

## Appendix B – Vehicle Maintenance Airside

### 1) Introduction

- a) It is recognised that there will be occasions where minor or emergency repairs are required to be completed on vehicles in the airside environment.
- b) The purpose of this appendix is to set out;
  - i) Which maintenance activities are permissible airside, and
  - ii) The safety related requirements for carrying out these activities.
- c) It is expected that vehicle maintenance providers will comply fully with all the instructions set out in this appendix, and where appropriate ensure that all their staff, contractors and other related parties are aware of the requirements herein. It is also expected that vehicle maintenance providers will dedicate sufficient management time and resources to complying with these requirements.

### 2) Key definitions

#### a) Locations

- i) *Stand Footprint* – This area is defined as the hard standing upon which an aircraft turnaround takes place. It is demarcated by white lines to both sides and double white lines to the rear of the stand. On some occasions double white lines will be to the sides of the stand in addition to the rear. To the head of stand (ie. the nose of the aircraft) the Stand Footprint continues to the roadway and includes the area used by aircraft tugs to access the aircraft nose wheel. The Stand Footprint does not include defined equipment parking areas, which are usually located towards the head of the stand.
- ii) *Inter-stand Clearway* – This area is hard standing positioned to either side of an aircraft stand, used for the purposes of accessing the aircraft for turnaround activities, and for emergency service transit. Clearways are marked by a zig-zag white line running along their length, parallel to the stand.
- iii) *Equipment Parking Areas / Parking Bays* – Are marked areas of hardstanding, which may be adjacent to an aircraft parking stand, but are also present in numerous other places adjacent to the roadway system. These are provided for the purposes of parking equipment overnight or between aircraft turnaround activities. Parking bays are marked using a variety of different coloured paint; some will be dedicated to certain operators – signage or markings will be in place in this instance.
- iv) *Airside Roads* – Roadways are provided to allow access to Heathrow’s facilities. Roadways are marked using standard highway paint markings and road signage.
- v) *Maintenance Facility* – An area leased to (or owned by) a vehicle maintenance provider (or their customer) for the purposes of providing a vehicle maintenance service.

#### b) Vehicle Maintenance Activities

- i) *Daily Inspections (DI) and Pre-Use Inspections* – These activities are non-intrusive, visual safety checks of equipment prior to use; usually carried out by the operator of the vehicle or in some cases by a maintenance provider. For the purposes of this appendix, these requirements apply only to contracted vehicle maintenance providers carrying out these inspections.



- ii) *Minor Repairs* – A short duration repair required in order to restore the safe operation of the vehicle. A minor repair shall not include preventative or pre-planned maintenance such as replacement of filters or oil changes, unless such changes are related to the rectification of the original fault.
- iii) *Emergency Repairs* – A repair...
  - (1) Required to make a vehicle or piece of equipment mobile again which has become an obstacle, or
  - (2) Required to rectify an immediate health and safety risk to colleagues or passengers, or
  - (3) Required because, if not rectified, the failure would cause an unacceptable operational impact to passenger experience.
- iv) *Vehicle Servicing* – A preventative or pre-planned maintenance process designed to assure the safe operation and extend the life-span of a vehicle or equipment.

### 3) Permitted Locations

- a) The following table details where each type of maintenance is permitted to be carried out.

	DI / Pre-Use Inspections	Minor Repairs	Emergency Repairs	Vehicle Servicing
<b>Stand Footprint</b>	x	x	✓	x
<b>Inter-stand Clearway</b>	x	x	✓	x
<b>Equipment Parking Areas</b>	✓	✓	✓	x
<b>Airside Roads</b>	x	x	✓	x
<b>Maintenance Facilities</b>	✓	✓	✓	✓

- b) Any maintenance activities which do not fit the definition of an emergency repair, but are required to a vehicle which is positioned on a stand footprint, an inter-stand clearway, or an airside road **are not** permitted; the vehicle must be moved to either an equipment parking area or a maintenance facility for a minor repair to be carried out.

### 4) Personnel Requirements

- a) Vehicle maintenance service providers must take steps to ensure that personnel carrying out duties in the airside environment are as visible as possible. Reflective Personal Protective Equipment (PPE) will support in this requirement, and therefore personnel carrying out maintenance duties airside must wear (as a minimum);
  - i) High-visibility trousers
  - ii) High-visibility tabard or jacket
  - iii) Protective safety shoes or safety boots
- b) Heathrow Operational Safety Instruction (OSI) ASGrOps\_OSI\_042 'Use of Personal Protective Equipment Airside' sets out the requirements for protective equipment (eg. reflective standards).
- c) In addition, the above OSI requires that personnel must carry hearing protection in areas likely to be subject to noise hazards.
- d) Vehicle maintenance providers may also specify additional PPE in accordance with their own task-based risk assessments (gloves, glasses etc.). It is the responsibility of vehicle maintenance providers to ensure that their personnel wear the appropriate PPE for the task.
- e) Vehicle maintenance providers must ensure that their personnel have received sufficient training for operating in the airside environment. Guidance on minimum induction training requirements



is set out in ASGrOps\_OSI\_041 – ‘Minimum Induction Training for Staff Operating on Airside Roads and Ramp Areas’. Support is also available from Heathrow Airside Operations in achieving this requirement.

