Operational Safety Instruction
Winter Hazards

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

1.1 This instruction introduces the Heathrow Snow Plan Airside (HSPA) and the Heathrow Aircraft De-icing Plan (HADIP) for the winter 2019/20 season and sets out the actions to be taken in winter conditions, including the responsibilities of Airside users.

1.2 Landside and terminal areas will be dealt with in accordance with the separate plans developed for those areas.

1.3 OSI 053 V4.0 is hereby cancelled.

2. Definitions

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AfDM</td>
<td>Airfield Duty Manager</td>
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<td>AIP</td>
<td>UK Aeronautical Information Publication</td>
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<td>AIRT</td>
<td>Airside Incident Response Team</td>
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<td>AODM</td>
<td>Aircraft Operations Duty Manager</td>
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<td>APOC</td>
<td>Airport Operations Control Centre</td>
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<td>ASD</td>
<td>Airside Safety Department</td>
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<td>CAP</td>
<td>Civil Aviation Publication</td>
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<td>cm</td>
<td>centimetres</td>
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<td>HADIP</td>
<td>Heathrow Aircraft De-icing Plan</td>
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<td>HSPA</td>
<td>Heathrow Snow Plan Airside</td>
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<tr>
<td>kt</td>
<td>knots</td>
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3. Safety Procedure

3.1 Aerodrome Snow Plan

3.1.1 The HSPA is published in accordance with the requirements of Regulation (EU) No 139/2014, Annex IV — Part-ADR.OPS SUBPART B — Aerodrome Operational Services, Equipment and Installations (ADR.OPS.B), ADR.OPS. B.035, AMC1 ADR.OPS.B.035 and GM1 ADR.OPS.B.035 to ED Decision 2014-012-R AMC & GM to Authority, Organisation & Operations for Aerodromes. All snow clearance procedures will comply with the Acceptable Means of Compliance for Operations in winter conditions.

3.1.2 The HSPA, effective from 15 October 2019, details the preparation and procedures necessary to enable airfield operations to continue during snow and ice conditions at Heathrow.

3.1.3 The responsibility for ice prevention and snow clearance operations on Airside areas at Heathrow rests with the Head of Airside Operations.

3.1.4 A copy of the HSPA is available at www.heathrow.com/airside under ‘Useful Publications’ then ‘Winter Operations’.

3.2 Aim of the Aerodrome Snow Plan

3.2.1 The aim of the HSPA is to keep the airfield open for normal safe operations, as far as is reasonably practicable, during adverse weather conditions such as snow and ice. The precise plan adopted will be according to the forecasted weather conditions and will be dynamic as the situation progresses. The Airport Operations Manager in consultation with the Airside Tactical Team (ATT) will be responsible for operational command and control, whilst the AfDM is responsible for the airfield state. Both will have regard to such factors as:

3.2.1.1 Forecast weather conditions
3.2.1.2 Severity of the snow conditions
3.2.1.3 Time of day/night
3.2.1.4 Traffic movements expected
3.2.1.5 Staff and equipment available
3.2.1.6 Environmental considerations
3.3  Aircraft De-icing Plan

3.3.1  The HADIP is published by the Aircraft Operations Unit and provides guidance on Heathrow’s approach to aircraft de-icing operations, endorsed by the Director of Operations for Heathrow Airport Limited (HAL).

3.3.2  The HADIP, effective from 23 October 2019, is intended to minimise and mitigate the disruptive effects of frost, ice, snow or any adverse winter weather event on the normal operation of aircraft flow by facilitating a consistent and coordinated response, assisting the continual safe operation of the airfield even when conditions require reduced capacity.

3.3.3  The responsibility for both the anti-icing and de-icing of aircraft on Airside areas at Heathrow rests with the Head of Airport Operations. Airfield de-icing is not within the scope of the HADIP. If wintry precipitation leads to the requirement for airfield infrastructure including aprons, taxiways and runways to be anti-iced, de-iced or have snow cleared from them, the Heathrow Snow Plan Airside (HSPA) is activated and dedicated resource is stood up to perform these functions. The HSPA should be read in conjunction with the HADIP.

3.3.4  A copy of the HADIP is available at www.heathrow.com/airside under ‘Useful Publications’ then ‘Winter Operations’.

3.4  Aim of the Aircraft De-icing Plan

3.4.1  An important part of the plan for low temperature events that lead to icing conditions is how airlines, De-icing Service Providers (DSPs), NATS and Heathrow maintain satisfactory aircraft flow rates when conditions require aircraft to be de-iced. When demand for de-icing services becomes high across the airfield it quickly becomes challenging to satisfy the scheduled runway throughput. The dynamic nature of de-icing service provision means aircraft are at risk of repeatedly missing scheduled runway slots. Departure runway demand can therefore reduce in a short period of time following the onset of snow or low temperatures, even when sufficient runway capacity exists.

3.4.2  The HADIP optimises the deployment of resources taking into consideration the operational impact and expected level of response by HAL to aircraft icing conditions including equipment, people, materials and infrastructure. This document also provides a description of the activities undertaken by DSPs at Heathrow to effectively deliver de-icing services to their airline customers and the communications required to support this activity.

3.4.3  The deployment of de-icing operations resulting in the smooth delivery of aircraft in the correct sequence to the departure runway can only be achieved through close
communication with the key relevant stakeholders who need to operate using accurate and timely information, allowing Heathrow to maintain a clear assessment of its ability to complete the published flying schedule.

