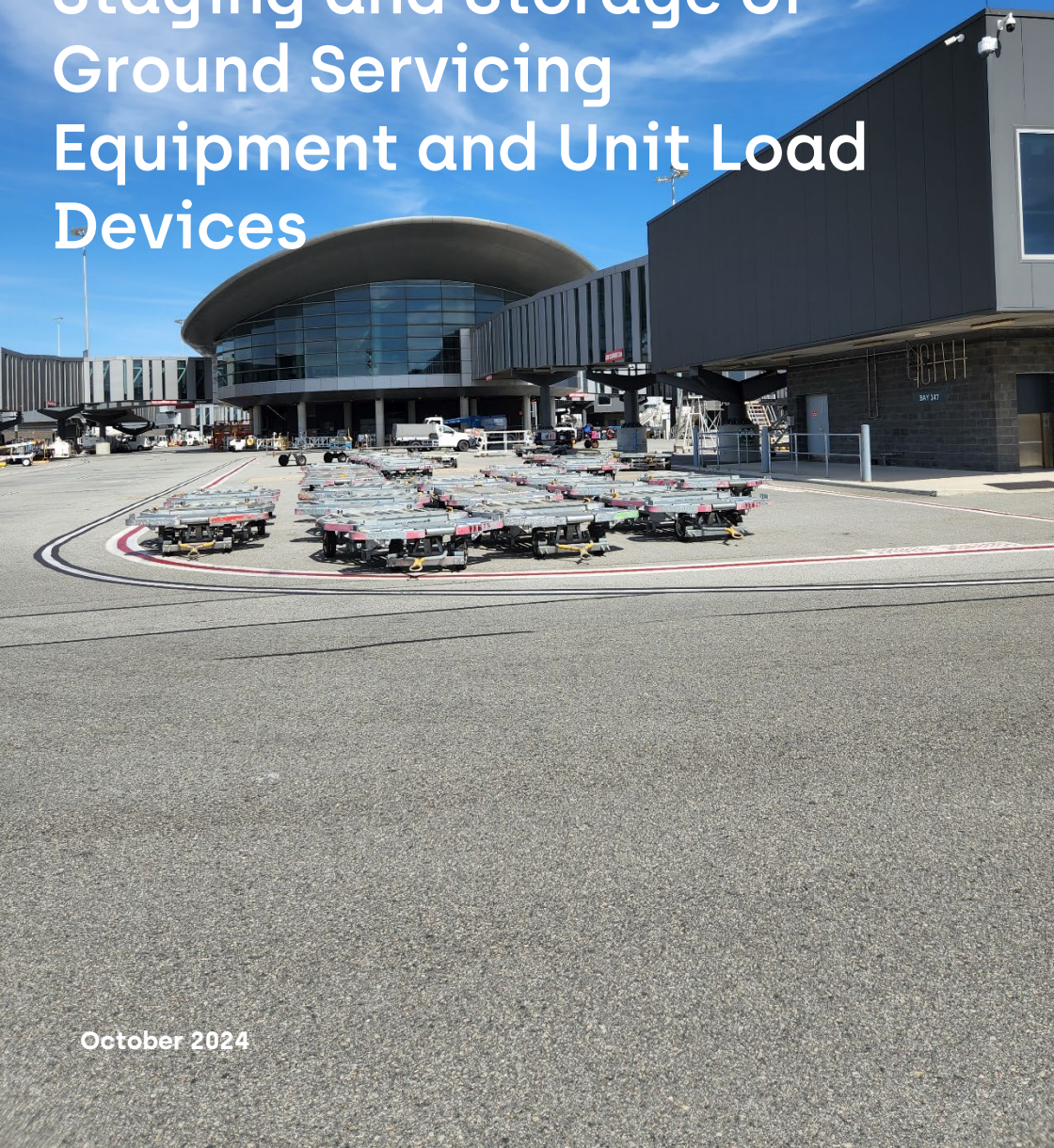


Airport Operating Standard

# Staging and Storage of Ground Servicing Equipment and Unit Load Devices





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# Introduction

This Airport Operating Standard (AOS) has been produced by Perth Airport Pty Ltd (PAPL) to ensure safe operations at Perth Airport. The **Staging and Storage of Ground Servicing Equipment and Unit Load Devices AOS** (the Standard) applies to all airside operators and their staff members who are undertaking airside services and are to be performed in conjunction with each individual organisations' procedures and requirements.

