



# Operational Safety Instruction

## Aircraft Arrival, Turnaround and Departure Procedures on Stand

It is the responsibility of all employers to ensure that relevant OSIs are brought to the attention of their colleagues. However, individuals remain responsible for their own actions and those who are in any doubt should consult their Supervisor or Manager.

### 1. Introduction

- 1.1 This Operational Safety Instruction (OSI) informs the airlines, ground handlers and third-party service providers of the requirements in respect to aircraft arrival, turnaround and departure procedures at Heathrow Airport. It includes critical safety measures that airlines and/or their ground handlers/third-party service providers must follow in line with their own aircraft turnaround plans, risk assessments and operating procedures.
- 1.2 The arrival phase is from when the aircraft is approaching the stand from the taxiway to the engines being shut down, parking brake engaged and the anti-collision lights being switched off when parked on the stand. At this point, the aircraft can be secured by chocks.
- 1.3 The turnaround phase commences once the aircraft has been secured by aircraft chocks and in a position where Ground Support Equipment (GSE) and ground personnel begin servicing the aircraft until the aircraft has been prepared for pushback.
- 1.4 The departure phase is from the time when the aircraft pushback movement commences prior to engine start or when engine starts on stand is required, whichever is earlier, to the point where taxi clearance is issued by Air Traffic Control (ATC).
- 1.5 This OSI incorporates the relevant contents and supersedes the following OSIs:
  - 1.5.1 ASGrOps\_OSI\_021 Aircraft Arrival Procedure on Stand v3.0.
  - 1.5.2 ASGrOps\_OSI\_022 Aircraft Turnround Procedures v2.0.
  - 1.5.3 ASGrOps\_OSI\_023 Aircraft Departure Procedures Off Stand v2.0.
- 1.6 This OSI should be read in conjunction with the reference documents as stipulated therein.
- 1.7 All operators must receive proper training in accordance with manufacturer's guidance and individual companies' standard procedures in order to operate any vehicles and GSE associated with aircraft arrival, turnaround, and departure. An Airside Driving Permit (ADP) is required for operating vehicles or GSE airside as defined in OSI "ASDRVE\_OSI\_006 Airside Driver Training and the Airside Driver Permit". All training records must be documented and made available to HAL upon request.



- 1.8** The standards and requirements of airside driving operations, as set out in OSI “ASDRVE\_OSI\_005 Vehicles and Equipment Airside – Operation” must also be observed while operating any vehicles or GSE airside.
- 1.9** With reference to the Provision and Use of Work Equipment Regulations 1998 (PUWER), Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) and The Management of Health and Safety at Work Regulations 1999, it is the employer’s responsibilities to conduct risk assessments, implement necessary measures, appoint competent people and provide information and training.
- 1.10** In addition to the above, the following legislation and guidance must also be observed and followed:
- 1.10.1** CAP 642 Airside Safety Management.
  - 1.10.2** Health and Safety Executive Guidance note HSG 209.
  - 1.10.3** Health and Safety at Work Etc Act 1974.
  - 1.10.4** The Workplace (Health, Safety and Welfare) Regulations 1992.
  - 1.10.5** The Work at Height Regulations 2005.
- 1.11** Adverse weather conditions can have a major impact on all aircraft servicing activities, including the arrival, turnaround and departure phases. Individual companies must have relevant risk assessments and standard operating procedures in place in relation to the services they provide.
- 1.12** Extra attention must be paid to strong winds, thunderstorms, heavy rain and extreme temperatures to safeguard colleagues against injuries. For details, reference should be made to OSI “ASWeather\_OSI\_054 Adverse Weather”.
- 1.13** All current OSIs can be found via the link [here](#) or via the Quick-response (QR) code below.



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## 3. Definitions

Abbreviation	Description
ADP	Airside Driving Permit
AIP	Aeronautical Information Publication
APOC	Airport Operations Centre
APU	Auxiliary Power Unit
CAA	Civil Aviation Authority
FEGP	Fixed Electrical Ground Power
FOD	Foreign Object Debris
GPU	Ground Power Unit
GSE	Ground Support Equipment
GOL	Ground Operations Licence
HAL	Heathrow Airport Limited
HSE	Health and Safety Executive
HV	High Visibility
IATA	International Air Transport Association
IDAHO	Information Database for Airlines and Handling Organisations
IGOM	IATA Ground Operations Manual
LOLER	Lifting Operations and Lifting Equipment Regulations 1998
MARS	Multiple Aircraft Ramp System
MCA	Multi-Choice Apron
PBB	Passenger Boarding Bridge
PCA	Pre-Conditioned Air
PIGS	Passenger Guidance System
PS	Passenger Step
PUWER	Provision and Use of Work Equipment Regulations 1998
SEGS	Stand Entry Guidance System (also known as Visual Docking Guidance System VDGS)
TRP	Tug Release Point
ULD	Unit Load Device



#### 4. Supervisor Nomination and its Roles and Responsibilities

- 4.1.** To ensure safety and efficiency in aircraft ground operations (also referred to below-wing activities), every aircraft must be proactively monitored during its arrival, turnaround, and departure phases. The airline, or if delegated to its ground handling agent, is responsible to appoint a designated individual such as a turnaround supervisor, coordinator, or an equivalent role. This information must be incorporated into the Aircraft Turnaround Plan. For detailed requirements, please refer to Section 6 of this OSI.
- 4.2.** The designated individual will bear the overall responsibility for managing, supervising, and monitoring all aspects of aircraft ground operation. This includes:
- 4.2.1.** Conducting a safety and operational briefing to all parties involved in the turnaround process prior to aircraft handling.
  - 4.2.2.** Liaising with other ground service providers to ensure that the entire ground handling process is safe and efficient.
  - 4.2.3.** Having sufficient authority to monitor and control the overall aircraft ground handling activities involved, including to stopping the work activities where it is deemed safety is at risk.
  - 4.2.4.** Overseeing the aircraft ground handling activities to ensure that all the respective company's procedures, regulatory and safety requirements (including OSIs) and any other agreed plans are fully complied with.
  - 4.2.5.** Reporting to HAL's representatives of any abnormal situations or safety occurrences that may arise during the aircraft ground handling process.
  - 4.2.6.** As appropriate during an incident, to act as a primary contact point to coordinate with third parties, such as HAL's representatives, Police, HSE, emergency services or any other stakeholders.
- 4.3.** The designated individual shall be clearly identified to all personnel working at the stand. They must wear single-coloured orange HV clothing with the role title such as "Ramp Supervisor" or "Coordinator" printed on the front or back for easy identification. For detailed PPE requirements, reference should be made to ASGrOps\_OSI\_042 Use of Personal Protective Equipment Airside.
- 4.4.** The designated individual is responsible for receiving the aircraft whenever the SEGS is available or serviceable. This includes SEGS operations, monitoring the overall aircraft parking process and the safety of aircraft. For details, reference should be made to Section 5 of this OSI.



- 4.5. Should the SEGS be unavailable or unserviceable, HAL Airfield Operations Team will deploy a marshaller to receive the aircraft. Once the aircraft has come to a complete stop, from which point, the responsibility for the control of ongoing operations shall be transferred from the marshaller to the designated individual.

