

## LSZH - ZURICH

## LSZH AD 2.1 AERODROME LOCATION INDICATOR AND NAME

LSZH - ZURICH

## LSZH AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

|   |  |   |
|---|--|---|
| 1 | ARP coordinates and site at Aerodrome                      | 47 27 29N 008 32 53E<br>INT RWY 16/34, 10/28  |
| 2 | Direction and distance from the CITY                       | 9 km N Zurich   |
| 3 | Elevation/Reference temperature                            | 1417 ft - 27.0°   |
| 4 | Geoid undulation at AD ELEV PSN                            | 47.3 m / 155.1 ft   |
| 5 | MAG VAR/Annual change                                      | 3° E (2020.5) / 0°10' eastwards   |
| 6 | AD Administration, address, telephone, telefax, telex, AFS | Post: Flughafen Zürich AG<br>P.O. Box<br>CH-8058 Zurich-Airport<br>AFS: LSZHYDYX<br>URL: <a href="http://www.zurich-airport.com/">http://www.zurich-airport.com/</a><br><b>Airport Authority:</b><br>Phone: +41 (0) 43 816 21 11<br>Email: <a href="mailto:airportauthority@zurich-airport.com">airportauthority@zurich-airport.com</a> |
| 7 | Types of traffic permitted (IFR/VFR)                       | IFR/VFR   |
| 8 | Remarks  | NIL   |

## LSZH AD 2.3 OPERATIONAL HOURS

|    |                            |   |
|----|----------------------------|---|
| 1  | Aerodrome Operator         | H24 refer to <a href="#">LSZH AD 2.20</a> for Local flying restrictions |
| 2  | Customs and immigration    | H24   |
| 3  | Health and sanitation      | H24   |
| 4  | AIS Briefing Office        | H24   |
| 5  | ATS Reporting Office (ARO) | H24   |
| 6  | MET Briefing Office        | H24   |
| 7  | ATS                        | H24   |
| 8  | Fuelling                   | H24 <sup>1)</sup>   |
| 9  | Handling                   | H24 <sup>1)</sup>   |
| 10 | Security                   | H24   |
| 11 | De-icing                   | H24 <sup>1)</sup>   |
| 12 | Remarks                    | NIL   |

1. reduced capacity during night ban

## LSZH AD 2.4 HANDLING SERVICES AND FACILITIES

|   |                              |  |
|---|------------------------------|--|
| 1 | Cargo-handling facilities    | All modern facilities AVBL                     |
| 2 | Fuel/oil types               | JET A1, AVGAS 100LL<br>Turbo oil, Aviation oil |
| 3 | Fuelling facilities/capacity | No limitations                                 |

|   |  |   |
|---|--|---|
| 4 | <b>De-icing facilities</b>                     | <p>OCT 01 - APR 30: De-icing assured<br/> MAY 01 - SEP 30: De-icing on request, 60 min reaction time<br/> De-icing fluids available: Type I: Kilfrost DF Plus,<br/> Type IV: Kilfrost ABC S Plus</p> <ul style="list-style-type: none"> <li>• Remote de-icing: SWISSPORT</li> <li>• On-stand de-icing: SWISSPORT, AAS-NORDIC Aero, DNATA, Jet Aviation</li> <li>• LSZH AD 2.5</li> </ul> <p>Use of remote de-icing facilities:<br/> ACFT stop PSN on de-icing lanes C1 / C2 / C3 / F1 / F2 / F3 marked and lighted. Stop PSN markings with yellow lights and the RMK "STOP DEICING" are located to the left with a 90-degree angle to the de-icing lane.<br/> To commence de-icing, aircraft (all types) has to stop with the pilot seat abeam the stop PSN.<br/> When entering the de-icing lane as instructed by "Zurich Apron", ACFT shall taxi independently with caution up to de-icing stop PSN and contact the respective Pad Coordinator (Charlie 121.640, Foxtrott 121.635).<br/> (See: <a href="#">LSZH AD 2.24.1 - 1</a>)<br/> Be aware of repositioning of de-icing trucks within the remote de-icing facilities.</p> |
| 5 | <b>Hangar space for visiting aircraft</b>      | Restricted (only at short notice and O/R)   |
| 6 | <b>Repair facilities for visiting aircraft</b> | <p>Major and minor aircraft and engine repairs:</p> <ul style="list-style-type: none"> <li>• 5-Star Aviation: Phone +41 (0) 79 465 68 99<br/>Email: 5star@5staraviation.ch</li> <li>• Textron Aviation - Cessna Zürich Citation Service Center:<br/>Phone +41 (0) 79 597 43 45<br/>Email: ipilipovic@txtav.com</li> <li>• Helvetic Maintenance: Phone +41 (0) 79 939 09 21<br/>Email: mcc@helvetic.com</li> <li>• Jet Aviation AG: Phone +41 (0) 58 158 84 62<br/>Email: zrhfbo@jetaviation.com</li> <li>• Motorfluggruppe Zürich: Phone +41 (0) 44 881 22 22<br/>Email: flightmaintenance@mfgz.ch</li> <li>• Northern Aerotech ApS: Phone: +41 (0) 76 470 29 55<br/>Email: zurich@northern-aerotech.com</li> <li>• SR-Technics Switzerland AG: Phone +41 (0) 79 320 26 25<br/>Email: zrhline@srtechnics.ch</li> <li>• Swiss Line Maintenance: Phone +41 (0) 44 564 40 44<br/>Email: mcc@swiss.com</li> </ul>   |
| 7 | <b>Remarks</b>                                 | Oxygen and related servicing AVBL.  |

**LSZH AD 2.5 PASSENGER FACILITIES**

|   |                             |   |
|---|-----------------------------|---|
| 1 | <b>Hotels</b>               | <p>Directly at the airport: Radisson Blu Hotel, Phone +41 (0) 44 800 40 40. Other hotels in vicinity and in town.<br/> 13 dayrooms at the airport; Crew restrooms at the OPS centre.</p>  |
| 2 | <b>Restaurants</b>          | Various restaurants for crews and passengers  |
| 3 | <b>Transportation</b>       | Public buses, trains, trams, taxis, car rental agencies   |
| 4 | <b>Medical facilities</b>   | <p>Designated airport according to International Health Regulations (2005).<br/> Airport Medical Centre: Open from 0700-1930 (0600-1830)<br/> Phone: +41 (0) 43 816 60 00<br/> Airport Dental Services: Open from 0600-1800 (0500-1700)<br/> Phone: +41 (0) 43 816 61 61<br/> Airport Eye Clinic: Open from 0700-1600 (0600-1500)<br/> Phone: +41 (0) 43 816 70 00<br/> Quarantine station (100 persons sitting);<br/> Doctor O/R; 3 ambulances; Hospitals in city.<br/> Special vehicle with lifting device available at Goldair AAS Assistance AG.<br/> Phone: +41 (0) 43 816 54 41</p> |
| 5 | <b>Bank and Post Office</b> | At AP and in city   |
| 6 | <b>Tourist Office</b>       | At AP and in city   |
| 7 | <b>Remarks</b>              | NIL   |

**LSZH AD 2.6 RESCUE AND FIRE FIGHTING SERVICES**

|   |   |  |
|---|---|--|
| 1 | AD category for fire fighting               | Category 10  |
| 2 | Rescue equipment                            | Available  |
| 3 | Capability for removal of disabled aircraft | Yes  |
| 4 | Remarks                                     | Fire Brigade available when ACFT on ground on 123.100 MHz in German and English. Ask ATC for frequency change on second set. |

**LSZH AD 2.7 SEASONAL AVAILABILITY - CLEARING**

|   |                               |   |
|---|-------------------------------|---|
| 1 | Type(s) of clearing equipment | 8 snow blowers, 17 snow ploughs, 19 ACFT de-icers, 11 RWY and apron de-icers, 25 jet sweepers |
| 2 | Clearance priorities          | Varies according to conditions at AD  |
| 3 | Remarks                       | All Rwys / Twys / Aprons de-iced / anti-iced with KFOR (potassium formate fluids)             |

**LSZH AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA**

| 1   | Designation, surface and strength of Aprons          | CONC - PCR 1260/R/B/W/T   |                            |     |                            |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
|-----|--|---|----------------------------|-----|----------------------------|--|----|--------------|----|--------------|----|--------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|--|--|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|--|--|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|--|--|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|--|--|-----|----------------------------|-----|----------------------------|-----|----------------------------|--|--|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|--|--|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|--|--|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|-----|----------------------------|
| 2   | Designation, width, surface and strength of Taxiways | WID: 27 m and 23 m<br>CONC - PCR 1260/R/B/W/T   |                            |     |                            |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| 3   | ACL location and elevation                           | Beginning RWY 10: 1391 ft<br>Beginning RWY 28: 1416 ft<br>Beginning RWY 14: 1402 ft<br>Beginning RWY 32: 1402 ft<br>Beginning RWY 16: 1390 ft<br>Beginning RWY 34: 1385 ft<br>Parking sector A: 1400 ft<br>Parking sector C, D: 1390 ft<br>Parking sector B, I: 1397 ft<br>Parking sector E: 1395 ft<br>Parking sector F: 1407 ft<br>Parking sector H: 1404 ft<br>Parking sector P: 1385 ft<br>Parking sector T: 1394 ft<br>Parking sector W: 1382 ft   |                            |     |                            |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| 4   | Location of VOR checkpoints                          | NIL   |                            |     |                            |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| 5   | Location of INS checkpoints                          | <table border="1"> <thead> <tr> <th>NR</th> <th>COORD WGS 84</th> <th>NR</th> <th>COORD WGS 84</th> <th>NR</th> <th>COORD WGS 84</th> </tr> </thead> <tbody> <tr><td>A02</td><td>47 27 12.59N 008 33 31.05E</td><td>A57</td><td>47 27 15.58N 008 33 20.44E</td><td>C53</td><td>47 26 52.13N 008 33 43.45E</td></tr> <tr><td>A03</td><td>47 27 14.35N 008 33 40.18E</td><td></td><td></td><td>C54</td><td>47 26 50.34N 008 33 44.68E</td></tr> <tr><td>A04</td><td>47 27 12.40N 008 33 29.08E</td><td>B31</td><td>47 27 05.67N 008 33 35.65E</td><td>C55</td><td>47 26 49.94N 008 33 45.04E</td></tr> <tr><td>A05</td><td>47 27 14.42N 008 33 38.15E</td><td></td><td></td><td>C56</td><td>47 26 49.06N 008 33 45.56E</td></tr> <tr><td>A07</td><td>47 27 14.56N 008 33 36.01E</td><td>B33</td><td>47 27 05.87N 008 33 33.66E</td><td>C57</td><td>47 26 47.81N 008 33 46.50E</td></tr> <tr><td>A08</td><td>47 27 13.03N 008 33 25.29E</td><td></td><td></td><td>C58</td><td>47 26 46.51N 008 33 47.32E</td></tr> <tr><td>A09</td><td>47 27 14.50N 008 33 33.99E</td><td>B35</td><td>47 27 05.81N 008 33 32.29E</td><td>C59</td><td>47 26 45.72N 008 33 48.10E</td></tr> <tr><td>A10</td><td>47 27 12.97N 008 33 23.34E</td><td></td><td></td><td>C60</td><td>47 26 45.24N 008 33 48.20E</td></tr> <tr><td>A11</td><td>47 27 15.08N 008 33 28.87E</td><td>B37</td><td>47 27 05.55N 008 33 31.60E</td><td></td><td></td></tr> <tr><td>A13</td><td>47 27 15.28N 008 33 26.86E</td><td>B38</td><td>47 27 01.55N 008 33 30.88E</td><td>D01</td><td>47 26 55.25N 008 33 29.93E</td></tr> <tr><td>A15</td><td>47 27 15.29N 008 33 24.82E</td><td>B39</td><td>47 27 06.05N 008 33 28.94E</td><td>D02</td><td>47 26 54.92N 008 33 30.01E</td></tr> <tr><td>A17</td><td>47 27 15.27N 008 33 22.78E</td><td>B41</td><td>47 27 06.35N 008 33 26.97E</td><td>D03</td><td>47 26 53.90N 008 33 30.86E</td></tr> <tr><td></td><td></td><td>B43</td><td>47 27 06.48N 008 33 25.62E</td><td>D04</td><td>47 26 52.95N 008 33 31.26E</td></tr> <tr><td>A42</td><td>47 27 11.77N 008 33 36.63E</td><td>B45</td><td>47 27 06.51N 008 33 24.98E</td><td>D05</td><td>47 26 52.58N 008 33 32.00E</td></tr> <tr><td>A44</td><td>47 27 12.13N 008 33 33.96E</td><td></td><td></td><td>D06</td><td>47 26 49.00N 008 33 34.74E</td></tr> <tr><td>A46</td><td>47 27 12.38N 008 33 30.37E</td><td>C50</td><td>47 26 54.70N 008 33 41.76E</td><td>D07</td><td>47 26 48.09N 008 33 34.47E</td></tr> <tr><td>A48</td><td>47 27 12.64N 008 33 27.17E</td><td>C51</td><td>47 26 53.41N 008 33 42.57E</td><td>D08</td><td>47 26 47.70N 008 33 35.45E</td></tr> <tr><td>A49</td><td>47 27 14.80N 008 33 31.35E</td><td>C52</td><td>47 26 52.57N 008 33 43.22E</td><td>D09</td><td>47 26 46.35N 008 33 36.38E</td></tr> </tbody> </table> |                            |     |                            |  | NR | COORD WGS 84 | NR | COORD WGS 84 | NR | COORD WGS 84 | A02 | 47 27 12.59N 008 33 31.05E | A57 | 47 27 15.58N 008 33 20.44E | C53 | 47 26 52.13N 008 33 43.45E | A03 | 47 27 14.35N 008 33 40.18E |  |  | C54 | 47 26 50.34N 008 33 44.68E | A04 | 47 27 12.40N 008 33 29.08E | B31 | 47 27 05.67N 008 33 35.65E | C55 | 47 26 49.94N 008 33 45.04E | A05 | 47 27 14.42N 008 33 38.15E |  |  | C56 | 47 26 49.06N 008 33 45.56E | A07 | 47 27 14.56N 008 33 36.01E | B33 | 47 27 05.87N 008 33 33.66E | C57 | 47 26 47.81N 008 33 46.50E | A08 | 47 27 13.03N 008 33 25.29E |  |  | C58 | 47 26 46.51N 008 33 47.32E | A09 | 47 27 14.50N 008 33 33.99E | B35 | 47 27 05.81N 008 33 32.29E | C59 | 47 26 45.72N 008 33 48.10E | A10 | 47 27 12.97N 008 33 23.34E |  |  | C60 | 47 26 45.24N 008 33 48.20E | A11 | 47 27 15.08N 008 33 28.87E | B37 | 47 27 05.55N 008 33 31.60E |  |  | A13 | 47 27 15.28N 008 33 26.86E | B38 | 47 27 01.55N 008 33 30.88E | D01 | 47 26 55.25N 008 33 29.93E | A15 | 47 27 15.29N 008 33 24.82E | B39 | 47 27 06.05N 008 33 28.94E | D02 | 47 26 54.92N 008 33 30.01E | A17 | 47 27 15.27N 008 33 22.78E | B41 | 47 27 06.35N 008 33 26.97E | D03 | 47 26 53.90N 008 33 30.86E |  |  | B43 | 47 27 06.48N 008 33 25.62E | D04 | 47 26 52.95N 008 33 31.26E | A42 | 47 27 11.77N 008 33 36.63E | B45 | 47 27 06.51N 008 33 24.98E | D05 | 47 26 52.58N 008 33 32.00E | A44 | 47 27 12.13N 008 33 33.96E |  |  | D06 | 47 26 49.00N 008 33 34.74E | A46 | 47 27 12.38N 008 33 30.37E | C50 | 47 26 54.70N 008 33 41.76E | D07 | 47 26 48.09N 008 33 34.47E | A48 | 47 27 12.64N 008 33 27.17E | C51 | 47 26 53.41N 008 33 42.57E | D08 | 47 26 47.70N 008 33 35.45E | A49 | 47 27 14.80N 008 33 31.35E | C52 | 47 26 52.57N 008 33 43.22E | D09 | 47 26 46.35N 008 33 36.38E |
| NR  | COORD WGS 84   | NR  | COORD WGS 84               | NR  | COORD WGS 84               |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A02 | 47 27 12.59N 008 33 31.05E                           | A57   | 47 27 15.58N 008 33 20.44E | C53 | 47 26 52.13N 008 33 43.45E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A03 | 47 27 14.35N 008 33 40.18E                           |   |                            | C54 | 47 26 50.34N 008 33 44.68E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A04 | 47 27 12.40N 008 33 29.08E                           | B31   | 47 27 05.67N 008 33 35.65E | C55 | 47 26 49.94N 008 33 45.04E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A05 | 47 27 14.42N 008 33 38.15E                           |   |                            | C56 | 47 26 49.06N 008 33 45.56E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A07 | 47 27 14.56N 008 33 36.01E                           | B33   | 47 27 05.87N 008 33 33.66E | C57 | 47 26 47.81N 008 33 46.50E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A08 | 47 27 13.03N 008 33 25.29E                           |   |                            | C58 | 47 26 46.51N 008 33 47.32E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A09 | 47 27 14.50N 008 33 33.99E                           | B35   | 47 27 05.81N 008 33 32.29E | C59 | 47 26 45.72N 008 33 48.10E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A10 | 47 27 12.97N 008 33 23.34E                           |   |                            | C60 | 47 26 45.24N 008 33 48.20E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A11 | 47 27 15.08N 008 33 28.87E                           | B37   | 47 27 05.55N 008 33 31.60E |     |                            |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A13 | 47 27 15.28N 008 33 26.86E                           | B38   | 47 27 01.55N 008 33 30.88E | D01 | 47 26 55.25N 008 33 29.93E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A15 | 47 27 15.29N 008 33 24.82E                           | B39   | 47 27 06.05N 008 33 28.94E | D02 | 47 26 54.92N 008 33 30.01E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A17 | 47 27 15.27N 008 33 22.78E                           | B41   | 47 27 06.35N 008 33 26.97E | D03 | 47 26 53.90N 008 33 30.86E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
|     |  | B43   | 47 27 06.48N 008 33 25.62E | D04 | 47 26 52.95N 008 33 31.26E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A42 | 47 27 11.77N 008 33 36.63E                           | B45   | 47 27 06.51N 008 33 24.98E | D05 | 47 26 52.58N 008 33 32.00E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A44 | 47 27 12.13N 008 33 33.96E                           |   |                            | D06 | 47 26 49.00N 008 33 34.74E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A46 | 47 27 12.38N 008 33 30.37E                           | C50   | 47 26 54.70N 008 33 41.76E | D07 | 47 26 48.09N 008 33 34.47E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A48 | 47 27 12.64N 008 33 27.17E                           | C51   | 47 26 53.41N 008 33 42.57E | D08 | 47 26 47.70N 008 33 35.45E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |
| A49 | 47 27 14.80N 008 33 31.35E                           | C52   | 47 26 52.57N 008 33 43.22E | D09 | 47 26 46.35N 008 33 36.38E |  |    |              |    |              |    |              |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |  |  |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |     |                            |