This Standard aims to provide a safe environment for all airside staff, passengers and aircraft and to ensure that the requirements documented in this standard are relevant and capable of practical implementation by all staff.

This Standard and the procedures described within this document may be amended from time to time by PAPL on recommendation of the Perth Airport's Airfield Operations Management Committee (AOMC) in consultation with the Ramp Safety Committee.

Any changes and updates to this Standard will be communicated through a distribution of a Perth Airport Notice (PAN) and via a Ramp Safety Committee meeting. In any case, it is the responsibility of each operator to keep informed of any amendments and use the most current version of this Standard, which is available on the Perth Airport's Extranet.

The Standard includes:

- Responsibilities
- Airside Operating Licence
- Equipment staging areas
- Equipment storage areas
- [Ground power unit areas](#)
- Storage of Unit Load Devices (ULDs)
- Incorrect parking of equipment
- Securing equipment.

The Standard is designed to be read in conjunction with the ***Perth Airport Operating Protocol, Airside Safety & Driving*** and ***Aircraft Turnaround*** AOS's.

The above documents are available via the Perth Airport's [corporate website](#) and [Extranet](#).

# Responsibilities

## Perth Airport Pty Ltd

PAPL is responsible for producing this Standard and consulting with stakeholders as necessary to determine operating requirements and necessary restrictions.

PAPL's Airfield Operations team has the day-to-day responsibility for implementation of this Standard. PAPL will also close a parking bay when Ground Service Equipment (GSE) has not been removed from the bay prior to the next aircraft's arrival.

## Airside operators

Airside operators are responsible for complying with this Standard and for notifying PAPL of any incidents, near misses or faults.

The operator must ensure:

- That they hold a current Airside Operators License (AOL) with PAPL.
- That only those personnel that are suitably trained and qualified perform operational duties regarding GSE and ULDs.
- All personnel involved in the operation of GSE and ULDs are briefed on their individual responsibilities.
- GSE is marked or branded so that it is clearly identifiable as belonging to the operator.
- That all motorised equipment (excludes towed equipment that has a motor to operate the equipment once in place) holds and displays a current Authority to Use Airside (AUA).
- That personnel operating motorised equipment hold and display a current Authority to Drive Airside (ADA).
- Personnel are instructed on the hazards associated with aircraft movements and aircraft turnarounds.
- Each ULD containing Dangerous Goods which requires a hazard label, must have the label clearly displayed on its exterior, as an indication that Dangerous Goods are contained within the unit.

# Airside Operating Licence

There are different types of areas where active and non-active GSE can be staged and/or stored at Perth Airport. Some of these areas are common-use, and some are leased to operators for the exclusive storage of their GSE equipment. Other areas, such as equipment clearance areas, are time limited for the purpose of staging prior to servicing an aircraft.

In all cases, operators are required to have an AOL with PAPL. The AOL is an agreement between the operator and PAPL to provide airside services at the Airport. Airside services are defined as activities performed or services delivered airside including (but not limited to) ground handling services, catering, cleaning, refuelling, engineering and transport operations (including the use of vehicles).

To meet the requirements of an AOL, operators must:

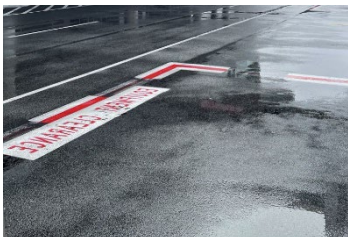
- Ensure that its GSE is stored so as not to affect the availability of positions or hinder the movement of passengers and GSE of other operators.
- Not impede the access of other operators to any equipment staging or storage area that they are allocated to use.
- Not use equipment that does not belong to them without the permission from the owner.
- Cooperate with other operators in common use equipment staging and storage areas.
- Comply with any reasonable direction that PAPL staff gives an operator concerning the operators use of an equipment staging and/or storage area.



# Equipment staging areas

Designated equipment staging areas are marked in one of two ways:

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## Equipment clearance areas

Equipment clearance areas are defined by a broken white-red-white line where vehicles and equipment can be staged.

Equipment may remain within the equipment clearance area unless another ground handler is servicing the next flight, in which case equipment must be removed no later than 45 minutes prior to the next flight.

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## Equipment clearance lines

Equipment clearance lines are broken red lines (dashed) and may be found on the T1 Domestic apron. This line is marked with the aircraft parking position that it is protecting. You must remain behind this line when aircraft are arriving at and departing from the bay indicated on the marking. This line is strictly prohibited for pre-staging GSE unless the operator remains with the equipment at all times.

