuring equipment

Consider that the mass may increase for loads that are affected by weather, for example, hay may absorb water, increasing its overall weight.

* 1. Control: Calculate or measure the dimension of the goods when packaged or prepared for transport.
  2. Control: Provide the transporter with mass and dimension information.
  3. Control: Provide the transporter with other relevant information about the load.

For example:

* loading plans or diagrams, including load distribution
* unloading plans
* the type of goods (including hazardous materials), handling or transport requirements
* equipment required for loading, unloading, and restraint
* how goods have been assembled, packaged or unitised for transport
* strength of material used for unitizing goods on a pallet
* coefficient of friction of packaging materials
* suitability of dunnage and stillage
* volume and ullage of liquid loads
* centre of gravity of tall loads
* rating and location of anchorage points on items
* density of material and size of particles
* recommendations about restraint after partial unloading
* details of restraint inside shipping containers
  1. Control: Provide the transporter with information about locations where the load is being collected from and transported to.

For example:

* access routes and operating hours
* proposed loading and unloading times
* pickup and delivery locations on site, or how to receive further instructions on arrival
* average waiting, loading and unloading times at premises
* local traffic hazards or restrictions/curfews
* dimension or height limits
* UHF channel if used
* how queuing system works
* how to communicate with those on site
* access arrangements when unstaffed, (light switches, gate codes etc)
* site rules and emergency procedures

Provide links to information in advance and in accessible formats.

* 1. Control: Ensure that a suitable vehicle is used to transport the load.

A vehicle may be unsuitable if, for example it is:

* not rated to carry the required load
* the wrong type of vehicle to transport the load
* not carrying the necessary load restraint equipment
* in poor mechanical condition
  1. Control: Arrange pickup and delivery times according to the capacity of the premises and availability of employees to load or unload vehicles.
  2. Control: For multiple deliveries or collections, stagger when vehicles arrive on site.

For example, by allocating times when vehicles should arrive at a site and communicating them to relevant parties.

* 1. Control: Provide a flexible time frame for pickup and delivery.
  2. Control: Avoid delaying the driver.

For example:

* gates open
* goods are ready
* staff are available to assist
* nothing blocking driveway or loading bay
* livestock fenced in
  1. Control: For long-term business partners and their employees, provide an on-site induction and tour.

Ensure there are opportunities to repeat the induction for new drivers or employees or when conditions change.

* 1. Control: Consult with the transporter in advance and establish clear expectations of who will do each task and what resources they will provide.

For example:

* who will provide loading and load restraint equipment
* how the load will be lifted and placed
* who will load livestock
* who will be involved in the loading process
* who will restrain the load
  1. Control: Consider contingency arrangements in consultation with transporters in the event of delays or other unforeseen events.
  2. Control: Ensure drivers are alerted of delays at the earliest opportunity, using the method agreed with the transporter.

For example:

* contact driver directly using UHF, phone or SMS
* call the driver’s employer or scheduler.
* providing information about delays at the earliest opportunity may allow drivers to stop and rest at alternate locations and avoid queuing.
  1. Control: Provide feedback after the transport task is complete and request the same of the transporter.

Feedback could cover any issues with:

* vehicle condition
* site access
* was the scheduling appropriate
* load restraint or the way the load was packaged
* staffing
* any unknown hazards on route
* what worked and what could be improved
  1. Control: Engage transporters whose vehicles have immobilising technology

1. Activity: Arranging for a vehicle to perform a task
   1. Control: Obtain or provide information about the location where the task is to be completed.

For example:

* access routes and operating hours
* proposed arrival times
* local traffic hazards or restrictions
* dimension or height limits
* UHF channel if used
* how to communicate with those on site
* site rules and emergency procedures

Provide links to information in advance and in accessible formats.

* 1. Control: Ensure the location or premises will be open and accessible and that staff will be present when the vehicle is on site.
  2. Control: Ensure there is flexibility for arrival times at the location.
  3. Control: Ensure information is provided at the earliest opportunity about delays or limitations for accessing the site.
  4. Control: Engage transporters whose vehicles have appropriate safety technology.
  5. Control: Provide and receive feedback after the transport task is complete.

1. Activity: Arranging for the collection and transport of livestock

Arranging livestock movements confronts many of the same challenges as the transportation of other goods but also requires unique treatments. The recommended controls in this activity are alternatives to or additional to controls recommended in Activities 24 - 27. Relevant activities are shown in brackets.

* 1. Control: Prepare livestock for transport so that they travel well.
* remove animals from some types of feed or provide quality dry feed instead of green feed
* separate or join herds as little as possible in the days before transport
* use handling, yarding and loading best practices to minimise livestock stress
* do not allow animals that are not fit to travel to be loaded

Refer to the [Fit to Load Guide](https://www.mla.com.au/extension-training-and-tools/resource-hubs/fit-to-load/)[[84]](#endnote-84) from Meat and Livestock Australia (MLA) for more information about deciding whether an animal is fit to be loaded for transport.

* 1. Control: Share information about the livestock to be transported.

For example:

* the number, species, condition, class and mass of livestock being transported
* how the livestock has been prepared for transport including time of feed and water
* specific handling or transport requirements for the livestock
  1. Control: Share information about the locations where livestock are to be collected from and delivered to.

Information includes:

* safe access routes and access hazards which may need to be controlled
* site layout and vehicle dimension limits
* vehicle movement information while on site, including pedestrian locations
* loading ramps, yarding and other equipment at the site
* availability of staff to assist with loading or unloading
* presence of truck wash and effluent disposal facilities, or location of nearby facilities
  1. Control: Allocate a driver to the livestock transport task (see also Activity 24)

Ensure the driver is trained and experienced in animal handling, loading and unloading livestock, and is familiar with the requirements of the [Australian Animal Welfare Standards and Guidelines **–**Land Transport of Livestock](https://animalwelfarestandards.net.au/welfare-standards-and-guidelines/land-transport/)(LTSG)[[85]](#endnote-85).

* 1. Control: Allocate an appropriate vehicle (see also Activity 27)

Additional considerations include:

* ensure the vehicle has appropriate carrying capacity for the number, species, condition, class and mass of livestock to be transported
* ensure the vehicle has sufficient effluent containment capacity for the transport task
* ensure vehicle is clean and equipment is functioning properly e.g., ramp mechanisms
  1. Control: Establish a Livestock Spelling Plan for the journey

A Livestock Spelling Plan applies the factors described in the LTSG for managing the welfare of livestock during extended journeys. It is important for managing total time off water and maximising livestock fitness for travel.

* 1. Control: Select an appropriate route (see also Activity 26)

Additional considerations when selecting the route include:

* requirements of the Livestock Spelling Plan
* the location and availability of effluent disposal facilities
* access limitations or hazards for the collection or delivery location
  1. Control: Establish a schedule for the livestock transport task (see also Activity 25)

Additional considerations include:

* the Livestock Spelling Plan for the transport task and any other relevant factors from the LTSG
* pick-up and arrival times which best manage animal welfare risks, in particular total time off water
* plan the journey to reduce the risk of effluent spillage
* where possible, plan so that livestock are loaded in the early morning
* where possible, plan so that livestock arrive at the destination at the scheduled time and when people are present to receive them
  1. Control: Ensure the driver has information about the vehicle, route, collection and delivery locations, and the number, species, condition and class of livestock being transported.
  2. Control: Only load (or present for loading) the number, volume or mass of livestock which can be carried by the livestock transport vehicle without exceeding mass or volume limits.
  3. Control: Ensure sufficient staff are on-site at premises for the scheduled loading or delivery of livestock.
  4. Control: Ensure collection and delivery schedules are flexible and accommodate changes without imposing a penalty.
  5. Control: Provide information about delays to relevant CoR Parties at the earliest opportunity.
  6. Control: Provide facilities for drivers to rest, away from their vehicle while waiting to load or deliver livestock.
  7. Resources for the collection and transport of livestock:
* The Registered Industry Code of Practice on [Managing Effluent in the Livestock Supply Chian](https://www.nhvr.gov.au/files/media/document/83/202212-1326-managing-effluent-in-the-livestock-supply-chain-ricp.pdf)[[86]](#endnote-86) focuses on measures to eliminate or minimise the risks of livestock effluent loss into a road corridor.
* NHVR Regulatory Advice on [Livestock](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/livestock)[[87]](#endnote-87) provides guidance to businesses and individuals that use or engage the use of heavy vehicles to transport livestock by road.
* NHVR Regulatory Advice on [Operating in the agricultural sector](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/operating-in-the-agricultural-sector)[[88]](#endnote-88) provides guidance to individuals and businesses who operate in the agricultural sector
* The [Fit to Load Guide](https://www.mla.com.au/extension-training-and-tools/resource-hubs/fit-to-load/)[[89]](#endnote-89) from Meat and Livestock Australia (MLA) provides information about deciding whether an animal is fit to be loaded for transport.
* The [Australian Animal Welfare Standards and Guidelines **–**Land Transport of Livestock (LTSG)](https://animalwelfarestandards.net.au/welfare-standards-and-guidelines/land-transport/)[[90]](#endnote-90) provides information about animal welfare and handling practices during road transport.

DECISION MAKING

Decisions made before a journey begins, such as selecting a suitable driver, planning and selecting a suitable route and considered scheduling, are fundamental to ensuring the safety of transport operations.

The following activities highlight the many inputs necessary for good decision making, including information about driver competency and fitness, vehicle suitability, the task and the route. For clarity, this has been described as four separate decision-making processes.

It is recognised that in practice, these decisions might be made in a different order, or all at once, depending on the task and the parties involved. The guidance should be considered as a whole, and controls adopted that lead to informed decision making that takes account of all the impacts on safety and allows for contingencies.

1. Activity: Allocating a driver to a driving task

Driver allocation is distinct from employing a driver long term. This activity focuses on choosing the right driver for a task on the day, or for a route over a longer period, or a job in the future.

The controls in this activity fall into three categories – fitness to work, competency, and information – all of which are necessary for safety.

* 1. Control: Obtain information about drivers’ licensing, skills and experience, including non-driving skills.
  2. Control: Confirm details of the transport task.

For example:

* identify what is being transported (such as freight, liquids, goods, people or livestock)
* where from and where to
* location where the heavy vehicle will perform the task
* time considerations or constraints (relevant to the fatigue risk)
* details of the vehicle to be used
* special requirements for load restraint
  1. Control: Establish whether there are further competencies, experience or knowledge required by the driver.

For example, that the driver:

* has completed a necessary site induction
* has the appropriate high-risk license to unload mobile plant
* is trained in animal handling and the LTSG
* is trained to safely restrain a large indivisible load
* knows how to use loading or unloading equipment or load restraints
* is competent to drive in snowy conditions or extreme weather
* is competent and appropriately licensed to work with dangerous goods
* has other skills or qualifications necessary to transport a particular load type
  1. Control: Only allocate drivers to vehicles they are competent to drive.
  2. Control: Assess a driver’s level of fatigue and fitness for duty, including their record of work and rest hours, before allocating them to a driving task.
  3. Control: When programming future transport tasks, consider which drivers and vehicles will be suitable to allocate to those tasks.

Considerations should include:

* adjust driver work schedules to ensure the required number of work and rest hours will be available, including consecutive driving days if required
* schedule allocated drivers for rest days in advance of the transport task, to maximise the available number of work and rest hours
* ensure allocated drivers are prepared for the transport task by providing them with the relevant information, equipment, training and inductions in advance of the task
* ensure required vehicle and equipment maintenance has been completed in preparation for the transport task
  1. Control: Provide information about drivers’ future tasks to their scheduler, to ensure that longer rest breaks are allowed for in schedules.
  2. Control: Provide drivers with information about the allocated vehicle.

For example:

* axle and gross mass limits
* dimension limits
* any access limits or conditions
* number of seats
* luggage capacity
* lifting capacity
* safe speeds in different road conditions
* emergency equipment and spill containment kits
  1. Control: Provide drivers with information about the load.

For example:

* loading plans or diagrams, including load distribution
* unloading plans
* the type of goods, including hazardous materials, handling or transport requirements
* mass and dimension of the load
* recommendations about restraint after partial unloading
* details of restraint inside shipping containers
  1. Control: Provide drivers with information about premises they will visit and allow time for them to attend induction sessions where warranted.