| 5 | Location of INS checkpoints |                            |  |                            |     |                            |
|---|-----------------------------|----------------------------|--|----------------------------|-----|----------------------------|
|   | NR                          | COORD WGS 84               | NR   | COORD WGS 84               | NR  | COORD WGS 84               |
|   | D10                         | 47 26 45.49N 008 33 36.25E | E64  | 47 27 41.12N 008 33 04.63E | T44 | 47 26 35.54N 008 33 56.25E |
|   | D11                         | 47 26 45.11N 008 33 37.24E | E67  | 47 27 42.19N 008 33 04.18E | T45 | 47 26 46.45N 008 33 59.87E |
|   | D12                         | 47 26 43.76N 008 33 38.17E |  |                            | T46 | 47 26 45.07N 008 34 00.23E |
|   | D13                         | 47 26 42.90N 008 33 38.04E | F70  | 47 27 17.95N 008 34 04.41E | T51 | 47 26 49.50N 008 33 57.45E |
|   | D14                         | 47 26 42.51N 008 33 39.03E | F71  | 47 27 18.23N 008 34 00.43E | T52 | 47 26 48.88N 008 33 55.51E |
|   | D15                         | 47 26 41.16N 008 33 39.96E | F72  | 47 27 18.51N 008 33 56.45E | T53 | 47 26 48.27N 008 33 53.56E |
|   | D16                         | 47 26 40.30N 008 33 39.83E |  |                            | T54 | 47 26 47.25N 008 33 51.89E |
|   | D17                         | 47 26 39.91N 008 33 40.81E | G01  | 47 26 33.89N 008 33 38.03E | T55 | 47 26 47.26N 008 33 50.46E |
|   |                             |                            | G02  | 47 26 32.51N 008 33 38.97E | T56 | 47 26 26.70N 008 33 49.90E |
|   | E4M                         | 47 27 38.86N 008 33 15.85E | G03  | 47 26 31.13N 008 33 39.92E | T60 | 47 26 39.19N 008 33 47.42E |
|   | E5M                         | 47 27 39.25N 008 33 08.66E | G04  | 47 26 29.75N 008 33 40.87E | T61 | 47 26 39.22N 008 33 46.47E |
|   |                             |                            | G05  | 47 26 28.37N 008 33 41.82E | T62 | 47 26 38.57N 008 33 45.47E |
|   | E19                         | 47 27 41.16N 008 33 30.08E | G06  | 47 26 27.08N 008 33 43.05E | T63 | 47 26 37.95N 008 33 43.52E |
|   | E20                         | 47 27 38.04N 008 33 30.07E | G11  | 47 26 32.90N 008 33 46.37E |     |                            |
|   | E23                         | 47 27 40.85N 008 33 27.92E | G12  | 47 26 31.55N 008 33 47.13E | W01 | 47 26 53.81N 008 32 56.31E |
|   | E26                         | 47 27 38.05N 008 33 26.60E | G13  | 47 26 30.28N 008 33 48.12E | W02 | 47 26 53.98N 008 32 58.59E |
|   | E27                         | 47 27 41.13N 008 33 24.48E | G14  | 47 26 28.97N 008 33 49.02E | W03 | 47 26 55.11N 008 33 00.42E |
|   | E32                         | 47 27 38.18N 008 33 23.26E |  |                            | W04 | 47 26 55.58N 008 33 03.02E |
|   | E33                         | 47 27 41.85N 008 33 21.81E | H11  | 47 27 20.38N 008 33 41.52E | W05 | 47 26 56.14N 008 33 04.79E |
|   | E34                         | 47 27 38.33N 008 33 22.58E | H12  | 47 27 20.66N 008 33 38.08E | W21 | 47 26 54.19N 008 32 56.76E |
|   | E35                         | 47 27 41.32N 008 33 21.03E | H13  | 47 27 20.80N 008 33 36.06E | W22 | 47 26 55.18N 008 32 59.90E |
|   | E36                         | 47 27 38.07N 008 33 21.15E | H14  | 47 27 20.95N 008 33 34.05E | W23 | 47 26 56.29N 008 33 03.40E |
|   | E37                         | 47 27 41.87N 008 33 19.72E |  |                            | W30 | 47 26 55.15N 008 32 59.23E |
|   | E42                         | 47 27 38.61N 008 33 19.14E | I01  | 47 27 21.39N 008 33 26.87E | W40 | 47 27 15.27N 008 32 47.27E |
|   | E43                         | 47 27 41.57N 008 33 17.59E | I02  | 47 27 21.51N 008 33 24.72E | W41 | 47 27 12.54N 008 32 45.21E |
|   | E44                         | 47 27 38.20N 008 33 17.00E | I03  | 47 27 21.74N 008 33 21.50E | W42 | 47 27 11.32N 008 32 44.49E |
|   | E45                         | 47 27 42.10N 008 33 15.58E | I04  | 47 27 21.89N 008 33 19.36E | W43 | 47 27 10.11N 008 32 43.77E |
|   | E46                         | 47 27 38.87N 008 33 15.71E | I05  | 47 27 22.04N 008 33 17.22E | W44 | 47 27 08.66N 008 32 42.68E |
|   | E47                         | 47 27 41.86N 008 33 14.15E |  |                            | W45 | 47 27 08.44N 008 32 41.22E |
|   | E48                         | 47 27 38.33N 008 33 14.93E | P31  | 47 27 48.26N 008 33 11.51E | W46 | 47 27 07.45N 008 32 41.94E |
|   | E49                         | 47 27 42.05N 008 33 13.48E | P32  | 47 27 48.41N 008 33 09.45E | W47 | 47 27 06.99N 008 32 40.68E |
|   | E50                         | 47 27 38.92N 008 33 12.93E | P33  | 47 27 48.55N 008 33 07.38E | W50 | 47 27 07.74N 008 32 52.30E |
|   | E51                         | 47 27 42.77N 008 33 10.93E | P34  | 47 27 48.70N 008 33 05.31E | W51 | 47 27 09.62N 008 32 52.65E |
|   | E52                         | 47 27 39.06N 008 33 12.26E | P35  | 47 27 49.10N 008 32 58.19E | W52 | 47 27 08.18N 008 32 52.35E |
|   | E53                         | 47 27 42.10N 008 33 10.13E | P36  | 47 27 50.38N 008 32 57.32E | W53 | 47 27 06.87N 008 32 51.58E |
|   | E54                         | 47 27 38.82N 008 33 10.83E | P37  | 47 27 51.66N 008 32 56.44E | W54 | 47 27 06.37N 008 32 51.76E |
|   | E55                         | 47 27 42.81N 008 33 08.85E |  |                            | W55 | 47 27 05.57N 008 32 50.81E |
|   | E56                         | 47 27 39.34N 008 33 08.82E | T41  | 47 26 38.04N 008 34 01.46E | W56 | 47 27 04.12N 008 32 50.75E |
|   | E57                         | 47 27 42.34N 008 33 06.69E | T42  | 47 26 37.23N 008 34 00.20E | W57 | 47 27 02.87N 008 32 49.57E |
|   | E58                         | 47 27 38.72N 008 33 06.88E | T43  | 47 26 36.40N 008 33 58.33E | W58 | 47 27 01.92N 008 32 49.52E |
|   | E62                         | 47 27 39.91N 008 33 05.72E |  |                            | W59 | 47 27 01.56N 008 32 48.80E |
|   |                             |                            |  |                            | W60 | 47 27 00.49N 008 32 48.98E |
| 6 | <b>Remarks</b>              |                            | Transverse slopes of following taxiway strips partially exceeding downward slope of 5 % beyond graded portion:<br>- TWY BRAVO (western part)<br>- TWY ECHO (between E3 and E1, between TWY DELTA and CHARLIE)<br>- TWY FOXTROTT (between TWY DELTA and CHARLIE)<br>- TWY GOLF (eastern part) |                            |     |                            |

## LSZH AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM, MARKINGS

|   |   |  |
|---|---|--|
| 1 | Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands | <p><b>ACFT PRKG PSNs at Dock A, B and E - Docking and stopping procedure</b></p> <ul style="list-style-type: none"> <li>Safegate Aircraft Docking Guidance System "Safedock A-VDGS T1"</li> </ul> <p><b>Routine docking manoeuvre:</b></p> <ul style="list-style-type: none"> <li>Check for correct ACFT type displayed (ICAO type designator according to ICAO Doc 8643).<br/>Note that the Airbus Neo series aircraft (A19N/A20N/A21N) are displayed as standard Airbus ICAO codes (A319/A320/A321). Same applies for Embraer 175 and Embraer 170-200 Aircraft, where short or long wing versions (E75S/E75L) are displayed as E175.</li> <li>Do not proceed beyond the passenger bridge unless a positive tracking of the aircraft has been established. This is indicated by changed displayed information, where a yellow guidance center line bar becomes visible. The position in relation to CL is indicated by yellow arrows. Additionally, arrows show direction of turn if aircraft is not aligned with CL.</li> <li>Display of digital countdown in meters starts at 15m before stop PSN.</li> <li>At the stop PSN the display will show "STOP" followed by "OK" if parked correctly.</li> <li>In case of overshooting the stop PSN, a "too far" indication is displayed. In any case where a safe docking process is not possible e.g., no guidance information displayed, error on display, obstacles in the path, wrong aircraft type, etc. stop the aircraft and request assistance from Apron Control.</li> <li>The color scheme of an ACFT may have a negative impact on the identification process.</li> </ul> <p><b>ACFT PRKG PSNs C, D, F, G, H, I, P, T and W - Stopping procedure:</b><br/>Stop markings are located to the left with a 90-degree angle to the guide lines and visible from the left-hand pilot seat only.<br/>ACFT has to be stopped with the pilot seat ABM the stop line.<br/>(See: <a href="#">LSZH AD 2.24.3 - 1</a>, inset)</p> |
| 2 | RWY/TWY markings and LGT  | <p>RWY markings: DTHR, THR, designation, aiming point, TDZ and centre line.<br/>TWY markings: Centre line and intermediate holding position.<br/>(See: <a href="#">LSZH AD 2.24.1 - 1</a>)<br/>Where no taxiway centre line markings are applied at runway exits, taxiing clearance distances using "cockpit over TWY CL" not ensured.<br/>Markings at all intersections with RWY: RWY holding position, mandatory instruction and enhanced TWY centre line.<br/>RWY LGT: See <a href="#">LSZH AD 2.14</a><br/>TWY LGT: See <a href="#">LSZH AD 2.15</a></p>   |
| 3 | Stop bars and RWY guard lights  | <p>Stop bars: TWY A1, B, B1, B7, B9, E, E1, E2, E3, E4, E5, E6, E7, E8, E9, F, G, H1, H2, H3, J, K, L, L7, L9, R7 and R8. LIH, R, no LED.<br/>On the apron, taxiway centre line light section after stop bars (intermediate holding positions) not switchable.<br/>RGL: TWY A1, B, B1, B7, B9, E, E1, E2, E3, E5, E6, E7, E8, E9, F, G, H1, H2, H3, J, K, L, L7, L9, R7 and R8. LIL, Y, no LED.<br/>(See: <a href="#">LSZH AD 2.24.3 - 1</a> and <a href="#">LSZH AD 2.24.3 - 3</a>)</p>   |
| 4 | Other RWY protection measures   | <p>RIMCAS: Runway Incursion Monitoring and Conflict Alerting System<br/>ARSI: Advanced Runway Safety Improvement</p>   |
| 5 | Remarks   | <p>Mandatory instruction signs at all RWY holding positions. Information signs on the movement area.</p> <ul style="list-style-type: none"> <li>Backtrack RWY 16: Turn Pad AVBL at THR 16.<br/>Turns are executed from left to right only.</li> <li>Backtrack RWY 34: Turns are executed at E9 from right to left only.</li> <li>RWY 10/28: RWY HLDG PSNs are located 75 m from RCL.<br/>(See: <a href="#">LSZH AD 2.24.1 - 1</a>)</li> </ul>  |

LSZH AD 2.10 AERODROME OBSTACLES

| In approach/TKOF areas |  |              | In circling area and at aerodrome          |                             |      |                           |          |
|------------------------|--|--------------|--|-----------------------------|------|---------------------------|----------|
| 1                      |  |              | 2  |                             |      | 3                         |          |
| RWY/Area affected      | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates                | RMK  |                           |          |
| a                      | b  | c            | a  | b                           | c    |                           |          |
|                        |  | ft           |  | ft                          |      |                           |          |
| AOC 10 (1)             | Pole                                       | 1420         | 47 27 23 N<br>008 34 18 E                  | Church                      | 1588 | 47 25 56 N<br>008 34 38 E | A0087/08 |
| AOC 10 (2)             | Pole                                       | 1420         | 47 27 21 N<br>008 34 18 E                  | Building<br>LGTD            | 1483 | 47 27 27 N<br>008 34 25 E | A0096/01 |
| AOC 10 (3)             | Pole                                       | 1422         | 47 27 26 N<br>008 34 20 E                  | Antenna<br>marked/LGTD      | 1705 | 47 24 52 N<br>008 33 56 E | A0164/12 |
| AOC 10 (4)             | Pole                                       | 1426         | 47 27 20 N<br>008 34 20 E                  | Building<br>LGTD            | 1690 | 47 24 49 N<br>008 33 10 E | A0390/02 |
| AOC 10 (5)             | Pole                                       | 1428         | 47 27 23 N<br>008 34 25 E                  | Antenna<br>marked/LGTD      | 1435 | 47 28 23 N<br>008 32 23 E | A0198/07 |
| AOC 10 (6)             | Enclosure                                  | 1433         | 47 27 27 N<br>008 34 30 E                  | Radar<br>marked/LGTD        | 1526 | 47 27 52 N<br>008 33 03 E | A0393/02 |
| AOC 10 (7)             | Pole                                       | 1436         | 47 27 23 N<br>008 34 31 E                  | Crane/Cranes<br>marked/LGTD | 1754 | 47 24 39 N<br>008 32 35 E | A0285/20 |
| AOC 10 (8)             | Pole                                       | 1440         | 47 27 20 N<br>008 34 31 E                  | RVR Camera                  | 1400 | 47 28 49 N<br>008 32 12 E | A0281/08 |
| AOC 10 (9)             | Pole                                       | 1442         | 47 27 22 N<br>008 34 34 E                  | Antenna<br>marked/LGTD      | 1766 | 47 24 39 N<br>008 32 38 E | A0635/08 |
| AOC 10 (10)            | Pole                                       | 1445         | 47 27 23 N<br>008 34 35 E                  | Antenna<br>LGTD             | 1591 | 47 26 56 N<br>008 34 33 E | A0285/00 |
| AOC 10 (11)            | Tree/Trees                                 | 1448         | 47 27 18 N<br>008 34 35 E                  | Antenna<br>marked/LGTD      | 2148 | 47 25 17 N<br>008 27 48 E | A0262/07 |
| AOC 10 (12)            | Tree/Trees                                 | 1452         | 47 27 18 N<br>008 34 35 E                  | Antenna<br>marked/LGTD      | 1591 | 47 26 59 N<br>008 34 26 E |          |
| AOC 10 (13)            | Tree/Trees                                 | 1461         | 47 27 24 N<br>008 34 38 E                  | Tower/Mast<br>LGTD          | 1683 | 47 26 30 N<br>008 34 55 E |          |
| AOC 10 (14)            | Tree/Trees                                 | 1478         | 47 27 26 N<br>008 34 40 E                  | Crane/Cranes<br>marked/LGTD | 1516 | 47 23 35 N<br>008 30 29 E |          |
| AOC 10 (15)            | Building                                   | 1486         | 47 27 25 N<br>008 34 47 E                  | Tower<br>LGTD               | 1550 | 47 27 14 N<br>008 33 28 E |          |
| AOC 10 (16)            | Tree/Trees                                 | 1496         | 47 27 27 N<br>008 34 58 E                  | Antenna<br>LGTD             | 1473 | 47 28 43 N<br>008 31 47 E |          |
| AOC 10 (17)            | Tree/Trees                                 | 1511         | 47 27 25 N<br>008 35 15 E                  | Tower/Mast                  | 2168 | 47 26 11 N<br>008 24 28 E | A0154/10 |
| AOC 10 (18)            | Tree/Trees                                 | 1515         | 47 27 27 N<br>008 35 20 E                  | Antenna<br>marked/LGTD      | 1699 | 47 25 22 N<br>008 32 14 E |          |
| AOC 10 (19)            | Tree/Trees                                 | 1536         | 47 27 26 N<br>008 35 21 E                  | Building<br>LGTD            | 1476 | 47 27 29 N<br>008 34 24 E |          |
| AOC 10 (20)            | Tree/Trees                                 | 1548         | 47 27 25 N<br>008 35 22 E                  | Antenna<br>LGTD             | 1532 | 47 26 43 N<br>008 32 57 E |          |
| AOC 10 (21)            | Tree/Trees                                 | 1554         | 47 27 25 N<br>008 35 23 E                  | Tree/Trees                  | 1611 | 47 26 31 N<br>008 34 20 E |          |
| AOC 10 (22)            | Antenna                                    | 1569         | 47 27 25 N<br>008 35 24 E                  | Building                    | 1532 | 47 27 13 N<br>008 34 13 E |          |
| AOC 10 (23)            | Tree/Trees                                 | 1572         | 47 27 25 N<br>008 35 25 E                  | Antenna<br>LGTD             | 1545 | 47 27 14 N<br>008 33 52 E |          |
| AOC 10 (24)            | Tree/Trees                                 | 1603         | 47 27 09 N<br>008 35 53 E                  | Antenna<br>LGTD             | 1421 | 47 27 26 N<br>008 32 44 E |          |
| AOC 10 (25)            | Tree/Trees                                 | 1620         | 47 27 08 N<br>008 35 54 E                  |                             |      |                           |          |