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GSE may only be staged in designated equipment clearance areas under the following conditions:

- Where there is more than one airline company, Ground Handling Agent (GHA) or operator utilising a bay over the day, staging of their equipment on the allocated bay may only commence 45 minutes prior to the arrival of the aircraft it is going to service and subject to the bay being vacant of any previous aircraft.
- All equipment should remain within the designated staging areas (i.e., within equipment clearance areas) until the aircraft arrives. However, the use of adjacent bays for positioning of equipment/vehicles may occur subject to bay availability and provided equipment/vehicle is not left unattended.
- Where there is more than one airline company, GHA or operator utilising a bay over the day, the airline, GHA or operator may negotiate with the Airport Control Centre (ACC) for early staging of the bay on a case-by-case basis only.
- Where there is more than one airline company, GHA or operator utilising a bay over the day, the airline, GHA or operator may negotiate with the ACC for its equipment to remain on the bay, if the next aircraft scheduled on the bay is to be serviced by that airline or ground handling agent.

Please refer to [Appendix 1](#) for the locations of multi-user equipment staging and storage areas for Terminal 1.

## Equipment storage areas



Designated equipment storage areas are marked with a solid red line where GSE vehicles, plant or equipment may be stored. They are provided on most aircraft parking bays, with dedicated off-apron leased storage areas elsewhere.

Ensure brakes are applied and equipment is secured within these areas.

Common use/multi-user equipment storage areas are provided for the parking of GSE typically required for loading/unloading baggage and freight or positioning aircraft such as bag tugs, belt loaders and pallet loaders.

Typical road vehicles such as passenger vehicles and high-lift trucks are not permitted to be stored in equipment storage areas - these vehicles are to be stored landside or in licensed premises airside. Short term parking/staging of such vehicles is permitted in Equipment Storage Areas providing the vehicle is required to operate on that bay (with equipment clearance areas conditions applicable), and it is not impacting the movement of GSE permitted to park in the area (e.g., tow motors, belt loaders, pallet loaders etc.)

Perth Airport may allocate equipment storage areas to GHA's or specific equipment where equipment storage needs to be managed for safe and efficient operations. Please refer to [Appendix 1](#) for the locations of allocated equipment staging areas.

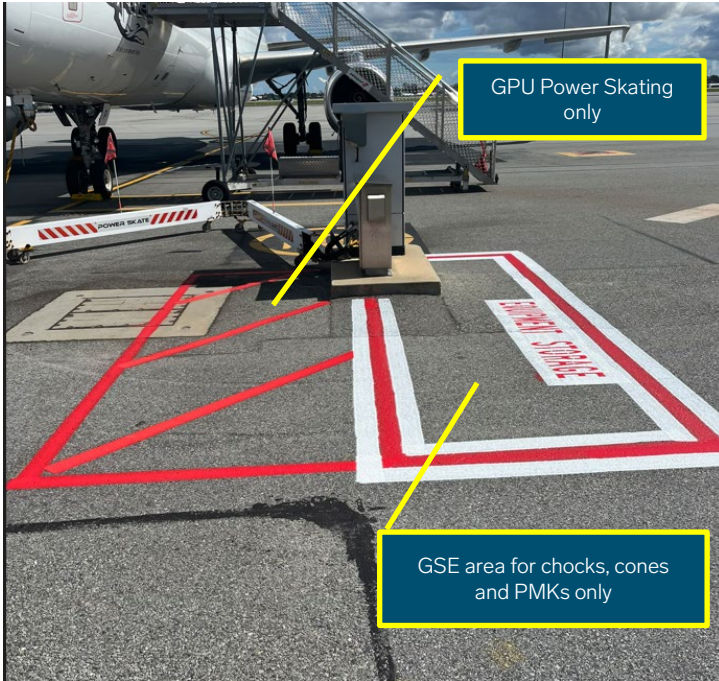
## Ground power unit areas

There are two types of designated Ground Power Unit (GPU) marking areas provided at Perth Airport.

### Fixed GPU areas on Bays 201-214 at Terminal 2

These areas are marked with a solid red line and red hatches inside and must only be used for the storage of power skates. No other GSE, including chocks, cones, and Passenger Marshalling Kits (PMK), may be placed inside the fixed GPU marked areas. There are designated areas marked as 'Equipment Storage' located next to the fixed GPU marked areas, and these areas can be used for the storage of chocks, cones, or PMKs. Refer to the image below illustrating the usage of these two areas.