3.5 Forecasts

3.5.1 Ice and or snow forecasts will be supplied by the UK Met Office and Meteogroup to Heathrow. These warnings will be promulgated to Airside users by means of APOC and the publication of the 15-day and 5-day forecasts. Updates to this information will be generated by Heathrow upon data received from the Met Office and Meteogroup. The forecast will take the following format, and will be issued not more than twelve and normally not less than two hours ahead:

3.5.1.1 Whether snow is possible or definitely expected
3.5.1.2 Time of onset of snowfall
3.5.1.3 Intensity (slight, moderate or heavy) and probable duration
3.5.1.4 Estimated depth in (cm) and type (dry or wet) and probability of drifting
3.5.1.5 Forecast surface wind speed and direction including expected changes exceeding 20 degrees and/or 10kt

3.5.2 When snow is not expected to lie, the phrase ‘amounts negligible – not expected to lie’ will be used. Amounts less than 1cm will be reported as ‘accumulation less than 1cm’.

3.6 Responsibility for Non-Airfield Areas

3.6.1 Airbridges – Terminal management are responsible for the clearance of snow and ice from exposed areas of airbridge heads, but staff must remain behind barriers at all times. Terminal management are also responsible for de-icing of airbridge external steps, where these are fitted. De-icing material will be supplied at strategic locations around the airfield and housed in ‘bins’ for self-help purposes.

3.6.2 Airside Roads and Tunnels – Designated teams under the supervision of the Airside Roads Coordinator are responsible for the clearance and treatments of these areas.

3.6.3 Control Posts – Campus Security and Landside teams are responsible for the clearance of the Control Post magazines.

3.6.4 Leased Areas – Tenants are reminded that they are responsible for the clearance of snow and ice within their individual leased areas.
3.6.5 Salt – The use of salt in Airside areas is prohibited due to the corrosion threat to aircraft, except within Control Post magazines and on the approach to the Cargo tunnel.

3.7 Self Help – Airside Companies (Airlines, Handlers and Service Providers)

3.7.1 During heavy or prolonged snowfall Airside companies are encouraged to proactively co-operate with others to supplement the Heathrow effort to maintain a safe airfield operation. Heathrow provides equipment and materials to assist with the removal of snow. Grit and/or De-icer prill can be found in storage containers at key locations (usually the head of stand) and should be used to address areas of ice/slippery surfaces. Equipment will be available from the Snow Equipment cages.

3.7.2 Where reasonable to do so, companies are expected to ‘self-help’ and treat areas adjacent to their operation by utilising Heathrow provided materials and equipment. Such areas would include footpaths, access routes and key areas at the head of stand.

3.7.3 If not already in place, Airside companies should consider developing their own local Snow Plan to provide details on the preparation and procedures necessary to enable their operations to continue during snow and ice conditions at the Airport.

3.8 Precautions in Freezing Conditions

3.8.1 Winter weather brings extra hazards. To avoid accidents, more care should be taken by all Airside personnel. Accident risks can be reduced by taking the following simple precautions:

3.8.1.1 Pedestrians

(a) Surfaces that have been treated with anti-icing or de-icing fluids may become more slippery initially, particularly painted surfaces. Allow additional time for all ramp activities and take extra care and caution when walking across ramp surfaces

(b) Any areas identified as slippery should be addressed using the grit or de-icing prill located at the head of stand (refer above to 3.5.2) or reported to Heathrow. De-icing prill should only be used on areas where snow and ice have already formed.

3.8.1.2 Vehicles

(a) Ensure that attention is given to vehicle inspection prior to use. Check operation of lights, battery condition and antifreeze.
(b) Do not leave vehicles unattended with engines running.

c) Take extra care when driving, especially at the approach to road junctions and on the approach ramps to tunnels. Bear in mind that vehicles will require a greater distance in which to stop.

d) Operators of specialist vehicles involved in the carriage of water should take special precautions as follows:

(i) In freezing conditions, or when freezing conditions are forecast, action must be taken to avoid unnecessary formation of ice on aprons and road surfaces. Operators of equipment such as potable water tankers and toilet servicing vehicles must take special care to ensure that there is no spillage or leakage leading to subsequent freezing. Care must also be taken in the use of potable water points to contain spillage and overflow to a minimum.

(ii) The washing of ramp equipment may only be undertaken in the specialist wash down areas provided.

(iii) Catering vehicle operators should ensure that any surplus ice from aircraft galleys is disposed of properly.

(iv) All operators of aircraft parked on stands during freezing conditions should ensure that galley drains are not left dripping onto apron surfaces and that when aircraft water tanks are drained water is disposed of where it cannot present a hazard if it subsequently freezes.

3.9 Communications

3.9.1 It should be noted that while Heathrow will make every effort to disseminate information on the changing weather situation as it develops, (by means of APOC through the community calls and weather forecast publications), responsibility also rests upon handling agents, airlines, and tenants to warn passengers and staff of the likely presence of snow and/or ice in their operational areas and to take self-help measures wherever possible.

3.9.2 Any winter airside hazards that have not been identified on the APOC communications network, should be reported to the ASD on extension 656459.

3.9.3 Communication during snow clearance is outlined in the HSPA document.

3.9.4 Communication during aircraft de-icing is outlined in the HADIP document.

3.9.5 The following contact details should be used during any snow event:

3.9.5.1 Airside Incident Response Team (AIRT): 07592 108 491
3.9.5.2 Email: Airside_IRT@heathrow.com

3.9.6 The following contact details should be used for aircraft de-icing operations:

3.9.6.1 Aircraft Operations Duty Manager (AODM): 07525 825 585

3.9.6.2 Email: aircraft_flow_managers@heathrow.com
4. Enquiries
   4.1 Any enquiries regarding this Instruction should be made to the Heathrow Winter Operations Manager – as outlined in the Heathrow Aerodrome Snow Plan.

5. References
   5.1 Heathrow Snow Plan Airside – as per Section 3.1.
   5.2 Heathrow Aircraft De-icing Plan – as per Section 3.3.