## 5. Arrival Procedures

### 5.1. Pre-arrival Inspection

- 5.1.1. Unless the aircraft is marshalled by HAL Airfield Operations Team, the person responsible (for example the nominated supervisor) for receiving the aircraft must conduct a pre-arrival inspection on the stand before allowing it to enter. This inspection must be made on foot, visually covering the full length and width of the entire stand. The following items must be checked during this inspection a minimum:
- 5.1.1.1. The stand is clear of FOD, removing all debris prior to the arrival of the aircraft.
  - 5.1.1.2. PBB(s) are fully retracted and parked in the designated positions.
  - 5.1.1.3. All vehicles and GSE are parked or stowed in the designated areas and positioned well clear of the aircraft path i.e. cargo loaders, belt loaders, GPUs, dollies etc.
  - 5.1.1.4. The stand surface condition is free from spills, contaminants and hazardous substances, i.e. standing water, hydraulic oil and damaged pavement etc.
  - 5.1.1.5. During darkness and periods of low visibility, the stand must have sufficient lighting coverage and an adequate level of illuminance to enable colleagues to operate safely and effectively.
  - 5.1.1.6. There are no other conditions deemed unsafe which may present a hazard to aircraft, colleagues or passengers.
- 5.1.2. If any safety issue is identified during the pre-arrival inspection which cannot be dealt with immediately such as temporary obstructions, large FOD, stranded vehicles or equipment that will obstruct the aircraft, it must be reported to the HAL Airfield Operations Team at 0208 745 6024 (option 2) with a request for support without delay. **Under no circumstance can the SEGS be activated until all unsafe conditions have been resolved.**
- 5.1.3. Once the pre-arrival inspection is completed and satisfactory, the SEGS can then be activated. Switching on the SEGS signifies to the flight crew that the stand is safe for aircraft parking.



- 5.1.4.** The aircraft must remain on the taxiway centreline and not attempt to enter the stand unless the SEGS is illuminated, or a marshaller has signalled clearance to proceed. The flight crew must inform ATC if the SEGS is not switched on or there is no marshaller, and they need to **hold position on the taxiway**. For details, reference should be made to UK AIP EGLL AD 2.9 Surface Movement Guidance and Control System and Markings.
- 5.1.5.** Before the aircraft arrives, the person receiving it must ensure an unobstructed view of the entire stand. If any object, such as a PBB, obstructs the view, a second person must be positioned within the line of sight of the SEGS emergency stop operator to ensure safety. They must communicate their roles and responsibilities clearly beforehand.
- 5.1.6.** Notwithstanding 5.1.5. above, the person manning the SEGS emergency stop has the ultimate responsibility to ensure the aircraft is clear to enter the stand.
- 5.1.7.** If the SEGS is unserviceable or unavailable, the airline or its ground handler must contact the HAL Airfield Operations Team at 0208 745 6024 (option 2) to request for a marshaller. The SEGS must then remain switched off if a fault is identified.
- 5.1.8.** Where there is a back-of-stand roadway adjacent to the stand, the person receiving the aircraft must ensure that the roadway is safeguarded to prevent road users from coming into conflict with the aircraft.

## 5.2. Aircraft Parking

### 5.2.1. Use of the Stand Entry Guidance Systems (SEGS)

- 5.2.1.1.** The vast majority of stands at Heathrow Airport are equipped with SEGS. All SEGS have a timing device that switches the system off after 20 minutes. The SEGS is displayed on plates affixed to the front of the terminal or other structures within the pilots' forward view.



- 5.2.1.2. The SEGS operating panel is normally located at the head of stand (see picture below).



- 5.2.1.3. Only trained personnel can operate the SEGS. HAL Airside Operation Training team has provided SEGS operation training material to the operating companies. Training shall be delivered by the airline or its ground handlers. For requests regarding the training material, contact should be made by email to [Airside-Operations-Training-Team@heathrow.com](mailto:Airside-Operations-Training-Team@heathrow.com).
- 5.2.1.4. The SEGS is networked through the IDAHO / IAirport system, the flight number and aircraft type are sent to the SEGS operating panel prior to aircraft arrival. The person receiving the aircraft must confirm the information displayed (for example the aircraft type) on the operator panel is correct.
- 5.2.1.5. If the SEGS is not displaying the correct flight information, the control panel can be used to manually select the correct aircraft type from the system. The SEGS will then carry out a self-test. Once it is completed, the selected aircraft type will be displayed (see picture below).





**5.2.1.6.** During the entire aircraft parking process, **visual contact with the aircraft must be maintained by the person receiving the aircraft to ensure safety.**

**5.2.1.7.** If an aircraft is present or partially occupying the stand before the SEGS is activated, the system may not recognise or identify the aircraft and the SEGS will not start. Under these circumstances, the HAL Airfield Operations Team must be informed immediately at 0208 745 6024 (option 2) so that a marshaller will be deployed to receive the aircraft.

## **5.2.2.** SEGS Emergency Stop Procedures

**5.2.2.1.** All colleagues must remain vigilant about the possibility of stand infringements during aircraft parking phase.

**5.2.2.2.** SEGS emergency stop buttons are installed at the head of each aircraft stand. Stands that are served with a PBB will have an additional SEGS emergency stop button at every bridgehead/drive control panel.

**5.2.2.3.** The person receiving the aircraft must position next to the emergency stop button of the SEGS located at the head of stand during the aircraft's arrival phase.

**5.2.2.4.** The person receiving the aircraft must not hesitate to activate the SEGS emergency stop button if there is any doubt about aircraft safety. Activation of the emergency stop button will display a 'STOP' message within the pilot's line of sight (see picture below).



### 5.2.3. Marshalling and Leader Service

**5.2.3.1.** Marshalling service is provided by the HAL Airfield Operations Team for those stands that are not equipped with SEGS or where the SEGS is unserviceable. This service is available on request by calling 0208 745 6024 (option 2).

**5.2.3.2.** Only trained HAL Airfield Operations Team personnel are authorised to marshal an aircraft. Unauthorised aircraft marshalling is considered as a breach of airside safety and will be dealt with as an offence. For details, reference should be made to OSI “ASDRVE\_OSI\_087 Management of Airside Safety Offences”.

**5.2.3.3.** Under no circumstance when aircraft marshalling is taking place, should vehicle or any other personnel cross between the marshaller and the aircraft or cause any obstructions to the view of the marshaller and the flight crew.

### 5.3. Engine Ingestion and Jet Blast/Propeller Wash

**5.3.1.** An aircraft engine poses a hazard even at idle power. The airflow characteristics around the engine can cause items to be picked up from in front, below, or the sides of the intake. Additionally, jet blast or propeller wash from the engine exhaust can displace objects. Even small items can be ingested or blown away, while larger engines can ingest or blow larger objects from several meters away, potentially causing catastrophic effects.

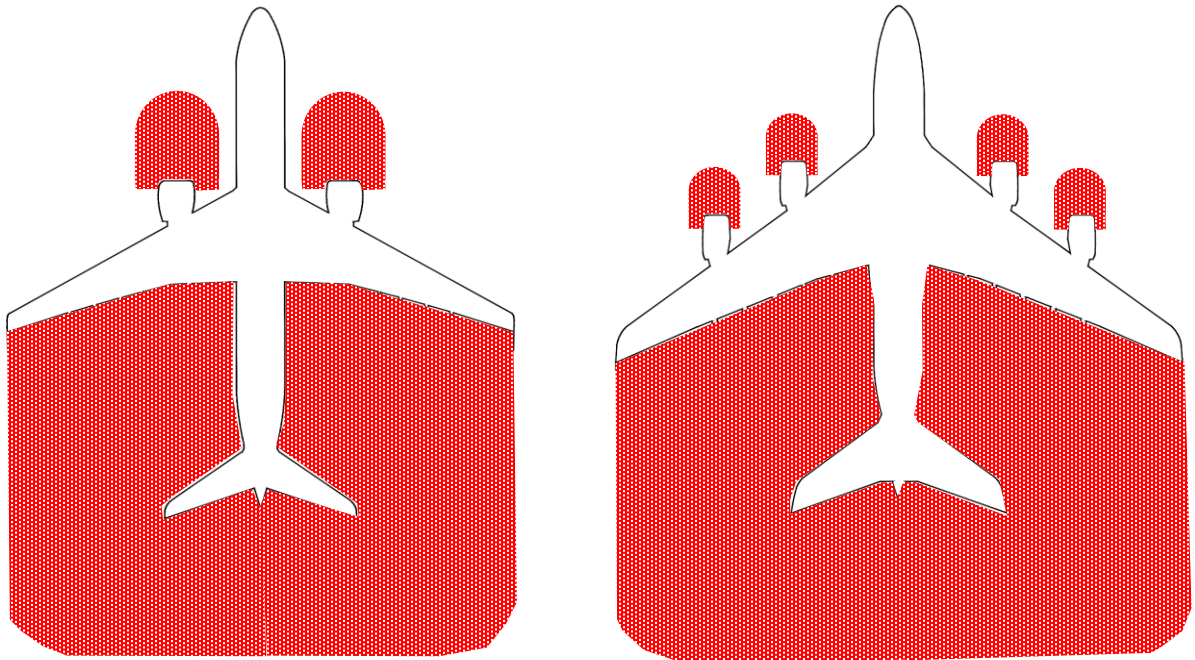
**5.3.2.** Colleagues must not enter the danger zones (as indicated in red in the diagram below for reference) in front or behind a running engine as they could expose themselves to the risk of being ingested or blown away, which could lead to serious or fatal injury.