| In approach/TKOF areas |  |              |                           | In circling area and at aerodrome          |              |                           |          |
|------------------------|--|--------------|---------------------------|--|--------------|---------------------------|----------|
| 1                      |  |              |                           | 2  |              |                           | 3        |
| RWY/Area affected      | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates |                           | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates |                           | RMK      |
| a                      | b  | c            |                           | a  | b            | c                         |          |
|                        |  | ft           |                           |  | ft           |                           |          |
| AOC 10 (26)            | Tree/Trees                                 | 1631         | 47 27 02 N<br>008 36 01 E |  |              |                           |          |
| AOC 10 (27)            | Tree/Trees                                 | 1633         | 47 27 13 N<br>008 36 14 E |  |              |                           |          |
| AOC 10 (28)            | Tree/Trees                                 | 1676         | 47 27 11 N<br>008 36 15 E |  |              |                           |          |
| AOC 28 (1)             | Pole                                       | 1416         | 47 27 30 N<br>008 31 44 E | Antenna<br>LGTD                            | 2881         | 47 28 54 N<br>008 24 10 E | A0492/06 |
| AOC 28 (2)             | Building                                   | 1433         | 47 27 35 N<br>008 31 41 E | RVR Camera                                 | 1402         | 47 28 50 N<br>008 32 14 E | A0279/08 |
| AOC 28 (3)             | Building                                   | 1435         | 47 27 36 N<br>008 31 41 E | Pole                                       | 1956         | 47 27 01 N<br>008 40 02 E | A0413/06 |
| AOC 28 (4)             | Building                                   | 1438         | 47 27 36 N<br>008 31 41 E | Pole                                       | 2002         | 47 27 15 N<br>008 39 44 E | A0412/06 |
| AOC 28 (5)             | Tree/Trees                                 | 1453         | 47 27 29 N<br>008 31 35 E | Pole                                       | 1998         | 47 27 23 N<br>008 39 36 E | A0411/06 |
| AOC 28 (6)             | Transmission line                          | 1464         | 47 27 29 N<br>008 31 23 E | Crane/Cranes<br>marked/LGTD                | 1582         | 47 27 08 N<br>008 33 39 E | A0107/02 |
| AOC 28 (7)             | Transmission line                          | 1465         | 47 27 29 N<br>008 31 23 E | Pole<br>LGTD                               | 1451         | 47 27 38 N<br>008 33 38 E | A0289/02 |
| AOC 28 (8)             | Tree/Trees                                 | 1499         | 47 27 33 N<br>008 31 08 E | Tower<br>marked/LGTD                       | 1684         | 47 26 30 N<br>008 34 55 E | A0045/22 |
| AOC 28 (9)             | Tree/Trees                                 | 1520         | 47 27 34 N<br>008 31 05 E | Antenna<br>marked/LGTD                     | 1542         | 47 27 12 N<br>008 34 05 E | A0316/02 |
| AOC 28 (10)            | Tree/Trees                                 | 1549         | 47 27 39 N<br>008 30 50 E | Antenna<br>LGTD                            | 1533         | 47 26 12 N<br>008 34 17 E | A0041/03 |
| AOC 28 (11)            | Tree/Trees                                 | 1585         | 47 27 31 N<br>008 30 43 E | Antenna<br>marked                          | 1533         | 47 27 32 N<br>008 34 34 E | A0391/02 |
| AOC 28 (12)            | Tree/Trees                                 | 1588         | 47 27 34 N<br>008 30 42 E | Antenna<br>marked                          | 1441         | 47 29 03 N<br>008 32 12 E | A0385/02 |
| AOC 28 (13)            | Tree/Trees                                 | 1599         | 47 27 28 N<br>008 30 40 E | Pole                                       | 2044         | 47 27 32 N<br>008 39 27 E | A0410/06 |
| AOC 28 (14)            | Tree/Trees                                 | 1602         | 47 27 28 N<br>008 30 36 E | Building                                   | 1605         | 47 23 08 N<br>008 31 52 E | A0264/04 |
| AOC 28 (15)            | Tree/Trees                                 | 1604         | 47 27 32 N<br>008 30 36 E | Pole<br>LGTD                               | 1444         | 47 27 32 N<br>008 33 39 E | A0359/02 |
| AOC 28 (16)            | Tree/Trees                                 | 1609         | 47 27 34 N<br>008 30 34 E | Crane/Cranes<br>marked/LGTD                | 1598         | 47 26 25 N<br>008 34 16 E | A0308/19 |
| AOC 28 (17)            | Tree/Trees                                 | 1609         | 47 27 31 N<br>008 30 33 E | Pole<br>LGTD                               | 1500         | 47 27 58 N<br>008 32 56 E | A0361/02 |
| AOC 28 (18)            | Tree/Trees                                 | 1617         | 47 27 28 N<br>008 30 32 E | Tree/Trees                                 | 2054         | 47 27 29 N<br>008 40 19 E | A0416/06 |
| AOC 28 (19)            | Tree/Trees                                 | 1623         | 47 27 37 N<br>008 30 27 E | Tree/Trees                                 | 2012         | 47 27 33 N<br>008 38 51 E | A0415/06 |
| AOC 28 (20)            | Tree/Trees                                 | 1629         | 47 27 43 N<br>008 30 25 E | Tree/Trees                                 | 1943         | 47 27 34 N<br>008 37 13 E | A0414/06 |
| AOC 28 (21)            | Tree/Trees                                 | 1640         | 47 27 49 N<br>008 30 23 E | Tower<br>marked/LGTD                       | 1851         | 47 27 29 N<br>008 36 38 E | A0043/22 |
| AOC 28 (22)            | Tree/Trees                                 | 1645         | 47 27 49 N<br>008 30 21 E | Tower<br>marked/LGTD                       | 1669         | 47 26 05 N<br>008 32 26 E | A0044/22 |
| AOC 28 (23)            | Tree/Trees                                 | 1701         | 47 27 26 N<br>008 29 29 E | RVR Camera                                 | 1383         | 47 28 15 N<br>008 32 13 E | A0277/08 |

| In approach/TKOF areas |  |              |                           | In circling area and at aerodrome          |              |                           |          |
|------------------------|--|--------------|---------------------------|--|--------------|---------------------------|----------|
| 1                      |  |              |                           | 2  |              |                           | 3        |
| RWY/Area affected      | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates |                           | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates | RMK                       |          |
| a                      | b  | c            |                           | a  | b            | c                         |          |
|                        |  | ft           |                           |  | ft           |                           |          |
| AOC 28 (24)            | Tree/Trees                                 | 1772         | 47 27 25 N<br>008 29 20 E | Pole<br>marked/LGTD                        | 1772         | 47 27 47 N<br>008 35 51 E | A0348/01 |
| AOC 28 (25)            | Tree/Trees                                 | 1804         | 47 27 20 N<br>008 28 47 E | Pole<br>marked/LGTD                        | 1800         | 47 27 47 N<br>008 35 51 E | A0042/22 |
| AOC 28 (26)            | Tree/Trees                                 | 1812         | 47 27 21 N<br>008 28 45 E | Antenna<br>marked/LGTD                     | 1542         | 47 27 12 N<br>008 34 05 E | A0316/02 |
| AOC 28 (27)            | Tree/Trees                                 | 1876         | 47 27 50 N<br>008 27 26 E | Antenna<br>marked/LGTD                     | 1459         | 47 28 46 N<br>008 31 46 E | A0286/10 |
| AOC 28 (28)            | Tree/Trees                                 | 1881         | 47 27 48 N<br>008 27 23 E | Pole<br>marked/LGTD                        | 1646         | 47 27 26 N<br>008 30 39 E | A0246/09 |
| AOC 28 (29)            | Tree/Trees                                 | 1915         | 47 27 46 N<br>008 27 18 E | Pole<br>marked/LGTD                        | 1748         | 47 26 51 N<br>008 31 10 E | A0245/09 |
|                        |  |              |                           |  |              |                           |          |
| AOC 14 (1)             | Pole                                       | 1408         | 47 27 41 N<br>008 33 58 E | Pole<br>LGTD                               | 1506         | 47 26 38 N<br>008 33 41 E | A0467/03 |
| AOC 14 (2)             | Pole                                       | 1410         | 47 27 39 N<br>008 33 56 E | Building<br>LGTD                           | 1529         | 47 26 34 N<br>008 33 51 E | B0615/03 |
| AOC 14 (3)             | Pole                                       | 1414         | 47 27 37 N<br>008 33 57 E | Radar<br>LGTD                              | 1609         | 47 26 54 N<br>008 34 38 E | A0491/17 |
| AOC 14 (4)             | Pole                                       | 1420         | 47 27 35 N<br>008 33 58 E | Pole<br>LGTD                               | 2340         | 47 21 59 N<br>008 35 36 E | A0391/03 |
| AOC 14 (5)             | Building                                   | 1423         | 47 27 35 N<br>008 34 06 E | Pole<br>LGTD                               | 2264         | 47 22 13 N<br>008 36 20 E | A0390/03 |
| AOC 14 (6)             | Pole                                       | 1434         | 47 27 30 N<br>008 33 58 E | Pole<br>LGTD                               | 1474         | 47 26 36 N<br>008 33 38 E | A0468/03 |
| AOC 14 (7)             | Pole                                       | 1445         | 47 27 30 N<br>008 34 01 E | Antenna<br>marked/LGTD                     | 1709         | 47 28 16 N<br>008 30 11 E | B0506/05 |
| AOC 14 (8)             | Tree/Trees                                 | 1457         | 47 27 33 N<br>008 34 11 E | Building<br>LGTD                           | 1739         | 47 23 10 N<br>008 31 02 E | A0070/09 |
| AOC 14 (9)             | Tree/Trees                                 | 1476         | 47 27 33 N<br>008 34 12 E | Antenna<br>marked/LGTD                     | 1477         | 47 25 59 N<br>008 33 42 E | A0068/09 |
| AOC 14 (10)            | Building                                   | 1531         | 47 27 13 N<br>008 34 16 E | Tower/Mast<br>marked/LGTD                  | 1687         | 47 28 14 N<br>008 34 00 E | A0229/06 |
| AOC 14 (11)            | Building                                   | 1532         | 47 27 12 N<br>008 34 17 E | Tower/Mast<br>marked/LGTD                  | 1841         | 47 27 12 N<br>008 37 19 E | A0228/06 |
| AOC 14 (12)            | Tree/Trees                                 | 1561         | 47 27 01 N<br>008 34 30 E | Tower/Mast<br>marked/LGTD                  | 2081         | 47 20 53 N<br>008 28 01 E | A0269/06 |
| AOC 14 (13)            | Tree/Trees                                 | 1587         | 47 27 00 N<br>008 34 31 E | Tower/Mast<br>marked/LGTD                  | 1897         | 47 20 28 N<br>008 27 43 E | A0268/06 |
| AOC 14 (14)            | Tree/Trees                                 | 1594         | 47 27 01 N<br>008 34 35 E | Antenna                                    | 1398         | 47 27 05 N<br>008 33 07 E | A0356/06 |
| AOC 14 (15)            | Tree/Trees                                 | 1597         | 47 27 00 N<br>008 34 38 E | Antenna<br>marked/LGTD                     | 1779         | 47 31 15 N<br>008 42 57 E | A0405/09 |
| AOC 14 (16)            | Building                                   | 1619         | 47 26 54 N<br>008 34 37 E | Antenna<br>marked/LGTD                     | 1459         | 47 28 46 N<br>008 31 46 E | A0285/10 |
| AOC 14 (17)            | Tree/Trees                                 | 1650         | 47 26 45 N<br>008 34 59 E | Antenna                                    | 1917         | 47 31 13 N<br>008 34 18 E | A0162/11 |
| AOC 14 (18)            | Tree/Trees                                 | 1658         | 47 26 43 N<br>008 34 59 E | Antenna<br>marked/LGTD                     | 1762         | 47 23 10 N<br>008 31 02 E | A0076/11 |
| AOC 14 (19)            | Tree/Trees                                 | 1673         | 47 26 37 N<br>008 35 08 E | Building<br>LGTD                           | 1710         | 47 23 23 N<br>008 31 38 E | A0161/16 |
| AOC 14 (20)            | Tree/Trees                                 | 1675         | 47 26 37 N<br>008 35 08 E | Antenna<br>LGTD                            | 1521         | 47 26 45 N<br>008 33 08 E | A0647/12 |

| In approach/TKOF areas |  |              |                           | In circling area and at aerodrome          |  |          |   |
|------------------------|--|--------------|---------------------------|--|--|----------|---|
| 1                      |  |              |                           | 2  |  |          | 3 |
| RWY/Area affected      | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates |                           | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates   | RMK      |   |
| a                      | b  | c            |                           | a  | b  | c        |   |
|                        |  | ft           |                           |  | ft   |          |   |
| AOC 14 (21)            | Tree/Trees                                 | 1682         | 47 26 35 N<br>008 35 13 E | Antenna<br>LGTD                            | 1429<br>47 27 51 N<br>008 32 29 E  | A0411/13 |   |
| AOC 14 (22)            | Tree/Trees                                 | 1686         | 47 26 33 N<br>008 35 16 E | Antenna<br>LGTD                            | 1454<br>47 27 43 N<br>008 33 59 E  | A0406/13 |   |
| AOC 14 (23)            | Tree/Trees                                 | 1699         | 47 26 33 N<br>008 35 21 E | Antenna<br>marked/LGTD                     | 1419<br>47 27 36 N<br>008 33 59 E  | A0171/14 |   |
| AOC 14 (24)            | Tree/Trees                                 | 1702         | 47 26 38 N<br>008 35 32 E | Antenna<br>marked/LGTD                     | 1442<br>47 28 50 N<br>008 32 26 E  | A0170/14 |   |
| AOC 14 (25)            | Tree/Trees                                 | 1753         | 47 26 37 N<br>008 35 48 E | Antenna<br>marked/LGTD                     | 1415<br>47 28 50 N<br>008 32 26 E  | A0169/14 |   |
|                        |  |              |                           | Crane/Cranes<br>marked/LGTD                | 1542<br>47 28 38 N<br>008 30 03 E  | A0183/19 |   |
|                        |  |              |                           | Building<br>LGTD                           | 1640<br>47 24 31 N<br>008 35 29 E  | A0060/20 |   |
|                        |  |              |                           | Power line                                 | 158 ft<br>AGL<br>47 27 41 N<br>008 39 23 E<br>47 27 32 N<br>008 39 27 E<br>47 27 23 N<br>008 39 36 E<br>47 27 15 N<br>008 39 44 E<br>47 27 01 N<br>008 40 02 E | A0409/06 |   |
| AOC 32 (1)             | Pole                                       | 1407         | 47 29 01 N<br>008 32 03 E | Building<br>marked                         | 1404<br>47 28 50 N<br>008 32 26 E  |          |   |
| AOC 32 (2)             | Pole                                       | 1407         | 47 29 01 N<br>008 32 02 E | Building<br>marked                         | 1390<br>47 28 23 N<br>008 32 23 E  |          |   |
| AOC 32 (3)             | Pole                                       | 1409         | 47 29 00 N<br>008 31 59 E | Pole<br>LGTD                               | 1465<br>47 27 29 N<br>008 31 23 E  | A0304/16 |   |
| AOC 32 (4)             | Pole                                       | 1410         | 47 29 01 N<br>008 31 57 E | Chimney<br>LGTD                            | 1538<br>47 26 57 N<br>008 33 59 E  | A0059/20 |   |
| AOC 32 (5)             | Enclosure                                  | 1422         | 47 29 10 N<br>008 31 55 E | Crane/Cranes<br>marked/LGTD                | 1586<br>47 27 03 N<br>008 35 07 E  | A0675/21 |   |
| AOC 32 (6)             | Enclosure                                  | 1422         | 47 29 10 N<br>008 31 55 E | Pole<br>marked/LGTD                        | 1526<br>47 27 59 N<br>008 32 57 E  | A0269/18 |   |
| AOC 32 (7)             | Tree/Trees                                 | 1428         | 47 29 11 N<br>008 31 56 E | Antenna                                    | 1541<br>47 27 05 N<br>008 31 49 E  | A0450/17 |   |
| AOC 32 (8)             | Tree/Trees                                 | 1435         | 47 29 11 N<br>008 31 54 E | Building<br>LGTD                           | 1486<br>47 26 23 N<br>008 33 53 E  | A0469/16 |   |
| AOC 32 (9)             | Tree/Trees                                 | 1444         | 47 29 18 N<br>008 31 49 E | Building<br>LGTD                           | 1475<br>47 26 23 N<br>008 33 52 E  | A0468/16 |   |
| AOC 32 (10)            | Tree/Trees                                 | 1463         | 47 29 24 N<br>008 31 28 E | Tree/Trees                                 | 1584<br>47 26 56 N<br>008 34 41 E  | A0490/16 |   |
| AOC 32 (11)            | Tree/Trees                                 | 1464         | 47 29 24 N<br>008 31 28 E | Crane/Cranes<br>marked/LGTD                | 1709<br>47 22 40 N<br>008 32 49 E  | A0518/16 |   |
| AOC 32 (12)            | Tree/Trees                                 | 1479         | 47 29 25 N<br>008 31 27 E | Antenna<br>marked/LGTD                     | 1524<br>47 27 15 N<br>008 33 52 E  | A0658/21 |   |
| AOC 32 (13)            | Tree/Trees                                 | 1501         | 47 29 45 N<br>008 31 21 E | Antenna<br>marked/LGTD                     | 1488<br>47 27 17 N<br>008 34 11 E  | A0657/21 |   |
| AOC 32 (14)            | Tree/Trees                                 | 1509         | 47 29 45 N<br>008 31 21 E | Antenna<br>marked/LGTD                     | 1541<br>47 26 55 N<br>008 33 44 E  | A0180/17 |   |
| AOC 32 (15)            | Tree/Trees                                 | 1625         | 47 30 41 N<br>008 29 39 E | Antenna<br>marked/LGTD                     | 1427<br>47 28 17 N<br>008 32 11 E  | A0656/21 |   |

| In approach/TKOF areas |  |              |                           | In circling area and at aerodrome          |              |                           |          |
|------------------------|--|--------------|---------------------------|--|--------------|---------------------------|----------|
| 1                      |  |              |                           | 2  |              |                           | 3        |
| RWY/Area affected      | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates |                           | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates | RMK                       |          |
| a                      | b  |              | c                         | a  |              | b                         | c        |
|                        |  | ft           |                           |  | ft           |                           |          |
| AOC 32 (16)            | Tree/Trees                                 | 1633         | 47 30 43 N<br>008 29 40 E | Antenna<br>marked/LGTD                     | 1436         | 47 28 26 N<br>008 33 01 E | A0655/21 |
| AOC 32 (17)            | Tree/Trees                                 | 1638         | 47 30 48 N<br>008 29 45 E | Crane/Cranes<br>marked/LGTD                | 1800         | 47 24 40 N<br>008 32 39 E | A0251/22 |
| AOC 32 (18)            | Tree/Trees                                 | 1655         | 47 30 51 N<br>008 29 45 E |  |              |                           |          |
| AOC 32 (19)            | Tree/Trees                                 | 1662         | 47 30 55 N<br>008 29 40 E |  |              |                           |          |
| AOC 32 (20)            | Tree/Trees                                 | 1667         | 47 30 59 N<br>008 29 40 E |  |              |                           |          |
| AOC 16 (1)             | Pole                                       | 1387         | 47 26 42 N<br>008 33 26 E |  |              |                           |          |
| AOC 16 (2)             | Pole                                       | 1395         | 47 26 38 N<br>008 33 33 E |  |              |                           |          |
| AOC 16 (3)             | Structure                                  | 1397         | 47 26 38 N<br>008 33 33 E |  |              |                           |          |
| AOC 16 (4)             | Pole                                       | 1405         | 47 26 33 N<br>008 33 37 E |  |              |                           |          |
| AOC 16 (5)             | Pole                                       | 1410         | 47 26 33 N<br>008 33 39 E |  |              |                           |          |
| AOC 16 (6)             | Pole                                       | 1414         | 47 26 30 N<br>008 33 39 E |  |              |                           |          |
| AOC 16 (7)             | Pole                                       | 1416         | 47 26 30 N<br>008 33 41 E |  |              |                           |          |
| AOC 16 (8)             | Pole                                       | 1421         | 47 26 26 N<br>008 33 38 E |  |              |                           |          |
| AOC 16 (9)             | Pole                                       | 1423         | 47 26 24 N<br>008 33 36 E |  |              |                           |          |
| AOC 16 (10)            | Pole                                       | 1429         | 47 26 20 N<br>008 33 34 E |  |              |                           |          |
| AOC 16 (11)            | Pole                                       | 1432         | 47 26 20 N<br>008 33 36 E |  |              |                           |          |
| AOC 16 (12)            | Building                                   | 1436         | 47 26 20 N<br>008 33 46 E |  |              |                           |          |
| AOC 16 (13)            | Tree/Trees                                 | 1444         | 47 26 19 N<br>008 33 50 E |  |              |                           |          |
| AOC 16 (14)            | Building                                   | 1446         | 47 26 18 N<br>008 33 48 E |  |              |                           |          |
| AOC 16 (15)            | Transmission line                          | 1454         | 47 26 18 N<br>008 33 52 E |  |              |                           |          |
| AOC 16 (16)            | Tree/Trees                                 | 1468         | 47 26 12 N<br>008 33 53 E |  |              |                           |          |
| AOC 16 (17)            | Building                                   | 1472         | 47 26 04 N<br>008 33 39 E |  |              |                           |          |
| AOC 16 (18)            | Building                                   | 1486         | 47 25 59 N<br>008 33 42 E |  |              |                           |          |
| AOC 16 (19)            | Building                                   | 1508         | 47 25 44 N<br>008 33 52 E |  |              |                           |          |
| AOC 16 (20)            | Building                                   | 1511         | 47 25 43 N<br>008 33 52 E |  |              |                           |          |
| AOC 16 (21)            | Building                                   | 1544         | 47 25 29 N<br>008 34 28 E |  |              |                           |          |

