

Productivity Commission

Australian Government

05 September 2025

**Australian Forklift and Industrial Truck Association Submission: National Competition Policy
analysis 2025 Interim Report**

The Australian Forklift and Industrial truck Association (AFITA) is the peak industry association representing industrial truck and forklift equipment manufacturers, suppliers and importers, and kindred associate industries supplying OEM's, e.g. attachment suppliers, battery & charger suppliers, spare parts, etc.

AFITA members supply and maintain equipment to major industries, including transport & logistics, construction, manufacturing, grocery & retail. AFITA members represent the major global industrial truck and forklift OEM's, which directly employ directly over 10,000 Australians, and large numbers indirectly via suppliers to the OEM's.

Industrial trucks and forklifts range from small pallet trucks used in delivery and grocery stores to large container handlers used in ports, as well as warehouse and storage. Industrial trucks and forklifts are an essential part of the logistics and supply chain for the movement and storage of all goods in Australia. They must be included in any exemption or decision which impacts the logistics and transport industry.

AFITA is actively involved in the development of Australian Standards via the AS ME 026 Committee (providing the current Chair and two other members) and was a key driver in the development of AS2359 in 1989 and its subsequent revisions. We actively participate internationally with a representative attending ISO meetings to encourage harmonisation between standards. We support direct adoption wherever possible, and this has been achieved in many instances. AFITA was instrumental in the creation of AS2359 in 1989.

AFITA has reviewed the proposal and provides the following feedback, specifically on the discussion around Australian and International Standards.

Understanding that many ISO Standards are recognised and aligned with Australian Standards, at a surface level, the automatic adoption of International Standards in place of Australian Standards can support trade, especially in the regulated product markets. However, this will then miss several fundamental and irrevocable issues, especially around the Australian Work Health and Safety (WHS) legislation. ISO standards represent a negotiated compromise and have a bias towards European legislative requirements (Vienna agreement for harmonisation between ISO and EN standards) which may not necessarily coincide with Australian legislative requirements. Accordingly, the continuance of Australian Standards to ensure that Australian legislative requirements are met as an essential component of standards development.

A significant example of this is at the core forklift truck Australian Standard, AS2359.1-2019 Powered Industrial trucks – Part 1: General Requirements, which has a requirement for sequential locking operator restraints, which the equivalent ISO Standard (ISO 3691-1:2011 Industrial Trucks – Part 1: Self-propelled industrial trucks, other than driverless trucks, variable reach trucks and burden carrier trucks) does not. This means that a forklift truck compliant to AS2359.1 cannot be operated unless the operator is actually wearing the seatbelt. In the last 12 months, there have been at least two operator deaths, which occurred on forklift trucks which complied to only to the ISO Standard and NOT the Australian Standard AS2359.1 requirements. These two deaths would NOT have occurred if those forklifts were compliant to AS2359.1 and its seatbelt requirements.

A second example is AS2359.2 Powered Industrial Trucks – Part 2 Operations which includes requirements for training and licensing which relate directly to the WHS Act 2011. The equivalent ISO standard (ISO 21262 – Industrial trucks – Safety rules for application operation and maintenance) is inconsistent with the WHS Act 2011 and AS2359.2 and thus either the ISO Standard or the WHS Act 2011 would require modification.

A third example is AS5144.3-2019 – Industrial trucks – Safety requirements and verification Part 3: Additional requirements for trucks with elevating operator position and trucks specifically designed to travel with elevated loads, which has requirements for fall arrest anchorages, which reference the Australian standard AS1891. This is consistent with the Australian Code of Practice for working at heights. The Australian requirements for fall arrest and anchorages are contained in the technical standard ISO/TS 3691.8-2019 – Industrial trucks – safety and verification Part 8: Requirements for countries outside the European community. This technical standard is a method of addressing country specific requirements where consensus could not be achieved at the ISO level. This fall arrest anchorage requirement is not specified in the equivalent standard ISO 3691.3, again, making it

inconsistent with Australian WHS requirements. AS 5144.3-2019 is a modified adoption of ISO 3691.3-2016 to provide alignment to the fall arrest anchorage requirements.

The appendix to this submission includes extracts from the cited standards citing the relevant clauses to show the differences discussed in the preceding paragraphs.

We are also very aware of the crane industry Australian Standards (called up in Australian legislation) inconsistency with the ISO standards regarding stability.

From the above examples, we can clearly recognise that the universal direct adoption of ISO Standards/ replacement of Australian standards with ISO would result in a REDUCTION in safety in Australia.

Direct adoption of ISO standards to minimise/eliminate barriers to entry should be supported, where appropriate legislative changes are made to address the reasons for local standards or local modification of adopted standards. However, AFITA believe that there will always exist situations where a unique Australian standard is required, such as the standard AS2359.2-2013. Therefore, AFITA would not support a proposal to unilaterally adopt ISO standards, as modification alone may not be sufficient to align with Australian laws and regulations, both State and Federal.

AFITA and its members appreciate your consideration of our response and look forward to the opportunity to discuss further.