**5.3.3.** Even with the engine switched-off, windmilling of the engine blades/propeller may cause the engine to rotate. Colleagues must stay away from the engine blades/propeller if it is not required by their job roles. If there is a need to carry out engine maintenance works, the operating company must have safety procedures and risk assessments in place to safeguard their colleagues.

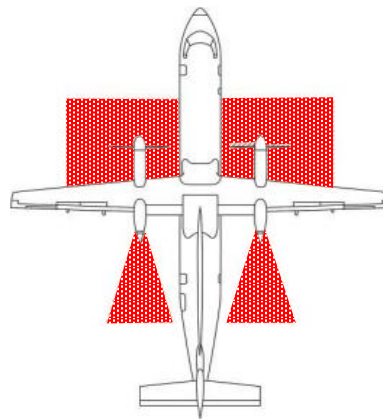


**5.3.4.** Examples of aircraft engines ingestion and jet blast danger zones for illustration purpose only:

- Jet engine aircraft:



- Propeller aircraft:



## 5.4. Chocking of Aircraft

- 5.4.1.** HAL mandates that aircraft must be appropriately chocked as soon as safely possible according to individual airline procedures, or IATA IGOM requirements, but as a minimum in line with manufacturer's recommendations. Aircraft chocking procedures must be risk assessed and carried out by trained individuals as required by their job roles.
- 5.4.2.** Colleagues must not approach the aircraft to place chocks until it has fully stopped, parking brake applied, the engines have shut down and the aircraft's anti-collision lights have been switched off.
- 5.4.3.** HAL provides 6 aircraft chocks for narrow-bodied aircraft and 8 aircraft chocks for wide-bodied aircraft respectively. Such provision also applies to MARS and MCA stands. Whenever additional aircraft chocks are required, such as under strong wind conditions, they should be provided by either the airline or its ground handler.
- 5.4.4.** HAL requires that airlines or their ground handlers have their own additional chocks in place and safely store them when not in use.
- 5.4.5.** It should be noted that unattended aircraft chocks close to the stand centreline can present a safety hazard and cause arriving aircraft to 'hold off' due to obstruction. Aircraft chocks must not be relocated without the consent from the Airfield Operations Team and must be returned to the designated equipment stowage area located at the head-of-stand after use.



- 5.4.6.** HAL's aircraft chocks are considered as essential safety equipment. They are not to be removed from stands or used for other purposes than that for which they are provided. If the correct number of aircraft chocks is not available on the stand, the Airfield Operations Team must be contacted at 020 8745 6024 (option 6) without delay.



## 5.5. Use of Ground Power Prior to Engine Shut Down

In certain circumstances, such as APU failure, the aircraft may require a ground power connection prior to engine shutdown. In which cases, the following critical safety procedures must be followed as a minimum:

- 5.5.1. All colleagues or ground equipment must be clear of the aircraft path.
- 5.5.2. After the aircraft has come to a complete stop, receive confirmation from the flight crew that the parking brakes have been set.
- 5.5.3. Notify the flight crew before placing chocks at the nose landing gear wheels. Once the chocks are in place, it must be confirmed with the flight crew.
- 5.5.4. Only appropriately trained ground colleagues may approach the aircraft to connect ground power according to the individual company's own risk assessments and operating procedures.
- 5.5.5. Position and connect the ground power to enable the flight crew to shut down the engine(s).

## 5.6. Use of FEGP and PCA

FEGP and PCA must be used as the primary source of providing electrical power and cooling, heating and ventilation of aircraft cabin respectively when they are available and/or operationally viable. For details regarding the use of APU, FEGP, GPU and PCA at Heathrow Airport, reference should be made to the following documents:

- 5.6.1. ASEnv\_OSI\_078 Use of Aircraft Auxiliary Power Units.
- 5.6.2. ASDRVE\_OSI\_018 Aircraft Fixed Electrical Ground Power Operating Procedures and Conditions of Use.
- 5.6.3. ASEnv\_OSI\_055 Pre-Conditioned Air Rules and Procedures.

## 5.7. Aircraft Towing

- 5.7.1. For aircraft towing procedures, please refer to OSI "ASGrOps\_OSI\_026 Aircraft Towing Operation".
- 5.7.2. The aircraft towing crew always has the same obligations as the colleagues receiving an aircraft and must conduct a visual inspection of the stand to ensure it is safe to tow in the aircraft.



## 5.8. Completion of Aircraft Arrival Procedure

Except for the circumstances outlined in Section 5.5 of this OSI where ground power prior to engine shutdown is required, colleagues **must not** approach an aircraft until it has fully stopped, parking brake is engaged, all engines are shut down, and the anti-collision lights are switched off. Once these conditions are met, colleagues may approach the aircraft to place the chocks. This marks the completion of the aircraft's arrival procedure, and the commencement of the turnaround process.

## 6. Aircraft Turnaround Plan

The airline/operating company shall have an Aircraft Turnaround Plan that is coordinated with all stakeholders as per the GOL requirement. The plan must outline the turnaround process, ensuring all personnel can perform their tasks safely and without endangering others. It should include an assessment of third-party activities and detail considerations for each stage. The company concerned is responsible for ensuring that risk assessments for all activities are in place.

## 7. Reflective Safety Cones

- 7.1. It is recognised that the use of reflective safety cones as best practice and their deployment around the aircraft is mandatory. As a minimum, reflective safety cones must be used to mark the locations of wing tips and engine pods. Airlines or their ground handlers must develop their own procedures to achieve this. Should their risk assessments demand additional reflective safety cones positioned around the aircraft, these will need to be provided by the airline or its ground handler.
- 7.2. Reflective safety cones must only be removed when the aircraft is ready to depart or when a strong wind warning is in force as communicated via the Airport Community Application and Airport Operations Plan (AOP).
- 7.3. HAL provides each aircraft stand with 8 reflective safety cones which can be found at the head of stand. If there aren't sufficient reflective safety cones on the stand, contact should be made to the HAL Airfield Operations Team at 0208 745 6024 (option 6) immediately. Under no circumstance should any reflective safety cones be relocated without the consent of HAL Airfield Operations Team.
- 7.4. Prior to placing the reflective safety cones around the aircraft, the operator must confirm that the aircraft is properly secured with the completion of arrival procedures as stated in 5.8 in this OSI.
- 7.5. Airlines or their ground handlers are required to train their colleagues in the proper use of the reflective safety cones and ensure any relevant operating procedures are strictly adhered to.



- 7.6.** Airlines or their ground handlers are responsible for returning the reflective safety cones and cone transportation trolley to the designated safe storage area after use, thereby reducing the risk of causing subsequent arriving aircraft to be 'holding off' due to obstruction as well as FOD generation caused by abandoned cones.



- 7.7.** Reflective safety cones and/or cone transportation trolleys are considered as essential safety equipment. They are not to be removed from stands or used for other purposes than that for which they are provided.
- 7.8.** Any damaged or insufficient numbers of reflective safety cones/ trolleys found on a stand must be reported to the Airfield Operations Team on 0208 745 6024 (option 6).