| In approach/TKOF areas |  |              |                           | In circling area and at aerodrome          |              |     |
|------------------------|--|--------------|---------------------------|--|--------------|-----|
| 1                      |  |              |                           | 2  |              | 3   |
| RWY/Area affected      | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates |                           | Obstacle type<br>Elevation<br>Markings/LGT | Co-ordinates | RMK |
| a                      | b  | c            |                           | a  | b            | c   |
|                        |  | ft           |                           |  | ft           |     |
| AOC 16 (22)            | Building                                   | 1554         | 47 25 29 N<br>008 34 29 E |  |              |     |
| AOC 16 (23)            | Building                                   | 1565         | 47 25 27 N<br>008 34 30 E |  |              |     |
| AOC 16 (24)            | Building                                   | 1566         | 47 25 27 N<br>008 34 30 E |  |              |     |
| AOC 16 (25)            | Building                                   | 1701         | 47 23 58 N<br>008 36 00 E |  |              |     |
| AOC 16 (26)            | Building                                   | 1768         | 47 23 58 N<br>008 36 01 E |  |              |     |
| AOC 16 (27)            | Transmission line                          | 1921         | 47 22 14 N<br>008 37 49 E |  |              |     |
| AOC 16 (28)            | Transmission line                          | 1927         | 47 22 14 N<br>008 37 49 E |  |              |     |
|                        |  |              |                           |  |              |     |
| AOC 34 (1)             | Pole                                       | 1396         | 47 28 36 N<br>008 32 07 E |  |              |     |
| AOC 34 (2)             | Pole                                       | 1397         | 47 28 37 N<br>008 32 07 E |  |              |     |
| AOC 34 (3)             | Pole                                       | 1398         | 47 28 38 N<br>008 32 06 E |  |              |     |
| AOC 34 (4)             | Pole                                       | 1398         | 47 28 39 N<br>008 32 05 E |  |              |     |
| AOC 34 (5)             | Pole                                       | 1405         | 47 28 41 N<br>008 32 04 E |  |              |     |
| AOC 34 (6)             | Pole                                       | 1409         | 47 28 45 N<br>008 32 01 E |  |              |     |
| AOC 34 (7)             | Building                                   | 1417         | 47 28 44 N<br>008 31 56 E |  |              |     |
| AOC 34 (8)             | Tree/Trees                                 | 1445         | 47 29 03 N<br>008 31 41 E |  |              |     |
| AOC 34 (9)             | Tree/Trees                                 | 1458         | 47 29 05 N<br>008 31 41 E |  |              |     |
| AOC 34 (10)            | Tree/Trees                                 | 1490         | 47 29 34 N<br>008 31 44 E |  |              |     |
| AOC 34 (11)            | Tree/Trees                                 | 1537         | 47 29 35 N<br>008 31 43 E |  |              |     |
| AOC 34 (12)            | Tree/Trees                                 | 1564         | 47 29 48 N<br>008 31 22 E |  |              |     |
| AOC 34 (13)            | Tree/Trees                                 | 1565         | 47 29 51 N<br>008 31 33 E |  |              |     |

Refer also to AOC 10, LSZH AD 2.24.4 - 1; AOC 28, LSZH AD 2.24.4 - 3; AOC 14, LSZH AD 2.24.4 - 5; AOC 32, LSZH AD 2.24.4 - 7; AOC 16, LSZH AD 2.24.4 - 9; AOC 34, 24.4 -11

**LSZH AD 2.11 METEOROLOGICAL INFORMATION PROVIDED**

|    |   |   |
|----|---|---|
| 1  | Associated MET Office   | MeteoSwiss  |
| 2  | Hours of service  | H24   |
| 3  | Office responsible for TAF preparation<br>Periods of validity       | MeteoSwiss, Zurich<br>30 hours  |
| 4  | Type of landing forecast  | Trend; issuance: HH+20, HH+50   |
| 5  | Briefing/consultation provided                                      | Self Briefing Service (www.skybriefing.com), (TAMSI <sup>1</sup> ), Briefing officer  |
| 6  | Flight documentation<br>Language(s) used                            | Digital and hard copy<br>En, Ge, Fr   |
| 7  | Charts and other information available for briefing or consultation | All area forecast charts available worldwide  |
| 8  | Supplementary equipment available for providing information         | Weather Radar, Satellite Pictures   |
| 9  | ATS units provided with information                                 | Zurich TWR / APP  |
| 10 | Additional information (limitation of service, etc.)                | Manned briefing between 0400 and 2100 (0300 and 2000).<br>Weather briefing:<br>Phone: 0900 162 737 (Ge);<br>accessible within Switzerland<br>Weather alert: orange FLG lights are ACT on apron areas if a lightning warning is active, red FLG lights are ACT on apron areas if a handling & fueling stop is required due to immediate adverse meteorological conditions. The warning lights are operated by the Airport Authority. |

1. TAMSI = TAF METAR SIGMET

**LSZH AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS**

| Designations<br>RWY NR | TRUE &<br>MAG<br>BRG | Dimensions<br>of RWY (m) | Strength (PCR)<br>and surface of<br>RWY and SWY | THR<br>COORD   | THR ELEV<br>and<br>highest<br>TDZ ELEV | Slope of<br>RWY-SWY                     |
|------------------------|----------------------|--------------------------|---|--|--|---|
| 1                      | 2                    | 3                        | 4   | 5  | 6                                      | 7                                       |
| 10*                    | 096° GEO<br>093° MAG | 2500 x 60                | ASPH**<br>PCR 875/F/B/W/T                       | 47 27 32.18N 008 32 14.93E<br>GUND 47.3 m / 155.2 ft | 1391 ft<br>1392 ft                     | Refer to LSZH<br>AOC 16/34/32,<br>10/28 |
| 28*                    | 276° GEO<br>273° MAG |                          |   | 47 27 23.76N 008 34 13.63E<br>GUND 47.2 m / 155.0 ft | 1416 ft<br>1417 ft                     |   |
| 14                     | 137° GEO<br>134° MAG | 3300 x 60                | ASPH**<br>PCR 875/F/A/W/T                       | 47 28 55.53N 008 32 09.87E<br>GUND 47.3 m / 155.3 ft | 1402 ft<br>1402 ft                     |   |
| 32                     | 317° GEO<br>314° MAG |                          |   | 47 27 40.65N 008 33 52.06E<br>GUND 47.3 m / 155.0 ft | 1402 ft<br>1402 ft                     |   |
| 16*                    | 155° GEO<br>152° MAG | 3700 x 60                | ASPH**<br>PCR 875/F/B/W/T                       | 47 28 32.57N 008 32 09.37E<br>GUND 47.3 m / 155.2 ft | 1390 ft<br>1390 ft                     |   |
| 34*                    | 335° GEO<br>332° MAG |                          |   | 47 26 57.39N 008 33 14.91E<br>GUND 47.3 m / 155.0 ft | 1388 ft<br>1389 ft                     |   |

\* MAG VAR tolerance for RWY designators exceeded.

\*\* Central strip 23 m wide; remaining side strips CONC PCR 1260/R/B/W/T.

| Designations<br>RWY<br>NR | SWY<br>dimensions<br>(m) | CWY<br>dimensions<br>(m) | Strip<br>dimensions<br>(m) | OFZ | Remarks  |
|---------------------------|--------------------------|--------------------------|----------------------------|-----|--|
| 1                         | 8                        | 9                        | 10                         | 11  | 12   |
| 10                        | NIL                      | 60 x 150                 | 2620 x 150                 | NIL | Non-instrument runway<br>Grooved<br>RESA: 240x150 m  |
| 28                        | NIL                      | 60 x 150                 | 2620 x 150                 | NIL | RWY strip dimensions according to non-instrument RWY criteria.<br>Grooved<br>RESA: 100x150 m<br>Engineered Materials Arresting System (EMAS) with a length of 160 m and a width of 60 m at the end of RWY 28.                          |
| 14                        | NIL                      | 60 x 150                 | 3420 x 300                 | YES | Precision approach runway CAT III<br>Grooved<br>RESA: 240x150 m<br>Fully frangible LOC (75 m x 3 m) positioned within RESA at 216 m after RWY end.<br>GP14 shelter located at 120 m from RCL within runway strip (marked and lighted). |
| 32                        | NIL                      | 60 x 150                 | 3420 x 300                 | NIL | Non-instrument runway<br>Grooved<br>RESA: 240x150 m  |
| 16                        | NIL                      | 60 x 150                 | 3820 x 300                 | YES | Precision approach runway CAT III<br>Grooved<br>RESA: 240x150 m<br>GP16 shelter located at 120 m from RCL within runway strip (marked and lighted).  |
| 34                        | NIL                      | 60 x 150                 | 3820 x 300                 | NIL | Precision approach runway CAT I<br>Grooved<br>RESA: 240x150 m  |

## LSZH AD 2.13 DECLARED DISTANCES

| RWY<br>Designator | TORA (m)   | TODA (m)   | ASDA (m)   | LDA (m)    | Remarks                          |
|-------------------|------------|------------|------------|------------|----------------------------------|
| 1                 | 2          | 3          | 4          | 5          | 6                                |
| 10                | 2500       | 2560       | 2500       | 2500       | Full length                      |
|                   | 2000       | 2060       | 2000       | Not usable | Intersection B7                  |
|                   | 1900       | 1960       | 1900       | Not usable | Intersection L7                  |
|                   | 1480       | 1540       | 1480       | Not usable | Intersection E                   |
| 28                | 2500       | 2560       | 2500       | 2500       | Full length                      |
|                   | 1900       | 1960       | 1900       | Not usable | Intersection K                   |
| 14                | Not usable | Not usable | Not usable | 3150       | --                               |
| 32                | 3300       | 3360       | 3300       | 3300       | Full length                      |
|                   | 2700       | 2760       | 2700       | Not usable | Intersection H2                  |
|                   | 2300       | 2360       | 2300       | Not usable | Intersection H1                  |
| 16                | 3700       | 3760       | 3700       | 3700       | Full length                      |
|                   | 3000       | 3060       | 3000       | Not usable | Intersection E3                  |
|                   | 1070       | 1130       | 1070       | Not usable | Intersection E6 / E7 / R7 / LIMA |
| 34                | 3700       | 3760       | 3700       | 3240       | Full length                      |
|                   | 3270       | 3330       | 3270       | Not usable | Intersection E8 / R8             |
|                   | 2570       | 2630       | 2570       | Not usable | Intersection E7 / R7             |

LSZH AD 2.14 APPROACH AND RUNWAY LIGHTING

| RWY Designator | ALS type, LEN, INTST  | THR LGT colour, INTST, WBAR                   | VASIS type, PSN, MEHT         | RTZL LEN, colour, INTST                  | RCLL LEN, spacing, colour, INTST   | REDL LEN, spacing, colour, INTST   | RENL colour, INTST | SWY LGT LEN, colour, INTST | RMK                                      |
|----------------|---|---|-------------------------------|--|--|--|--------------------|----------------------------|--|
| 1              | 2   | 3   | 4                             | 5  | 6  | 7  | 8                  | 9                          | 10                                       |
| 10             | NIL   | RTHL G, LIL, LED                              | NIL                           | NIL                                      | 1600 m, 15 m, W, LIH; 600 m, 15 m, R/W, LIH; 300 m, 15 m, R, LIH. All LED    | 1900 m, 45 m, W, LIH; 600 m, 45 m, Y, LIH. All LED                         | R, LIH, LED        | NIL                        | NIL                                      |
| 28             | Calvert, 630 m, LIH, LED; SALS 420 m, LIL, LED                  | RTHL G, LIH, LED; RTIL FLG W, LED             | PAPI 3.3°, L, 18.83 m, no LED | Simple TZL* 921 m FM THR 28, W, LIH, LED | R/W, LIH; 300 m, 15 m, R, LIH. All LED                                       | 1900 m, 45 m, W, LIH; 600 m, 45 m, Y, LIH. All LED                         | R, LIH, LED        | NIL                        | Calvert 28 shorter than standard (900m). |
| 14             | Calvert CAT II/III, 900 m, LIH, no LED                          | RTHL G, LIH, WBAR, no LED; RTIL FLG W, no LED | PAPI 3.0°, L, 17.40 m, no LED | LIH 900 m, no LED                        | 2400 m, 15 m, W, LIH; 600 m, 15 m, R/W, LIH; 300 m, 15 m, R, LIH. All no LED | 150 m, 30 m, R, LIH; 2550 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH. All no LED | R, LIH, no LED     | NIL                        | NIL                                      |
| 32             | NIL   | RTHL G, LIH, LED; RTIL FLG W, LED             | NIL                           | NIL                                      | 2700 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH. All no LED                        | 2700 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH. All no LED                      | R, LIH, no LED     | NIL                        | NIL                                      |
| 16             | Calvert CAT II/III, 900 m, LIH, no LED; SALS 420 m, LIL, no LED | RTHL G, LIH, WBAR, no LED; RTIL FLG W, no LED | PAPI 3.0°, L, 20.57 m, no LED | LIH 900 m, no LED                        | 2800 m, 15 m, W, LIH; 600 m, 15 m, R/W, LIH; 300 m, 15 m, R, LIH. All no LED | 3100 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH. All no LED                      | R, LIH, no LED     | NIL                        | NIL                                      |
| 34             | Calvert CAT I, 795 m, LIH, no LED                               | RTHL G, LIH, WBAR, no LED; RTIL FLG W, no LED | PAPI 3.3°, L, 17.60 m, no LED | NIL                                      | 450 m, 30 m, R, LIH; 2650 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH. All no LED   | 450 m, 30 m, R, LIH; 2650 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH. All no LED | R, LIH, no LED     | NIL                        | Calvert 34 shorter than standard (900m). |

\*TZL: The purpose of simple touchdown zone lights is to provide pilots with enhanced situational awareness in all visibility conditions and to help enable pilots to decide whether to commence a go-around if the aircraft has not landed by a certain point on the runway.

**LSZH AD 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY**

|   |  |  |
|---|--|--|
| 1 | ABN/IBN location, characteristics and hours of operation | NIL  |
| 2 | LDI location and LGT<br>Anemometer location and LGT      | No LDI.<br>Anemometer:<br>RWY 14: 325 m S of THR 14, LGTD.<br>RWY 16: 385 m N of THR 16, LGTD.<br>RWY 28: 330 m NW of THR 28, LGTD.<br>RWY 34: 590 m NW of THR 34, LGTD.   |
| 3 | TWY edge and centre line lighting                        | Edge no LED: RWY exits, TWY curves, G, R, S, T and apron area. LIL, B<br>Edge LED: RWY exits, TWY curves L, L7, L9 LIH, B<br>CL no LED: TWY A, A1, B, B1, B9, C, C1, C2, C3, D, E, E1, E2, E3, E5, E7, E8, E9, F, F1, F2, F3, H, H1, H2, H3, INNER, J, K, L9, Link 1, Link 2, Link 3, Link 4, Link 5, Link 6, Link 7, M, N, P and Z. LIH, G; coded Y/G on ILS critical/sensitive areas, LIH.<br>CL LED: TWY T, E (partially), E6 (partially), M (partially), LIH, G<br>RETIL no LED: H1. LIH, Y. |
| 4 | Secondary power supply/switch-over time                  | AVBL / MAX 1 sec.  |
| 5 | Remarks  | OBST: Marked and lighted (see <a href="#">LSZH AD 2.24.1 - 1</a> )   |

**LSZH AD 2.16 HELICOPTER LANDING AREA**

|   |   |  |
|---|---|--|
| 1 | Coordinates TLOF or THR of FATO<br>Geoid undulation       | THR 01: 47 26 57.90 N 008 32 51.89 E<br>GUND 47.3m / 155.1 ft<br>THR 19: 47 27 06.77 N 008 32 56.13 E<br>GUND 47.3 m / 155.1 ft  |
| 2 | TLOF and/or FATO elevation                                | FATO: 421 m / 1382 ft  |
| 3 | TLOF and FATO area dimensions, surface, strength, marking | Reference HEL: Overall LEN 17 m, rotor diameter 14.0 m<br>TLOF: 10 stands collocated with TLOF, inner diameter touchdown/positioning marking 8.5 m<br>Distance between centre of stands 28 m, ASPH<br>FATO: 25 x 290 m, grass<br>Markings: FATO designation, heliport identification, touchdown/positioning and apron safety line.   |
| 4 | True BRG of FATO  | FATO THR 01: 018°<br>FATO THR 19: 198°   |
| 5 | Declared distance available                               | Ref: VFRM Zürich HEL, LSZH AD INFO 3   |
| 6 | APP and FATO lighting                                     | FATO lighted, no LED   |
| 7 | Remarks   | The geographical coordinates of helicopter stands are not published in AIP.<br>The diameter of the stand protection area is 28 m instead of 34 m required. Therefore simultaneous operations on Heliport West are not allowed due to overlapping of the protection areas.<br>It is the pilot's responsibility to avoid simultaneous operation between: <ul style="list-style-type: none"> <li>• Adjacent helicopter stand</li> <li>• Helicopter stands and FATO</li> <li>• FATO and the taxiway SIERRA</li> </ul> HEL TKOF or LDG shall take place on FATO, RWY or designated helicopter landing area.<br>Air taxi shall only take place on RWYs, TWYs and at Heliport West.<br>Air taxi and/or taxi are considered as ground movements. ATC does not apply wake turbulence separation to ground movements and it is the pilot in commands responsibility to be aware of and avoid as far as practicable, turbulent wake hazards.<br>HEL OPS at GA sectors 1-4 is prohibited, except HEMS.<br>Unless otherwise directed by air traffic control, the last assigned SSR code shall be retained. If no SSR code has been assigned, Mode A code 2000 (for repositioning) or 7000 (for VFR flights) shall be selected.<br>Detailed charts: VFR Manual |

LSZH AD 2.17 ATS AIRSPACE

|   |                                |   |
|---|--------------------------------|---|
| 1 | Designation and lateral limits | <b>Zurich CTR</b><br>47 21 49 N 008 32 10 E - 47 21 52 N 008 23 26 E -<br>47 23 20 N 008 20 36 E - 47 29 06 N 008 19 59 E -<br>47 30 44 N 008 20 38 E - 47 32 10 N 008 21 38 E -<br>47 33 10 N 008 22 33 E - 47 34 08 N 008 23 57 E -<br>47 35 20 N 008 26 21 E - 47 36 12 N 008 28 54 E -<br>47 36 34 N 008 32 27 E - 47 30 35 N 008 44 15 E -<br>47 29 46 N 008 44 57 E - 47 29 33 N 008 46 08 E -<br>47 27 40 N 008 45 34 E - 47 23 58 N 008 44 27 E -<br>47 23 17 N 008 43 24 E - 47 21 50 N 008 42 58 E -<br>47 19 10 N 008 34 10 E - 47 21 49 N 008 32 10 E |
| 2 | Vertical limits                | CTR: 4500 ft AMSL (1350 m)  |
| 3 | Airspace classification        | D   |
| 4 | ATS unit call sign Language(s) | CTR: Zurich TWR, En   |
| 5 | Transition altitude            | 7000 ft   |
| 6 | Remarks                        | NIL   |