For example:

* driver knows where to go when arriving at premises or who to contact on arrival
* information about timeslots
* whether there is a site induction
* location of driver facilities including rest and meal areas and toilets
* information about traffic control
* if there is specific equipment and ensure they are trained in using it
  1. Resources for Allocating a driver to a driving task:
* NHVR has published Regulatory Advice on [Managing the risks associated with heavy vehicles travelling down steep descents](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-associated-with-heavy-vehicles-travelling-down-steep-descents)[[91]](#endnote-91), especially steep descents which requires the use of low gear.

1. Activity: Scheduling transport tasks

Key considerations for trip scheduling are driver fatigue and fitness to drive, and the availability of a safe, suitable vehicle. In developing a schedule allowance needs to be made for rest breaks and time allowed for non-driving tasks which drivers are still required to do. Schedules for the use of vehicles also need to allow for out-of-service periods when vehicles can be maintained, inspected or refitted.

* 1. Control: Obtain information about driver’s level of fatigue and fitness for duty, including their work and rest hours.
  2. Control: Ensure the complete task the driver has to perform is accounted for when establishing the driver’s schedule.

For example, allowing time for:

* include time for pre and post trip inspections.
* non-driving tasks such as loading, unloading, load restraint, being intercepted, getting fuel, paperwork, attending to the load, passengers etc.
  1. Control: Where possible, schedule time slots to minimise driving between midnight and dawn.
  2. Control: Implement extra fatigue risk management controls for drivers who drive between midnight and dawn.
  3. Control: Ensure schedules allow adequate time for the proposed route to be completed without causing drivers to feel pressured – directly or indirectly – to speed, to drive while fatigued or when unfit for duty, or to breach work and rest hours.
  4. Control: Obtain information about the vehicle, load, origin and destination.

For example:

* expected time for vehicle to complete the journey
* approved sleeper berth
* whether load requires special handling or equipment to load or unload
* access routes and operating hours at origin and destination
* proposed loading and unloading times
* average waiting, loading and unloading times at premises
  1. Control: Obtain information about facilities required by the vehicle, driver, passengers or livestock, and when during the journey they will be required.

For example:

* place to stop, park or rest
* rest facilities, wash facilities and accommodation
* nutritious food
* fuel
* weighbridges
* places to clean equipment to meet quarantine requirements
* animal spelling or effluent disposal facilities
  1. Control: Obtain information about the proposed route.

For example: restrictions on travel on certain days or times.

* 1. Control: Propose a schedule for the journey which meets the requirements, and which allows drivers to stop and rest at suitable places.
  2. Control: Provide information about the schedule to the driver.

Schedule information should include:

* departure and arrival times
* anticipated journey times
* proposed stopping times, rest times and locations
  1. Control: Consult with the driver about the proposed schedule and adjust it to incorporate driver feedback.
  2. Control: Provide training to all employees involved in creating rosters and schedules about the risks arising from working while fatigued or speeding.
  3. Control: Make sure the schedule is flexible enough to allow unexpected delays or changes to be managed.

Causes of delay:

* poor communication/confusion
* freight not ready for pickup, equipment not available, or backlog at loading facility
* traffic congestion, major roadworks, adverse weather or road closures
* safety incidents
* vehicle or load problems in transit
* driver has to stop driving due to feeling fatigued or unfit to drive
* unloading facility closed or not ready to receive load
  1. Control: Consult with other CoR parties about planning loading and unloading times, including potential delays and flexibility.
  2. Control: Identify or establish a procedure for communicating with other parties in real time.
  3. Control: Monitor average journey times and adjust future schedules accordingly.
  4. Control: Monitor average waiting, loading and unloading times and adjust future schedules accordingly.
  5. Control: Include time in driver’s schedules for non-driving tasks.

For example:

* training
* preventative health care, fitness to drive assessments
* attendance at induction sessions at new premises
* consultation with other workers, including from other businesses.
  1. Control: Include time in vehicle operating schedules for out-of-service tasks.

For example:

* regular inspection, maintenance and repair
* installation of new safety equipment
  1. Control: Alert other parties of delays that will alter the schedule.
  2. Control: Maintain two-way communication with all relevant parties (and drivers) and encourage early notification of delays that have potential to impact on schedule.

This allows appropriate alternative arrangements to be made (Communicating Safety Information) and can also reduce queuing time.

* 1. Control: Conduct reviews of trip schedules used for repeated trips.

Reviews should be undertaken following a collision or other driving incident, and when a driver returns from a period of leave. In all other cases, trip schedules should be reviewed at least quarterly.

* 1. Resources for Scheduling transport tasks:
* NHVR has published Regulatory Advice on [Obligations for Restricted Access Vehicles](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/obligations-for-restricted-access-vehicles)[[92]](#endnote-92).

1. Activity: Route planning and selection

Route selection needs to consider the suitability of the route for the vehicle and load, access conditions or limitations, requirements of the vehicle, driver, passengers or livestock during the journey and any possible hazards that may be encountered on the journey.

* 1. Control: Obtain information about the vehicle allocated to the transport task.

For example:

* axle and gross mass limits
* dimension limits
* permitted routes, or access limits or conditions
* fuel sources and operating range
  1. Control: Obtain information about the load.

For example:

* loading plans or diagrams, including load distribution
* the type of goods, including hazardous materials or dangerous goods
* handling or transport requirements
* mass and dimension of the load
  1. Control: Obtain information about the origin and destination of the journey.

For example, are they:

* in a declared biohazard zone (for the control of fire ants, ticks, etc)
* subject to special conditions due to drought
* prone to flooding
* during harvest time
* in a densely populated urban zone
* in a school zone.
  1. Control: Obtain information about potential infrastructure hazards such as low bridges or tunnels relevant to the vehicle height.

This is particularly relevant for vehicles taller than 4.3m. Use NVHR or road manager information resources, driver apps or industry knowledge.

* 1. Control: Obtain information about facilities required by the vehicle, driver, passengers or livestock.

For example:

* places to stop, park or rest
* rest facilities, wash facilities and accommodation
* nutritious food
* refuelling requirements
* weighbridges
* places to clean equipment to meet quarantine requirements
* animal spelling or effluent disposal facilities
  1. Control: Identify appropriate stopping locations along the route which allow sufficient space for the vehicle to be stopped safely.

Considerations include:

* wide enough so the driver can access all parts of the vehicle and load without being on the roadway
* long enough so the full length of the vehicle is off the roadway
* quiet enough so the driver can rest if required
* have the facilities required by the driver, passengers or livestock at that point of the journey
  1. Control: Obtain information about other hazards on the proposed route and assess all hazards.

For example:

* level crossings
* high traffic density
* presence of vulnerable road users, e.g., townships, schools, shopping precincts
* sharp, closing radius or off-camber bends, roundabouts, narrow shoulders etc.
* multiple bends in quick succession
* steep descents
* T-junctions
* local weather effects, such as fog or ice, high or low temperatures, high wind
* extremely rough road
  1. Control: Propose an alternative route to avoid hazards; or
  2. Control: Implement suitable controls to manage the risk.

For example:

* extra time, or a different travel time
* a different or more experienced driver
* additional training for the driver
* different configuration of combination
* modifications to the vehicle or load
* scope hazards along the route using Google Maps Street View
  1. Control: Propose a route that meets the requirements and for which the vehicle and load are authorised.
  2. Control: For OSOM loads, ensure the permitted route is surveyed to establish whether it is suitable for the overall dimension of the combination transporting the large indivisible item, including swept path and tail swing.
  3. Control: Establish a procedure for drivers to identify appropriate and safe locations for unplanned stops, or if planned locations are not available.
  4. Control: Provide information about the route to the driver.

Route information should include:

* departure and arrival times and locations
* path of travel including access limitations or conditions
* intermediate stops for vehicle, driver, passenger or livestock amenity
* identified hazards on the proposed route and suitable controls
* information should be provided in a format the driver can use (e.g., physical maps or GPS data).
  1. Control: Implement a system to assist the driver to navigate and remain on the selected route.

Considerations include:

* technology devices to prompt or alert the driver about route features or hazards (exits, detours, low bridges, slow points)
* Allocate a second driver or navigator to the transport task
  1. Control: Require drivers to provide feedback on the suitability of the route.
  2. Control: Conduct reviews of route plans used for repeated trips.

Reviews should be undertaken following a collision or other driving incident, and when a driver returns from a period of leave. In all other cases, route plans should be reviewed at least quarterly.

* 1. Control: Ensure drivers, including pilot and escort drivers, are aware of the route conditions of any notice or permit and have access to a copy of the document.

**Note:** For Class 1 heavy vehicles, note the requirement in Schedule 8 of the [*Heavy Vehicle (Mass, Dimension and Loading) National Regulation*](https://www.legislation.qld.gov.au/view/whole/html/inforce/current/sl-2013-0077)*[[93]](#endnote-93)* to be satisfied the route has been assessed to avoid disruption to relevant services including electricity, telecommunications, rail, gas, water or sewerage services and damage to a road (including a bridge), structure, rail crossing or tree.

* 1. Resources for Route planning and selection:
* NHVR has published Regulatory Advice on [Managing the risks associated with heavy vehicles travelling down steep descents](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-associated-with-heavy-vehicles-travelling-down-steep-descents)[[94]](#endnote-94), especially steep descents which requires the use of low gear.
* NHVR has published Regulatory Advice on [Obligations for Restricted Access Vehicles](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/obligations-for-restricted-access-vehicles)[[95]](#endnote-95).
* Refer to tools on the [NHVR](https://www.nhvr.gov.au)[[96]](#endnote-96) website such as the [Route Planner tool](https://www.nhvr.gov.au/road-access/route-planner)[[97]](#endnote-97) and [National Network Map](https://www.nhvr.gov.au/road-access/route-planner/national-network-map)[[98]](#endnote-98), for further information about heavy vehicle access, including approved routes and obtaining permits.
* Consult resources such as the “[Look up and Live](https://www.byda.com.au/look-up-and-live/)[[99]](#endnote-99)” website and the WHS regulator codes and guides listed in the References section of this code.

1. Activity: Allocating or accepting a vehicle for a transport task
   1. Control: Obtain information about the mass and dimension limits (such as tare, gross and axle mass limits, widths and lengths) and loading requirements that apply to each vehicle or combination.
   2. Control: Obtain information about the load.

For example:

* loading plans or diagrams, including load distribution
* the type of goods, including hazardous materials, handling or transport requirements
* mass and dimension of the load
  1. Control: Obtain information about the route and the schedule.
  2. Control: Obtain information about the destination, including access routes and hazards.
  3. Control: Confirm whether any CoR party has special conditions or requirements in relation to the transport task.

For example:

* snow chains
* tyre pressure and or temperature monitors
* roll stability control (RSC) or electronic stability control (ESC)
* onboard mass of particular accuracy
* side loading
* fire detection and fire suppression system inside the body
* automatic tarpaulins for dust
* effluent tanks of certain capacity
  1. Control: Ensure vehicles or combinations have the capability, capacity and equipment to match the mass, dimension and loading requirements for the transport task.

These considerations include:

* mass and dimension limits
* mass management accreditation schemes
* access limits or conditions
* fuel type and availability and operating range
* dangerous goods requirements
* capacity of components for restraining loads such as headboards, gates, curtains or tie rails
  1. Control: Only allocate (or agree to the allocation of) a vehicle that is suitable for the task.

For example:

* the vehicle and its components are roadworthy and maintained in safe working order
* the vehicle’s mass and dimensions meet the requirements of the planned route
* the vehicle has the capacity to safely carry the load
* the loaded vehicle will have a low centre of gravity (or high static rollover threshold (SRT)
* the vehicle has the necessary load restraint equipment for the load
  1. Control: Engage an external transport provider for the task if there is no appropriate heavy vehicle or combination in your own fleet.
  2. Control: Provide information about the vehicle allocated to the transport task to the driver and relevant CoR Parties.

For example:

* axle and gross mass limits
* dimension limits
* any access limits or conditions
* number of seats
* luggage capacity
* lifting capacity
* safe speeds in different road conditions
* capacity of components for restraining loads such as headboards, gates, curtains or tie rails
  1. Control: Refuse to undertake the transport task if an appropriate vehicle cannot be allocated to complete the task safely.