## 8. Passenger Boarding Bridge Operations

- 8.1.** PBB-related incidents can cause major aircraft damage as well as serious personnel injury. It is important to strictly adhere to relevant guidelines, instructions and procedures while operating the PBB. Operators must always maintain competency in PBB operations, rules and procedures at all times.
- 8.2.** PBB operation is restricted to those who have attained a valid PBB permit and are required to operate the PBB as part of their job roles.
- 8.3.** For detailed PBB operations & operator permit training requirements at Heathrow Airport, reference should be made to OSI "ASDRVE\_OSI\_011\_ Passenger Boarding Bridge Operations & Operator Permit Training Requirements".
- 8.4.** Prior to operating the PBB, the operator must confirm the following:
- 8.4.1.** The aircraft is properly secured with the completion of arrival procedures as stated in 5.8 above.
- 8.4.2.** No person, vehicle, equipment or any other object is in the PBB's travelling path (also known as the starburst lines) and the surrounding areas.



- 8.5. For safety reasons, the PBB docking and undocking sequence across the terminals at Heathrow Airport must be strictly followed. Failure to follow such guidelines may lead to PBB collision incident. For details, reference should be made to OSI “ASDRVE\_OSI\_011\_ Passenger Boarding Bridge Operations & Operator Permit Training Requirements”.
- 8.6. PBB(s) must be returned to its designated parking position(s) before any aircraft movement occurs on the stand.
- 8.7. In the event of a PBB being unserviceable or a PBB cannot be fully retracted into the designated parking circle, it must be reported by the operator to the HAL Aircraft Operations Unit immediately at 0208 745 6033 by an external phone or 656033 by an internal HAL phone. If immediate on-site assistance or attention is needed, such as the requirement of a marshaller, the operator should clearly specify this in the fault report.
- 8.8. In addition to the above, an Aircraft Turnaround Checklist that covers PBB operations can be found in Appendix A of this OSI.

## 9. Passenger Step Operations

- 9.1. In the event that an aircraft is parked at remote stands where PBB is not available, a passenger step must be used as an alternative for passenger embarkation and disembarkation, which shall be provided by the airline or its ground handler.
- 9.2. If an aircraft is parked at a pier-served stand with an unserviceable PBB, passenger step may be used for embarkation and disembarkation. The airline or its ground handler must have a procedure in place for such situation. Also, Section 14 of this OSI regarding the safety of passengers on apron must also be observed.
- 9.3. Airlines or their ground handlers must have their own standard operating procedures and risk assessments in place in relation to the handling of aircraft parking at remote stands. Such documents shall include the use of passenger step, fault reporting and passenger control and management. These must be documented and made available to HAL upon request.
- 9.4. Prior to attaching the passenger step to the aircraft, the operator must confirm that the aircraft is properly secured as per 5.8 of this OSI.
- 9.5. Prior to approaching the aircraft, brake tests must be conducted at approximately **5m and 2m** away. Following this, the passenger step must be driven at a walking pace during the final approach to the aircraft.
- 9.6. Safety guardrails and stabilisers (if fitted) must be deployed before the cabin door is opened and during the transition of any personnel. They must also be fully retracted before the passenger step is removed from the aircraft.
- 9.7. If the passenger step is faulty, it must be suspended from operation immediately until the problem has been resolved as per the individual company’s procedures.





- 9.8. Passenger step must be removed from the aircraft immediately after all required procedures have been completed.
- 9.9. In addition to the above, an Aircraft Turnaround Checklist that covers passenger step operations can be found in Appendix A of this OSI.

## 10. Other GSE/Manually Operated Equipment Operations

This section covers the safety requirements of using both self-propelled GSE and manually operated ground equipment (such as engineering steps). These requirements must be fully complied with at all times.

- 10.1. GSE and any other manually operated ground equipment are essential for serving an aircraft during turnaround process. They must be maintained and operated in a safe manner and comply with IATA's standards and in line with OSI "ASDRVE\_OSI\_005 Vehicle and Equipment Airside – Operations" and "ASDRVE\_OSI\_008 Vehicle and Equipment Airside – Requirements".
- 10.2. GSE and any other manually operated ground equipment shall be provided by the airline or its ground handler who must have relevant operating procedures (including recommended best practices), maintenance procedures and risk assessments in place to ensure operational safety.
- 10.3. All GSE and any other manually operated ground equipment involving lifting operations (except those done solely by manual effort without assistance from equipment) are subject to the LOLER and PUWER requirements, such as cargo loaders, passenger steps, de-icing rigs, refuelling trucks, catering trucks, etc. According to LOLER, the planning of individual routine lifting operations may be the responsibility of those who carry them out. A single initial generic plan may be required as part of the risk assessment for the activity.
- 10.4. Before docking to the aircraft, the operator must confirm that the aircraft is properly secured with the completion of arrival procedures as stated in 5.8 of this OSI
- 10.5. For self-propelled GSE, conduct brake tests at approximately **5m and 2m** away from the aircraft respectively, then the GSE must be driven at walking pace on final approach to the aircraft.
- 10.6. After GSE/manually operated equipment is docked to the aircraft, wheel chocks, stabilisers (if equipped) and any other safety devices must be deployed before any ground operation activity is taken place. Before GSE is removed from aircraft, the operator must ensure that all of them are fully retracted. HAL requires the airlines/ground handler to assess the risk associated with work at height and must implement additional fall from height protective measures where required.



- 10.7.** While the GSE or any other manually operated equipment is used in close proximity of the aircraft, the driver/operator must ensure that:
- 10.7.1.** The equipment is positioned correctly to ensure safe transition of personnel/loads, including alignment and levelling with the aircraft hold.
  - 10.7.2.** Any fall protection devices must be deployed (if equipped), for example guardrails, and ensure that there is no gap large enough for a person to fall through.
- 10.8.** Drivers/operators must ensure that there is sufficient separation between the GSE or any other manually operated equipment and any parts of aircraft to allow the change in height during loading/unloading process to prevent damage.
- 10.9.** If the GSE or manually operated equipment is faulty, it must be withdrawn from operations and reported immediately until the fault has been resolved.
- 10.10.** As soon as all the required servicing activities are completed, all GSE or manually operated equipment must be removed from aircraft with doors closed. They should then be removed from the stand and parked at the designated locations for each company.
- 10.11.** In addition to the above, an Aircraft Turnaround Checklist that covers GSE operations can be found in Appendix A of this OSI.

## 11. Aircraft Loading/Unloading

- 11.1.** All ground handling companies must ensure that all colleagues carrying out aircraft loading/unloading tasks are suitably trained. They must also have a risk assessment and safety procedures in place which must be documented and made available to HAL upon request.
- 11.2.** As per Section 4 of this OSI, the designated individual is responsible for overseeing the overall aircraft loading/unloading process. This is to ensure that all ground servicing activities are carried out according to the company procedures and any local safety requirements (for example OSIs).
- 11.3.** The Aircraft Turnaround Plan must be properly communicated amongst the ground handling team and any deviation must be acknowledged. This includes communication of any special loads, dangerous goods and any procedures which must be followed in relation to those.
- 11.4.** The designated individual must ensure that all ramp workers are wearing the appropriate PPE as per their own company procedures as well as the OSI "ASGrOps\_OSI\_042 Use of Personal Protective Equipment Airside". No loose clothing or item can be worn under any circumstances in order to prevent serious injury to themselves or others.



- 11.5.** The designated individual must perform a walkaround inspection to check for any damage of the aircraft, this should be performed before any GSE or other manually operated equipment approaches the aircraft.
- 11.6.** Where ULDs are being used to serve the aircraft, colleagues must ensure the following:
- 11.6.1.** A competent banksman is in position to ensure the dolly/trailer loading surface is aligned against the cargo loader's loading platform.
  - 11.6.2.** All the locks and stops of the dolly/trailer are used properly to secure the ULD.
  - 11.6.3.** The levelling and gap between cargo loader platform and the aircraft hold/the dolly/trailer loading surface is appropriate to ensure safe transition.
  - 11.6.4.** The side/rear guard of the cargo loader is appropriately deployed to prevent the ULD from sliding down/dropping from the loading platform.
- 11.7.** The designated individual must oversee the entire loading and unloading process and ensure clear communication with all colleagues, particularly during the transfer of ULDs on a cargo loader, which involves raising and lowering the loading platform.
- 11.8.** If bulk loading/unloading is required, a dynamic assessment on the weight of the item must be conducted to prevent personnel injury.