### Pre-staged GPU areas for a mobile GPU

These dedicated areas are marked with a solid red line, where a mobile GPU may be pre-staged prior to aircraft arrival at Terminals 3/4 and the Network Aviation apron. A mobile GPU may remain in this area unless it conflicts with other GSE movements during Aircraft Turnaround activities.

On bays 12, 14 and 17, there are two GPU areas provided for narrowbody and widebody aircraft due to apron separation distances required between the aircraft and the object (such as a GPU). The GPU designated area at Bay 13 can be used for a mobile GPU required to service both narrowbody and widebody aircraft. Refer to Appendix B for the locations of dedicated GPU marked areas at the T3/4 aprons.

#### Usage requirements:

- Areas marked as 'NARROW BODY GPU ONLY' (or 'GPU ONLY') must be used for pre-staging a GPU to service Code C aircraft (e.g., B737, A320, A321, A319).
- Areas marked as 'WIDE BODY GPU ONLY' must be used for pre-staging a GPU to service Code E aircraft (e.g., A330, B787).
- If a GPU marked area is designed for a narrowbody aircraft, it must not be used for pre-staging a GPU required to service a widebody aircraft (e.g., Bay 12, 14 and 17).

- If there are two GPU areas on a bay designed for both narrowbody and widebody aircraft, the airline or GHA must ensure that a mobile GPU required for narrowbody aircraft is removed prior to the arrival of a Code E/widebody aircraft at that bay.
- No other GSE or supporting equipment should be placed inside GPU marked areas.
- A mobile GPU may be placed in another area on the bay for aircraft servicing in accordance with airline operator procedures and the IATA Ground Operations Manual (IGOM) requirements, but it must not be pre-staged prior to aircraft arrival unless it is located inside the equipment storage area or within the pre-staged area marked by the equipment clearance line.
- For GPU pre-staging within the dedicated GPU marked areas or other area on the bay (as per the previous requirement), the airline/GHA must set parking brake/chock the GPU.

Below are examples of GPU marked areas usage.



## Storage of unit load devices (ULDs)

Empty ULDs can be hazardous to passengers, staff, equipment and aircraft when left unsecured.

Because of the high risk of ULDs being blown around they must always be secured either on a trolley/ dolly and within a GSE Area or within a racking system or on a roller bed within a leased area when not in use.

ULDs must not be stored directly on the pavement under any circumstances.

## Incorrect parking of equipment

Incorrectly parked equipment can be reported to the ACC on 9478 8572.

# Securing equipment

All GSE should be secured when parked on the apron.

Rolling stock, such as dollies or barrows must have some form of braking system or chocks which is to be applied when they are detached from tow units. An automatic braking system to stop rolling stock which has uncoupled during transit is highly recommended.

All containers must be secured on dollies, roller beds or racking. Containers are not to be left unsecured on the apron under any circumstances and any found will be removed at the Operators cost.

When parked, high lift vehicles and mobile stairs must be lowered.

In anticipation of strong wind conditions where wind (including gusts) greater than 40 knots (74km/h) are forecast, the following should occur:

- Equipment such as mobile stairs, Disabled People Loader (DPL) and maintenance stands should be laid on their side or hitched together or relocated to an area away from aircraft & airport infrastructure (if possible)
- High lift vehicles lowered and stabilizers deployed
- Mobile stairs lowered with stabilizer jacks deployed
- Dollies with containers loaded on them should have park brake set, where fitted. If park brake is not fitted, dollies should either be chocked, or connected in train with at least one dolly chocked if not connected to a tug that has brakes applied
- Empty containers must have the container flap in the closed and locked position
- Airside drivers transporting dollies loaded with empty containers should use extra caution during strong winds conditions. The minimum distance within an aircraft they are not servicing must be adhered to:
  - 15 metres within a refuelling aircraft (except when travelling on a marked airside road)
  - 3 metres when not being refuelled.

## Tie down blocks



Concrete tie-down blocks are designed and engineered to withstand the harsh weather conditions and withstand the dangerous uplift of high wind speeds.

Reinforced concrete can withstand high winds and protect GSE, vehicles, aircraft, buildings and structures from damage and people from injuries.

PAPL provided concrete tie down blocks throughout the Airport to assist operators in securing their equipment. However, not all areas have these blocks. Therefore, the operator is to ensure the equipment is secure by use of other means.