LOADS, LOADING, UNLOADING

The way goods are prepared, loaded, restrained, and unloaded, and accurate information about their size, weight and dimension, play a critical role in the safety of the transport task. Parties involved in these activities, from manufacturing, packaging goods for transport, loading or unloading vehicles, to operating weighbridges, share a responsibility to ensure that loads are secure, stable, and within safe limits.

This section provides practical guidance to help CoR parties work together to manage risks associated with mass, dimension, load restraint, and determining the weight of a vehicle. It encourages a proactive approach to communication, planning, and monitoring, so that loads are handled in a way that protects drivers, road users, and infrastructure.

1. Activity: Manufacturing and packaging goods
   1. Control: Consider the method of transportation and loading of the item during design, or when specifying packaging methods and materials.

For example:

* whether the item will be moved or handled by a forklift
* whether the item will be restrained directly, or blocked or contained
* if goods are to be tied down, the coefficient of friction (CoF) of the vehicle deck, blocking surfaces, restraint equipment
* distance to be transported, road conditions, weather, speed
* exposure to rain, wind, agitation
  1. Control: Design and construct goods and their containers to withstand the forces prescribed in the loading performance standards during transport.

For example:

* incorporate rated anchorage points in the design of large objects or plant
* use barrels and containers strong enough for the mass of their contents
* the lower surface of goods or their containers have a high CoF
* for boxes or other goods that are unitised, all surfaces have a high CoF
  1. Control: Use or recommend a packaging method or process that ensures packaged goods are robust enough to withstand handling and transport.

For example:

* advise how goods should be configured on a pallet
* advise unitising goods using rated wrapping
* provide or recommend appropriate dunnage and stillage in the product or its packaging
* limit the mass of goods to be transported on a pallet to the load rating of the pallet
  1. Control: Use a process to monitor the quality and suitability of packaging material

For example:

* obtain independent testing of the strength of consumables such as plastic wrap
* replace lashings and other equipment when indicated as per OEM instructions
* monitor pallet quality and remove pallets that deform when loaded or are damaged
  1. Control: Clearly and accurately label palletised goods

Information should include:

* type of goods, verified weight, dimensions and density
* co-efficient of friction where relevant
* specific requirements such as being perishable or requiring refrigeration
* presence of dangerous or hazardous materials
  1. Control: Provide documentation to parties involved in loading and restraining goods.

For example:

* loading plans detailing load distribution, positioning, and restraint methods
* unloading plans
* diagrams, work procedures, work instructions and task specific training for loading or unloading
  1. Control: Seek feedback from other CoR parties about the design of goods and their containers, and the suitability and performance of packaging materials and methods. Change or improve the type of packaging materials used if problems are identified.
  2. Control: Communicate changes to products, container design, packaging, processes or resources to relevant CoR parties.

1. Activity: Loading
   1. Control: Ensure employees have access to the equipment required for loading.

For example: ramps, forklifts, hoists, trolleys or cranes.

* 1. Control: Provide training to employees about how to load vehicles safely.

Training should include:

* information to be obtained before a vehicle is loaded
* procedure for obtaining or preparing loading plans
* how to interpret and use loading plans
* how to construct a load on a vehicle
* ensuring load distribution, axle and gross mass compliance
* load restraint, loading requirements and the loading performance standards
* correct use of load restraint equipment
* correct use of loading equipment
* policies or procedures to follow to safely load vehicles
* how to recognise unsafe load distribution or restraint
  1. Control: Obtain relevant information about the load, its distribution and restraint requirements.

For example:

* loading plans or diagrams, including load distribution
* the type of goods (including hazardous materials), handling or transport requirements
* mass and dimension of the load
* equipment required for loading
* how goods have been assembled, packaged or unitised for transport
* strength of material used for unitising goods on a pallet
* coefficient of friction of packaging materials
* suitability of dunnage and stillage
* volume and ullage of liquid loads
* centre of gravity of tall loads
* rating of anchorage points on items
* density of material and size of particles
* recommendations about restraint after partial unloading
* details of restraint inside shipping containers
  1. Control: Obtain information about the vehicle allocated to the transport task.

For example:

* axle and gross mass limits
* dimension limits
* capacity of restraint equipment such as headboards, gates, curtains or tie rails
  1. Control: Obtain or prepare a loading plan that describes how to place, distribute, arrange or restrain a load for transport.

Considerations include:

* ensure the mass (gross and axle) and dimension limits applying to the allocated vehicle are not exceeded
* ensure loads are restrained in accordance with the HVNL loading requirements and loading performance standards
* stillage and dunnage requirements are identified and described
* recommendations for the redistribution and restraint of loads after partial unloading
* for ongoing pick-up and delivery operations, consider how the total mass of the load will change with each collection or delivery, and how that will affect axle mass and load restraint requirements.
  1. Control: Consult with an OEM or professional engineer to identify proper methods for loading, restraining, transporting and unloading a large indivisible item.
  2. Control: Load goods onto the vehicle as per the loading plan or relevant policies and procedures or OEM instructions.
  3. Control: Establish the total mass of the heavy vehicle before it drives on a road.
* calculate the total mass based on the mass of the load, and the vehicle
* use a weigh bridge
* communicate with the driver if the vehicle is fitted with OBM to verify mass
* load commodities up to marked lines indicating volume for commodities of known density
  1. Control: Ensure the mass of the load does not exceed mass limits for the vehicle.
  2. Control: Provide information to the driver before driving commences.

Information should include:

* the distribution and restraint of the load (or loading plan for the load)
* relevant vehicle masses
* recommendations or plans for redistribution and restraint after partial unloading
* unloading plans for the load
  1. Control: Reconfigure load distribution, blocking and restraint following pickup and delivery of part loads, in accordance with the loading plan.
  2. **Control: Empower employees, including drivers, to refuse to work with or transport loads that are unsafe**.
  3. Resources for Loading:
* NHVR has published Regulatory Advice on [Managing the risk of a light or empty lead trailer in a laden B-double](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risk-of-a-light-or-empty-lead-trailer-in-a-laden-b-double)[[100]](#endnote-100).

1. Activity: Restraining loads

The loss of loads or partial loads is a critical safety risk to road users. Care must be taken to restrain equipment and objects carried with the vehicle, and components of the vehicle itself. Adequate restraint of substances inside tippers and tankers is important for improving vehicle stability.

* 1. Control: Provide load restraint equipment with sufficient capacity for its purpose.

Refer to Australian Standards and the [Load Restraint Guide 2025](https://wws.nhvr.gov.au/road-access/loading/load-restraint-guide)[[101]](#endnote-101).

* 1. Control: Periodically check the integrity of lashing and restraint equipment in accordance with OEM requirements and Australian Standards.
  2. Control: Ensure headboards, gates, curtains, tie rails, and other vehicle components used to restrain loads are designed and constructed to withstand the forces applied to them.
  3. Control: Provide training to employees about how to restrain loads safely.

Training should include:

* meaning of the HVNL loading requirements and loading performance standards
* how to interpret and use loading plans
* correct use of load restraint equipment
* difference between tie-down and direct restraint
* co-efficient of friction and lashing angles
* calculating lashing requirements using the [Load Restraint Guide 2025](https://wws.nhvr.gov.au/road-access/loading/load-restraint-guide)[[102]](#endnote-102)
* policies or procedures to follow to safely restrain loads
  1. Control: Ensure employees have ready access to the information or resources required to restrain loads safely.

For example: [the Load Restraint Guide 2025](https://wws.nhvr.gov.au/road-access/loading/load-restraint-guide)[[103]](#endnote-103) and other reference material such as loading plans or guides.

* 1. Control: Develop loading plans, or a load restraint system, for common or repeated load types.

A load restraint system should be designed and certified by an engineer as meeting the HVNL loading performance standards. Consider whether specialist engineering advice is also required when designing loading plans.

Manufacturers or suppliers of large, heavy items of plant, equipment or fabricated steel structures should consider load restraint in the design and manufacturing process and incorporate rated restraint attachment points. They should also develop and supply loading plans for these items, to ensure they are correctly and consistently restrained.

* 1. Control: Ensure loads are restrained in accordance with loading plans or relevant policies and procedures.
  2. Control: Ensure all loads are restrained using the correct type of restraint equipment or method.
  3. Control: Use containers, bins, cages, vessels suitable for the size of the goods or particles being transported, and that have sufficient strength to contain the load.
  4. Control: Ensure the lids and closures for all storage compartments, and fastenings for removable equipment, are checked and secure prior to road travel.
  5. Control: Ensure all moveable plant fitted to the vehicle is properly secured and restrained prior to road travel.

For example: Concrete pump booms, vacuum truck hoses, truck mounted crane booms, amusement ride components, concrete agitator chutes, mobile crane hooks and auxiliary equipment, outrigger legs.

* 1. Control: Ensure tanks or vessels used to transport bulk liquid loads are full, or empty, during transport.

By doing this, the effect of fluid slosh is greatly reduced, so that the distribution of the liquid remains largely unchanged when driving.

* 1. Control: For tankers with multiple compartments, fill each compartment fully, or empty each compartment fully, before filling or emptying another compartment.

If possible, leave only one compartment with a partial load.

See advice from the National Road Safety Partnership Program about [minimising the risk of bulk tanker rollover[[104]](#endnote-104).](https://cdn.nrspp.org.au/wp-content/uploads/sites/4/2018/05/30164149/Bulk-Tanker-Roll-Overs-QandA-V2.pdf)

* 1. Control: Ensure sufficient time is allowed in the transport schedule for loads to be properly restrained.
  2. Control: Ensure an appropriate location is available at loading or unloading premises for loads to be properly restrained.
  3. Control: Ensure that the driver of the heavy vehicle has the opportunity to participate in restraining the load, or to satisfy themselves that the load has been properly restrained.
  4. Control: Provide training to drivers about monitoring and rectifying issues with load restraint which occur during travel.
  5. Control: Provide feedback and encourage other CoR parties to provide feedback about the effectiveness of restraint methods.
  6. Resources for Restraining Loads:
* NHVR Regulatory Advice on [Loading and load restraint](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/loading-and-load-restraint)[[105]](#endnote-105) provides guidance on how parties in the CoR can ensure the safety of packing, loading, unloading, and load restraint practices.
* The [Load Restraint Guide 2025](https://wws.nhvr.gov.au/road-access/loading/load-restraint-guide)[[106]](#endnote-106)  provides technical information, detailed diagrams and worked examples to determine the restraint required for heavy vehicle loads.
* [Q&A on Bulk Tanker Rollovers](https://cdn.nrspp.org.au/wp-content/uploads/sites/4/2018/05/30164149/Bulk-Tanker-Roll-Overs-QandA-V2.pdf)[[107]](#endnote-107) from NRSPP explores the background of bulk tanker rollovers and provides insight into how bulk tanker operators ensure safety.

1. Activity: Unloading
   1. Control: Ensure employees have access to the equipment required for unloading.

This includes ramps, forklifts, hoists or trolleys.

* 1. Control: Provide training to employees about how to unload vehicles safely.

Training should include:

* procedure for obtaining or preparing unloading plans
* how to interpret and use unloading plans
* correct use of load restraint equipment
* correct use of unloading equipment
* policies or procedures to follow for unloading vehicles
* how to recognise unsafe load distribution, construction or restraint
  1. Control: Obtain or prepare an unloading plan to ensure goods can be unloaded safely.
  2. Control: Unload goods from vehicles as per the unloading plan, or relevant policies and procedures.
  3. Control: Ensure that unloaders are notified of problems detected during transport that may create a hazard during unloading or would require specialised equipment or skills to deal with.
  4. Control: Establish procedures for when poorly secured loads arrive at premises.
  5. Control: Document and provide feedback to CoR parties about loads which were not properly secured when they reached their destination.

1. Activity: Measuring, communicating and monitoring mass

Having access to correct, timely information about the mass of the load is essential for a safe journey. All relevant parties also need access to this information, and for loads and journeys to be planned accordingly.