## 12. Fuelling of Aircraft and Fuel Hydrant Emergency Stop Facility

- 12.1.** Airlines or their ground handlers must have their own standard operating procedures and risk assessment in place in relation to aircraft fuelling which must be documented and made available to HAL upon request. Such documents shall include fault reporting and emergency procedures with reference to the following documents as a minimum:
- 12.1.1.** ASGrOps\_OSI\_019 Fuelling of Aircraft.
  - 12.1.2.** ASEnv\_OSI\_059 Spillage and Incident Reporting Procedures.
  - 12.1.3.** ASSMS\_OSI\_065 Mandatory Occurrence Reporting.
  - 12.1.4.** ASSMS\_OSI\_067 Airside Incident Reporting and Investigation.
- 12.2.** As fuelling trucks are always considered as lifting equipment, they are subject to LOLER and PUWER requirements.



- 12.3.** The fuel hydrant emergency stop facility (as shown below) is in the form of a break glass unit, located at the head of the stand. Colleagues must familiarise themselves with the location and signage associated with this emergency facility in order to access it promptly should the need arise. Breaking the glass will cut off fuel to the stand and other stands adjacent to it. It must be used in the event of an aircraft fire, a major hydrant leak or a fire near an aircraft. Operation of this break glass must be followed by a 222 call on the stand emergency telephone, which is usually (but not always) co-located with the fuel hydrant stop break glass unit.



- 12.4.** If any of the aircraft fuelling facilities is faulty, the operator must inform HAL Airfield Operations Team on 0208 745 6024 (option 6) immediately.
- 12.5.** Details of into plane fuelling procedures at Heathrow Airport can be found in OSI ASGrOps\_OSI\_019 Fuelling of Aircraft. Also, an Aircraft Turnaround Checklist that covers aircraft fuelling operations can be found in Appendix A of this OSI.

### 13. Aircraft Doors Open Without Ground Equipment in Position

- 13.1.** Aircraft doors must not be operated or remain opened without suitable equipment in position (such as PBB, passenger step or any other service platform) in view of fall-from-height prevention. They must not be removed from an opened aircraft door unless 13.2 below is fully satisfied.
- 13.2.** Passenger and cargo door engineering nets which are designated for the specific aircraft type are considered a safe alternative. During the installation process of the engineering net, safety measures must be in place to safeguard the personnel, such as placing a GSE or engineering steps to prevent a fall.



## 14. Safety of Passengers on the Ramp

- 14.1.** It is the airline or its ground handler's responsibility to ensure that any passengers crossing the ramp (during embarkation or disembarkation between the link bridge/vehicle and aircraft) or staying on the apron for a longer period (such as baggage reconciliation) are supervised.
- 14.2.** Colleagues must always remain vigilant to ensure passengers do not deviate from the intended safe walking route within the stand footprint. It is essential that there are sufficient personnel to monitor passengers' activities at all times. The following are typical example of passenger unsafe behaviours on the ramp:
- 14.2.1.** Crossing the double white lines, i.e. entering/infringing the taxiway.
  - 14.2.2.** Boarding the wrong bus.
  - 14.2.3.** Boarding the wrong aircraft.
  - 14.2.4.** Walking under the aircraft wing or close to an engine even it has been switched off.
  - 14.2.5.** Walking in the fuelling zone.
  - 14.2.6.** Using mobile phones, smoking or dropping FOD.
  - 14.2.7.** Passengers alighting from passenger step or bus unsupervised.
  - 14.2.8.** Passengers being on a stand with an aircraft running an engine on an adjacent stand or where they could be subject to jet blast.
- 14.3.** As a minimum, one ground colleague must be positioned near the bottom of the passenger step (this could be a cabin crew if wearing high viz), one by the vehicle or terminal door they are heading for and one **for every 20m in between**. This may need to be increased if there are specific hazards. If the number of passengers is particularly large, additional colleagues should be considered; likewise, if the number is sufficiently small one colleague may be able to walk with them and provide adequate supervision. **Under no circumstance should safety of passengers be compromised.**
- 14.4.** The following shall be considered as good practice while passengers are transiting on the ramp:
- 14.4.1.** Ground colleague positioned in a place where they are visible to passengers and can maintain line of sight with them. This is particularly important during operations in the hours of darkness. Under no circumstance should any ground colleague undertaking passenger supervision stay inside any vehicle.
  - 14.4.2.** Appropriate guarding of specific hazards. For example, engines pods or wing tips must be coned as per Section 7 of this OSI as minimum.
  - 14.4.3.** Use of moveable barriers and chains to create a temporary safe walking route across the ramp for passengers to follow. For example, the Passenger Guidance System (PIGS). Where green walkways are indicated on stands, these should be used wherever possible.



- 14.4.4.** This temporary safe walking route must be clear of any traffic, stationary equipment, cables and hoses. Jet blast caused by other aircraft movement must also be considered while setting up this safe walking route.
- 14.4.5.** Sensible placement of any bags, buggies or any other items for passenger collection. This needs to be close to the temporary safe walking route.
- 14.5.** Where an airport shuttle bus is required to transfer passengers from the stand to terminal building, no passenger is allowed to wait for the bus either on the passenger step or on the stand. Instead, they must stay inside the aircraft cabin.
- 14.6.** Individual companies must have procedures and risk assessments in place with regard to passenger safety on the ramp which must be made available to HAL upon request. These documents must make reference to the requirements as per CAA Publication CAP 642 Airside Safety Management.

## 15. Other Ground Vehicles

- 15.1.** Vehicles are prohibited from driving under any part of the aircraft unless there is no other viable alternative to perform the necessary tasks to serve the aircraft. While doing so, the operator must have knowledge of the vehicle/equipment overall height against any part of the aircraft and proceed with caution. The company concerned must have standard operating procedures (including recommended best practices) and risk assessments in place for the activity.
- 15.2.** All other ground operation vehicles that involve lifting, the requirements of LOLER and PUWER must also be observed, including the requirements for planning, organising and undertaking lifting operations.

## 16. Aircraft Pushback Procedures

- 16.1.** Aircraft pushback operations must only be operated by the trained colleagues holding either a valid "P", "M" or "R" ADP. For details, reference should be made to OSI "ASDRVE\_OSI\_006 Airside Driver Training and the Airside Driver Permit".
- 16.2.** Some specific instructions are applicable for remotely operated pushback vehicles. For details, reference shall be made to OSI "ASGrOps\_OSI\_073 Use of Remotely Operated Pushback Vehicles".
- 16.3.** Powerback operation **is only permitted under exceptional circumstance** and must be with the special approval from the HAL AfDM.
- 16.4.** Individual companies must ensure they have published procedures in the event of a failure in the aircraft pushback process (e.g., towbar malfunction, aircraft or tug technical failure). In such circumstances, the aircraft pushback crew must inform HAL Airfield Operations Team without delay at 0208 745 6024 (option 2) with the information provided as detailed in Paragraph 18.1 in this OSI if the situation cannot be resolved immediately.