## 5) **Site Safety Requirements**

### a) **Risk Assessment**

- i) Vehicle maintenance providers must complete a formal risk assessment for carrying out their activities in the airside environment. This risk assessment must consider the hazards to which personnel are likely to be exposed whilst carrying out their duties, and document control measures to reduce, as far as is practicable, the risk of personnel being injured.
- ii) Providers must communicate the contents of the risk assessment to their personnel, and ensure that the identified control measures are included within their standard operating procedures and training programmes.
- iii) Vehicle maintenance personnel, upon arrival at a task, must carry out a dynamic risk assessment of the site and area in which the repair is to take place. The assessment must include (not exhaustive);
  - (1) The suitability of the site for the repair (surface condition, lighting conditions etc.)
  - (2) The ability to set up a safe working boundary and the ability to move around the vehicle safely; giving particular consideration to other vehicular traffic in the area.
  - (3) The ability for the operative to access the parts of the vehicle required to effect the repair without placing themselves at risk – especially when these parts may require working at height or underneath vehicles/equipment.
- iv) Where the operative identifies hazards during their dynamic assessment, suitable control measures must be put in place; for example, where lighting levels are deemed insufficient, artificial lighting should be provided, or the vehicle recovered to a maintenance facility.

### b) **Site Segregation and Protection**

The following requirements are applicable to ‘minor repairs’ and ‘emergency repairs’ only. Vehicle maintenance providers may optionally choose to implement them for DI/Pre-use inspections.

- i) A safe protective zone for repairs is required;
  - (1) Barriers must be placed around the full perimeter of the vehicle being worked upon at a minimum distance of 1m from the vehicle/equipment. The purpose of the barrier perimeter is to increase the conspicuity of the vehicle under repair and to increase the distance at which other vehicles pass.
  - (2) Barriers must be of sufficient weight and stability to be unaffected by passing traffic or the prevailing weather conditions. Barriers must be able to withstand winds of 25kts without falling.
  - (3) When a strong wind warning is in effect at Heathrow, barriers shall not be used.
  - (4) Barriers must be a minimum height of 1m.
  - (5) Barriers must be conspicuously coloured and ideally, reflective in nature.
  - (6) Where the 1m perimeter from the subject vehicle protrudes into an airside road, into a clearway, or into a taxiway, maintenance operators may position barriers close alongside the vehicle so as not to infringe the roadway, clearway or taxiway, unless the maintenance provider is required to work on that side of the vehicle; in which case



maintenance providers must contact ASD on 0208 745 6024 to request support with traffic management.

- ii) Where practicable, the vehicle maintenance providers' service vehicle may be positioned in such a way to afford protection to the operative from other vehicles or the elements.
- iii) In addition, the following protective measures are required;
  - (1) Where practicable, the wheels of the vehicle/equipment must be turned in such a direction that, should the subject vehicle be struck by another vehicle, the vehicle will move away from the operative.
  - (2) The subject vehicle's wheels must be chocked, where practicable.
  - (3) The subject vehicle's engine must be switched off if not required for the repair.
  - (4) The subject vehicle's handbrake must be firmly applied.

#### 6) **Repair Durations**

- a) Both minor repairs and emergency repairs must be completed within 60 mins. Vehicles whose repairs cannot be carried out within this duration must be recovered to a dedicated maintenance facility by the maintenance provider. This recovery must take place immediately if the vehicle is in any position other than in an equipment parking bay, or within 24 hours if parked within a marked bay.
- b) Heathrow Airside Operations reserves the right to direct vehicle maintenance providers to recover vehicles to dedicated maintenance facilities if it deems that a repair may not be completed safely within an appropriate time. Heathrow Airside Operations may also direct its own recovery provider to remove a vehicle if a maintenance provider cannot do so in a suitable time; costs for this service will be billed to the maintenance provider.

#### 7) **First Aid**

- a) Vehicle maintenance providers must ensure that appropriate facilities, equipment and personnel are available to enable first aid to be provided to their employees if they are injured or become ill at work.
- b) A first aid needs assessment must be completed, taking into account that there is a Heathrow provision for medical emergencies (London Ambulance Service).

#### 8) **Supervision, Auditing and Record Keeping**

- a) Maintenance providers must hold records of all vehicle repairs that take place airside. These records must be made available to Heathrow Airside Operations upon request. These records must include as a minimum;
  - i) Location of the repair
  - ii) Start and finish times of the repair
  - iii) Description of the vehicle/equipment repaired, including registration number
  - iv) Confirmation that a pre and post repair safety inspection took place
  - v) Description of work completed
  - vi) Names of the personnel involved in the repair
- b) Maintenance providers must also hold records to demonstrate that they have conducted routine auditing, monitoring and reviewing of their safe systems of work. This must include both scheduled and unplanned visits and inspections to airside vehicle repairs to ensure that vehicle maintenance operators are adhering to safe systems of work.



- c) Vehicle maintenance providers must complete a minimum of 12 supervisory site audits each year, and must hold records of these audits which must be made available to Heathrow Airside Operations upon request.
- i) These records must include as a minimum;
- (1) Location of the repair
  - (2) Start and finish times of the repair, and of the audit
  - (3) Description of the vehicle/equipment repaired, including registration number
  - (4) Confirmation that a pre and post repair safety inspection took place
  - (5) Description of work completed
  - (6) Names of the personnel involved in the repair
  - (7) Whether the safe system of work was adhered to, including all control measures identified through risk assessment
  - (8) Details of any matter identified that risks the health & safety of any person
  - (9) Details of any action taken in respect of any matter identified above
  - (10) Details of any further actions considered necessary as a result of the audit
  - (11) The auditor's name
- d) Heathrow Airside Operations will also carry out random on-site audits of vehicle maintenance activity to ensure that these requirements are adhered to. Results will be shared with the appropriate vehicle maintenance provider.

#### 9) Near Miss Reporting

- a) Vehicle maintenance providers must have in place a safety reporting system to enable personnel operating airside to raise concerns related to their health and safety whilst carrying out their duties. Vehicle maintenance providers must share with Heathrow without delay the findings from any near miss or safety observation reports which may influence either the content of these requirements, or the processes and procedures employed by other vehicle maintenance providers.