LSZH AD 2.18 ATS COMMUNICATION FACILITIES

| Service designation        | Call sign   | Frequency   | Hours of Operation   | Remarks   |
|----------------------------|---|---|--|---|
| 1                          | 2   | 3   | 4  | 5   |
| ZURICH AREA                |   | 121.500 MHz   | H24  | <b>Language: En</b><br>Emergency channel  |
| ATIS ARR                   |   | 125.730 MHz   | H24  | Phone: Service +41 (0) 43 931 60 72   |
| ATIS DEP                   |   | 129.005 MHz   | H24  | Phone: Service +41 (0) 43 931 60 73   |
| APP/SR VDF <sup>1)</sup>   | Zurich Arrival<br>do.<br>Zurich Departure<br>Zurich Final | 130.560 MHz<br>135.230 MHz<br>125.955 MHz<br>125.330 MHz<br>120.750 MHz | H24<br>H24<br>HX*<br>HX*<br>HX*  | ARR ACFT via GIPOL<br>ARR ACFT via AMIKI and RILAX<br>DEP ACFT<br>*only on ATC instruction<br>ALTN FREQ for all APP services<br>(Zurich Arrival, Departure and Final) |
| TWR VDF <sup>1)</sup>      | Zurich Tower<br>do.<br>do.                                | 118.100 MHz<br>120.230 MHz<br>119.700 MHz                               | H24<br>H24<br>H24  | Primary<br>APCH RWY 14 and TKOF RWY 32<br>ALTN FREQ   |
| Dubendorf TWR              | Dubendorf Tower   | 118.975 MHz   | HX   | See: ENR 2.1 TMA Zurich 5: up to FL095 - if<br>Dubendorf TWR inactive, contact Zurich<br>Information 124.700 MHz  |
| Terminal VDF <sup>1)</sup> | Zurich Terminal   | 127.755 MHz   | H24  | VFR FLT within LSZH TMA   |
| CLR DEL                    | Zurich Delivery   | 121.930 MHz   | H24  | ATC clearance for IFR   |
| GND VDF <sup>1)</sup>      | Zurich Ground   | 121.905 MHz<br>118.100 MHz<br>119.700 MHz                               | H24<br>H24<br>H24  | Primary   |
| De-icing                   | Pad Coordinator<br>F                                      | 121.635 MHz   | AVBL if MET COND<br>requires   | REF: LSZH AD 2.20, § 5  |
|                            | Pad Coordinator<br>C                                      | 121.640 MHz   | AVBL if MET COND<br>requires   | REF: LSZH AD 2.20, § 5  |
|                            | De-icing Coordination                                     | 121.810 MHz   | H24  |   |
| APRON                      | Zurich Apron<br>do.<br>do.<br>do.                         | 121.755 MHz<br>121.705 MHz<br>121.855 MHz<br>121.980 MHz                | 0445-2230 (0345-2130)<br>0445-2230 (0345-2130)<br>0445-2230 (0345-2130)<br>0445-2230 (0345-2130) | South of RWY 28<br>ALTN FREQ<br>North of RWY 28<br>ALTN FREQ  |
| FIC                        | Zurich Information  | 124.700 MHz   | H24  | For VFR FLT within TMA  |
| Fire Brigade               | Florian 1   | 123.100 MHz   | H24*   | *Only when fire brigade present on site.<br>REF: LSZH AD 2.6 §4   |

1. VDF REC antenna PSN: 47 27 01 N 008 34 37 E

## LSZH AD 2.19 RADIO NAVIGATION AND LANDING AIDS

| Type of aid, supported OPS, classification, MAG VAR, (declination)  | ID            | FREQ CH NR, RPI        | Hours of operation | Coordinates of transmitting antenna position | ELEV of DME antenna or GBAS; ELEV, ellipsoid HGT of reference point SBAS; ellipsoid HGT of LTP/FTP | SER volume radius from GBAS reference point | RMK   |
|---|---------------|------------------------|--------------------|--|--|---|---|
| 1   | 2             | 3                      | 4                  | 5  | 6  | 7   | 8   |
| TRASADINGEN DME   | TRA           | CH 90X                 | H24                | 47 41 22.2N<br>008 26 13.1E                  | 1850 ft  | NIL   | DOC 100 NM / 50'000 ft<br>Paired VOR FREQ<br>114.30 MHz   |
| KLOTEN DVOR/DME, VAR 3° E   | KLO           | 114.85 MHz<br>95Y      | H24                | 47 27 25.7N<br>008 32 44.1E                  | 1410 ft  | NIL   | PSN: 234° MAG, 0.12 NM FM ARP.<br>DOC 50 NM / 25'000 ft<br>VOR partially UNREL BTN R235 and R245 BLW 7400 ft AMSL and BTN R040 and R080 BLW 5200 ft AMSL.   |
| ZURICH EAST DVOR/DME, VAR 3° E                                      | ZUE           | 110.05 MHz<br>37Y      | H24                | 47 35 31.8N<br>008 49 03.6E                  | 1734 ft  | NIL   | PSN: 051° MAG, 13.6 NM FM ARP.<br>DOC 80 NM / 50'000 ft   |
| HOCHWALD DME  | HOC           | CH 79X                 | H24                | 47 27 59.6N<br>007 39 55.6E                  | 2425 ft  | NIL   | DOC 60 NM / 50'000 ft,<br>DME range 85 NM in sector 30° - 120°.<br>Paired VOR FREQ<br>113.20 MHz  |
| KRONBERG DME  | KRO           | CH 28Y                 | H24                | 47 17 30.1N<br>009 19 39.9E                  | 5489 ft  | NIL   | DOC 100 NM / 50'000 ft in sector 185° - 115°, unreliable in sector 115° - 185°.<br>Paired VOR FREQ<br>109.15 MHz  |
| WILLISAU DVOR/DME, VAR 3° E   | WIL           | 116.90 MHz<br>CH 116X  | H24                | 47 10 42.1N<br>007 54 20.9E                  | 2426 ft  | NIL   | DOC 50 NM / 25'000 ft, range 80 NM in sector 0° - 105°.   |
| GBAS, class C/G1/0/H, APCH facility designation LSZH/G14A/20242/S/C | G14A (RWY 14) | 114.05 MHz<br>CH 20242 | H24                | 47 28 46.9N<br>008 31 49.2E                  | ELEV of GBAS<br>1416 ft  | NIL   | Restricted coverage (published procedures covered):<br>at 15 NM -35°E to 20°S from CL above 3700 ft AMSL.<br>at 15 NM +/- 35° from CL above 4000 ft AMSL.<br>at 20 NM +/- 10° from CL above 4700 ft AMSL.<br>Ellipsoid height: 478.81 m   |
| LOC 14; ILS CAT III, class III/E/4 VAR 3° E                         | IKL           | 111.75 MHz             | H24                | 47 27 35.5N<br>008 33 59.1E                  | NIL  | NIL   | LOC PSN:<br>216 m FM THR 32.<br>RWY 14: LOC course 134° MAG.<br>Front course sector width 3.57°.<br>Restricted coverage: (published procedures covered):<br>at 10 NM - +/- 35° from CL above 3800 ft AMSL.<br>at 17 NM - 24° E to 33° W from CL above 3800 ft AMSL.<br>at 25 NM - +/- 10° from CL above 4500 ft AMSL. |

| Type of aid, supported OPS, classification, MAG VAR, (declination) | ID  | FREQ CH NR, RPI | Hours of operation | Coordinates of transmitting antenna position | ELEV of DME antenna or GBAS; ELEV, ellipsoid HGT of reference point SBAS; ellipsoid HGT of LTP/FTP | SER volume radius from GBAS reference point | RMK   |
|--|-----|-----------------|--------------------|--|--|---|---|
| 1  | 2   | 3               | 4                  | 5  | 6  | 7   | 8   |
| GP 14  |     | 333.35 MHz      | H24                | 47 28 50.0N<br>008 32 25.8E                  | NIL  | NIL   | GP angle 3°. PSN: 350 m FM THR 14. GP HGT THR 14: 53 ft / 16.2 m.   |
| DME 14   | IKL | 54Y             | H24                | 47 28 50.0N<br>008 32 25.6E                  | 1415 ft  | NIL   | DME co-located with GP. Zero range at DME station. Restricted coverage (published procedures covered):<br>at 10 NM - +/- 35° from CL above 3800 ft AMSL.<br>at 17 NM - +/- 35° from CL above 3800 ft AMSL.<br>at 25 NM - 10° E to 0° W from CL above 4500 ft AMSL.  |
| LOC 16, ILS CAT III, class III/E/4, VAR 3° E                       | IZH | 110.50 MHz      | H24                | 47 26 35.2N<br>008 33 30.2E                  | NIL  | NIL   | LOC PSN: 758 m FM THR 34. RWY 16: LOC course 152° MAG Front course sector width 3.0°. Restricted coverage:<br>at 17 NM; +/- 15° from CL above 3800 ft AMSL.<br>at 25 NM; +/- 10° from CL above 4600 ft AMSL.<br>No low clearance and no receiver flag within the area 17 NM 3800 ft 25° E to 30° W from CL. |
| GP 16  |     | 329.60 MHz      | H24                | 47 28 23.1N<br>008 32 22.6E                  | NIL  | NIL   | GP angle 3°. PSN: 384 m FM THR 16. GP HGT THR 16: 54 ft / 16.5 m.   |
| DME 16   | IZH | 42X             | H24                | 47 28 23.0N<br>008 32 22.9E                  | 1400 ft  | NIL   | DME co-located with GP. Zero range at DME station. Restricted coverage:<br>at 17 NM; +/- 15° from CL above 3800 ft AMSL.<br>at 25 NM; +/- 10° from CL above 4600 ft AMSL.   |

| Type of aid, supported OPS, classification, MAG VAR, (declination) | ID  | FREQ CH NR, RPI | Hours of operation | Coordinates of transmitting antenna position    | ELEV of DME antenna or GBAS; ELEV, ellipsoid HGT of reference point SBAS; ellipsoid HGT of LTP/FTP | SER volume radius from GBAS reference point | RMK  |
|--|-----|-----------------|--------------------|---|--|---|--|
| 1  | 2   | 3               | 4                  | 5   | 6  | 7   | 8  |
| LOC 28, ILS UNCAT, class I/C/2, VAR 3° E                           | IZW | 109.75 MHz      | H24                | 47 27 33.6N<br>008 31 55.3E                     | NIL  | NIL   | LOC PSN:<br>413 m FM THR 10.<br>RWY 28:<br>LOC course 273° MAG.<br>Front course sector width 4.13°.<br>Uncategorised ILS APCH RWY 28 due to obstacle limitation and restriction according to non-instrument RWY criteria.<br>Restricted coverage:<br>at 17 NM; +/- 35° from CL above 4900 ft AMSL.<br>at 25 NM; +/- 10° from CL above 4900 ft AMSL.  |
| GP 28  |     | 333.050 MHz     | H24                | Radiating point:<br>47 27 26.5N<br>008 33 59.4E | NIL  | NIL   | GP angle 3.3°.<br>PSN: 304 m FM THR 28.<br>GP HGT THR 28:<br>51 ft / 15.5 m.<br>Restricted coverage (published procedures covered):<br>above 4900 ft AMSL<br>at 12 NM; - 8° S to - 4° S from CL<br>at 15 NM; - 4° S to 0° from CL<br>at 13 NM; 0° to 3° N from CL<br>at 12 NM; 3° N to 4° N from CL above 5900 ft AMSL<br>at 13 NM; - 8° S to - 4° S from CL<br>at 17 NM; - 4° S to 2° N from CL<br>at 14 NM; 2° N to 4° N from CL |
| DME 28   | IZW | 34Y             | H24                | 47 27 27.1N<br>008 33 59.8E                     | 1423 ft  | NIL   | DME co-located with GP.<br>Zero range at DME station.<br>Restricted coverage (published procedures covered):<br>at 16 NM - 8° S to 4° N from CL<br>above 4700 ft AMSL.<br>at 17 NM - +/- 15° from CL above 5700 ft AMSL.<br>at 20 NM - 8° S to 4° N from CL above 5700 ft AMSL.  |

| Type of aid, supported OPS, classification, MAG VAR, (declination) | ID  | FREQ CH NR, RPI | Hours of operation | Coordinates of transmitting antenna position    | ELEV of DME antenna or GBAS; ELEV, ellipsoid HGT of reference point SBAS; ellipsoid HGT of LTP/FTP | SER volume radius from GBAS reference point | RMK  |
|--|-----|-----------------|--------------------|---|--|---|--|
| 1  | 2   | 3               | 4                  | 5   | 6  | 7   | 8  |
| LOC 34, ILS CAT I, class I/C/2, VAR 3° E                           | IZS | 110.75 MHz      | H24                | 47 28 45.2N<br>008 32 00.7E                     | NIL  | NIL   | LOC PSN:<br>431 m FM THR 16.<br>RWY 34: LOC course 332°<br>MAG.<br>Front course sector width<br>3.27°.<br>Restricted coverage:<br>at 17 NM; +/- 35° from CL<br>above 4200 ft AMSL.<br>at 21 NM; +/- 10° from CL<br>above 5000 ft AMSL.<br>at 25 NM; +/- 10° from CL<br>above 6000 ft AMSL.   |
| GP 34  |     | 330.05 MHz      | H24                | Radiating point:<br>47 27 04.6N<br>008 33 07.1E | NIL  | NIL   | GP angle 3.3°.<br>PSN: 272 m FM THR 34.<br>GP HGT THR 34:<br>51 ft / 15.6 m.<br>Restricted coverage<br>(published procedures<br>covered):<br>GP usable up to an angle of<br>5.6°<br>at 10 NM; - 2° W to + 6° E<br>from CL above<br>3200 ft AMSL.<br>at 10 NM; - 4° W to + 7° E<br>from CL above 3600 ft<br>AMSL.<br>at 13 NM; - 4° W to + 7° E<br>from CL above 4900 ft<br>AMSL.<br>at 17 NM; - 2° W to + 6° E<br>from CL above 5900 ft<br>AMSL. |
| DME 34   | IZS | 44Y             | H24                | 47 27 04.5N<br>008 33 06.8E                     | 1400 ft  | NIL   | DME co-located with GP.<br>Zero range at DME station.<br>Restricted coverage<br>(published procedures<br>covered):<br>at 17 NM; - +/- 35° from CL<br>above 5000 ft AMSL.<br>at 25 NM; - +/- 10° from CL<br>above 6000 ft AMSL.   |

---

**LSZH AD 2.20 LOCAL AERODROME REGULATIONS****1. Local flying restrictions****1.1 General**

Active DEP RWY is published on ATIS. DEP on other RWYs, especially opposite to the landing RWY, are only granted in exceptional cases. FLT crews have to expect major delay.

Several missed APCH procedures conflict with SIDs in the immediate climb-out area. The following RWY configurations are therefore operated as dependent RWYs, where DEPs are timed by ATC in respect of arriving traffic:

DEP RWY 16 - LDG RWY 14

DEP RWY 10 - LDG RWY 14

DEP RWY 32 - LDG RWY 34

FLT crews have to expect delay at the HLDG PSN of the above mentioned RWYs.

LSZH may not be planned as ALTN between 2200-0500 (2100-0400).

Crossing Runway Operations:

Pilots to be aware of movements on the crossing runway. For situational awareness: listen out on the TWR-frequency also for calls affecting traffic on the other runways and visually scan the areas around the runways during take-off / landing and crossing.

**1.2 Scheduled Air Traffic**

DEPs and LDGs may be planned between 0500 and 2200 (0400 and 2100). DEPs and LDGs of delayed ACFT are allowed until 2230 (2130) without further permission.

**1.3 Non-scheduled flights**

All non-scheduled flights with origin or destination outside of Schengen-area shall send general declaration to border control prior to ARR or DEP.

**1.4 Charter Flights**

DEPs may be planned between 0500 and 2100 (0400 and 2000). DEPs of delayed ACFT are allowed until 2130 (2030) without further permission.

LDGs may be planned between 0500 and 2200 (0400 and 2100). LDGs of delayed ACFT are allowed until 2230 (2130) without further permission.

**1.5 Non-scheduled commercial air traffic (Business Flights)**

DEPs and LDGs may be planned between 0500 and 2200 (0400 until 2100).

LDGs and DEPs of delayed ACFT are allowed until 2230 (2130) without further permission.

**1.6 Non-commercial air traffic**

DEPs and LDGs may be planned between 0500 and 2100 (0400 until 2000).

A pilot-in-command may only expect a clearance for APCH if he is over or ABM (if radar vectored) reporting points GIPOL or AMIKI at 2030 (1930) at the latest.

**1.7 Exemptions****1.7.1 Urgent flights**

- FLTs with special AUTH from FOCA, namely State ACFT with diplomatic clearance;
- SAR FLT;
- Police and supervision FLT;
- FLT carrying sick or injured persons;
- Disaster relief FLT;
- Forced LDG due to technical or other safety reasons.

Note: For planned urgent flights prior notification to Airport Authority is required.

Please provide the following information in advance: Date and time of FLT (UTC); FLT number; Type of ACFT and registration; ARR from/DEP to; Number of passengers; Type or purpose of FLT, specific reason for urgency as well as needed services (fuel, customs, others).

Email: [airportauthority@zurich-airport.com](mailto:airportauthority@zurich-airport.com) or phone +41 (0) 43 816 21 11

**1.7.2 Permission requests**

Other exemptions not stipulated in §1.7.1 may be authorised by Zurich Airport Authority only in unforeseen and exceptional cases, notably in severe weather conditions.

Zurich Airport Authority:

Phone: +41 (0) 43 816 21 11

### **1.8 Training missed approaches for IFR flights**

Due to dependent RWY operations and difference in performance of arriving aircraft, planned missed approaches for training purpose are generally not allowed.

## **2. Airport slot permission request procedures**

### **2.1 General**

Air carriers may not expect an AP slot allocation systematically for night FLT movements for the period between 2045 - 0500 (1945 - 0400). All AP slot requests will be authorised by Slot Coordination Switzerland in order to meet the local noise restrictions.

Traffic flow restrictions for ICAO APCH category "A" ACFT apply in accordance with § 2.3.1.

### **2.2 Scheduled air traffic and charter flights**

All scheduled and charter FLTs are subject to schedule coordination by Slot Coordination Switzerland. Permission requests for AP slots shall be submitted in the SCR-format specified in Chapter 6 of the IATA Standard Schedules Information Manual: Slot Coordination Switzerland:

Email: [slot@slotcoordination.ch](mailto:slot@slotcoordination.ch)

### 2.3 Non-commercial and non-scheduled commercial air traffic

All non-scheduled commercial and non-commercial IFR air traffic is subject to coordination by Slot Coordination Switzerland (SCS). Flights to and from LSZH are only permitted with a previously allocated airport slot and the corresponding airport Slot-ID. The airport Slot-ID shall be communicated to the operator by the respective and mandatory handling agent. Slot requests must contain accurate flight information and changes must be communicated to the handling agent. The airport slot-ID shall be entered in field "18 – Other Information" of the ATC flight plan. ATC flight plans not containing a valid airport Slot-ID may be rejected.

The filing format is as follows:

RMK/ASL<Slot-ID>

The Slot-ID is composed of 14 alphanumeric characters assigned by SCS when allocating the airport slot.

Example: RMK/ASLLSZHDNJE0137L0

Due to limited stands, the ACFT operator shall declare the ground elapse time in item 18 of flight plan (e.g. RMK/ground time 2 HR). If the parking sector is 1 to 9 and the planned ground time is more than 48 HR, the ground handling agent shall check stand availability with Apron Service on phone: +41 (0) 43 816 21 19 prior to departure at origin.