* 1. Control: Train employees how to operate or read mass measuring equipment according to OEM requirements.
  2. Control: Identify the mass limits that apply to each vehicle, and any conditions attached to those limits.
* gross and axle limits
* mass exceptions and concessions
* accreditation status, [Intelligent Access Program](https://www.nhvr.gov.au/road-access/access-management/telematics-and-intelligent-access-programs)[[108]](#endnote-108) (IAP) requirements etc.
* notice or permit conditions about route, time of travel, configuration etc.
  1. Control: Establish the mass of the vehicle and its equipment.
* regularly weigh vehicles on certified weighbridges to confirm their tare mass
* weigh vehicles when fully equipped as per normal use e.g., with full fuel tanks
* re-weigh vehicles after modifications
  1. Control: Ensure that employees who arrange the transport of goods have ready access to information about the mass and the mass limits for each vehicle.
  2. Control: Provide drivers with documents or electronic data that allows them to confirm vehicle mass and mass limits for themselves and to other parties.
  3. Control: Provide verified information about vehicle mass and mass limits to CoR parties, particularly parties who load the vehicle or weigh the loaded vehicle.

Where there are ongoing arrangements, provide verification in writing, or by entering information into a register or database used by CoR parties.

* 1. Control: Establish the mass of loads, using an appropriate method.

For example:

* weigh the load on calibrated scales
* calculate mass based on manufacturer information plus mass of packing material
* calculate mass based on volume and density of a product
* use records of previous weighed loads to estimate the mass of similar loads
  1. Control: Provide information about the measured mass of loads to CoR parties.

Include details about the weight of packaging materials, pallet, stillage or dunnage to better equip CoR parties to manage mass.

* 1. Control: Before loading commodities onto a vehicle, verify the name of the operator and driver, the destination of the load, and the mass and mass limits of the vehicle.
  2. Control: Use loading equipment that weighs loads or provides an indicative weight for loading commodities.
  3. Control: Communicate with the driver of a vehicle fitted with on board scales to determine the mass of commodities as the vehicle is loaded.
* ensure the vehicle is on firm level ground
* sight the displayed information before the vehicle leaves
  1. Control: Transmit mass information to CoR parties and others in real time, using on board mass equipment connected to communication systems.
  2. Control: Determine the average volume of material that loading equipment picks up and calculate the estimated mass of a load of commodities using information about its density.
  3. Control: Load to marked lines in a tipper body or trailer and calculate the estimated mass of a load of commodities using information about its density.
  4. Control: Share information about the density of commodities with other parties and make the information available to loaders and drivers.

For example, by displaying it on loading equipment, or through training or documentation.

* 1. Control: Where it is not possible to accurately determine the mass of the loaded vehicle, aim to load less than the maximum limit.
  2. Control: Direct driver, where possible, to establish the mass of the loaded vehicle immediately after loading and return to the loading location to offload part of the load if mass limits are exceeded.
  3. Control: Provide access, space and equipment for returning drivers to offload partial loads and help them to offload before loading other vehicles.
  4. Control: Maintain records of all vehicles loaded, including information about the amount of the commodity and the information provided by the transporter or driver.
  5. Control: Communicate estimated mass information (load, vehicle or combined) to other CoR Parties.

Include details of the accuracy and precision of weighing equipment that was used, including scales, load cells on forklifts, on-board mass fitted to heavy vehicles, weighbridges.

* 1. Control: Request information about the mass of loads from CoR parties who weigh loads when received.
  2. Control: Provide weighbridge or weigh-in-motion (WIM) data to CoR parties.
  3. Control: Compare estimated mass with confirmed mass and adjust targeted tolerances or use the information to reassess how accurately loading equipment measures mass or volume.
  4. Control: Use alternative methods to establish the gross mass of vehicles transporting loads which are never taken to premises for weighing.

Such loads may include waste, construction materials, landscaping materials, car bodies, scrap metal, quarry materials or demolition waste.

Alternative methods may include:

* use vehicles with onboard scales
* regularly test-weigh sample loads at certified weighbridges, noting the volume or height of test loads
* use insights from the test weighing to inform loaders and drivers
  1. Control: Verify ongoing mass compliance at an agreed frequency, based on the severity of risk.
  2. Resources for Measuring, communicating and monitoring mass:
* NHVR Regulatory Advice on [CoR for Owners and Operators of Weighbridges](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/cor-for-owners-and-operators-of-weighbridges)[[109]](#endnote-109) provides guidance for parties who own or operate weighbridges and outlines expectations of what may be considered reasonably practicable actions.
* Check information from the OEM for the maximum safe load for each vehicle.
* Refer to the NHVR website for information about [permits and exemptions](https://www.nhvr.gov.au/road-access/access-management/do-i-need-a-permit)[[110]](#endnote-110).
* Note that mass limits can apply for individual roads or bridges. As a rule, where there are conflicting limits, you should comply with the lowest limit.

1. Activity: Measuring, communicating and monitoring dimension

A heavy vehicle that is over dimension, either height or width, presents significant public risk and road safety risk, in the form of bridge strikes, swept path or length when turning, or vehicle rollover.

* 1. Control: Ensure employees have access to and are trained to use or read equipment or systems that measure the dimension of a vehicle and its load.
  2. Control: Establish the dimensions of incoming and outgoing loads, using the appropriate means or equipment, and communicate the information to other CoR parties.
  3. Control: Compare estimated dimension with measured dimension and take variations into consideration in future loading activities.
  4. Control: Verify ongoing dimension compliance at an agreed frequency based on severity of risk.
  5. Control: Display information inside the driver cabin about the height of the vehicle.
  6. Resources for Measuring, communicating and monitoring dimension:
* Prescribed dimension limits are found in Schedule 6 of the [*Heavy Vehicle (Mass, Dimension and Loading) National Regulation*](https://www.legislation.qld.gov.au/view/whole/html/inforce/current/sl-2013-0077)*[[111]](#endnote-111)*. Conditions that apply to over-dimension vehicles travelling under notice or permit are found in Schedule 8 of that same regulation.
* More information about access permits can be found on the [NHVR website](https://www.nhvr.gov.au/road-access/access-management/do-i-need-a-permit)[[112]](#endnote-112).

1. Activity: Operating a weighbridge

Many CoR parties use weighbridges to calculate payment for commodities being delivered, or to manage the mass of loads. Accurate information about the mass of a loaded vehicles is useful information, particularly when the mass limits for the vehicles are also known. Verifying that information is one of the challenges for weighbridge operators. Providing information to other parties is an essential element of mass management across the supply chain.

As per other guidance in this code, the suggested controls are recommendations for the business that owns or operates the weighbridge, rather than the individual. However, to successfully implement controls, it will be necessary to establish procedures and train employees to follow them.

* 1. Control: Require operators or drivers to provide verified information about the mass and the mass limits of a vehicle, before or at the time the vehicle is weighed.
  2. Control: Train employees to recognise common vehicles and combinations and learn the mass limits applying to them.

Training and reference resources include:

* [GTSN Truck Book August 2021](https://www.gtsn.com.au/wp-content/uploads/2022/05/GTSN_Truck_Book_V2_0_-_August_2021.pdf)[[113]](#endnote-113)
* [NHVR - Common Heavy Freight Vehicle Combinations](https://www.nhvr.gov.au/files/201707-0577-common-heavy-freight-vehicles-combinations.pdf)[[114]](#endnote-114)
* [Heavy Vehicle (Mass, Dimension and Loading) National Regulation](https://www.legislation.qld.gov.au/view/pdf/inforce/current/sl-2013-0077)[[115]](#endnote-115)
* [NHVR National Notices](https://www.nhvr.gov.au/law-policies/notices-and-permit-based-schemes/national-notices)[[116]](#endnote-116)
  1. Control: Train employees to compare provided mass limit information with information from other sources, for a sample of vehicles, or when there is doubt about the accuracy of the information provided.

For example: use the [NHVR Registration Checker App](https://www.nhvr.gov.au/road-access/registration/nhvr-registration-checker-app)[[117]](#endnote-117) to verify gross mass limits and accreditation status.

* 1. Control: Weigh the vehicle and each axle group in accordance with weighbridge OEM recommendations.
  2. Control: Create and retain a record of the following information:
* registration number of each vehicle
* name of operator and driver
* mass limit and vehicle mass nominated by driver or operator
* date and time
* gross mass and axle masses
* commodity being carried
  1. Control: Provide details of measured gross and axle masses to the driver or operator of the vehicle.

For example:

* provide a printed docket, or text or email an electronic docket
* record the information in a shared database
  1. Control: Provide CoR Parties with information about the vehicle’s mass at departure.
  2. Control: Immediately alert the driver and CoR parties if a vehicle’s mass exceeds limits.
  3. Control: Establish a safe area where loads can be adjusted prior to departure, if the vehicle is over-mass.
  4. Control: Retain records about vehicle masses measured at the weighbridge for three years and provide these to the NHVR if requested.
  5. Control: Conduct audits of a sample of transport operators, to assess the information provided about mass limits.

This may involve requesting copies of permits, vehicle approvals, certifications and comparing that information, and GVM information from the [NVHR Rego Checker app](https://www.nhvr.gov.au/road-access/registration/nhvr-registration-checker-app)[[118]](#endnote-118), with operator provided information about the mass and mass limits of a vehicle.

* 1. Control: Provide feedback to CoR Parties about:
* inaccurate information or delays in obtaining information
* repeated or extreme overloads.
* inconsistency in the mass of loads from the same source e.g., a vehicle loaded with the same commodity multiple times a week but with vastly different masses on arrival
  1. Control: Establish contractual terms that set clear expectations of safety standards and mass compliance, particularly for ongoing business relationships.

For example, terms highlighting the expectations on information sharing about vehicle mass and how non-compliance will be managed.

* 1. Control: Communicate expectations, policies and procedures to all CoR parties through inductions, by publicly displaying them at the entry to the premises, on the business website and on social media pages.
  2. Control: Notify the NVHR if a pattern of non-compliance is not addressed.

Information about safety issues can be provided to the NHVR anonymously via the Heavy Vehicle Confidential Reporting Line (HVCRL). Information about the HVCRL is available on the [NHVR website](https://www.nhvr.gov.au/safety-accreditation-compliance/heavy-vehicle-confidential-reporting-line)[[119]](#endnote-119). The HVCRL can be contacted on 1800 931 785.

* 1. Resources for Operating a weighbridge:
* NHVR Regulatory Advice on [CoR for Owners and Operators of Weighbridges](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/cor-for-owners-and-operators-of-weighbridges)[[120]](#endnote-120) provides guidance for parties who own or operate weighbridges and outlines expectations of what may be considered reasonably practicable actions.

BUSES

Operating a bus fleet safely and efficiently requires careful coordination across driver management, passenger safety, and route planning. This section outlines controls to assist parties involved in bus operations to deliver services safely by considering proactive driver screening, clear communication with passengers, and scheduling that considers safety alongside timetabling. These controls may assist bus operators to create a safe experience for drivers, passengers, and other road users.

1. Activity: Equipping and modifying buses
   1. Control: Provide fire extinguishers.

This is a mandatory requirement for buses designed for hire and reward.

* 1. Control: Provide first aid kits.
  2. Control: Fit lap/sash seatbelts to seats, ensuring the top sash mounting point of seats beside the window is closest to the window.
  3. Control: Install audible and visual reminders for passengers to fasten seatbelts.

This will be mandatory in ADR 68/01 from 1/11/26.

* 1. Control: Install seatbelt reminder stickers or stitching on the back of seats to communicate reminder.

This will be mandatory in ADR 68/01 from 1/11/26.

* 1. Control: Fit laminated safety glass to bus side windows.
  2. Control: Equip buses with glass breaking hammers.

This is mandatory if an emergency exit is fitted with readily breakable glass. Not required/needed if fitted with a window ejecting emergency exit.

* 1. Control: Procure buses with driver safety screens or retrofit screens to existing buses.

**Note**: An [NHVR Exemption Notice](https://www.legislation.gov.au/C2025G00295/latest/text)[[121]](#endnote-121) is currently in place for the fitment of driver safety screens on public passenger transport ultra-low floor buses only.