Other operator's responsibility is to monitor weather forecasts and ensuring equipment is secure ahead of strong wind forecasts (not necessarily a wind warning).

When using the provided tie down blocks, the operator is responsible in selecting an appropriate tether for the equipment to be secured and that a selected tethering method complies with the Work Health and Safety (WHS) regulations ensuring that it is visible and clear from trip hazards.

## Storage and handling of engine oil



Aircraft engine oils and other similar substances must be stored in the provided oil storage cabinets and comply with storage and handling requirements of the Safety Data Sheet (SDS) and the Australian Standard **AS 1940:2017 – The storage and handling of flammable and combustible liquids.**

Oil cans must not be stored on top of the oil cabinets.

# Further enquiries, contacts & emergencies

## Further enquiries & changes

If you have any questions in relation to this standard, please contact:

General Manager Operations  
Perth Airport Pty Ltd  
PO Box 6  
Cloverdale, Western Australia, 6985  
Phone: (618) 9478 8430  
Fax: (618) 9478 8889

For enquiries or proposed changes to this Standard, please email [document.controller@perthairport.com.au](mailto:document.controller@perthairport.com.au).

Changes will be considered by the Ramp Safety Committee and Airfield Operations Management Committee.

## Important contacts

### Airport Control Centre

Phone: 9478 8572 Reporting incorrectly parked equipment.

