

## **Aerodrome Safety**



**Operational Safety Instruction** Use of Remotely Operated Pushback Vehicles 30<sup>th</sup> October 2024

ASGrOps\_OSI\_073

Version 3.1

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

### 1. Introduction

- This Operational Safety Instruction (OSI) informs the airport community of the licensing 1.1 and operating requirements for using Remotely Operated Pushback Vehicles (ROPV) at Heathrow Airport.
- 1.2 This OSI must be read in conjunction with the following documents which can be found on the Heathrow.com/airside website or here:
  - 1.2.1 ASDRVE\_OSI\_005 Vehicle and Equipment Airside – Operations.
  - 1.2.2 ASDRVE\_OSI\_006 Airside Driver Training and the Airside Driver Permit.
  - 1.2.3 ASDRVE\_OSI\_008 Vehicle and Equipment Airside – Requirements.
  - 1.2.4 ASGrOps\_OSI\_093 Aircraft Arrival, Turnaround and Departure Procedures on Stand.
- Red bars have been added to the left-hand side of this document to draw the reader's 1.3 attention to where changes or clarifications have been incorporated.

| Abbreviation | Description                              |
|--------------|--|
| ADP          | Airside Driver Permit                    |
| APU          | Auxiliary Power Unit                     |
| ATC          | Air Traffic Control                      |
| HAL          | Heathrow Airport Limited                 |
| 'M' ADP      | 'Manoeuvring Area' Airside Driver Permit |
| 'P' ADP      | 'Pushback' Airside Driver Permit         |
| 'R' ADP      | 'Runway' Airside Driver Permit           |
| ROPV         | Remotely Operated Pushback Vehicle       |

#### 2. Definitions

**S** Aerodrome Safety

### 3. Licensing and Training of ROPV Operators

- 3.1 ROPV operators must hold either a valid Pushback ADP ('P' ADP), Manoeuvring Area ('M' ADP) or Runway ADP ('R' ADP) in order to operate the ROPV. They are also required to be suitably trained and competent in the use of the ROPV by the operating companies. For information regarding ADP training and requirements, reference should be made to ASDRVE\_OSI\_006 Airside Driver Training and the Airside Driver Permit.
- **3.2** HAL <u>does not provide</u> any training in the use of the ROPVs. The operating company is responsible for providing role-specific training with respect to ROPVs operations. The syllabus must include pre/post-use check and operating procedures of the ROPV as recommended by the manufacturer and general aircraft pushback procedures as a minimum. All training records must be documented and provided to HAL upon request.

#### 4. ROPV Operating Requirements

- 4.1 All ROPVs must be parked in designated equipment parking spaces while not in use.
- **4.2** A serviceable obstruction light must be displayed while the ROPV is in operation.
- 4.3 Before using the ROPV, the operator must conduct a visual check for any loose parts, and ensure that the battery level is sufficient to support the range that the ROPV is to be used. Any defects must be reported to the operating company and recorded. If the ROPV is faulty, it <u>must not</u> be used, and the operator should seek assistance from the operating company.
- **4.4** While operating the ROPV, the operator must maintain a safe distance from the equipment to prevent the ROPV from colliding with or running over the operator's feet.
- 4.5 The pushback procedures as stipulated in reference to ASGrOps\_OSI\_093 Aircraft Arrival, Turnaround and Departure Procedures on Stand must be observed and complied in full. If there is any conflict between this OSI and ASGrOps\_OSI\_093 Aircraft Arrival, Turnaround and Departure Procedures on Stand, the terms of this OSI shall prevail.
- **4.6** In the event that engine start prior to aircraft pushback is required, for example an unserviceable APU, the procedures as per ASGrOps\_OSI\_093 Aircraft Arrival, Turnaround and Departure Procedures on Stand must be observed and followed.
- 4.7 The ROPV operator must be equipped with a headset or radio which allows direct and continuous verbal communication with the flight deck and maintain a close listening watch to ATC frequencies. ROPV <u>must not</u> be used without a serviceable direct line of verbal communication to the flight deck (i.e., a headset).

S Aerodrome Safety

- 4.8 Where verbal communication has failed after aircraft pushback is commenced, the ROPV operator must use internationally agreed hand signals to maintain communication with the flight crew in accordance with Standardised European Rules of the Air (SERA). The operating company must ensure that all ROPV operators are trained to use these hand signals.
- **4.9** After pushback manoeuvre has been completed, the operator must return to the nearest stand via the most direct route and return to the origin stand by manoeuvring the ROPV within the double white lines (in the apron side but not the taxiway side).
- **4.10** The ROPV must not be driven (manoeuvred by an operator) on any airside road (including the uncontrolled crossings). However, manoeuvring on inter-stand clearways is permitted.
- **4.11** The operating company must have ROPV standard operating procedures in place and have a risk assessment that factors the following as a minimum:
  - **4.11.1** Manoeuvring ROPVs in adverse weather conditions, including strong wind and the risk of lightning.
  - **4.11.2** Impacts to visibility and traction on contaminated surfaces (e.g., fog, rain, ice, snow, de-icing fluids).
  - **4.11.3** Staff safety during pushback manoeuvres (suitable distance with the ROPV, noise and engine ingestion/jet blast area).
  - **4.11.4** The ROPV operator can safely and efficiently carry out pushback manoeuvres per ATC's instructions considering the capabilities/range of the ROPV.

#### 5. Enquiries

Any enquiries relating to this OSI should be directed to the Airfield Duty Manager at 020 8745 7373.

#### 6. References

- 6.1 ASDRVE\_OSI\_005 Vehicle and Equipment Airside Operations
- 6.2 ASDRVE\_OSI\_006 Airside Driver Training and the Airside Driver Permit

- 6.3 ASDRVE\_OSI\_008 Vehicle and Equipment Airside Requirements
- 6.4 ASGrOps\_OSI\_093 Aircraft Arrival, Turnaround and Departure Procedures on Stand

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# **Document Data**

| <b>Document Name</b><br>Use of Remotely Operated<br>Pushback Vehicles | Document Reference<br>Number<br>ASGrOps_OSI_073 | <b>Issue Date</b><br>09 <sup>th</sup> August 2017 |
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| Author Name<br>Vincent Chan   | Approval Name<br>Alpesh Patel                   | <b>Technical Approval<br/>Name</b><br>N/A         |
| Aerodrome Manual<br>Reference<br>N/A                                  | <b>Airside Standard Reference</b><br>N/A        | <b>Airside Plan Reference</b><br>N/A              |

# **Document History**

| Revision | Description of Change  | Date                          |
|----------|--|-------------------------------|
| V1.0     | Initial version  | 09 <sup>th</sup> August 2017  |
| V2.0     | Amended to cover all airport.  | 28 <sup>th</sup> June 2019    |
| V3.0     | Relocation of "P" ADP licensing requirements to<br>other OSI, removal of dispensation relating to<br>manoeuvring equipment underneath an<br>airbridge, updated licensing requirements and<br>operating procedures, and added risk<br>assessment requirements for operating the<br>ROPVs. | 30 <sup>th</sup> April 2024   |
| V3.1     | Update reference to ASGrOps_OSI_093<br>Aircraft Arrival, Turnaround and Departure<br>Procedures on Stand   | 30 <sup>th</sup> October 2024 |