Bus driver safety screens must be designed, fitted, and tested in accordance with the [Bus Industry Confederation’s Driver Safety Screens Guide](https://www.nhvr.gov.au/document/738)[[122]](#endnote-122) and certified in accordance with the necessary modification approval pathway, typically, [Vehicle Standards Bulletin 6](https://www.nhvr.gov.au/safety-accreditation-compliance/vehicle-standards-and-modifications/vehicle-standards-bulletin-6)[[123]](#endnote-123).

* 1. Control: Install vehicle immobilising technology.

Examples of vehicle immobilising technologies are a park brake alert system, or a fail-safe automatic braking system that instantly applies the vehicle park brake if it is not applied by the driver or operator before they exit the cabin.

* 1. Control: Install automatic passenger counting technologies, to provide the bus driver an accurate count of the number of passengers on the bus.
  2. Control: Install on-board mass measuring technology, to provide the bus driver accurate and real-time information about the mass of the bus.
  3. Control: Fit drawers to the cargo area under high floor buses to contain luggage and freight during travel.
  4. Control: Treat the floor of the cargo area with non-slip material to minimise the movement of luggage and freight during travel.
  5. Control: For buses with overhead luggage storage, install dividers in overhead compartments at frequent intervals, to prevent items from being able to move laterally in the event of emergency braking.
  6. Resources for Equipping and Modifying Buses:
* The Transport for NSW [Technical specifications for buses](https://www.nsw.gov.au/driving-boating-and-transport/vehicle-registration/how-to-register/vehicle-standards-guidelines-for-registration/technical-specifications-for-buses)[[124]](#endnote-124) details the safety specifications for public and school buses including the requirements for doors, seats, padding, internal partitions, handrails, warning signs and lighting systems.
* The [National Heavy Vehicle Standards (Bus Driver Safety Screen) Exemption Notice 2025 (No.1)](https://www.legislation.gov.au/C2025G00295/latest/text)[[125]](#endnote-125) exempts public passenger transport ultra-low floor buses modified for the installation of a driver safety screen from certain prescribed heavy vehicle standards.
* [ADR 58/00](https://www.legislation.gov.au/F2006L01450/latest/text)[[126]](#endnote-126) outlines the requirements for the construction of buses designed for hire and reward.
* The Bus Industry Confederation’s [Driver Safety Screens Guide](https://www.nhvr.gov.au/document/738)[[127]](#endnote-127) provides advice about the vehicle standards requirements when installing driver safety screens as part of any in-service modifications.

1. Activity: Operating a bus fleet
   1. Control: Before engaging a new driver, seek confirmation in the form of a Statutory Declaration that the driver has no adverse driving history, and has not previously lost their bus driving accreditation or authority.
   2. Control: Verify the currency of the driver's license and bus driving authority, including whether the driver's license is subject to conditions which restrict when and what types of buses they may drive.
   3. Control: Provide information to the bus driving accreditation issuing authority about conduct that led to termination of the driver's employment.
   4. Control: Train drivers about how to de-escalate aggressive or abusive passenger behaviour.
   5. Control: Establish the total number of passengers who can be carried on the bus, to prevent the bus being over-mass when full.

Publish this information inside the bus and provide the information to the driver to manage passenger numbers.

* 1. Control: Establish a luggage mass limit per passenger for transport on high floor buses.
  2. Control: Distribute luggage and freight across the cargo area to ensure appropriate mass distribution.
  3. Control: Limit the amount of luggage in the saloon, having regard to the combined mass of passengers and luggage and the mass limit of the passenger cabin.
  4. Control: Provide training to bus drivers to always apply the park brake when stationary.

Further information about managing the risk of vehicle roll-aways is available from [Safe Work Australia](https://www.safeworkaustralia.gov.au/sites/default/files/2023-09/Prevention%20of%20vehicle%20roll-aways%20-%20Fact%20Sheet_0.pdf)[[128]](#endnote-128) and [WorkSafe Queensland](https://www.worksafe.qld.gov.au/__data/assets/pdf_file/0009/122202/6558-safe-immobilising-of-vehicles-self-assessment.pdf)[[129]](#endnote-129).

* 1. Control: Provide adequate training time for drivers to learn and familiarise themselves with new routes.
  2. Resources for Operating a bus fleet:
* NHVR Regulatory Advice on [Bus and Coach Driver Fatigue and Health and Wellbeing](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/bus-and-coach-driver-fatigue-and-health-and-wellbeing)[[130]](#endnote-130) provides guidance on the management of fatigue and driver health and wellbeing in the bus and coach industry.

1. Activity: Managing passengers

There are several safety risks associated with managing bus passengers, including risks associated with luggage not being safely stowed, overall weight of luggage, and with passenger conduct/behaviour.

* 1. Control: Provide information about luggage mass limits to passengers at the time of ticket purchase and include on website.
  2. Controls: Set standards and provide clear information about how to behave on buses, such as using signage or announcements.
  3. Control: Alert bus operators to issues and provide feedback.
  4. Control: Impose ticket terms and the right to exclude violent passengers.
  5. Control: Provide information and guidance to passengers about safe stowage of luggage inside the saloon.
  6. Resources for Managing passengers:
* The [Safe Transport of Children Info Sheet](https://www.acecqa.gov.au/sites/default/files/2020-08/Infosheet-SafeTransportationOfChildren.pdf)[[131]](#endnote-131) from the Australian Children's Education and Care Quality Authority details oversight arrangements of transport that occurs when children are under the care of an education and care service.
* The [Guidelines for Managing School Student Behaviour on Buses](https://transportnsw.info/document/5577/201907guidelines-managing-school-student-behaviour-buses.pdf)[[132]](#endnote-132) from Transport for NSW aim to ensure the safety and well-being of school children, other bus passengers, road users and bus drivers by making clear to students and parents/guardians that courteous and responsible behaviour is expected when students travel on buses.

1. Activity: Establishing, monitoring and scheduling bus routes
   1. Control: Situate bus stops where the stationary bus will not create a hazard for passengers or other road users.
   2. Control: For bus stops located on main or arterial roads, establish turnouts so the bus can move out of the traffic flow when stopping.
   3. Control: Ensure the intended route for the bus can be driven safely within the scheduled time.
   4. Control: Establish the schedule for an intended route at the time of day with the heaviest traffic volumes.
   5. Control: Establish multiple schedules for each route, for use during times of peak or off-peak traffic volumes.
   6. Control: Ensure contracts and agreements do not impose penalties for failing to meet “on time running” performance indicators.
   7. Control: Ensure contracts and other agreements do not cause or encourage the driver of a bus to speed, cut short or skip rest breaks, to drive while impaired by fatigue, to drive while unfit to drive, or to breach another legal requirement.
   8. Control: Review the scheduled time for bus routes at regular intervals, including when changes occur to passenger numbers, the road alignment or traffic volumes on the route.
   9. Control: Implement a procedure to receive feedback from bus drivers about the schedule for a route and review the schedule as appropriate.
   10. Resources for Establishing, monitoring and scheduling bus routes:

* The [Guide to Appointed School Bus Stops](https://www.transport.nsw.gov.au/system/files/media/documents/2023/Appointed%20School%20Bus%20Stop%20Guide.pdf)[[133]](#endnote-133) from Transport for NSW aims to assist in determining appropriate locations, layouts and features for appointed or ‘fixed’ school bus stops.
* The [Guidelines for choosing informal bus stop locations](https://dli.nt.gov.au/__data/assets/pdf_file/0004/1355773/2024-guidelines-for-choosing-informal-bus-stop-locations.pdf)[[134]](#endnote-134) from NT Department of Infrastructure, Planning and Logistics are designed to assist in making informed decisions regarding the selection of suitable locations for informal bus stops, which is a location recognised as a suitable place for a bus to halt.

ADDITIONAL SECTOR SPECIFIC CONTROLS

Some transport activities present distinct operational challenges and opportunities for risk mitigation that require tailored safety approaches.

Whether running an online platform, operating on construction sites, recovering vehicles, transporting dangerous goods, or managing containerised freight, these sectors involve environments and tasks that may present unique challenges. The following sections suggest additional controls to help parties ensure safety.

These sections need to be considered along with other guidance in the code that is relevant to each activity.

1. Activity: Running an on-line freight platform

On-line platforms enable transport operators, particularly owner operators, to deal directly with potential customers. Some of those customers may have little experience with heavy vehicle transport and may not be aware of safety requirements. Transporters may have limited opportunity to find out more about the people they will be dealing with, before making binding agreements with them.

Persons who run these platforms are performing CoR functions and have opportunities to minimise risks of unsafe arrangements.

* 1. Control: Require requests for quotes to include all relevant information before they can be posted on the platform.
* nature of load and special requirements
* load dimensions and weight
* clarity about how load will be loaded and restrained and unloaded
* clarity about who will provide equipment and services
* location and destination
* information about site access, opening times, facilities.
* assurance that the load is not contaminated
  1. Control: Enable the driver to communicate directly with the sender of the load to clarify details relevant to safety.
  2. Control: Do not allow senders to post jobs whose payment terms may cause a driver to speed, cut short or skip rest breaks, to drive while impaired by fatigue, to drive while unfit to drive, or to breach another legal requirement.

For example, by:

* including terms in conditions that prohibit such posts
* monitoring a proportion of posts
  1. Control: Include a process for varying the original quote if job specifics change.

For example:

* time
* distance
* date
* load
  1. Control: Include protections for drivers who have not been paid for work, or who have been provided inaccurate information about a job and incurred a loss as a result.

For example:

* implement a complaints process and / or dispute resolution process
* report and or ban senders who include false or misleading information
* compensate drivers who incur loss or damages through relying on information on the platform

1. Activity: Operating on and around construction sites

There are unique hazards associated with the movement of heavy vehicles on construction sites, and in transporting materials and waste to and from sites. These hazards include:

* construction industry participants not seeing themselves as parties in the CoR
* multi-level contracts and the invisibility of other parties leading to a lack of oversight
* unskilled or poorly managed sub-contractors
* poor vehicle maintenance / unroadworthy vehicles
* accelerated deterioration of mechanical components due to the operating environment
* the type of loads being transported to and from site – rubbish, building materials, gravel, fill, spoil or debris
* interactions with pedestrians and other vulnerable road users
* limited areas for vehicles to safely queue – congestion on adjoining roads
* set work hours, particularly on large infrastructure projects
* absence or lack of access to mass and dimension measuring equipment
* delays on site creating uncertainty for scheduling
  1. Control: Register for monthly updates from [CLOCS-A](https://clocs-a.org.au/)[[135]](#endnote-135) to stay abreast of safety issues in and around construction sites and best practice for eliminating risk.
  2. Control: Ensure that tasks scheduled for heavy vehicle drivers enable them opportunities to rest. Consider time spent driving to and from a site, and other tasks or actions required of them.

For example:

* Arriving early to queue for materials
* Stopping to wash or fuel a vehicle on the way home
  1. Control: Train workers at the site to identify hazards with a vehicle before it drives onto a road.

For example, the:

* driver appears fatigued or unfit to drive
* vehicle is not rated or permitted to carry the required load
* vehicle has a defect, or a component that does not function correctly
* vehicle does not have necessary load restraint equipment
* load is not safely restrained
* vehicle exceeds a dimension limit or is over mass
* vehicle or load is unsafe for any other reason
  1. Control: Empower workers at the site to take action to rectify a hazard with a vehicle before it drives onto a road.
  2. Control: Provide mass, height and width measuring equipment for incoming or exiting vehicles.

For example: weighbridges, height measurements marked on gantries or walls, lasers or infrared devices

* 1. Control: Use loading machinery with mass measuring capability.

This includes loaders and excavators, forklifts, and cranes.

* 1. Control: Recommend that vehicles loaded at the site have onboard mass measuring capability.
  2. Control: Provide information to the driver of a vehicle about the mass and dimensions of the vehicle as it enters or leaves the site.
  3. Control: Provide equipment or infrastructure to ensure vehicles can be loaded and loads assembled, restrained and measured safely.
  4. Control: Provide equipment or infrastructure to ensure vehicles can be unloaded safely.

For example: lifting equipment, bunding, chains, elevated work platforms.