### Airfield Safety & Operations Manager

Phone: 9478 84441  
Mobile: 0407 087 360

### Airfield Duty Manager (ADM)

Phone: 9478 8424  
Mobile: 0419 195 790

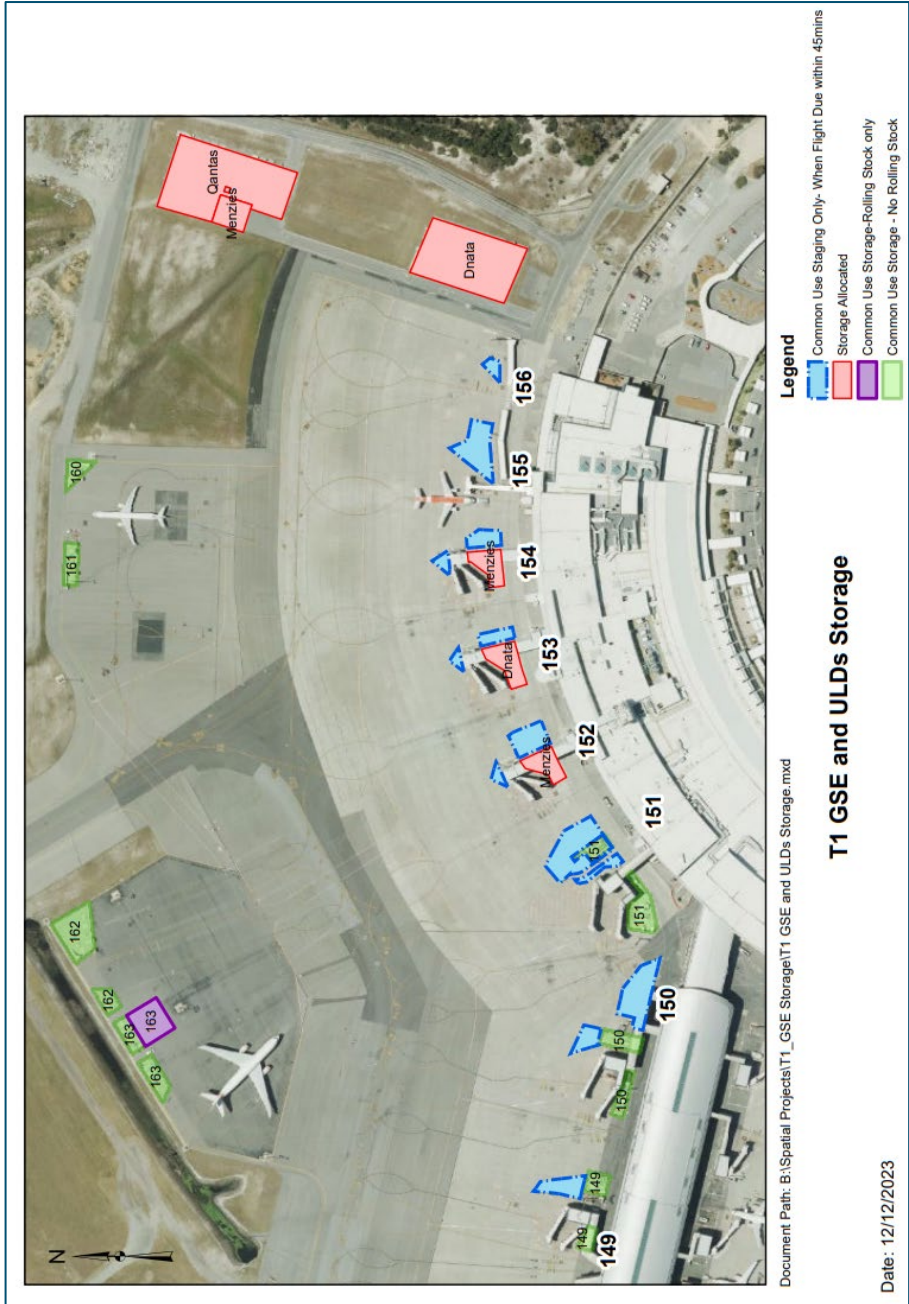
## Emergencies

In case of emergency contact **000** (if life threatening situation) then ACC on **9478 8500**.