- 16.5.** Flight crews and aircraft pushback crews must always remain in verbal or visual contact.
- 16.6.** Aircraft pushback crew is responsible for ensuring the following:
- 16.6.1.** All aircraft chocks, reflective safety cones and any other ground equipment must be removed before pushback.
  - 16.6.2.** The area immediately behind an aircraft is clear of any obstructions, including any vehicle/equipment parked within the adjacent hatched areas.
- 16.7.** Aircraft pushback operation must not be commenced without a serviceable direct line of communication between the pushback crew and the flight crew (i.e. a headset). Where verbal communication has failed after aircraft pushback is commenced, the headset operator must be trained to use internationally agreed hand signals to maintain communication with the flight crew. For example, in accordance with Standardised European Rules of the Air (SERA).
- 16.8.** Aircraft tug driver must ensure they maintain a close-listening watch on the appropriate ATC ground frequency before, during, and immediately after pushback.
- 16.9.** Flight crew will relay ATC clearance message to the aircraft pushback crew. If it appears that the message relayed is different to the clearance that they heard ATC had issued, or if any doubt exists as to which aircraft is the 'subject aircraft' of a conditional clearance, the aircraft pushback crew must ask the flight crew to confirm with ATC.
- 16.10.** Aircraft pushback crews must inform the flight crew if they are unable to execute an instruction or face any difficulties in executing an instruction.
- 16.11.** If engine start is required prior to pushback for operational reasons, for example APU failure, aircraft pushback crew must ensure that:
- 16.11.1.** Permission is obtained from ATC for engine start.
  - 16.11.2.** No other aircraft is on the taxiway centreline or about to push back onto the centreline, in the area behind the aircraft awaiting start.
  - 16.11.3.** Passengers are not embarking or disembarking via passenger step from an aircraft on an opposite stand or in an area that would be affected by jet blast/prop wash.
  - 16.11.4.** All ground personnel on the stand are aware of the engine start and clear of the ingestion, jet blast and propeller wash zones.
  - 16.11.5.** The above procedures also apply to remotely operated pushback vehicles, i.e. the Mototok.



- 16.12.** All ground personnel, including those involved in the pushback manoeuvring, must remain clear of the ingestion, jet blast and propeller wash zones during engine start-up and pushback as indicated in 5.3 of this OSI.
- 16.13.** Aircraft pushback crew is responsible for alerting the flight crew of any potential hazard that could be created by a starting engine.
- 16.14.** During the pushback manoeuvre, aircraft engine settings must not exceed idle power.
- 16.15.** Additional requirements for the engine running on the stand can be found in OSI “ASEnv\_OSI\_061 Ground Noise at Heathrow – Approval, Control Process and Safety of Engine Ground Running”.
- 16.16.** Pushback manoeuvring ends when the aircraft nose wheel is aligned on the taxiway centreline, designated TRP or otherwise instructed by ATC.
- 16.17.** At Cargo Terminal, certain aircraft types must be pushed either out of Cul-de-sac Zulu prior to engine start or stop on the designated TRP so that the aircraft is positioned 100 meters away from the blast screen. For details, please refer to OSI ASGrOps\_OSI\_033 Cargo Apron Operations (Stands 601 – 609 and 611 – 616)”.
- 16.18.** After disconnecting from the aircraft, a clear signal must be made to the flight crew that the bypass/safety pin has been removed and full control of the aircraft is returned to them. The aircraft tug must remain in front of the aircraft until the bypass/safety pin is removed from the aircraft. Any personnel must stand at a safe distance and maintain visual contact with the flight crew at all times, such as to the side of the aircraft that is closest to the stand from which the aircraft has departed. Under no circumstances should any person stand on the taxiway centreline in front of the aircraft.
- 16.19.** Aircraft pushback restrictions at Heathrow Airport can be found in OSI “ASGrOps\_OSI\_072 Airfield Pushback Restrictions”.

## 17. Non-Standard Pushbacks

- 17.1.** For the purpose of this OSI, a non-standard aircraft pushback refers to a procedure that deviates from the usual methods due to specific circumstances or requirements, i.e. not following a straightforward 90-degree manoeuvre from the stand centreline. This may include facilitating the movement of other aircraft, accommodating restrictions due to nearby infrastructure, or adapting to the airport layout.
- 17.2.** Under certain circumstances, a non-standard pushback may be necessitated by the presence of nearby infrastructure that limit the available space for standard pushback manoeuvres. In such cases, it is the responsibility of the pushback crews to verify that the aircraft is clear of any obstructions. This includes ensuring there are no vehicles, GSE, infrastructures, or other aircraft in the vicinity that could pose a hazard. Additionally, flight crew must communicate effectively with ATC and ground personnel to coordinate the pushback procedure safely and efficiently. Proper planning and



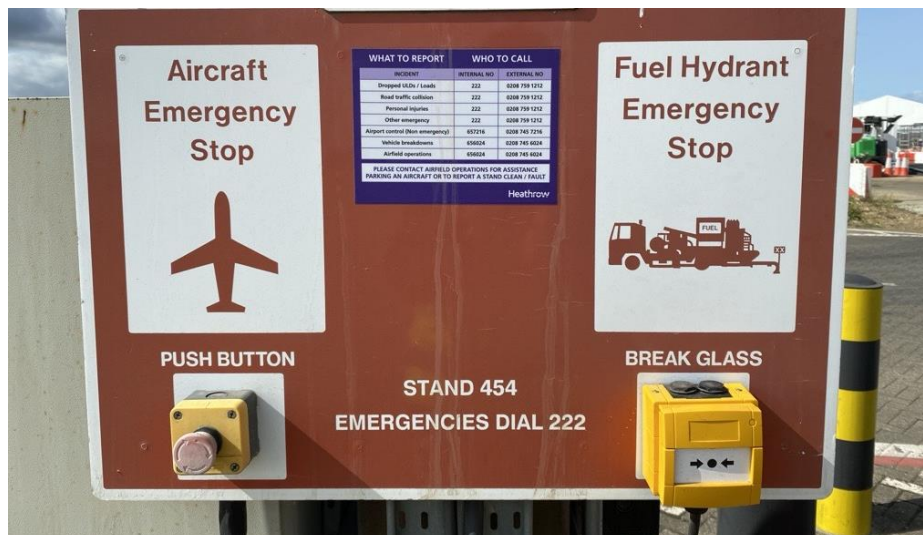


situational awareness are crucial to avoid any potential incidents during non-standard pushbacks.

- 17.3.** For all non-standard aircraft pushback, wing-walkers must be positioned on both side of the aircraft wingtips to oversee the entire operation and must be in the line of sight of the pushback tug driver. This is to ensure that the wings and any parts of the aircraft is maintaining sufficient clearance with other aircraft, vehicles, ground equipment, infrastructures or any other obstacles.
- 17.4.** If non-standard pushback is initiated by the ATC, aircraft pushback crews must always follow the instructions given. Clarification must be sought from ATC if in doubt.

## 18. Emergency Procedures

- 18.1.** In case of an emergency during aircraft arrival and pushback process, regardless of the severity of such situation, the flight crew must inform ATC to include the following information as a minimum:
- 18.1.1.** Aircraft call sign/registration;
  - 18.1.2.** Aircraft location; and
  - 18.1.3.** Nature of problem.
- 18.2.** For any incident occurred with impact to aircraft or personnel safety, 222 must be called using a HAL internal phone or 0208 759 1212 from an external phone immediately.



## 19. Post-Departure Inspection

Following the completion of the aircraft pushback, a post-departure FOD check must be conducted. Any stand equipment used must be returned to its correct position before the stand is vacated. This includes:

- 19.1.** A walking inspection to check that the stand is clear of obstructions, FOD and surface contamination.
- 19.2.** All equipment has been shut down, removed and correctly parked or stowed in the designated areas, such as GPU, mobile PCA units, cargo loader, dollies etc.
- 19.3.** All aircraft chocks, reflective safety cones and cone transportation trolleys are stowed in the designated area.
- 19.4.** PBB, FEGP and PCA units are fully retracted and returned in the designated areas.
- 19.5.** Any near misses (e.g. fuel spills, trips, slips) are reported through HAL reporting systems. For details, please refer to OSIs “ASSMS\_OSI\_067 Airside Incident Reporting and Investigation”, and “ASSMS\_OSI\_065 Mandatory Occurrence Reporting”.

## 20. Emergency Telephones

- 20.1.** All stands or a pair of stands at Heathrow Airport are equipped with emergency telephones situated at the head of stands. Calls can be made by lifting the handset, dialling 222 and waiting for the HAL operator to respond.
- 20.2.** Emergencies can also be reported to APOC at 0208 759 1212 if using an external phone or extension 222 if using a HAL internal phone. For any other non-emergency incident, please call 0208 745 7216.
- 20.3.** Colleagues should familiarise themselves with the location and signage associated with these telephones, in order to access them promptly in the event of an emergency.