For all other stands with a ground time request of more than 48 HR the ground handling agent shall contact: [dispo@zurich-airport.com](mailto:dispo@zurich-airport.com) or phone +41 (0) 43 816 77 55 for permission prior to DEP at origin.

AP slots will be organised by the respective handling agent.

IFR AP slots shall be requested by operators providing the following data:

- New request, modification or cancellation of AP slot;
- ACFT REG;
- Airline/Operator code (if applicable);
- FLT number (if applicable);
- Date;
- ACFT type (ICAO Code);
- Number of cabin seats;
- Commercial, non-commercial or training FLT;
- Origin and/or DEST of FLT (ICAO Code);
- Intended scheduled OFF-BLOCK time LSZH in UTC or
- Intended scheduled ON-BLOCK time LSZH in UTC.

AP slots shall be requested before filing any flight plan.

Filed flight plans shall include EOBT based on the allocated AP slot. The field flight plan has to match the airport slot +/- 0 minutes. No deviation is permitted.

Non-commercial and non-scheduled commercial traffic have to comply with the regulations stated in chapter 3 § 3.3.2.1 up to 3.3.2.5

Modifications and cancellations of the already permitted FLTs as well as all modifications of the flight plan times which necessitate a new AP slot, shall be notified immediately to the handling agent.

Not subject to flight plan coordination and AP slot requirements are:

- Air traffic which conducts an APCH to Zurich AP due to MET or technical reasons;
- SAR, urgent medical and EMERG FLTs;
- State ACFT FLTs with diplomatic clearance issued by FOCA.

Technical check FLTs shall be coordinated with the TWR supervisor:

Phone: +41 (0) 43 931 69 61

at least one HR prior ETD. The following declarations should be stated:

- Requested FLT program;
- Routing;
- Requested FL;
- Special FLT program parts;
- DUR of special FLT program parts.

ATC may instruct other times and/or routings and may impose other restrictions. Subsequently a corresponding flight plan shall be filed.

### 2.3.1 Traffic flow restrictions for ICAO approach category “A” ACFT

Due to capacity and traffic flow reasons, the following restrictions apply for ICAO APCH category “A” ACFT:

- AP Slots may be requested at the earliest the day before the planned FLT\*.
- AP Slots may only be requested for off-peak HR in accordance with the table below.
- FLT will only be permitted by ATC during off-peak HR in accordance with the table below.
- All helicopter IFR-operations are equated with ICAO approach category “A” fixed-wing aircraft.
- Further restrictions may apply at short notice due to meteorological or operational reasons.

\*Except Federal Office for Civil Aviation (FOCA) check FLT.

| MON-FRI                                     |                           | SAT, SUN and German public holidays <sup>1</sup> |                           |
|---|---------------------------|--|---------------------------|
| Outbound                                    | Inbound                   | Outbound   | Inbound                   |
| 0715 - 0725 (0615 - 0625)                   | 0750 - 0915 (0650 - 0815) | -  | 0815 - 0915 (0715 - 0815) |
| 0930 - 1030 (0830 - 0930)                   | 1130 - 1415 (1030 - 1315) | 0930 - 1030 (0830 - 0930)                        | 1130 - 1415 (1030 - 1315) |
| 1315 - 1530 (1215 - 1430)                   | 1600 - 1730 (1500 - 1630) | 1315 - 1530 (1215 - 1430)                        | 1600 - 1730 (1500 - 1630) |
| 1740 - 1825 (1640 - 1725)                   | 1915 - 1945 (1815 - 1845) | 1740 - 1825 (1640 - 1725)                        | 1915 - 1945 (1815 - 1845) |
| 2015 - 2045 (1915 - 1945)                   | -                         | 2015 - 2045 (1915 - 1945)                        | -                         |
| 1. REF to <a href="#">LSZH AD 2.21</a> §2.3 |                           |  |                           |

Off-peak HR at LSZH:

The AP slot for ICAO APCH category “A” ACFT refers:

- for a DEP to the OFF-BLOCK time
- for an ARR to the ON-BLOCK time

## 3. Aircraft guidance and procedures on Apron and TWYs

### 3.1 General

#### 3.1.1 Advanced Surface Movement Guidance and Control System (A-SMGCS)

Zurich AP is equipped with A-SMGCS, supported by SMR and Mode S MLAT, which provides ACFT PSN information and IDENT to Tower, Ground and Apron Control.

##### 3.1.1.1 General

Aircraft Operators intending to use Zurich Airport shall ensure that Mode S transponders are able to operate when the ACFT is on the ground, transmitting Mode S squitter and replying to Mode S addressed interrogations only.

##### 3.1.1.2 Mode A code

Flight crews shall ensure that the transponder is set to and transmitting the assigned Mode A code;

- for departure: latest when start-up and/or push-back clearance is received by Apron Control; and
- after landing: continuously until the ACFT has reached its final parking position

##### 3.1.1.3 Mode S Aircraft Identification

Flight crews of ACFT with Mode S transponder being able to manually set an aircraft identification shall set their aircraft identification as specified in item 7 of the filed ATC flight plan.

- For departure: latest when start-up and/or push-back clearance is received by Apron Control, the ACFT identification shall be set.

### 3.2 Apron Control

The AP operates a ground control radio station with the call sign “Zurich Apron”. **Language: En**

#### 3.2.1 Area of responsibility

The exact area of responsibility is shown on the chart [LSZH AD 2.24.1-1](#), [LSZH AD 2.24.3 - 1](#) and [LSZH AD 2.24.3 - 3](#).

#### 3.2.2 Clearance and Transmission of messages

Clearances will only be issued in for the area within their scope of responsibility. In particular, a clearance to TAX does not include a clearance to cross a RWY or to TAX onto a RWY. Handling requests will not be transmitted.

#### 3.2.3 Operational hours and Marshaller service

Operational HR are from 0445 until 2230 (0345 until 2130). In exceptional cases, radio contact will be AVBL after 2230 (2130). Outside the operating HR, ACFT on the apron and TWYs are guided by a marshaller. In exceptional operational conditions, marshallers are AVBL for ACFT guidance.

---

### 3.3 Procedures

#### 3.3.1 Arriving aircraft

##### 3.3.1.1 Minimum RWY occupancy time

Rapid exit from the LDG RWY minimises the occurrence of go-arounds and allows ATC to apply MNM spacing. ACFT vacating the RWY in use should not stop on the exit TWY until the entire ACFT has passed the RWY stop bar.

##### 3.3.1.1.1 Landing RWY 14

To ensure MNM RWY occupancy time, pilots are reminded to vacate the RWY via TWY H1 whenever possible (except wake turbulence category HEAVY) or as instructed by ATC.

##### 3.3.1.1.2 Landing RWY 16

Vacating via TWY E4 or E6 only with ATC clearance.

##### 3.3.1.1.3 Landing RWY 28

Vacating into RWY 16 or RWY 34 only with ATC clearance. Vacating to the south via TWY F only with ATC clearance.

##### 3.3.1.1.4 Landing RWY 34

When landing on RWY 34 expedite to cross intersecting RWY 28 to enable departure. Preferred exit via TWY E4 or later. Vacating via TWY E6 only with ATC clearance.

##### 3.3.1.2 Taxi procedures

Arriving aircraft shall taxi independently to the parking position according to taxi instructions issued by Apron Control. All traffic shall stop at Intermediate HLDG PSN when Stop bars are activated.

If the docking guidance system, fails the FLT crew shall stop the ACFT immediately and notify Apron Control. The ACFT shall not TAX any further until a marshaller has taken over the guidance.

The final guidance for ACFT taxiing to the GA sectors will be provided by a marshaller. During taxiing in GA sectors use minimum thrust to avoid jet blast.

Placement of ground service equipment (baggage/post cars, dollies, trailer) between two aircraft stands is accepted in accordance with the ground handling regulation.

#### 3.3.2 Departing aircraft

##### 3.3.2.1 Optimization of RWY occupancy time and intersection/converging RWY operations

ATC will consider every ACFT at the HLDG point as able to commence line up and take off immediately after clearance issued. Pilots not ready when reaching the HLDG point (no ACFT in front on the same TWY) shall advise ATC as early as possible.

During certain periods, landings and/or departures on intersecting and/or converging RWYs are in effect. The RWY designator shall be read-back with every take-off or landing clearance received.

Pilots in receipt of a conditional line-up clearance on a preceding departing ACFT should remain behind the subject ACFT but may cross the RWY HLDG point (as long as there is no illuminated red stop bar) and enter the RWY upon receipt of the clearance. Pilots must be aware that there may be a blast hazard as the ACFT on the RWY applies PWR.

The ACFT has to be rolling within 10 seconds after reception of take-off clearance. Pilots unable to comply with this requirement shall notify ATC, preferably before entering the RWY.

Be aware of possible wake turbulence from departing/landing traffic on the intersecting RWY, especially in case of long landing or missed approach.

##### 3.3.2.2 Airport Collaborative Decision Making (A-CDM)

A-CDM focusses on the turn-round process in order to ensure common situational awareness followed by best possible allocation of resources. A PERM and fully automatic data exchange with the European Air Traffic Flow and Capacity Management (ATFCM) is established.

### 3.3.2.3 A-CDM Definition and Procedure

#### Target Off Block Time (TOBT)

- i. The TOBT reflects the time when all ground handling activities are completed, meaning
  - all doors are closed
  - boarding bridge removed
  - except on stand de-icing
- ii. TOBT must have an accuracy of +/- 5 minutes and shall be maintained by Aircraft Operator (AO) or Ground Handling (GH).
- iii. FLT crew shall ensure that the flight is ready at TOBT +/- 5 minutes. Otherwise, a TOBT update shall be initiated (see also §3.3.2.5).

#### EOBT

- i. Time when the ICAO FPL has estimated to leave the stand.
- ii. The Aircraft Operator (AO) is required to adjust FPL EOBT when the deviation to the latest TOBT is more than 15 minutes.

#### Target Start-up Approval Time (TSAT)

- i. Time provided by ATC that an ACFT can expect to receive start-up / pushback approval.
- ii. TSAT has a tolerance of +/- 5 minutes
- iii. Latest at TSAT -5 minutes pushback vehicle shall be connected with the ACFT and ready for immediate push.

### 3.3.2.4 Departure Clearance - General

Departure clearance may be obtained from "Zurich Delivery" through Skyguide Datalink Departure Clearance (DCL) service or by voice. Use of DCL should be preferred over voice whenever practicable. DCL service is operated by the same ATC controller as "Zurich Delivery".

Aircraft operators intending to use data link for obtaining ATC clearance shall ensure that their flight crews are adequately trained.

#### 3.3.2.4.1 Clearance Request (RCD)

Datalink RCD message is accepted from 30 minutes prior to TOBT (Ti) until TOBT +5 minutes (Tt).

An RCD reception will be acknowledged immediately by means of an automatic FSM.

Alternatively, the FLT crew may contact "Zurich Delivery" at the earliest 30 minutes prior to TOBT to request the departure clearance by voice.

When requesting departure clearance, the FLT crew shall report / RCD message shall contain:

- call sign as filed in the ATC FPL
- ACFT type
- IDENT letter of the received DEP ATIS information
- parking stand
- if unable for standard DEP RWY, refer to 3.3.2.4.3

*Note: Free text remarks are indicated to the ATC controller.*

After RCD is sent, FLT crew shall monitor "Zurich Delivery" frequency. When ACFT is ready according conditions §3.3.2.5, FLT Crew shall call "Zurich Delivery" to report ready.

#### 3.3.2.4.2 Unable for standard DEP RWY

Different DEP RWY, other than the standard as broadcast on the DEP ATIS are only accepted for performance reasons or when initiated by ATC for operational reasons. FLT crews which are UNA to accept the standard DEP RWY in accordance with DEP ATIS shall send a corresponding RCD message or report this to "Zurich Delivery" at the earliest 30 minutes prior TOBT, but not later than 15 minutes prior to TOBT.

RCD message shall contain the following information in the free text / remark field: "UNABLE[RWY]" or "UNA[RWY]" (RWY as number, without space).

#### 3.3.2.4.3 DCL Clearance Uplink Message (CLD)

"Zurich Delivery" may intentionally delay the issuance of the ATC clearance for operational reasons. In this case, CLD uplink message may not arrive immediately.

Airborne frequency received in datalink clearance shall only be contacted upon ATC instruction.

Current ATIS notification sent via CLD corresponds to the DEP ATIS valid at the time of the message. It is FLT crew's responsibility to check for any subsequent updates of the current DEP ATIS.

For regulated flights only, current CTOT is communicated once with CLD uplink message. No subsequent electronic updates are provided through DCL.

A received CLD message shall be acknowledged within 5 minutes (T1), otherwise the DCL process is automatically aborted with a negative FSM message.

#### 3.3.2.4.4 Revert to voice procedures

Upon receiving any message containing the line "REVERT TO VOICE PROCEDURES" or in the event of any inconsistency with the clearance received, the pilot shall contact "Zurich Delivery".

A clearance received by voice always supersedes any DCL datalink clearance.

Re-clearances and revisions by DCL are not permitted/possible under normal circumstances.

#### 3.3.2.4.5 Datalink Departure Clearance (DCL) Technical Information

DCL is available to all ACARS equipped aircraft on the ground. The messages must be routed via either SITA or ARINC and shall comply with ARINC specification 623-2 and the EUROCAE specification ED-85A.

- Ti set to TOBT -30 minutes
- Tt set to TOBT +5 minutes
- Timers T0 & T2 set to 1 minute
- Timer T1 set to 5 minutes

Reporting of problems: email to atm@skyguide.ch

#### 3.3.2.5 Aircraft Ready

- FLT crew shall report ready to "Zurich Delivery" at TOBT +/- 5 minutes tolerance irrespective of de-icing, pushback vehicle availability and TSAT.  
ACFT not ready within the specified time frame shall update their TOBT (via AO or GH) prior reporting ready to "Zurich Delivery".
- ACFT not ready at TOBT +5 minutes may lose their position in the departure sequence. TSAT will only be recalculated after TOBT has been updated.
- ACFT not ready at TOBT +5 minutes may not be accepted by "Zurich Delivery" and FLT crew will be advised to arrange a new TOBT.
- "Zurich Delivery" will transfer ACFT that are ready within the TOBT tolerance to "Zurich Apron" for start-up clearance.
- For flights with CTOT, the ACFT ready status will be transmitted automatically to NM. A Ready Message (REA) does not need to be requested.

#### 3.3.2.6 Start-up and pushback procedure

- Start-up clearance will be issued by "Zurich Apron" at TSAT +/- 5 minutes.
- If pilot is not ready to push and/or start the engine at TSAT +5 minutes TSAT will be cancelled and pilot might be advised to contact "Zurich Delivery" to restart the departure process according § 3.3.2.4
- For the towing or push-back of an ACFT a general AUTH will be given to the FLT crew. All detailed instructions for the tow or push-back of ACFT will be transmitted directly by Apron Control on the tow vehicle's FREQ to the driver.
- For any cross bleed / cross generator start-up the FLT crew shall inform Apron Control first.  
If necessary other procedures may be requested or authorized by Apron Control.

#### 3.3.2.7 Taxi procedures for departing aircraft

Departing aircraft shall taxi independently from the parking position according to taxi instructions issued by Apron Control.

#### 3.3.2.8 Winter Operation

Winter operation is ACT from 15 OCT to 30 APR. If de-icing of ACFT is heavily delayed due to high demand and prolonged processing time, due impact on operations with RWY closures for SN cleaning, resulting in increasing number of FLT's missing their slots, "General De-icing with Extended Slot Tolerance Window" might be applicable. This information will be BCST on DEP ATIS during activation. With handover to "Zurich Apron", ATC slot adherence will be assured by ATC.

### 3.4 ICAO Code Letter F Ground Operation

According to ICAO Annex 14 §1.7 table 1.1, Code letter F refers to a wingspan between 65 m and 80 m.

#### 3.4.1 Ground movement area

For Code letter F FLT operations, refer to [LSZH AD 2.22](#) § 2.8.

The Code letter F ground movement area is shown on the chart [LSZH AD 2.24.3 - 5](#). The movement area for this ACFT is divided into three zones: areas where a Code letter F ground movement is allowed (marked black), allowed with a marshaller only (marked dark-grey) and not allowed (marked light-grey).

### 3.4.2 Parking positions

For the different Code letter F ACFT following table shows the possible parking PSNs:

| parking position | A380-800 | AN-124 | B747-8 |
|------------------|----------|--------|--------|
| E19              | Yes      | No     | Yes    |
| E42              | No       | No     | Yes    |
| E46              | No       | No     | Yes    |
| E52              | Yes      | No     | Yes    |
| E67              | Yes      | No     | Yes    |
| B38              | No       | No     | No     |

The following remote stands are AVBL for Code letter F ACFT at the parking sector whiskey:

| parking position | A380-800 | AN-124 | B747-8 |
|------------------|----------|--------|--------|
| W21              | No       | No     | Yes    |
| W22              | No       | No     | Yes    |
| W30              | Yes      | Yes    | Yes    |

### 3.5 High-Visibility Jackets and FLT crew ID badge

All persons walking on the AP movement area (incl. FLT crew during outside check) shall wear a high-visibility jacket which complies with the EN 471 standard class 2 or 3.

FLT crew members wearing uniform shall display their FLT crew ID badge clearly visible above the waist and shall show their IDENT upon demand by the control agents of the AP (Flight Crew Member Certificate (or equivalent), licence and passport (or equivalent)).

FLT crew members without uniform shall be in possession of a Flight Crew Member Certificate, Cockpit Permit (or equivalent) and passport (or equivalent). Private pilots shall carry a licence, passport or equivalent, and their flight plan.

## 4. Ground handling

All ACFT must be able to pushback. It is compulsory to check with the ground handling if an adequate tow-bar is AVBL. Operators of scheduled air traffic and charter FLT's (including ferry-, technical-, trainings- and positioning FLT's) are obliged to choose one of the following ground handling agents mentioned in § 4.1.

Operators of scheduled- and charter FLT's are requested to announce ground handling agents for planning purpose 30 days prior to

- start of operation at Zurich or change of ground handling agents to:

Post: Flughafen Zürich AG:

Email: [handling.admin@zurich-airport.com](mailto:handling.admin@zurich-airport.com)

### 4.1 Ground handling agents:

Post: **Airline Assistance Switzerland**

Operations

P.O. Box 2119

CH-8058 Zurich-Airport

Phone: +41 (0) 43 816 54 23

Fax: +41 (0) 43 816 54 29

Email: [ops@aas-switzerland.ch](mailto:ops@aas-switzerland.ch)

SITA: ZRHKPCR

URL: <http://www.aas-switzerland.ch/>

FREQ: 131.485 MHz

Post: **Dnata Switzerland AG**

P.O. Box

CH-8302 Kloten

Phone: +41 (0) 43 815 83 83

Fax: +41 (0) 43 815 83 85

Email: [zrh.opsplanning@dnata.ch](mailto:zrh.opsplanning@dnata.ch)

SITA: ZRHSC7X

URL: <http://www.dnata.ch/>

FREQ: 130.455 MHz

Post: **Swissport International AG**  
Station Zurich  
Business Development & Sales Zürich  
P.O. Box  
CH-8058 Zurich-Airport  
Phone: +41 (0) 43 812 28 73  
Fax: +41 (0) 43 812 91 95  
Email: zrh.sales@swissport.com  
SITA: ZRHKWXH  
URL: <http://www.swissport.com/>  
FREQ: 131.655 MHz

#### 4.1.1 Non-commercial and non-scheduled commercial air traffic

A MAX of 24 passengers and / or 200 kg of cargo may be handled at the general and business aviation facilities GAC and Business Aviation Center (BAC).