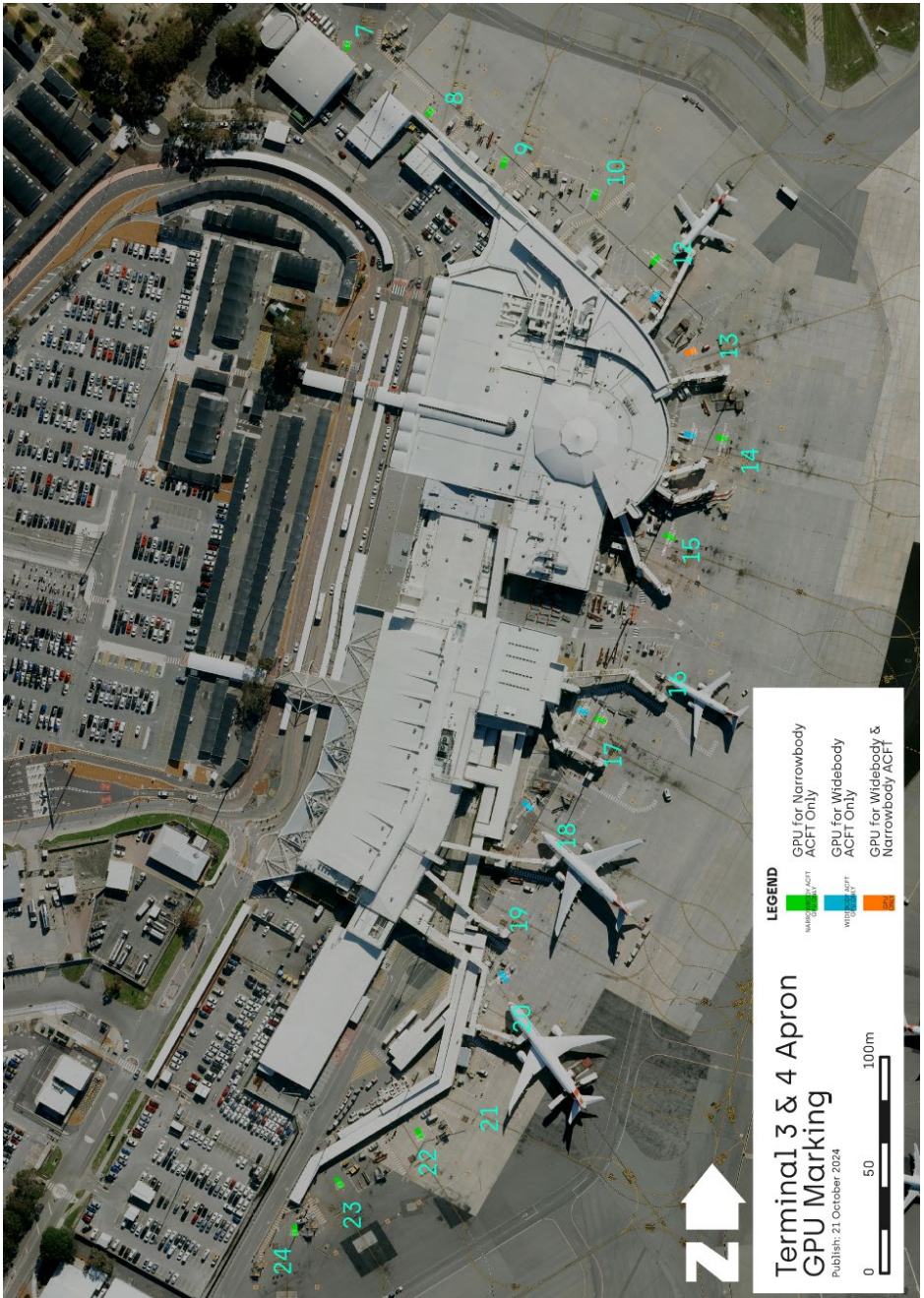
# Definitions and acronyms

Term	Definition
Airfield Duty Manager (ADM)	Perth Airport employee responsible for airfield safety including oversight of the airfield, Airport Operations Officers (AOO) and Works Safety Officers (WSO).
Airside services	Activities performed or services delivered airside including but not limited to ground handling services, catering, cleaning, refuelling, engineering and transport operations (including the use of vehicles).
Disabled People Loader (DPL)	A DPL is lift GSE to assist disabled people or for people who may struggle with stairs due to age or mobility issues.
Equipment clearance (staging) area	A designated area where equipment can be staged prior to the arrival or departure of an aircraft. Defined by a broken white/red/white line.
Ground Power Unit (GPU)	A GPU can be either a fixed or mobile unit which can be connected to the electrical system of an aircraft while on the ground to provide either 120V AC or 28V DC power. Ground power units usually consist of a generator powered by a diesel engine but may be found in other configurations.
Equipment storage area	A designated area where equipment can be stored.
Ground servicing equipment (GSE)	Equipment that is owned, leased or licensed and operated by an airside operator for the servicing of an aircraft. GSE includes, but is not limited to, container loading vehicles, belt loaders, high lift trucks, cabin cleaning vehicles, refuelling vehicles, toilet trucks, water trucks, container dollies, tow bars, mobile stairs, push-back tugs, baggage tugs, baggage scanners, ground power units, catering vehicles, engineering service vans and rolling stock as well as non-motorised equipment such as ladders, steps and tow bars.
Perth Airport Notice (PAN)	Perth Airport Notice, issued on temporary or permanent changes to operations, service or facilities and may include general information for distribution to airport tenants, stakeholders and operators.
Unit Load Device (ULD)	A pallet or container used to load freight onto an aircraft.

# Appendix 1 - Terminal 1 GSE map



# Appendix 2 - Terminal 3/4 GPU areas





# Notes

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Perth Airport Pty Ltd

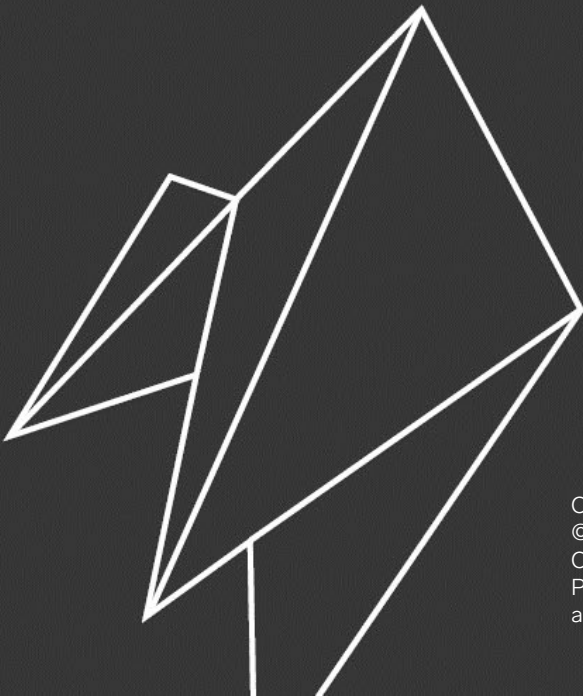
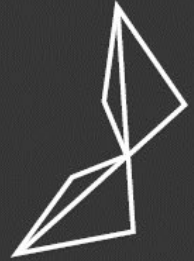
Level 2, 2 George Wiencke Drive, Perth Airport, WA 6105

PO Box 6, Cloverdale WA 6985

T: +61 8 9478 8888

F: +61 8 9478 8889

W: [perthairport.com.au](http://perthairport.com.au)



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