Michael Croxford – Technical Committee Chair, AFITA

Appendix A – Operator restraint requirements – AS2359.1 and ISO 3691.1

AS2359.1:2019

Section 7.4.1 General

Where seatbelts are fitted they shall be interlocked to prevent the truck from travel motion (forward or reverse) until the seatbelt is buckled, except in the case of tow tractors. In addition, the seatbelt interlock shall include the sequencing/logic of the seatbelt switch with a seat pressure switch. The weight of the operator on the seat shall be detected prior to the seatbelt switch being engaged. The system shall not be readily overridden. Means shall be provided to discourage unbuckling of the seat belt while the truck is in motion. For example, activation of an audible alarm or switching to neutral. If it is developed in the future and it is deemed reasonably practicable, such technology may be fitted to tow tractors to control the risk of the operator or passenger being ejected.

The above Australian Standard requires a seat presence system smart interlocked with the seatbelts such that it uses logic control and cannot be over-ridden.

The equivalent ISO3691.1 (2011) (extract below) simply requires a lap seat belt.

In the last 12 months alone, there have been at two operator deaths, which occurred on fork trucks which complied to only the ISO Standard and NOT the Australian Standard AS2359.1 requirements. Upon investigation, these two deaths would NOT have occurred if those forklifts were compliant to AS2359.1 seatbelt interlock requirements.

4.7.8 Operator restraint

Sit-on counterbalanced lift trucks (as defined in ISO 5053-1:2020, 3.3) with a center controlled forward facing operator with a rated capacity up to and including 10 000 kg and sit-on, side-loading trucks (as defined in ISO 5053-1:2020, 3.6) shall have a restraint device, system or enclosure intended to reduce the risk of entrapment of the operator's head and/or torso between the truck and the ground in the event of a tip-over. Such means shall not unduly restrict the operation of the truck, e.g. the operator's access, egress, and/or visibility. Warnings and instructions on the purpose, use and action to be taken in the event of a tip-over, so as to reduce the risk associated with the operator's head impacting a solid surface, shall be provided on the truck and described in the instruction handbook (see 6.2). If a restraint system incorporates the use of a pelvic lap type seat belt, this system shall be in accordance with ISO 24135-1:2006.

Appendix B – Operator training requirements AS2359.2 and ISO 21262

AS2359.2-2013 Clause 2.1 and 2.2 Qualification & Training of operators

2.1 QUALIFICATIONS OF OPERATORS

Operators of trucks shall have the following qualifications and requirements:

- (a) Sufficient knowledge of this Standard to allow implementation of the requirements relevant to their operation.
- (b) Absence of any medical condition that could impair the safe operation of a truck or endanger the safety of others.
- (c) Training in the operation of each type of truck that they are required to operate, and any attachments that will be used with it (see Clause 2.2).
- (d) Sufficient skills and knowledge in the safe operation of the relevant type of truck.
- (e) A high risk work licence or any other licensing requirements of the relevant authorities where required.
- (f) Be sufficiently fluent in the use of the English language for basic safety related communication.

2.2 TRAINING OF OPERATORS

2.2.1 Training requirements

Operators shall be instructed on the following for each type of truck prior to its use:

- (a) User's policies for safe systems of work.
- (b) The work safety practices and procedures the operator is required to observe.
- (c) Operating conditions in all areas of operation including any special or hazardous conditions.
- (d) Basic information on the particular truck, such as its safety features, capacity, stability and limitations, and the attachments and components to be used with it.
- (e) Operator control positions and functions.
- (f) Operator responsibilities for servicing, maintenance and repair.
- (g) Working within a traffic management plan (TMP), see Clause 3.6.
- (h) Weights of generic standard loads.
- (i) Battery charging or refuelling procedure including orientation of a removable LP Gas cylinder where fitted.
- (j) Personal protective equipment.
- (k) Access and egress to and from the operator's compartment.

NOTES:

- 1 The operator should also have supervised practice on a remote operating course designed to simulate actual working conditions, and this should be followed by oral, written and operational performance tests.
- 2 On-the-job evaluation and ongoing refresher training should occur at regular intervals as determined by the user. The frequency of on-the-job evaluation and ongoing refresher training will depend upon the nature of operations, number and type of trucks in use and their design and safety features, design of workplace, local hazards in the working environment, risk control measures in place, and incident history. The frequency should not exceed 5 years.
- 3 Codes of Practice and other guidance material should also be considered when developing user policies.

The above Australian standard references the requirement for a HRW (High Risk Work) license, which is defined in the WHS (Work Health and Safety) regulation 2011.

The ISO 21262:2020 standard does not provide any guidance on licensing requirements of operators. The standard is prescriptive in nature and defines the basis of a training programme only.

ISO 21262:2020 Clause 4.3 Training Program

4.3 Training program

4.3.1 Personnel who have not been trained to operate powered trucks may operate a truck for the purposes of training only, and only under the direct supervision of the trainer. This training should be conducted in an area away from other trucks, obstacles, and pedestrians.