Operators of such FLTs are obliged to choose one of the ground handling agents listed below unless they hold a Self Handling AUTH issued by Flughafen Zürich AG.

For such FLTs on ARR and DEP, the name of the handling agent (AUTH of either the handling agent with third party handling or an organisation with self handling) as well as the parking period of the arriving ACFT shall appear in item 18 of the ICAO flight plan.

##### 4.1.1.1 Ground Handling Agents:

Post: **Cat Air Service AG**  
P.O. Box 2221  
CH-8060 Zurich-Airport  
Phone: +41 (0) 43 816 08 08  
Fax: +41 (0) 43 816 08 09  
Email: [info@cat-airservice.com](mailto:info@cat-airservice.com)  
URL: <http://www.cat-airservice.com>  
FREQ: 131.905 MHz

Post: **BHS Aviation AG**  
Flughofstrasse 39a  
CH-8152 Glattbrugg  
Phone: +41 (0) 44 555 44 20  
Fax: +41 (0) 44 555 44 99  
Email: [sales@bhs-aviation.com](mailto:sales@bhs-aviation.com)  
URL: <https://bhs-aviation.com>  
FREQ: 131.555 MHz

Post: **Execujet Europe AG**  
FBO  
Business Aviation Center  
P.O. Box 1  
CH-8058 Zurich-Airport  
Phone: +41 (0) 44 876 56 56  
Fax: +41 (0) 44 876 56 57  
Email: [fbo.lszh@execujet.eu](mailto:fbo.lszh@execujet.eu)  
URL: <http://www.execujet.ch/>  
FREQ: 130.255 MHz

Post: **Jet Aviation AG**  
Private Aircraft Handling  
P.O. Box 1513  
CH-8058 Zurich-Airport  
Phone: +41 (0) 58 158 84 66  
Fax: +41 (0) 58 158 84 75  
Email: [vip.zrh@jetaviation.ch](mailto:vip.zrh@jetaviation.ch)  
SITA: ZRHPHPP  
URL: <http://www.jetaviation.com/>  
FREQ: 130.455 MHz

Post: **Lions Air AG**  
P.O. Box 233  
CH-8058 Zurich-Airport  
Phone: +41 (0) 44 828 88 88  
Fax: +41 (0) 44 828 88 99  
Email: [handling@lionsair.ch](mailto:handling@lionsair.ch)  
URL: <http://www.lionsair.ch>  
FREQ: 120.005 MHz

Post: **Motorfluggruppe Zürich**  
General Aviation Center  
P.O. Box  
CH-8058 Zurich-Airport  
Phone: +41 (0) 79 899 22 11 (Mobile)

Email: [handling@mfgz.ch](mailto:handling@mfgz.ch)  
URL: <http://www.mfgz.ch/handling>

Post: **Swiss Privilege Aviation Services**  
General Aviation Center  
P.O. Box  
CH-8058 Zurich-Airport  
Phone: +41 (0) 41 815 09 21  
Email: [ops@privilegeaviation.com](mailto:ops@privilegeaviation.com)  
FREQ: 131.575 MHz

## 4.2 Fuelling

### 4.2.1 Aircraft fuelling or defuelling when passengers are on board is permitted.

At any time, the fire fighting service is ready for operation in the VCY of the dock and OPN stands.

The aviation company concerned is obliged to ensure that the provisions stated in Appendix 1 of JAR-OPS 1.305 are fully complied with.

## 5. ACFT De-icing

### 5.1 Locations

- Depending on demand, de-icing provider, type of ACFT or special requirements / operational needs, the ACFT will be de-iced either at the parking position (on stand) or on one of the remote de-icing pad's.
- On T- / W- parking stands (except T52 and W01-W30) as well as on GA parking sectors (except GA1 and GA5) de-icing activities are not allowed and the ACFT is required to reposition first (when not foreseen for remote de-icing).

### 5.2 De-icing - Status

De-icing at Zurich AP has one of the following three status:

- De-icing O/R
- General De-icing
- General De-icing with extended Slot Tolerance Window

DEP ATIS BCST the de-icing status if "General de-icing" or "General De-icing with extended Slot Tolerance Window" is in use.

### 5.3 De-icing - Procedures

- If de-icing is required (irrespective of the de-icing status), the FLT crew shall contact "De-icing Coordination" on FREQ **121.810** MHz prior to obtaining departure clearance and 15 MIN before TOBT at the latest. The FLT crew will be informed about its de-icing location foreseen (on-stand or remote de-icing).
- TOBT shall not be adjusted to reflect the de-icing process (spraying time).

#### 5.3.1 ACFT de-icing on stand

- When all handling activities are completed, except de-icing, FLT Crew shall report ready to "Zurich Delivery" within TOBT +/- 5 minutes.
- The duration of the de-icing process is reflected in the TSAT.
- When de-icing activities are completed, standard start-up/push-back and TAX procedure shall be followed.

**5.3.2 ACFT repositioning for de-icing on stand**

- i. Upon requesting de-icing on the "De-icing Coordination" FREQ, the FLT crew is informed if a prior repositioning of the ACFT is required.
- ii. "De-icing Coordination" issues instructions about the repositioning procedure.
- iii. FLT crew shall request start-up and TAX clearance for repositioning from "Zurich APRON".
- iv. Departure clearance shall only be obtained, when the ACFT is on the parking stand where the de-icing takes place.
- v. On the de-icing parking position, the engines must be shut down for the de-icing treatment.
- vi. On the de-icing parking position, prior de-icing process starts, FLT crew shall report ready to "Zurich Delivery" within TOBT +/- 5 minutes.  
*Note: The TOBT in this case shall reflect the time when the ACFT is at the de-icing parking position with all handling activities completed, prior de-icing activities start.*
- vii. The duration of the de-icing process is reflected in the TSAT.
- viii. When de-icing activities are completed, standard start-up/push-back and TAX procedure shall be followed.

**5.3.3 ACFT, foreseen for remote de-icing: Map [LSZH AD 2.24.1 - 1](#)**

- Standard start-up/push-back procedure shall be followed
- TAX on to the de-icing lane only when instructed by "Zurich Apron" and stop at the marked and yellow lighted de-icing stop PSN ("STOP DE-ICING") located to the left of the de-icing lane.
- After reaching the de-icing stop PSN ("STOP DE-ICING") and when instructed by "Zurich Apron" contact the "Pad Coordinator".
  - Pad Charlie FREQ **121.640** MHz
  - Pad Foxtrott FREQ **121.635** MHz
- Pad coordinator may instruct to adjust aircraft position if required.
- After de-icing and only when released by the "Pad Coordinator", request further TAX clearance from "Zurich Apron".

**5.3.4 Between 1 NOV and 31 MAR it is prohibited to drain water onto the tarmac.****5.4 Clean Aircraft Concept (CAC)**

Clean Aircraft Concept as defined in ICAO Doc 9640 is applied; aircraft are de-iced according to the requirements of SAE AS6285. Airport Authority can intervene in case of non-adherence.

**6. IFR/VFR mixed operations**

FLT crews have to expect VFR DEPs and ARR on any RWY irrespective of the current RWY configuration BCST on ATIS. The following situations require special attention:

1. IFR traffic waiting for DEP from RWY 28 on TWY B or intermediate HLDG PSN A2, P1, P2 or Y1 and VFR ACFT LDG on RWY 28.
2. IFR traffic waiting for DEP from RWY 10 on TWY B or L and VFR ACFT LDG on RWY 10.
3. IFR traffic departing or LDG on RWY 28 or 10 and VFR ACFT departing from RWY 16 INT E6 south of RWY 28/10.

**7. IFR operations****7.1 RNAV 1 requirement**

All aircraft operating under IFR to and from Zurich Airport are required to be eligible for RNAV 1 operations. Aircraft operators shall be approved for RNAV 1 and flight crews shall be qualified accordingly. For exemptions refer to chapter 1.7.

**7.2 iStream Procedure****7.2.1 Goal**

iStream is a process concerning all IFR inbound flights to LSZH between 0500 and 0600 (0400 and 0500). It aims at an early pre-planning of an optimized approach sequence in order to:

- Prevent holding delay due to night curfew regulations
- Reduce fuel consumption

**7.2.2 Participation**

The participation to the process is mandatory for flights expected to arrive between 0500 and 0600 (0400 and 0500) and having a flying time of 5 hours or more, and is recommended for all other flights arriving during this period.

### 7.2.3 Process

#### 7.2.3.1 Strategic Phase

Skyguide will generate a strategic sequence for all flights with a scheduled time of arrival (STA) between 0500 and 0600 (0400 and 0500) and will provide a strategic planning time frame for each flight, within which the landing time can be expected. The Operational Flight Plan shall take into account this Strategic Landing Time.

#### 7.2.3.2 Tactical Phase

Aircraft operators of flights expected to arrive between 0500 and 0600 (0400 and 0500) shall provide the estimated time over (ETO) of the last waypoint of the FPL before 0030 (2330). Skyguide will generate a provisional approach sequence and provide target times over (TTO) for all flights to the aircraft operators before 0100 (0000). The aircraft operators shall forward the information to the flight crews for the purpose of adapting their flight speed.

#### 7.2.4 Further information

Aircraft operators planning flights with an arrival time during the above mentioned time frame shall contact [istream.support@skyguide.ch](mailto:istream.support@skyguide.ch) for information and guidance on the process.

### 7.3 Restrictions on VEBIT SIDs RWY 16

#### 7.3.1 Suspension of VEBIT SIDs RWY 16 during main arrival peak hours

Due to capacity constraints, the following restrictions apply daily between 0930 and 1045 (0830 and 0945): VEBIT SIDs RWY 16 are suspended. Aircraft requiring a VEBIT SID shall be ready and report to CLR DEL on 121.930 MHz before 0930 (0830) to depart from RWY 16 during the restricted time frame. If ready later, earliest start-up will be issued at 1045 (0945). Tactical re-routings after departure will not be granted and non-standard flight plans are not accepted.

#### 7.3.2 VEBIT 1T SID RWY 16 not available for Boeing 777 aircraft

SID VEBIT 1T RWY 16 is not available for Boeing 777 aircraft. In case of VEBIT 4S is also not available, Boeing 777 with DEP on RWY 16 shall refile the flight plan via exit fix DEGES.

**LSZH AD 2.21 NOISE ABATEMENT PROCEDURES****1. General****1.1 The following regulations are in force to avoid excessive aircraft noise in the populated areas in the vicinity of Zurich AP**

Departures of subsonic aircraft not certified according to the noise standards of ICAO Annex 16, Volume 1, Part 2, Chapter 3 and of supersonic aircraft are not permitted. Exceptions may be granted by the airport authority.

DEV from published routes and procedures are only permitted if the safety of the ACFT is affected; subject to Art. 27 of the ordinance concerning the aviation infrastructure (OAI).

ACFT operators that are unable to comply with these regulations and procedures shall submit alternative procedures to Zurich Airport Authority.

**1.2 Auxiliary Power Units (APU)****1.2.1 All stands**

Primarily, the stationary airport pneumatic and electrical service units shall be used. Alternatively, mobile units shall be used.

**1.2.2 The APU shall only be started:**

- to start engine, but no earlier than 10 MIN before the target off-block time (TOBT).
- if the stationary or mobile units are not available or unserviceable for specific aircraft types. In that case, the APU shall be started no earlier than:
  - 50 minutes before off-block time for aircraft Codes B and C
  - 70 minutes before off-block time for aircraft Codes D, E and F
  - 30 minutes before off-block time for GA sector 1
 and kept in operation no more than 20 minutes after the on-block time.
- if maintenance work on the ACFT makes it unavoidable; in that case the service period shall be kept as short as possible.  
Exceptions have to be permitted by the Airport Authority.

**2. Approaches****2.1 ILS/GLS approach:**

The descent shall be arranged so as to maintain ENR configuration for as long as possible taking safety and ATC requirements into consideration. Speed reduction and extension of LDG gear and high lift devices are to be planned in such a way that the LDG configuration is established and the correct APP speed is reached shortly prior to or at 4 miles final.

**2.2 Other approaches:**

Visual circuits shall be flown at 3000 ft AMSL or HYR whenever visibility and BASE permits. Overflying of densely populated areas shall be avoided as far as possible.

**2.3 German ordinance****2.3.1 Application:**

MON - FRI: 0000 - 0600 and 2000 - 2359 (2300 - 0500 and 1900 - 2259)

SAT, SUN and German public HOL: 0000 - 0800 and 1900 - 2359 (2300 - 0700 and 1800 - 2259)

Remark: LDGs before 0500 (0400) are not allowed.

| German Public Holidays | 2021   | 2022   | 2023   | 2024   | 2025   |
|------------------------|--------|--------|--------|--------|--------|
| New Year               | JAN 01 | JAN 01 | JAN 01 | JAN 01 | JAN 01 |
| 6th January            | JAN 06 | JAN 06 | JAN 06 | JAN 06 | JAN 06 |
| Good Friday            | APR 02 | APR 15 | APR 07 | MAR 29 | APR 18 |
| Easter Monday          | APR 05 | APR 18 | APR 10 | APR 01 | APR 21 |
| 1st May                | MAY 01 | MAY 01 | MAY 01 | MAY 01 | MAY 01 |
| Ascension Day          | MAY 13 | MAY 26 | MAY 18 | MAY 09 | MAY 29 |
| Whit Monday            | MAY 24 | JUN 06 | MAY 29 | MAY 20 | JUN 09 |
| Corpus Christi Day     | JUN 03 | JUN 16 | JUN 08 | MAY 30 | JUN 19 |
| Day of German Unity    | OCT 03 | OCT 03 | OCT 03 | OCT 03 | OCT 03 |
| All Saints' Day        | NOV 01 | NOV 01 | NOV 01 | NOV 01 | NOV 01 |
| Christmas Day          | DEC 25 | DEC 25 | DEC 25 | DEC 25 | DEC 25 |
| Boxing Day             | DEC 26 | DEC 26 | DEC 26 | DEC 26 | DEC 26 |

### 2.3.2 Lowest FL over German airspace

The lowest FL to be used in German airspace for arrivals at Zurich AP is FL 120 during the German ordinance period. Therefore all INBD FLTs to LSZH at cruising FL 110 or below which enter German airspace APSG IAF AMIKI or GIPOL, shall expect to CMB FL 120 in accordance with ATC instruction. Exemptions are only AVBL for PER reasons and/or due to weather conditions.

### 2.3.3 RWY 14/16

As APCHs to both RWY 14 and RWY 16 require the use of German airspace below FL 120, these RWYs are not AVBL during the German ordinance period. Therefore, the LDG RWY will be in accordance with § 2.4, weather permitting.

### 2.3.4 RWY 28

For ATC operational reasons, LDGs on RWY 28 shall be conducted with MNM VIS 4300m.

## 2.4 Landing RWY

Expect the LDG RWY to be assigned as follows, weather permitting.

### 2.4.1 Weekdays

|                           |         |
|---------------------------|---------|
| 0500 - 0600 (0400-0500)   | RWY 34  |
| 0600 - 2000 (0500 - 1900) | RWY 14  |
| 2000 - 0500 (1900 - 0400) | RWY 28* |

\* RWY 34 may be requested for safety reasons, however, FLTs to RWY 28 have priority.

### 2.4.2 SAT and SUN and German Holidays

|                           |         |
|---------------------------|---------|
| 0500 - 0800 (0400-0700)   | RWY 34  |
| 0800 - 1900 (0700 - 1800) | RWY 14  |
| 1900 - 0500 (1800 - 0400) | RWY 28* |

\* RWY 34 may be requested for safety reasons , however, FLTs to RWY 28 have priority.

Other LDG RWYs may be assigned due to MET conditions or operational reasons. Outside the German ordinance period, RWY 34 is only AVBL in cases of EMERG LDG due to the FLT path leading into uncontrolled airspace.

## 2.5 Reverse thrust

More than idle reverse shall not be used except for safety reasons (e.g. tailwind, wet or contaminated runway and/or required landing distance close to runway length).

### 3. Departures

#### 3.1 Departure routes

DEV from the SID routes published in the AIP are only permitted at and above **5000 ft AMSL**. Between 2100 - 0500 (2000 - 0400), DEV from a SID is only permitted at and above FL080 with the permission of ATC.

#### 3.2 Departure procedures

If possible, a rolling TKOF shall be executed. The engine PWR shall be increased only after entering the DEP RWY.

Climb with MAX climb gradient to **4500 ft AMSL**:

- use the high lift devices TKOF configuration
- TKOF PWR reduction to climb PWR at **2900 ft AMSL**

Automatic measuring equipment is used to MNT adherence.

#### 3.3 Departure runways

Depending on the LDG RWY in use, expect DEP RWY to be assigned as follows:

##### 0600-2000 (0500-1900)

| LDG RWY         | DEP RWY  |
|-----------------|--|
| RWY 14 / RWY 16 | 28 <sup>1)</sup> / 16 <sup>2)</sup> / 10 <sup>3)</sup> |
| RWY 28          | 32 <sup>4)</sup> / 34 <sup>4) 5)</sup>                 |
| RWY 34          | 28 / 32 / 34 <sup>5)</sup>                             |

- 1) RWY 28 is used primarily
- 2) RWY 16 will only be assigned if requested for performance reasons (minimization of delays)  
For propeller aircraft normally only SID WIL 3Q will be assigned" (Ref. LSZH AD 2.22, 1.2.3)
- 3) RWY 10 only, if RWY 28 cannot be used due to MET reasons
- 4) SID with left turn only; SID with right turn may be assigned by ATC
- 5) RWY 34 will only be assigned due to operational reasons or if requested for performance reasons.

##### 2000-0600 (1900-0500)

Jet ACFT expect DEP on RWY 32 / 34\*.

\* Exception between 2000 and 2100 (1900-2000) when LDG RWY 14 or RWY 16 is in use, in which case, expect DEP on RWY 28 or RWY 16.

Other DEP RWYs may be assigned due to MET conditions or operational reasons.

##### ACFT exceeding noise index 96\*:

are not admitted for DEP between 2100 and 2230 (2000 and 2130).

##### ACFT with a non-stop flight DIST of 5000 km and above and not exceeding noise index 98\*:

are admitted for DEP between 2100 and 2230 (2000 and 2130).

\* Authoritative noise index according to Swiss Law article 39c of the ordinance concerning the aviation infrastructure (OAI):  
The authoritative noise index is the arithmetic average of the two AUTH levels, lateral and flyover of an ACFT model, determined using the standard in ICAO Annex 16, Volume 1, Chapter 3.

### 4. Engine Tests

#### 4.1 Idle Power

For safety reasons and noise MNT as well as to ensure proper operations, the running of engines (e.g. short and idle), not used for taxiing, is subject to prior permission.

Permission shall be requested from the Zurich Airport Authority,

Phone: +41 (0) 43 816 21 11

#### 4.2 Run-ups

Run-ups shall only be performed when using silencers.

Exemptions may be granted by the Zurich Airport Authority:

- when the silencers cannot be used for unpredictable technical or MET reasons;
- if the silencers are not compatible with the TYP in question.

Both DUR and PWR setting for such run-ups shall be kept to a MNM.

LSZH AD 2.22 FLIGHT PROCEDURES

1. SID Description

Speed limitation:

If the SID stipulates a speed limit for a turn, this speed must be adhered to during the turn even after a "DIRECT TO" clearance.