* 1. Resources for Operating on and around Construction sites:
* NHVR Regulatory Advice on [Managing the risks of heavy vehicle transport activities in the construction industry (Principal Contractor)](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-of-heavy-vehicle-transport-activities-in-the-construction-industry-principal-contractor)[[136]](#endnote-136) provides guidance Principal Contractors in the construction industry about how to manage risks when engaging in heavy vehicle transport activities.
* NHVR Regulatory Advice on [Managing the risks of heavy vehicle transport activities in the construction industry (Operator)](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-of-heavy-vehicle-transport-activities-in-the-construction-industry-operator)[[137]](#endnote-137) provides guidance Operators in the construction industry about how to manage safety risks and hazards associated with their heavy vehicle transport activities.
* NHVR Regulatory Advice on [CoR for Owners and Operators of Weighbridges](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/cor-for-owners-and-operators-of-weighbridges)[[138]](#endnote-138) provides guidance on for parties who own or operate weighbridges and outlines expectations of what may be considered reasonably practicable actions.
* The CLOCS-A Program has a primary goal of reducing road trauma associated with construction logistics. [Case Studies](https://clocs-a.org.au/category/case-studies/)[[139]](#endnote-139), [Vehicle Safety Resources](https://clocs-a.org.au/resource-category/clocs-a-documents/vehicle-safety/) [[140]](#endnote-140) and [the CLOCS-A Standard](https://clocs-a.org.au/resources/clocs-a-standard/)[[141]](#endnote-141) are available on the [CLOCS-A website](https://clocs-a.org.au/)[[142]](#endnote-142).
* The [Loading and Unloading Exclusion Zone (LUEZ) Guidelines](https://media.nrspp.org.au/wp-content/uploads/2017/03/06021817/Loading-and-Unloading-Exclusion-Zones.pdf)[[143]](#endnote-143) provide advice on the design of locations accessed by pedestrians, including public access, loading and unloading areas.

1. Activity: Recovery vehicles and operations

Recovery of broken down or crashed vehicles presents unique hazards and risks including proximity to moving traffic, space restriction, and hours of work. In many cases, the work has an element of urgency, increasing inducements to speed or to fail to manage driver fatigue effectively. Recovery operations may involve several different parties, making communication and coordination particularly important.

* 1. Control: Ensure the vehicle deployed to a recovery operation has sufficient capacity and capability to safely undertake the recovery task.
  2. Control: Ensure there are sufficient recovery vehicles available (tow trucks, tilt trays, truck mounted crash attenuators) for vehicles to be recovered in the shortest possible time.
  3. Control: Ensure vehicles undertaking recovery operations are equipped with signage, lights, traffic management equipment and personal protective equipment (PPE).
  4. Control: Provide training to drivers and employees conducting recovery operations about how to undertake the task safely.
  5. Control: Deploy truck mounted crash attenuators or other protective barriers to create separation between recovery operations and other traffic.
  6. Control: Establish an exclusion zone, or implement traffic management, to create a safe distance between recovery operations and other traffic.
  7. Control: Undertake recovery operations only in circumstances where it is safe to do so.

For example:

* the vehicle being recovered is well off the roadway
* traffic conditions are light, and visibility is good
* traffic is under the control of a traffic controller
  1. Control: Choose a different time to recover a vehicle, to ensure recovery can be undertaken safely.

If immediate recovery is unsafe for the recovery vehicle operator or other road users, decide whether the vehicle can safely be left in place to be recovered later, for example at night, outside peak traffic times or when there is less traffic on the roadway.

* 1. Control: If the vehicle being recovered has been involved in a collision, be aware of the risk of the vehicle catching fire, including ignition of alternative fuel sources.

For example, there is a risk of fire:

* of the vehicle due to collision damage
* if the skin of a lithium battery has not been perforated or compromised
* if the fuel reservoir (petrol/diesel or hydrogen) is leaking or damaged

Further information is available in the Emergency Response Guides produced by electric vehicle manufacturers.

1. Activity: Transporting dangerous goods

The presence of dangerous goods in a load significantly alters the risk profile of the transport task. In a collision or loss of load, dangerous goods in a load pose increased risks to public safety, and the environment - for example, fire, explosion, chemical reactions, or environmental contamination.

The nature and quantity of the goods play a crucial role in determining the nature and level of risk involved. For instance, flammable liquids pose different hazards compared to toxic substances or corrosive materials. Larger quantities of dangerous goods increase the potential impact of any incident, necessitating more stringent controls and precautions.

The primary duty in the HVNL requires operators to ensure the safety of their transport activities by applying proactive risk management, continuous monitoring, and the implementation of best practices tailored to the specific risks associated with the goods being transported.

The potential for severe consequences when a vehicle carrying dangerous goods is involved in an incident means that while compliance with the Australian Dangerous Goods Code is essential, and provides a solid foundation for safe transport, it may not be sufficient to fulfill the primary duty. All persons involved in the movement of these goods need to take steps to ensure the safety of the journey.

* 1. Control: Verify the transport of dangerous goods is undertaken per the requirements of the Australian Dangerous Goods Code.

The [Australian Dangerous Goods Code](https://www.ntc.gov.au/codes-and-guidelines/australian-dangerous-goods-code)[[144]](#endnote-144) (ADG Code) establishes the requirements for the transport of dangerous goods by road and rail in Australia. It sets out rules and guidelines for classifying, packaging, marking, labelling and transporting dangerous goods safely.

* 1. Control: Identify the competent authority in your jurisdiction for operational advice.

For operational advice relating to the ADG Code, please direct questions to the [competent authority in your state or territory](https://www.infrastructure.gov.au/infrastructure-transport-vehicles/transport-strategy-policy/transport-australia/transport-dangerous-goods/competent-authorities-dangerous-goods)[[145]](#endnote-145). As the regulators, they can authoritatively advise on operational issues such as labelling, packaging, quantities or placarding.

* 1. Control: Provide emergency equipment that would be required in the vehicle to manage different kinds of incidents, and in different situations.

For example:

* fire suppression devices, in the absence of emergency services or fire hydrants in remote or rural areas
* communication equipment in areas with no or poor network coverage
* signage and traffic control management equipment
* personal protective equipment (PPE)
* first aid supplies
  1. Control: Ensure all employees involved in the transport of dangerous goods are adequately trained and hold the appropriate licenses and qualifications to handle and transport these materials safely.
  2. Control: Ensure drivers are trained in emergency response procedures as per the Australia and New Zealand Emergency Response Guidebook.

This resource can be found online [here](https://www.ntc.gov.au/sites/default/files/assets/files/Australian%20and%20New%20Zealand%20Emergency%20Response%20Guide%20-%20ANZ-ERG2021%20UPDATED%2018%20OCTOBER%202022.pdf)[[146]](#endnote-146).

* 1. Control: Ensure that Emergency Response Plans and emergency contact details are carried in a readily accessible area of the vehicle.
  2. Control: Ensure the premises where the dangerous goods are being transported to is equipped to receive the load.

For example:

* waiting areas away from roads
* waiting areas with shade
* the appropriate number of trained staff
* appropriate storage
* designated loading and unloading zones
* procedures for completing documentation (e.g., declarations)
* emergency response equipment is available

1. Activity: Packing and restraining goods in shipping containers

There are unique challenges in the safe transport of goods in containers, because hazards are not visible once a container has been packed, and it may not be possible to open and inspect the container before it is loaded for road transport. If heavy vehicle drivers do become aware of problem loads inside containers, there are often obstacles to addressing the problem in a timely way, including the lack of safe places to stop, restrictions and risks from opening or inspecting containers. Sources of risk inside containers include the mass and mass distribution of the contents, the suitability of load restraint, and the presence of invasive species, biohazards or hazardous materials.

* 1. Control: Obtain information about the load, its distribution and restraint requirements.

For goods to be transported by sea, consider requirements for maritime shipping, or the [Code of Practice for the packing of Cargo Transport Units](https://unece.org/transport/intermodal-transport/imoilounece-code-practice-packing-cargo-transport-units-ctu-code)[[147]](#endnote-147) (CTU Code).

* 1. Control: Choose the appropriate container for the load.

For example: size, carrying capacity, rated attachment points, single tripper, floor rails, refrigerated.

* 1. Control: Provide training to employees on how to recognise and manage damaged containers.
  2. Control: Develop a loading plan for the container which ensures goods are appropriately distributed and properly restrained, and gaps in the container are filled.
  3. Control: Pack goods into the container according to the loading plan.
* use lashings and load restraint equipment rated and appropriate for the task
* calculate gaps in the container and determine dunnage requirements
* make sure appropriate dunnage and stillage is used for the task and that any packaging materials, pallet, stillage or dunnage is in good condition
* ensure sufficient load restraint is applied at the open end of the container
* seek specialist advice if required
  1. Control: Document the loading process by taking photos as goods are loaded and restrained in the container.
  2. Control: Verify the gross mass of the loaded container and share with other CoR parties.

This may include sharing a completed Verified Gross Mass (VGM) declaration or Container Weight Declaration (CWD).

* 1. Control: Share detailed loading and mass information with other CoR parties, especially for containers with a high centre of gravity or uneven mass distribution.

This includes the loading plan used to pack and restrain the goods inside the container, and the photos documenting the container being packed and restrained.

* 1. Control: Seek professional advice about the restraint system used to secure machinery or heavy loads transported in shipping containers.
  2. Control: Provide training to employees about indications that containers may be unsafely loaded.
  3. Control: Seek feedback from other CoR parties about the distribution and restraint of goods in the container.

1. Activity: Importing goods in shipping containers

The challenges of transporting goods in containers may be exacerbated when the container is imported, because hazards are not visible once a container has been packed. Sources of risk include the mass and mass distribution of the contents, the suitability of load restraint, and the possibility of dangerous goods, biohazards, or environmental contaminants inside containers.

It may be impracticable to inspect import containers before they are loaded onto heavy vehicles due to:

* the method and speed of unloading containers from vessels
* limited space or time for vehicles to stop at ports
* restrictions on opening some containers under Commonwealth legislation
* WHS / OHS risks associated with opening containers

Overseas businesses such as manufacturers, packers and loaders of containers are not bound by the HVNL. Other legal requirements - such as international conventions about shipping – are not uniformly or reliably enforced at the point of origin. This increases the risk profile of import containers and requires parties in the CoR to do more to ensure public safety, particularly in the way they form contracts with businesses.

* 1. Control: Choose to purchase goods from businesses that can demonstrate that loads will be safely restrained and accurately weighed.

Cease working with businesses unable or unwilling to ensure goods are safely packed, loaded and restrained inside containers.

* 1. Control: For ongoing business relationships, include contractual terms requiring the manufacturer to ensure that goods are safely packed and restrained, and to provide accurate mass information.

Include contract terms allowing termination of the contract where goods are not safely packed and restrained inside containers.

* 1. Control: Choose to work with manufacturers with knowledge of and demonstrated capability to comply with the [CTU Code](https://unece.org/transport/intermodal-transport/imoilounece-code-practice-packing-cargo-transport-units-ctu-code)[[148]](#endnote-148) and the [HVNL](https://www.legislation.qld.gov.au/view/whole/html/current/act-2012-hvnlq)[[149]](#endnote-149).

Ensure that business partners understand the legal requirements for shipping containers to Australian ports. For example:

* load restraint
* mass distribution and gross mass limits
* dangerous goods requirements
* managing biohazards
  1. Control: Provide material that has been translated into the manufacturer’s language or direct them to translation tools.
  2. Control: Require a loading plan for each container, and a series of photos taken during the loading process, showing how lashings and other restraints are applied.
  3. Control: Specify restraint equipment and methods and/or loading plans for each container.
  4. Control: Require the manufacturer to engage a specialist packing and loading service.
  5. Control: Make enquiries with shipping lines, customs brokers and freight forwarders about the packing and loading services and skills offered by businesses in overseas ports.

Share information with business partners and clients about available services in overseas ports.

* 1. Control: Engage or send a trainer to work with employees of the manufacturer to ensure that they have the skills to safely load goods into containers.
  2. Control: Inspect or arrange for inspection of containers at the first safe opportunity after landing, to assess how well goods were packed and secured and to identify any other hazards.
  3. Control: Provide feedback to manufacturers, packers and/or loaders and work with them to maintain and improve the quality of their work.
  4. Control: Record and share information about non-compliance with loading plans or load restraint failures with other CoR parties.