## 21. Enquiries

Any enquiries regarding this OSI should be addressed to [airside\\_safety@heathrow.com](mailto:airside_safety@heathrow.com) .



## 22. References

- 22.1. ASDRVE\_OSI\_005 Vehicles and Equipment Airside – Operation.
- 22.2. ASDRVE\_OSI\_006 Airside Driver Training and the Airside Driver Permit.
- 22.3. ASDRVE\_OSI\_008 Vehicle and Equipment Airside – Requirements.
- 22.4. ASDRVE\_OSI\_011 Airbridges - Operators Permit, Operation and Use.
- 22.5. ASDRVE\_OSI\_018 Aircraft Fixed Electrical Ground Power Operating Procedures and Conditions of Use.
- 22.6. ASGrOPS\_OSI\_019 Fuelling of Aircraft.
- 22.7. ASGrOPS\_OSI\_026 Aircraft Towing Operation.
- 22.8. ASGrOps\_OSI\_042 Use of Personal Protective Equipment Airside.
- 22.9. ASEnv\_OSI\_055 Pre-Conditioned Air Rules and Procedures.
- 22.10. ASEnv\_OSI\_061 Ground Noise at Heathrow - Approval Control Process and Safety of Engine Ground Running.
- 22.11. ASSMS\_OSI\_067 Airside Incident Reporting and Investigation.
- 22.12. ASGrOPS\_OSI\_072 Pushback Restriction.
- 22.13. ASEnv\_OSI\_078 Use of Aircraft Auxiliary Power Units.
- 22.14. CAA Publication CAP 642 Airside Safety Management.
- 22.15. Provision and Use of Work Equipment Regulations 1998 (PUWER).
- 22.16. Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).
- 22.17. The Management of Health and Safety at Work Regulations 1999.
- 22.18. Health and Safety Executive Guidance note HSG 209.
- 22.19. Health and Safety at Work Etc Act 1974.
- 22.20. The Workplace (Health, Safety and Welfare) Regulations 1992.
- 22.21. The Work at Height Regulations 2005.



## Document Data

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## Document History

Revision	Description of Change	Date
V1.0	Initial version	30 <sup>th</sup> October 2024



## Appendix A: Aircraft Turnaround Checklist

AIRCRAFT TURNAROUND CHECKLIST			
	Activities	Checked	Remarks
<b>Aircraft Pre-arrival and Parking</b>			
1	<b>Pre-arrival:</b> A stand pre-arrival check (FOD, stand clearance, equipment infringement, pavement conditions) is conducted.		
2	<b>Pre-arrival:</b> Sufficient lighting is available, especially during the hours of darkness and low visibility.		
3	<b>Pre-arrival:</b> Colleagues are wearing appropriate PPE (HV clothing, safety shoes, bump caps, ear protection and etc). No loose items and clothing are worn.		
4	<b>Pre-arrival:</b> PBB operator conducts pre-use checks on the PBB. The PBB's wheels are positioned within the designated parking circle, or within the pre-positioned box provided to set up for the approaching aircraft type.		
5	<b>Pre-arrival:</b> GSE and any other ground servicing vehicles/equipment are parked in their designated positions.		
6	<b>Pre-arrival:</b> Sufficient number of essential safety equipment are in place (aircraft chocks, reflective safety cones and etc).		
7	<b>Pre-arrival:</b> Access route to SEGS emergency stop button is clear of obstruction.		
8	<b>Pre-arrival:</b> Prior to activation of the SEGS, all of the above items have been checked and verified.		
9	<b>Pre-arrival:</b> The aircraft type is displayed correctly on the SEGS.		
10	<b>Pre-arrival &amp; Aircraft Parking:</b> No PBB movement is performed whilst the aircraft is entering the stand.		
11	<b>Aircraft Parking:</b> Aircraft taxis onto the stand only when the SEGS is activated or under the guidance of a marshaller.		



12	<b>Aircraft Parking:</b> The colleagues receiving the aircraft stays in a position where the SEGS emergency stop can be activated immediately whenever necessary.		
13	<b>Aircraft Parking:</b> If the view of the SEGS operator is blocked, a second person is deployed to assist aircraft parking process.		
14	<b>Aircraft Parking:</b> No person, GSE or any other ground vehicles/equipment infringe the stand.		
<b>Aircraft Shutdown/Chock Placement</b>			
1	If ground power is required (for example APU failure), appropriate OSIs procedures are followed for FEGP or GPU connection with aircraft engine running.		
2	Aircraft chocks are only applied when 1) Aircraft has come to a complete stop, 2) Parking brake applied, 3) Anti-collision light is extinguished and 4) All engines have completely shut down.		
3	Aircraft is chocked correctly with sufficient numbers in accordance with the OSIs' requirements.		
4	Post-arrival walkaround check is conducted for any damage prior to any GSE or vehicle/equipment approaching the aircraft.		
5	Reflective safety cones are placed to demarcate aircraft's wing tips and engine pods as a minimum requirement and in accordance with individual company's procedures. <b>(During a strong wind warning, all safety cones must be removed and returned to the designated stow location)</b>		
<b>Use of FEGP, GPU &amp; PCA</b>			
1	HAL's APU usage hierarchy is followed (i.e., FEGP, GPU and then APU).		
2	FEGP, GPU and/or PCA are started only after it has been connected to the aircraft.		



3	All FEGP cables and PCA hoses are returned to their designated stow locations after use.		
<b>PBB/ Passenger Step (PS) Docking/Retracting</b>			
1	<b>PBB/PS Docking:</b> Pre-use inspection and basic functional check are performed, and the walkway of PS/PBB external step is free of contaminants such as FOD and safe for use.		
2	<b>PBB/PS Docking:</b> Prior to manoeuvring, the docking path is visually checked for any possible obstructions and confirmed that the aircraft is secured.		
3	<b>PBB Docking:</b> The correct docking sequence is followed.		
4	<b>PS Docking:</b> Prior to docking the aircraft, brake tests are conducted at approximately <b>5m and 2m</b> away. Following this, the passenger step is driven at a walking pace during the final approach to the aircraft.		
5	<b>PBB/PS Docking:</b> PBB cab is adjusted vertically and in position to suit the aircraft type. Appropriate clearance is observed between the PBB and aircraft door sill to ensure passenger safety.		
6	<b>PS Docking:</b> Ensure that stabilisers and chocks (if fitted) are properly deployed before anyone steps onto the PS.		
7	<b>PS Docking:</b> All the guardrails equipped on the landing platform are fully extended as a fall-from-height prevention measure.		
8	<b>PBB Docking:</b> Once the PBB has been successfully attached to the aircraft, a check is made to ensure the auto-leveller and safety shoes (if equipped) have been engaged.		
9	<b>PBB/ PS Docking:</b> Prior to opening the cabin door, sufficient clearance for door opening and hand signals are observed from inside the cabin according to individual company's procedures.		
10	<b>PBB/ PS Retracting:</b> Before retracting from the aircraft, a visual check is conducted to confirm FEGP & PCA are disconnected from the aircraft and the retracting path is clear.		



11	<b>PS Retracting:</b> Stabilisers and chocks (if applicable) are properly retrieved or removed before reversing from the aircraft.		
12	<b>PBB Retracting:</b> While retracting the PBB from the aircraft, the undocking sequence is followed.		
13	<b>PBB Retracting:</b> For MARS stands, following the departure of a narrow-bodied aircraft on the left-hand side centreline, the PBB is re-positioned to the centre parking box that serves the centre line of the stand.		
<b>Reflective Safety Cones</b>			
1	Reflective safety cones are only applied when: 1) Aircraft has come to a complete stop. 2) Parking brake applied. 3) The anti-collision light is switched off. 4) All engines have completely shut down. 5) Aircraft is secured by chocks.		
2	Sufficient reflective safety cones are correctly positioned to mark the locations of wing tips and engine pods.		
3	Reflective safety cones are removed only when the aircraft is ready to depart or when strong wind warning is in force.		
<b>Passenger Embarkation/Disembarkation</b>			
1	Passengers are supervised at all times while walking across and/or during their stay on the ramp (such as baggage reconciliation).		
2	Sufficient ground colleagues are present at all times while the passengers are transiting on the ramp.		
3	Where an airport shuttle bus is required to transfer passengers from the stand to terminal building, no passenger is waiting either on the passenger step or on the stand.		
4	No passenger passes through any fuelling zone areas.		