4.3.2 The training program shall emphasize safe and proper operation to avoid injury to the operator and others and prevent property damage, and shall cover the following areas:

- a) fundamentals of the powered truck(s) the trainee will operate, including:
 - characteristics of the powered truck(s) and attachments, including variations between trucks in the workplace;
 - differences between automobiles and trucks;
 - significance of nameplate data, including rated capacity, warnings, and the instructions affixed to the truck;
 - operating instructions and warnings in the manufacturer's instruction handbook for the truck, and instructions for inspection and maintenance to be performed by the operator;
 - type of motive power and its traction characteristics;
 - method of steering;
 - braking method and characteristics, with and without load;
 - visibility, with and without load, forward and reverse;
 - load handling capacity, weight and load centre;
 - stability characteristics with and without load, with and without attachments;
 - controls – location, function, method of operation, identification of symbols;
 - load handling capabilities, forks, attachments;
 - hazards due to production of carbon monoxide by internal combustion engines and common initial symptoms of exposure;
 - refuelling and battery charging;
 - guards and protective devices for the specific type of truck;
 - other characteristics of the specific truck;
 - what to do in an emergency (e.g. tip-over, off-dock);
 - where installed, automated functions and their characteristics and basic operating principles;
 - the procedure and sequence of operation for start-up and shut-down of the truck;
- b) operating environment and its effect on truck operation including, as appropriate:
 - floor or ground conditions including temporary conditions;
 - ramps and inclines, with and without load;
 - trailers, railcars and dockboards (including the use of wheel chocks, jacks, and other securing devices);
 - refuelling and battery charging facilities;
 - the use of "classified" trucks in areas classified as hazardous due to risk of fire or explosion, as appropriate;
 - narrow aisles, doorways, overhead wires and piping, and other areas of limited clearance;
 - areas where the truck may be operated near other powered trucks, other vehicles, or pedestrians;

- use and capacity of elevators;
 - operation near edge of dock or edge of improved surface;
 - other special operating conditions and hazards that can be encountered;
- c) operation of the powered truck, including:
- preshift inspection and method for removing from operation a truck that is in need of repair;
 - load handling techniques: lifting, lowering, picking up, placing, tilting;
 - travelling, with and without loads; turning corners;
 - parking and shutdown procedures;
 - other special operating conditions for the specific application;
- d) operating safety rules and practices including:
- provisions in [Clauses 4](#) to [7](#) addressing operating safety rules and practices;
 - provisions in [Clauses 8](#) to [9](#) addressing care of the truck;
 - other rules, regulations, or practices specified by the user at the location where the powered truck will be used.

Appendix C – Fall arrest anchorage – AS5144.3 and ISO 3691.3

AS5144.3-2019 Clause CI 6.1 includes modification to provide requirements for fall protection.

CI 6.1 At the end of the clause, *add* the following new paragraph:
Information for the use of harnesses and lanyards shall be in accordance with AS/NZS 1891.4.

ISO/TS 3691-8:2019 provides regional requirements listing fall arrest requirements for Australia and other countries.

4.2.1 Platforms equipped with a fall protection device

- For Australia, the fall protection harness and lanyard shall comply with AS/NZS 1891-1.
- For North America, operator stand-on platforms not equipped with a guarding system shall be equipped with a fall protection device that meets the requirements of ANSI/ITSDF B56.1 applicable at the time of manufacture. The guarding specified in ISO 3691-3:2016, 4.4.5.2 and 4.4.5.3 is not required if using this type of protection.
- For Japan, the operator platforms may be equipped with operator bars in lieu of guard rails, and shall be equipped with a fall protection device for not only type of operator bars but also type of guard rails.

4.2.2 Anchorage points of fall protection device(s)

- For North America, the anchorage point(s) of the fall protection device(s) shall meet the requirements of ANSI/ITSDF B56.1 applicable at the time of manufacture.
- For Australia:

The operator platform anchorage point(s) shall be capable of supporting a load of 15 kN for one person with maximum deflection of 10 mm. If a second person is to use the same anchorage point, then the anchorage point shall be capable of supporting a load of 21 kN.

The anchorage point shall be marked to show the test loading and how many lanyards it is capable of supporting.

ISO 3691.3 Clause 4.4.5.5 and 4.4.5.6 define the requirements for fall arrest systems and anchorages. This includes the reference to the ISO technical standard ISO/TS 3691.8-2019 for regional requirements.

4.4.5.5 Platforms equipped with a fall protection device

Platforms equipped with a fall protection device are subject to regional requirements, additional to the requirements of this part of ISO 3691. See ISO/TS 3691-7 and ISO/TS 3691-8.

4.4.5.6 Anchorage points of fall protection device(s)

Anchorage point(s) of fall protection device(s) shall be capable of withstanding three consecutive drop tests of 135 kg falling a distance of 1800 mm without failure of the anchorage point. If a second person is to use the same anchorage point, the test weight shall be 270 kg.

Anchorage points for fall protection is subject to regional requirements, additional to the requirements of this part of ISO 3691. See ISO/TS 3691-8.