1. Activity: Transporting shipping containers

Transporting goods in containers carries some specific risks related to the fact that there is no visibility of the goods inside the container. Often, another party is packing the container, and it is difficult to identify hazards around mass, mass distribution, centre of gravity, load restraint, and how goods are secured inside the container, prior to it being loaded to transport.

* 1. Control: Obtain accurate information about the type of goods, their characteristics and mass, and the method of restraining the goods inside the container.

This includes the loading plan used to pack and restrain the goods inside the container, and the photos documenting the container being packed and restrained.

* 1. Control: Obtain verified gross mass information from the relevant CoR party.
  2. Control: Obtain assurance from the relevant CoR party that loads inside imported containers have been safely restrained, and that the mass of a loaded container has been accurately reported.
  3. Control: If assurance is not available that goods in a container have been restrained in accordance with the HVNL loading performance standards, load the container road transport with doors to the rear where possible.
  4. Control: Provide training to drivers and other employees about the procedure and actions to be taken if a non-compliant container is identified.
  5. Control: Establish a procedure, agreed with other CoR Parties, for actions to be taken when a non-compliant container is suspected or identified.
  6. Control: Report non-compliant containers to relevant CoR parties.
  7. Resources for Transporting shipping containers:
* NHVR Regulatory Advice on [Managing the risks of transporting freight in shipping containers](https://www.nhvr.gov.au/safety-accreditation-compliance/chain-of-responsibility/regulatory-advice/managing-the-risks-of-transporting-freight-in-shipping-containers)[[150]](#endnote-150) provides guidance on identifying and managing the safety risks of transporting freight in shipping containers by road.
* The CoR Safe (Logistics Safety Solutions) [Safe Container Loading and Transport Guide](https://logss.com.au/container-guide)[[151]](#endnote-151) details the steps required when loading and restraining containers for transport within Australia and New Zealand.

1. Activity: Managing premises where shipping containers are loaded and/or unloaded

Stevedores and freight forwarders have a unique opportunity to identify non-compliant import containers before they are loaded for road transport. With the right combination of infrastructure, procedures and training these parties have the opportunity to detect and deal with containers before they create risks to the public.

* 1. Control: Nominate safe places for drivers to stop in the vicinity of loading and unloading premises, if a non-compliant container is detected.
  2. Control: Establish a location and provide equipment where non-compliant containers can be opened safely or identify the closest place where containers can be taken for safe opening.
  3. Control: Use weighing equipment to assess gross mass and mass distribution of containers.
  4. Control: Train operators of loading and unloading equipment to identify containers suspected of exceeding mass limits or with uneven mass distribution (which may indicate that load restraint inside the container has failed).
  5. Control: Train employees to identify import containers suspected of harbouring invasive species.
  6. Control: Isolate non-compliant containers for further investigation, and open and inspect when authorised and when safe to do so.
  7. Control: Establish a procedure, agreed with other CoR parties, for actions to be taken when a non-compliant container is suspected or identified.

For example, refuse to load or release for transport a container which is identified to be over-mass or unevenly distributed until the issue is rectified with the party responsible for the load or container.

* 1. Control: Display contact information for entities who need to be contacted before containers can be opened and for persons who will be required to assist if a non-compliant container is detected.

For example: Australian Border Force, Australian Quarantine and Inspection Service, WorkSafe

* 1. Control: Implement a procedure for responding to identified safety hazards or risks, including isolating suspect containers for further investigation.
  2. Control: Allow heavy vehicle drivers to return to stevedore premises when a mass, mass distribution, or loading issue has become apparent after the vehicle carrying the container has left the premises.
  3. Control: Report any identified non-compliance to CoR parties for the container.
  4. Resources for Managing premises where shipping containers are loaded and unloaded:
* The [*Guide for Unpacking Shipping Containers*](https://www.safework.nsw.gov.au/__data/assets/pdf_file/0015/108060/SW08344-Guide-for-unpacking-shipping-containers.pdf) from SafeWork NSW provides information on how to manage health and safety risks when unpacking containers transported by land or sea.

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KEY TERMS AND DEFINITIONS

HVNL Definitions

**ATM** – aggregate trailer mass (HVNL s5), of a heavy trailer, means the total maximum mass of the trailer, as stated by the manufacturer together with its load and the mass imposed on the towing vehicle by the trailer when the towing vehicle and trailer are on a horizontal surface.

**Business practices** (HVNL s5), of a person, means the person’s practices in running a business associated with the use of a heavy vehicle on a road, including:

• the operating policies and procedures of the business; and

• the human resource and contract management arrangements of the business; and

• the arrangements for preventing or minimising public risks associated with the person’s practices.

**Consign and consignor** (HVNL s5) – A person consigns goods, and is a consignor of goods, for road transport using a heavy vehicle, if –

(a) the person has consented to being, and is, named or otherwise identified as a consignor of the goods in the transport documentation relating to the road transport of the goods; or

(b) the person engages an operator of the vehicle, either directly or indirectly or through an agent or other intermediary, to transport the goods by road; or

(c) if paragraphs (a) and (b) do not apply – the person has possession of, or control over, the goods immediately before the goods are transported by road.

**Consignee,** of goods (HVNL s5) –

(a) means a person who –

(i) has consented to being, and is, named or otherwise identified as the intended consignee of the goods in the transport documentation relating to the road transport of the goods; or

(ii) actually receives the goods after completion of their road transport; but

(b) does not include a person who merely unloads the goods

**Dimension requirement** (HVNL s5) means:

* a prescribed dimension requirement (under HVNL s 101); or
* a requirement as to a dimension limit relating to a heavy vehicle under a condition to which a mass or dimension authority is subject (where the dimension limit is more restrictive than the relevant prescribed dimension requirement); or
* a requirement as to a dimension limit under a PBS vehicle approval; or
* a requirement as to a dimension limit indicated by an official traffic sign; or
* a requirement as to a dimension limit for a component vehicle as prescribed by a heavy vehicle standard.

**Due diligence** (HVNL s 26D) includes taking reasonable steps –

(a) to acquire, and keep up to date, knowledge about the safe conduct of transport activities; and

(b) to gain an understanding of –

(i) the nature of the legal entity’s transport activities; and

(ii) the hazards and risks, including the public risk, associated with those activities; and

(c) to ensure the legal entity has, and uses, appropriate resources to eliminate or minimise those hazards and risks; and

(d) to ensure the legal entity has, and implements, processes –

(i) to eliminate or minimise those hazards and risks; and

(ii) for receiving, considering, and responding in a timely way to, information about those hazards and risks and any incidents; and

(iii) for complying with the legal entity’s safety duties; and

(e) to verify the resources and processes mentioned in paragraphs (c) and (d) are being provided, used and implemented.

**Employee** (HVNL s5) means an individual who is employed by someone else.

**Employer** (HVNL s5) means a person who employs someone else.

**Executive** (HVNL s26D), of a legal entity, means:

* for a corporation – an executive officer of the corporation; or
* for an unincorporated partnership – a partner in the partnership; or
* for an unincorporated body – a management member of the body.

**Executive officer**, (HVNL s5) of a corporation, means:

* a director of the corporation; or
* any person, by whatever name called and whether or not the person is a director of the corporation, who is concerned or takes part in the management of the corporation.

**Fit to drive a heavy vehicle**, (HVNL, s5) or to start or stop its engine, for a person, means the person –

(a) is apparently physically and mentally fit to drive the vehicle, or start or stop its engine; and

(b) is not apparently affected by either or both of the following –

(i) alcohol;

(ii) a drug that affects a person’s ability to drive a vehicle; and

(c) is not found to have an alcohol concentration in the person’s blood or breath exceeding the amount permitted, under an Australian road law of this jurisdiction, for the driver of a heavy vehicle; and

(d) is not found to be under the influence of a drug or to have present in the person’s blood or saliva a drug that the driver of a heavy vehicle is not permitted to have present in the driver’s blood or saliva under an Australian road law of this jurisdiction.

**GCM** (gross combination mass) (HVNL s5), of a motor vehicle, means the total maximum loaded mass of the motor vehicle and any vehicles it may lawfully tow at any given time—

(a) if the registration authority has specified the total maximum loaded mass of the motor vehicle and any vehicles it may lawfully tow at any given time - specified by the registration authority; or

(b) otherwise - stated by the motor vehicle’s manufacturer.

**GVM** (gross vehicle mass) (HVNL s5), of a vehicle, means the maximum loaded mass of the vehicle:

* if the registration authority has specified the vehicle’s maximum loaded mass - specified by the registration authority; or
* otherwise - stated by the vehicle’s manufacturer.

**Heavy Vehicle** (HVNL s6) means a vehicle with a GVM or ATM of more than 4.5t, or a combination that includes a vehicle with a GVM or ATM of more than 4.5t.

**Load**, when used as a verb, and loader (HVNL s5) – A person loads goods in a heavy vehicle, and is a loader of goods in a heavy vehicle, if the person is a person who –

(a) loads the vehicle, or any container that is in or part of the vehicle, with the goods for road transport; or

(b) loads the vehicle with a freight container, whether or not it contains goods, for road transport.

**Loading manager** (HVNL s5), for goods in a heavy vehicle, means:

(a) a person who manages, or is responsible for the operation of, regular loading or unloading premises for heavy vehicles where the goods are –

(i) loaded onto the heavy vehicle; or

(ii) unloaded from the heavy vehicle; or

(b) a person who has been assigned by a person mentioned in paragraph (a) as responsible for supervising, managing or controlling, directly or indirectly, activities carried out by a loader or unloader of goods at regular loading or unloading premises for heavy vehicles.

**Loading requirements** and **loading performance standards** (HVNL s110 and s115), are the requirements and standards prescribed in Schedule 7 of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation, about securing a load on a heavy vehicle or a component of a heavy vehicle. The loading requirements and loading performance standards include requirements and standards about the restraint or positioning of a load or any part of it on a vehicle or trailer.

**Operate and operator** (HVNL s5) means:

A person operates a vehicle or combination, and is an operator of the vehicle or combination, if the person is responsible for controlling or directing the use of –

(a) for a vehicle (including a vehicle in a combination) – the vehicle; or

(b) for a combination – the towing vehicle in the combination.

**Pack and packer** (HVNL s5) – A person packs goods, and is a packer of goods, if the person –

(a) puts the goods in packaging, even if that packaging is already on a vehicle; or

Example for the purposes of paragraph (a) – a person who uses a hose to fill the tank of a tank vehicle with petrol packs the petrol for transport.

(b) assembles the goods as packaged goods in an outer packaging, even if that packaging is already on a vehicle; or

(c) supervises an activity mentioned in paragraph (a) or (b); or

(d) manages or controls an activity mentioned in paragraph (a), (b) or (c).

**Party in the chain of responsibility** (HVNL s5), for a heavy vehicle, means each of the following persons:

(a) if the vehicle’s driver is an employed driver – an employer of the driver

(b) if the vehicle’s driver is a self-employed driver – a prime contractor for the driver

(c) an operator of the vehicle

(d) a scheduler for the vehicle

(e) a consignor of any goods in the vehicle

(f) a consignee of any goods in the vehicle

(g) a packer of any goods in the vehicle

(h) a loading manager for any goods in the vehicle

(i) a loader of any goods in the vehicle

(j) an unloader of any goods in the vehicle.

**Prime Contractor** (HVNL s5) of the driver of a heavy vehicle, means a person who engages the driver to drive the vehicle under a contract for services. (Explanation: the term applies where a self-employed driver enters an agreement with another individual or business. That individual or business is the prime contractor.)

**Public place** (HVNL s5) means a place or part of a place:

(a) that the public is entitled to use, is open to members of the public or is used by the public, whether or not on payment of money; or

(b) the occupier of which allows members of the public to enter, whether or not on payment of money.

**Public risk** (HVNL s5) means:

(a) a safety risk; or

(b) a risk of damage to road infrastructure.

**Public safety** (HVNL s5) means the safety of persons or property, including the safety of:

(a) the drivers of, and passengers and other persons in, vehicles and combinations; and

(b) persons or property in or in the vicinity of, or likely to be in or in the vicinity of, road infrastructure and public places; and vehicles and combinations and any loads in them.