5	Reconciliation of passenger baggage, buggies, and other items is carried out in areas that are safe and away from potential hazards. This includes, but is not limited to, areas such as fuelling zones or near the engines/wheels.		
<b>GSE Operations for Aircraft Loading/ Unloading</b>			
1	GSE is inspected prior to use for any defects.		
2	Prior to docking the aircraft, brake tests are conducted at approximately <b>5m and 2m</b> away. Following this, the GSE is driven at a walking pace during the final approach to the aircraft.		
3	Before GSE docking, it is confirmed that the aircraft has been secured by aircraft chocks and is safe to proceed.		
4	GSE approaches the aircraft at a safe speed, and it is ensured that there are no objects protruding at the leading edges of the GSE that may damage the aircraft.		
5	GSE is secured by stabilisers and/or chocks (if applicable) whilst servicing the aircraft.		
6	Colleagues utilise appropriate equipment to operate the cargo door for wide-bodied aircraft according to their company procedures.		
7	Colleagues performs visual doorway clearance checks whilst the cargo door is in transit position.		
8	Colleagues ascend and descend the GSE and/or aircraft lower deck cargo compartment safely (i.e., maintaining 3-point contact at all times).		
9	Fall from height prevention devices are used, for example guardrails/handrails.		
10	Loading and unloading sequences are correctly followed as per loading instructions.		
11	ULD flaps or locks are secured before the dolly train moves.		



12	All GSE or any other vehicles are driven and operated in a safe manner, such as obeying the 5mph speed limit at the stand.		
13	If reversing is necessary, the requirements as the per OSIs are followed.		
14	If applicable, all means of electric mobility aids are handled according to relevant regulations and procedures such that it is made safe for flight.		
15	Sufficient observation is conducted by the dolly train driver before moving off.		
16	The number of trailers being towed by a baggage tractor does not exceed the maximum number permitted in the respective terminals.		
17	No colleague is crossing in between connected trailers, dollies or baggage carts.		
<b>Fuelling of Aircraft</b>			
1	The access route to the fuel hydrant emergency stop facility is clear of obstruction.		
2	Fuel truck approaches the aircraft at a safe speed and with caution. Extra attention is paid to the headroom clearance between the aircraft wing and the fuel truck.		
3	Fuel truck is positioned so that no reversing is required.		
4	Fuel coupling is made highly visible with the aid of appropriate equipment, such as a flag.		
5	A pit valve lanyard is connected and easily accessible and the pit lid is laid flat during re-fuelling operations.		
6	Fire extinguisher(s) is/are available before the transfer of fuel begins.		



7	The refueller is holding a "Dead Man Control" while refuelling is in progress.		
8	When fuelling is taking place, all vehicles, GSE and ground equipment are positioned to allow the unobstructed egress of the person(s) using the designated exits, including the chute deployment areas, from the aircraft in an emergency if the aircraft is being fuelled when passengers are onboard.		
9	A clear path is maintained from the aircraft to allow for the quick removal of any fuelling bowser/tanker/hydrant vehicle.		
10	Sufficient clearance is maintained between the fuelling truck and the aircraft wing so that the aircraft does not 'sink' onto the vehicle as aircraft loading and refuelling is in progress.		
11	Refuelling during certain maintenance activities to the landing gear/undercarriage is only conducted with the permission of the airline.		
12	De-fuelling is not carried out during any type of maintenance to the aircraft's landing gear/undercarriage on the apron.		
13	If the use of GPU is essential, it is positioned more than 6 metres from aircraft filling and venting points, hydrant valves and any other fuelling equipment. Also, it is started and electrical connections made before fuelling begins and should not be disconnected or the switches operated.		
14	No mobile phones or any other electronic devices are used within 3m distance of the fuelling zone, Only ATEX-approved devices are used with permission from HAL.		
<b>Catering/ Lavatory/ Engineering High Platform Truck</b>			
1	Brake tests are conducted at approximately <b><u>5m and 2m</u></b> away from the aircraft.		
2	The vehicle approaches the aircraft at a safe speed and ensures that there are no objects protruding at the leading edges that may damage the aircraft		
3	If reversing is necessary, the requirements as the per OSIs are followed.		



4	Vehicles are secured by stabilisers and/or chocks (if applicable) while serving the aircraft.		
5	The guardrails are extended before the cabin door opening as a fall-from-height prevention measure. They are fully retracted after use with the cabin door closed.		
6	If the cabin door is left opened without a truck attached, a passenger door engineering net is used to protect anyone from a fall.		
<b>Aircraft Maintenance &amp; De-icing Activities</b>			
1	If certain maintenance activities to landing gear/undercarriage are conducted whilst fuelling is in progress, it is conducted with the permission of the airline.		
2	No pollutants, oils, lubricants or other hazardous wastes areas disposed of in waste compactors, containers, wheeled bins as well as the foul water system unauthorised.		
3	Equipment approaches the aircraft at a safe speed and brake tests are conducted from approximately <b>5m and 2m</b> away from the aircraft.		
4	If reversing is necessary, the requirements as the per OSIs are followed.		
5	Whenever applicable, all equipment is chocked and/or with stabilizers deployed while serving the aircraft.		
6	Fall-from-height prevention measures are in place according to the individual company's procedures, such as safety harnesses and guardrails.		
<b>Aircraft Pre-pushback</b>			
1	A visual check is conducted for aircraft damage, ensuring all doors are securely closed and a stand clearance is checked.		
2	All reflective safety cones, FEGP, PCA and any other equipment are returned to the designated stowage location after use.		



3	In case of APU failure and/or engine start before pushback is necessary:  1) Permission is granted from ATC. 2) No other aircraft is being or about to be pushed onto the taxiway centreline behind. 3) No passenger boarding/ disembarking is taking place on opposite stands or in an area that would be affected by jet wash. 4) All personnel are well aware and clear of the aircraft.		
4	The anti-collision lights have been switched on prior to engine start.		
5	All GSE or other equipment are properly retracted before aircraft pushback commences.		
6	The aircraft is secured by chocks until the aircraft tug is attached.		
<b>Aircraft Pushback</b>			
1	Aircraft pushback crews are in either verbal or visual contact with the flight deck at all times.		
2	Aircraft pushback crews are maintaining a listening watch on the appropriate ATC ground frequency before, during and immediately after pushback.		
3	Once pushback clearance is granted or with the engine started prior to pushback, the anti-collision lights are switched on.		
4	Aircraft chocks and reflective safety cones are removed from the aircraft and returned to the designated stow location.		
5	Before commencing pushback, aircraft pushback crews have checked the immediate area behind the aircraft to be pushed is well cleared.		
6	All ground personnel remain clear of the ingestion and jet blast/propeller wash areas during engine start-up and pushback.		
7	ATC's instruction is properly followed to push the aircraft to the designated stopping position.		



8	After disconnecting from aircraft, a clear signal is made to the flight crew that the bypass/safety pin has been removed. The aircraft tug remains in front of the aircraft. All personnel are stand at a safe distance.		
9	If required by individual company's procedures, a safety chock is placed on the aircraft's nose wheel to prevent it from moving due to engine start while the aircraft tug is being disconnected.		
10	The ground crew leaves the taxiway system and returns to the back of the stand (within the double white lines) and gives an indication to the flight deck that all personnel and aircraft tug have vacated. They stay at a safe place where the flight deck can see and do not cause any obstructions to any aircraft movement.		
11	For any non-standard pushback operation, wing-walkers are positioned on both sides of the aircraft wing tip and in the line of sight of the aircraft tug driver.		
<b>Post-pushback</b>			
1	Post-pushback stand checks (FOD, stand clearance, pavement conditions) are conducted.		
2	Aircraft chocks, reflective safety cones, FEGP & PCA equipment are returned to their designated location.		