**Reasonably practicable** (HVNL s5), in relation to a duty, means that which is, or was at a particular time, reasonably able to be done in relation to the duty, weighing up all relevant matters, including –

(a) the likelihood of a safety risk, or damage to road infrastructure, happening; and

(b) the harm that could result from the risk or damage; and

(c) what the person knows, or ought reasonably to know, about the risk or damage; and

(d) what the person knows, or ought reasonably to know, about the ways of –

(i) removing or minimising the risk; or

(ii) preventing or minimising the damage; and

(e) the availability and suitability of those ways; and

(f) the cost associated with the available ways, including whether the cost is grossly disproportionate to the likelihood of the risk or damage.

**Regular loading or unloading premises** (HVNL s5) for heavy vehicles, means premises at or from which an average of at least 5 heavy vehicles are loaded or unloaded on each day the premises are operated for loading or unloading heavy vehicles.

**Road** (HVNL s8) is an area that is open to or used by the public and is developed for, or has as 1 of its uses, the driving or riding of motor vehicles. Examples of areas that are roads – bridges, cattle grids, culverts, ferries, fords, railway crossings, tunnels or viaducts

**Road infrastructure** (HVNL s5) includes:

(a) a road, including its surface or pavement; and

(b) anything under or supporting a road or its surface or pavement; and

(c) any bridge, tunnel, causeway, road-ferry, ford or other work or structure forming part of a road system or supporting a road; and

(d) any bridge or other work or structure located above, in or on a road; and

(e) any traffic control devices, railway equipment, electricity equipment, emergency telephone systems or any other facilities (whether of the same or a different kind) in, on, over, under or connected with anything mentioned in paragraphs (a) to (d).

**Safety duties** (HVNL s5) is a prescribed list of eighteen HVNL duty and offence provisions in relation to which executives have a duty to exercise due diligence, and for which authorised officers have extra investigative powers. The most important duty in this category is the primary duty (s26C). For the full list, see s5 HVNL.

**Safety risk** (HVNL s5) means a risk:

(a) to public safety; or

(b) of harm to the environment.

**Scheduler** (HVNL s5) for a heavy vehicle, means: a person who –

(a) schedules the transport of any goods or passengers by the vehicle; or

(b) schedules the work times and rest times of the vehicle’s driver.

**Transport activities** (HVNL s5) means activities, including business practices and making decisions, associated with the use of a heavy vehicle on a road, including, for example –

(a) contracting, directing, or employing a person:

(i) to drive the vehicle; or

(ii) to carry out another activity associated with the use of the vehicle (such as maintaining or repairing the vehicle); or

(b) consigning goods for transport using the vehicle; or

(c) scheduling the transport of goods or passengers using the vehicle; or

(d) packing goods for transport using the vehicle; or

(e) managing the loading of goods onto or unloading of goods from the vehicle; or

(f) loading goods onto or unloading goods from the vehicle; or

(g) receiving goods unloaded from the vehicle.

**Unload and unloader** (HVNL s5)— A person unloads goods in a heavy vehicle, and is an unloader of goods in a heavy vehicle, if the person is a person who –

(a) unloads from the vehicle, or any container that is in or part of the vehicle, goods that have been transported by road; or

(b) unloads from the vehicle a freight container, whether or not it contains goods, that has been transported by road.

Other Terms and Definitions

**ANPR** –automatic number plate recognition. This is a technology which uses cameras to read vehicle number plates then transmit that information to a computer for processing.

**Assurance** refers to information or processes for confirming that systems are working as intended. It may include reviewing records or data, making enquiries, conducting or requesting audits, inspecting documents, interviewing employees or any other means of obtaining relevant information. A business typically looks for assurance about its own processes and systems, and for assurance about the safety performance of business partners.

**Australian Dangerous Goods** **Code** (ADG Code) provides consistent technical requirements for the land transport of dangerous goods across Australia. The ADG Code should be read in conjunction with relevant state or territory law.

**Australian Design Rules** (ADRs) contain mandatory requirements for the safe design and construction of vehicles and for the control of emissions and noise.

**Australian Standards** are voluntary documents that set out specifications, procedures and guidelines that aim to ensure products, services, and systems are safe, consistent, and reliable. They cover a variety of subjects, including consumer products and services, the environment, construction, energy and water utilities, and more.

**Axle group load** means the total mass on an axle group, including the mass due to the truck and the mass due to the load.

**Chain of Responsibility** (CoR) is the principle that recognises that heavy vehicle safety depends upon the whole supply chain. The term ‘party in the chain of responsibility’ is also defined under the HVNL as each person performing any one of ten functions, in relation to a heavy vehicle. Any person or business that performs one of those functions has a primary duty to ensure, so far as reasonably practicable, the safety of their transport activities. See HVNL s5, s26C, s26F, s26G, s26H.

**Code of Practice** is a document which provides information about hazards, risks and controls and which helps parties in the chain of responsibility to identify, analyse, evaluate, and mitigate risks to public safety associated with their transport activities.

**Coefficient of Friction** (CoF) – The co-efficient of friction (μ) is used to compare the load restraint friction force between two surfaces. Loads on vehicles with low friction surfaces generally need more or stronger restraint. Increasing friction, for example by using high friction matting, improves overall restraint. (See the Load Restraint Guide for more information.)

**Commodity** –an agricultural product, raw material, landscaping supplies, or other type of goods loaded and transported in bulk. For example: grain, gravel, spoil or fill, waste, scrap metal.

**Consequence** is the outcome of an event affecting the objectives of an organisation (objectives can include financial, health and safety, and environmental goals for example).

**Container weight declaration** (CWD) is a written declaration of the weight of a container and its contents. It may be either in hard copy or electronic form, or a placard attached to the freight container.

**Control** refers to measures which can be used to eliminate or minimise public risks. Some controls do not reduce risk but do minimise the potential injury or damage that may be caused.

**CoR** – Chain of Responsibility.

**Dangerous goods** –any material which is classified as a dangerous good in the Australian Dangerous Goods Code or which has characteristics that require special handling precautions to ensure safety during transport. Dangerous goods must be stored and handled in accordance with relevant Australian Standards for dangerous goods storage and handling.

**Driver** or heavy vehicle driver – An employed driver is not a party in the CoR, however, if a driver is a self-employed owner-operator then they fall within the definition of an ‘operator’ under the HVNL.

**Direct restraint** – a form of load restraint where the load is restrained by containing, blocking or attaching.

**Dunnage** – packing placed either between items of a load or between the base of a load and the surface of the vehicle’s loading deck.

**EWD** – electronic work diary.

**Fatigue-regulated heavy vehicle** – a motor vehicle with a GVM of more than 12t; a combination with a GVM of greater than 12t; a fatigue-regulated bus.

**FDDT** – fatigue and distraction detection technology.

**Freight container**, or container – a re-usable container that is designed for the transport of goods by one or more modes of transport.

**Hazard** refers to anything with the potential to cause harm or damage, this could be an activity or behaviour, a physical object, a situation or a management practice.

**Heavy Goods Vehicle**, under ADRs – a goods vehicle with a GVM exceeding 12.0 tonnes.

**HVNL** – Heavy Vehicle National Law.

**Human Factors** is about understanding human behaviour and performance. When applied to business operations, Human Factors knowledge is used to optimise the fit between people and the systems in which they work to improve safety and performance.

**Internal review** is generally a way of something being assessed through the collection of objective evidence. It provides critical information to the decision makers of the organisation and is used to confirm that the organisation meets specified requirements.

**Likelihood** is the chance of something happening (sometimes called probability).

**Load restraint**, or restraint, is the way loads are effectively restrained on a vehicle. Loads can be restrained by two basic methods: tie-down or direct restraint (which includes containing, blocking and attaching).

**Load Restraint Guide** provides guidance about designing and implementing a load restraint system that will meet the loading performance standards (see above). The Load Restraint Guide is published on the NHVR website.

**LTSG** –Land Transport Standards and Guidelines – the Australian Animal Welfare Standards and Guidelines, Land Transport of Livestock. Information about animal welfare and handling practices during road transport, published by the Animal Welfare Task Group, part of the Commonwealth Department of Agriculture, Fisheries and Forestry.

**MDL** – mass, dimension and loading.

**Mass requirements** are the requirements about the mass of heavy vehicles and the mass of components of heavy vehicles – section 95 of the HVNL. The mass requirements applying to a heavy vehicle are stated in Schedules 1 to 5A of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation.

**NHVAS,** the National Heavy Vehicle Accreditation Scheme, is an accreditation scheme NHVR manages. Accreditation is based on meeting standards for individual modules such as maintenance management or advanced fatigue management.

**NHVR** – National Heavy Vehicle Regulator. The NHVR is Australia’s independent regulator for all vehicles over 4.5 tonnes gross vehicle mass.

**OEM** – Original Equipment Manufacturer.

**OBM** –On-board mass is a system that monitors all the axle groups in the vehicle combination and provides the mass readings of these axle groups to an Intelligent Access Program (IAP) system.

**PBS** – Performance Based Standard.

**PPE** – Personal Protective Equipment.

**Policies** are clear, simple statements of how your organisation intends to conduct its business practices. They provide a set of guiding principles to help with decision making.

**Procedures** describe how policies will be put into action in your organisation. Procedures outline who will do what, the steps to take, and the documents or forms to use.

**Process** (method or mechanism) is a series of actions or steps taken in order to achieve a particular end, objective or outcome.

**Primary Duty**is the obligation on a party in the Chain of Responsibility to ensure, so far as is reasonably practicable, the safety of their transport activities relating to the vehicle.

**Public Risk,** for the Primary Duty under the HVNL, means the elements described in the definitions of Public Risk, Public Safety and Safety Risk (s5, HVNL).

That is, a risk to the safety of persons or property, including:

* the safety of drivers, passengers and other people in vehicles
* the safety of people and property on or near roads or in public places
* the safety of vehicles and any loads
* a risk of damage to road infrastructure
* a risk of harm to the environment

**RICP** – Registered Industry Code of Practice; an RICP has an evidentiary status under s632A of the HVNL. A court may have regard to the contents of a registered code of practice when determining whether a party in the CoR has done what was reasonably practicable to ensure safety.

Specifically, the contents of a code can be used as evidence of what a party knew, or ought to have known, about hazards, risks, risk assessments and controls in relation to the subject matter of the code.

**Risk** refers to the possibility of harm or damage occurring when a person or thing is exposed to a hazard.

**Risk management** is the coordinated activities to identify and control the risks arising from the activities of an organisation. The risk management process consists of four key steps, including identifying hazards; assessing risks; controlling risks; and monitoring and reviewing controls.

**SMS** – Safety Management System.

**SRT** – static rollover threshold. It is a measure of the sideways force required to roll a stationary vehicle and is a useful indication of vehicle stability. The number is expressed as a decimal. A higher number indicates better stability. Vehicles carrying Dangerous Goods must have an SRT of 4.0; PBS vehicles must have an SRT of 3.5. To calculate SRT, refer to [S.R.T. - Calculator (ternz.co.nz),](https://ternz.co.nz/SRT_Calculator/index.html) [Payload Pilot (Advantia)](https://payloadpilot.com.au/) or another online tool.

**Stillage** – a structure such as a cage or frame, used to contain individual items of a load, particularly items that are fragile or unusually shaped.

**System** is a set of resources and activities integrated in a business that all work together to help improve safety and other business imperatives. The system details the required documentation of policies, procedures and operational records associated with business practices.

**The Code** (this Code) – this Registered Industry Code of Practice.

**Tie down restraint**, is a form of load restraint where the load is restrained by friction (also called “indirect restraint”).

**Vehicle Standards**, or Heavy Vehicle Safety Standards, are the standards derived from Australian Design Rules, HVNL and Heavy Vehicle (Vehicle Standards) National Regulation that set out the minimum safety, emissions and anti-theft requirements that apply to heavy vehicles. The vehicle standards are used to guide heavy vehicle inspections as published in the National Heavy Vehicle Inspection Manual (NHVIM).

**VSB6 (**Vehicle Standards Bulletin 6) provides clear guidelines and technical requirements for modifying heavy vehicles in compliance with the Australian Design Rules and the HVNL to ensure safety and consistency.

**WHS** – Work Health and Safety, also known as Occupational Health and Safety (OHS).

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