1.1 SID RNAV

1.1.1 SID RWY 10 - RNP 1

(see chart LSZH AD 2.24.7.1 - 1)

| DESIGNATOR                                | RWY 10 - RNP 1  |   |   |  |        |
|---|---|---|---|--|--------|
|   | ROUTE   |   |   | Contact  | Remark |
|   | Lateral   | Vertical  |   |  |        |
| <b>GERSA 1D</b><br>PDG 6.3% to<br>2200 ft | Climb straight ahead to ZH510. At ZH510 turn left to ZH505 (MAX IAS 210kt during turn). At ZH505 proceed via BREGO, ZH556, ZH561, ARTAG to GERSA. | INITIAL CLIMB CLEARANCE 5000ft.<br>Cross ZH505 at 5000ft or above, ZH556 at FL090 or above, ZH561 at FL100 or above, GERSA at FL140 or above. | When instructed contact Zurich DEP 125.955. | RF required.<br>TFC via GERSA file VEBIT T53 GERSA.<br>EXP tactical assignment of GERSA SID by ATC when RWY 10 in use. |        |
| <b>VEBIT 1D</b><br>PDG 6.3% to<br>2200 ft | Climb straight ahead to ZH510. At ZH510 turn left to ZH505 (MAX IAS 210kt during turn). At ZH505 proceed via BREGO, ZH554, ZH558 to VEBIT.        | INITIAL CLIMB CLEARANCE 5000ft.<br>Cross ZH505 at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.                        | When instructed contact Zurich DEP 125.955. | RF required.<br>TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 - 1).  |        |

Procedure Description of RNP 1 SID GERSA 1D

| Path terminator                     | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-------------------------------------|----------|---------|---------------|------------------|----------------|---------------|
| IF                                  | RWY10    | N       | -             | -                | -              | -             |
| TF                                  | ZH510    | N       | -             | -                | 093° (096.0°T) | 3.9           |
| RF<br>(Centre ZH509<br>r = 2.069NM) | ZH505    | N       | +5000         | -210             | -              | 8.0           |
| TF                                  | BREGO    | N       | -             | -                | 232° (235.2°T) | 13.1          |
| TF                                  | ZH556    | N       | +FL090        | -                | 150° (153.0°T) | 3.5           |
| TF                                  | ZH561    | N       | +FL100        | -                | 150° (153.1°T) | 5.3           |
| TF                                  | ARTAG    | N       | -             | -                | 150° (153.1°T) | 6.4           |
| TF                                  | GERSA    | N       | +FL140        | -                | 171° (174.3°T) | 7.6           |

Procedure Description of RNP 1 SID VEBIT 1D

| Path terminator                     | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-------------------------------------|----------|---------|---------------|------------------|----------------|---------------|
| IF                                  | RW10     | N       | -             | -                | -              | -             |
| TF                                  | ZH510    | N       | -             | -                | 093° (096.0°T) | 3.9           |
| RF<br>(Centre ZH509<br>r = 2.069NM) | ZH505    | N       | +5000         | -210             | -              | 8.0           |
| TF                                  | BREGO    | N       | -             | -                | 232° (235.2°T) | 13.1          |
| TF                                  | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF                                  | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF                                  | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

**SID RWY 10 - RNAV 1**

(see chart LSZH AD 2.24.7.1 - 3)

| DESIGNATOR                            | RWY 10 - RNAV 1   |  |   |   |        |
|---------------------------------------|---|--|---|---|--------|
|                                       | ROUTE   |  |   | Contact   | Remark |
|                                       | Lateral   | Vertical   |   |   |        |
| <b>DEGES 3E</b><br>PDG 7.0% to 2400ft | Climb straight ahead to ZH510. At ZH510 turn left to ZH502. At ZH502 turn right to KOLUL.<br>At KOLUL proceed via ZH504, ZH525 to DEGES.                          | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH502 at 4000ft or above, ZH504 at 5000ft or above, ZH525 at 7000ft or above, DEGES at FL080 or above. | When instructed contact Zurich DEP 125.955. | NIL   |        |
| <b>GERSA 3C</b><br>PDG 7.0% to 2400ft | Climb straight ahead to ZH510. At ZH510 turn left to ZH502. At ZH502 turn right to ZH524 (MAX IAS 210kt during turn). At ZH524 proceed via ZH527, ARTAG to GERSA. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH502 at 4000ft or above, ZH524 at 6000ft or above, ZH527 at FL100 or above, GERSA at FL140 or above.  | When instructed contact Zurich DEP 125.955. | TFC via GERSA file VEBIT T53 GERSA. EXP tactical assignment of GERSA SID by ATC when RWY 10 in use. |        |
| <b>GERSA 2E</b><br>PDG 7.1% to 2500ft | Climb straight ahead to ZH510. At ZH510 turn left to ZH505 (MAX IAS 210kt during turn). At ZH505 proceed via BREGO, ZH556, ZH561, ARTAG to GERSA.                 | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH505 at 5000ft or above, ZH556 at FL090 or above, ZH561 at FL100 or above, GERSA at FL140 or above.   | When instructed contact Zurich DEP 125.955. | TFC via GERSA file VEBIT T53 GERSA. EXP tactical assignment of GERSA SID by ATC when RWY 10 in use. |        |
| <b>VEBIT 4E</b><br>PDG 7.1% to 2400ft | Climb straight ahead to ZH510. At ZH510 turn left to ZH505 (MAX IAS 210kt during turn). At ZH505 proceed via BREGO, ZH554, ZH558 to VEBIT.                        | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH505 at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.                          | When instructed contact Zurich DEP 125.955. | TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 - 1).                                       |        |
| <b>ZUE 1E</b><br>PDG 7.1% to 2400ft   | Climb straight ahead to ZH510. At ZH510 turn left to ZH507. At ZH507 proceed via ZH508 to ZUE.  | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZUE at 6000ft or above.  | When instructed contact Zurich DEP 125.955. | NIL   |        |

**Procedure Description of RNAV 1 SID DEGES 3E**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY10    | N       | -             | -                | -              | -             |
| TF              | ZH510    | Y       | -             | -                | 093° (096.0°T) | 3.9           |
| TF              | ZH502    | Y       | +4000         | -                | 079° (081.6°T) | 5.5           |
| TF              | KOLUL    | N       | -             | -                | 084° (087.0°T) | 2.3           |
| TF              | ZH504    | N       | +5000         | -                | 099° (102.1°T) | 3.1           |
| TF              | ZH525    | N       | +7000         | -                | 099° (101.8°T) | 4.7           |
| TF              | DEGES    | N       | +FL080        | -                | 099° (102.0°T) | 8.0           |

**Procedure Description of RNAV 1 SID GERSA 3C**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY10    | N       | -             | -                | -              | -             |
| TF              | ZH510    | Y       | -             | -                | 093° (096.0°T) | 3.9           |
| TF              | ZH502    | Y       | +4000         | -                | 079° (081.6°T) | 5.5           |
| DF              | ZH524    | N       | +6000         | -210             | -              | -             |
| TF              | ZH527    | N       | +FL100        | -                | 215° (217.9°T) | 10.6          |
| TF              | ARTAG    | N       | -             | -                | 215° (217.7°T) | 8.9           |
| TF              | GERSA    | N       | +FL140        | -                | 171° (174.3°T) | 7.6           |

**Procedure Description of RNAV 1 SID GERSA 2E**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY10    | N       | -             | -                | -              | -             |
| TF              | ZH510    | Y       | -             | -                | 093° (096.0°T) | 3.9           |
| DF              | ZH505    | N       | +5000         | -210             | -              | -             |
| TF              | BREGO    | N       | -             | -                | 232° (235.2°T) | 13.1          |
| TF              | ZH556    | N       | +FL090        | -                | 150° (153.0°T) | 3.5           |
| TF              | ZH561    | N       | +FL100        | -                | 150° (153.1°T) | 5.3           |
| TF              | ARTAG    | N       | -             | -                | 150° (153.1°T) | 6.4           |
| TF              | GERSA    | N       | +FL140        | -                | 171° (174.3°T) | 7.6           |

**Procedure Description of RNAV 1 SID VEBIT 4E**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY10    | N       | -             | -                | -              | -             |
| TF              | ZH510    | Y       | -             | -                | 093° (096.0°T) | 3.9           |
| DF              | ZH505    | N       | +5000         | -210             | -              | -             |
| TF              | BREGO    | N       | -             | -                | 232° (235.2°T) | 13.1          |
| TF              | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF              | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF              | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

**Procedure Description of RNAV 1 SID ZUE 1E**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY10    | N       | -             | -                | -              | -             |
| TF              | ZH510    | Y       | -             | -                | 093° (096.0°T) | 3.9           |
| DF              | ZH507    | N       | -             | -                | -              | -             |
| TF              | ZH508    | N       | -             | -                | 013° (016.0°T) | 5.3           |
| TF              | ZUE      | N       | +6000         | -                | 051° (053.8°T) | 5.1           |

1.1.2 SID RWY 16 - RNAV 1

(see chart LSZH AD 2.24.7.2 - 1)

| DESIGNATOR                            | RWY 16 - RNAV 1  |   |   |  |
|---------------------------------------|--|---|---|--|
|                                       | ROUTE  |   |   | Remark   |
|                                       | Lateral  | Vertical  | Contact                                     |  |
| <b>DEGES 3S</b><br>PDG 5.3% to 2000ft | Climb straight ahead.<br>- Turn left at 2000ft but not before D1 KLO (MAX IAS 210kt during turn). Intercept R084 KLO. Proceed via ZH502, KOLUL, ZH504, ZH525 to DEGES. | INITIAL CLIMB CLEARANCE 5000ft.<br>Cross ZH502 at 4000ft or above, ZH504 at 5000ft or above, ZH525 at 7000ft or above, DEGES at FL080 or above. | When instructed contact Zurich DEP 125.955. | WIL DME required for DME/DME navigation. RNAV applicable when passing KOLUL. |

| Procedure Description of RNAV 1 SID DEGES 3S |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                              | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF   | KOLUL    | N       | -             | -                | -              | -             |
| TF   | ZH504    | N       | +5000         | -                | 099° (102.1°T) | 3.1           |
| TF   | ZH525    | N       | +7000         | -                | 099° (101.8°T) | 4.7           |
| TF   | DEGES    | N       | +FL080        | -                | 099° (102.0°T) | 8.0           |

**SID RWY 16 - RNAV 5**  
(see chart LSZH AD 2.24.7.2 - 3)

| DESIGNATOR   | RWY 16 - RNAV 5   |   |   |  |
|--|---|---|---|--|
|  | ROUTE   |   | Contact                                     | Remark   |
|  | Lateral   | Vertical  |   |  |
| <b>DEGES 2R</b><br>(SUSPENDED)<br>PDG 6.4% to 2000ft | Climb straight ahead.<br><br>- Turn left at 2000ft but not before D1 KLO (MAX IAS 210kt during turn). Intercept R085 KLO. Proceed via ZH502, KOLUL, ZH504, ZH525 to DEGES.        | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH502 at 4000ft or above, ZH504 at 5000ft or above, ZH525 at 7000ft or above, DEGES at 8000ft or above.   | When instructed contact Zurich DEP 125.955. | As long as below 9200ft, monitoring of cross references at ZH504 and ZH525 compulsory.<br>RNAV 5 applicable when passing 9200ft. |
| <b>GERSA 2S</b><br>(SUSPENDED)<br>PDG 6.4% to 2000ft | Climb straight ahead.<br><br>- Turn left at 2000ft but not before D1 KLO (MAX IAS 210kt during turn). Intercept R053 WIL. Proceed via BREGO, ZH556, ZH557, AFOLT, ARTAG to GERSA. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross R180/R360 KLO at 4000ft or above, BREGO at 5000ft or above, ZH556 at 8000ft or above, ZH557 at 9000ft or above, AFOLT at 10000ft or above, GERSA at 14000ft or above. | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing BREGO.<br>TFC via GERSA file VEBIT T53 GERSA.   |
| <b>VEBIT 4S</b><br>PDG 5.3% to 2000ft                | Climb straight ahead.<br><br>- Turn left at 2000ft but not before D1 KLO (MAX IAS 210kt during turn). Intercept R052 WIL. Proceed via BREGO, ZH554, ZH558 to VEBIT.               | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross R180/R360 KLO at 4000ft or above, BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.   | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing BREGO.<br>TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 - 1).                             |

**Procedure Description of RNAV 5 SID DEGES 2R**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| -               | ZH502    | N       | +4000         | -                | -              | -             |
| TF              | KOLUL    | N       | -             | -                | 085° (087.0°T) | 2.3           |
| TF              | ZH504    | N       | +5000         | -                | 100° (102.0°T) | 3.1           |
| TF              | ZH525    | N       | +7000         | -                | 100° (101.9°T) | 4.7           |
| TF              | DEGES    | Y       | +8000         | -                | 100° (102.0°T) | 8.0           |

**Procedure Description of RNAV 5 SID GERSA 2S**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| -               | BREGO    | N       | +5000         | -                | -              | -             |
| TF              | ZH556    | N       | +8000         | -                | 151° (153.1°T) | 3.5           |
| TF              | ZH557    | N       | +9000         | -                | 151° (153.1°T) | 1.7           |
| TF              | AFOLT    | N       | +10000        | -                | 151° (153.1°T) | 5.2           |
| TF              | ARTAG    | N       | -             | -                | 151° (153.1°T) | 4.8           |
| TF              | GERSA    | N       | +14000        | -                | 173° (174.3°T) | 7.6           |

**Procedure Description of RNAV 5 SID VEBIT 4S**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | BREGO    | N       | +5000         | -                | -              | -             |
| TF              | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF              | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF              | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

**SID RWY 16 - RNAV 1 (by ATC only)**  
(see chart LSZH AD 2.24.7.2 - 5)

| DESIGNATOR                            | RWY 16 - RNAV 1 (by ATC only)   |   |   |  |        |
|---------------------------------------|---|---|---|--|--------|
|                                       | ROUTE   |   |   | Contact  | Remark |
|                                       | Lateral   | Vertical  |   |  |        |
| <b>DEGES 1T</b><br>PDG 5.3% to 2000ft | Climb straight ahead to ZH530. Turn left at 2000ft but not before ZH530 direct to ZH521 (MAX IAS 210kt during turn). At ZH521 proceed via ZH502, KOLUL, ZH504, ZH525 to DEGES.                              | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH502 at 4000ft or above, ZH504 at 5000ft or above, ZH525 at 7000ft or above, DEGES at FL080 or above.  | When instructed contact Zurich DEP 125.955. | NIL  |        |
| <b>VEBIT 1T</b><br>PDG 5.3% to 2000ft | Climb straight ahead to ZH530. Turn left at 2000 ft but not before ZH530 direct to ZH531 (MAX IAS 210kt during turn). At ZH531 proceed via ZH533 (MAX IAS 210kt until ZH533), BREGO, ZH554, ZH558 to VEBIT. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH533 at 4000ft or above, BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above. | When instructed contact Zurich DEP 125.955. | Restrictions B777 (see LSZH AD 2.20). TFC via GERSA file VEBIT T53 GERSA (see LSZH AD 2.24.6 - 1). |        |

**Procedure Description of RNAV 1 (by ATC only) SID DEGES 1T**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY16    | -       | -             | -                | -              | -             |
| TF              | ZH530    | Y       | -             | -                | 152° (155.0°T) | 2.2           |
| CA              | -        | -       | +2000         | -                | 152° (155.0°T) | -             |
| DF              | ZH521    | N       | -             | -210             | -              | -             |
| TF              | ZH502    | N       | +4000         | -                | 084° (086.9°T) | 4.8           |
| TF              | KOLUL    | N       | -             | -                | 084° (087.0°T) | 2.3           |
| TF              | ZH504    | N       | +5000         | -                | 099° (102.1°T) | 3.1           |
| TF              | ZH525    | N       | +7000         | -                | 099° (101.8°T) | 4.7           |
| TF              | DEGES    | N       | +FL080        | -                | 099° (102.0°T) | 8.0           |

**Procedure Description of RNAV 1 (by ATC only) SID VEBIT 1T**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY16    | -       | -             | -                | -              | -             |
| TF              | ZH530    | Y       | -             | -                | 152° (155.0°T) | 2.2           |
| CA              | -        | -       | +2000         | -                | 152° (155.0°T) | -             |
| DF              | ZH531    | N       | -             | -                | -              | -             |
| TF              | ZH533    | N       | +4000         | -210             | 261° (264.1°T) | 2.5           |
| TF              | BREGO    | N       | +5000         | -                | 238° (240.5°T) | 9.3           |
| TF              | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF              | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF              | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

1.1.3 SID RWY 28 - RNAV 5

(see chart LSZH AD 2.24.7.3 - 1)

| DESIGNATOR   | RWY 28 - RNAV 5  |  |   |  |        |
|--|--|--|---|--|--------|
|  | ROUTE  |  |   | Contact  | Remark |
|  | Lateral  | Vertical   |   |  |        |
| <b>DEGES 3W</b><br>PDG 6.6% to 2100ft<br>MNM climb gradient 7.0% to 5000ft due to airspace restrictions. | Climb straight ahead. At D2.3 KLO turn left. Intercept R252 KLO. At ZH552/D6.5 KLO or when instructed by ATC, turn left (MAX IAS 210kt during turn). Intercept R231 KLO. Proceed via KLO, MOMOL, KOLUL, ZH504, ZH525 to DEGES. | INITIAL CLIMB CLEARANCE 5000ft.  | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing KLO.  |        |
| <b>GERSA 2W</b><br>(SUSPENDED)<br>PDG 7.0% to 2500ft   | Climb straight ahead. At D2.3 KLO turn left. Intercept R053 WIL. Proceed via BREGO, ZH556, ZH557, AFOLT, ARTAG to GERSA.   | INITIAL CLIMB CLEARANCE 5000ft.<br>Cross BREGO at 5000ft or above, ZH556 at 8000ft or above, ZH557 at 9000ft or above, AFOLT at 10000ft or above, GERSA at 14000ft or above. | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing BREGO.<br>TFC via GERSA file VEBIT T53 GERSA.                           |        |
| <b>VEBIT 4W</b><br>PDG 6.6% to 2100ft<br>MNM climb gradient 6.6% to 5100ft due to airspace restrictions. | Climb straight ahead. At D2.3 KLO turn left. Intercept R052 WIL. Proceed via BREGO, ZH554, ZH558 to VEBIT.   | INITIAL CLIMB CLEARANCE 5000ft.<br>Cross BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.   | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing BREGO.<br>TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 - 1). |        |

Procedure Description of RNAV 5 SID DEGES 3W

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | KLO      | Y       | -             | -                | -              | -             |
| TF              | MOMOL    | N       | -             | -                | 084° (086.9°T) | 5.1           |
| TF              | KOLUL    | N       | -             | -                | 084° (086.9°T) | 6.2           |
| TF              | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF              | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF              | DEGES    | N       | -             | -                | 099° (102.0°T) | 8.0           |

Procedure Description of RNAV 5 SID GERSA 2W

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
|                 | BREGO    | Y       | +5000         | -                | -              | -             |
| TF              | ZH556    | N       | +8000         | -                | 151° (153.1°T) | 3.5           |
| TF              | ZH557    | N       | +9000         | -                | 151° (153.1°T) | 1.7           |
| TF              | AFOLT    | N       | +10000        | -                | 151° (153.1°T) | 5.2           |
| TF              | ARTAG    | N       | -             | -                | 151° (153.1°T) | 4.8           |
| TF              | GERSA    | N       | +14000        | -                | 173° (174.3°T) | 7.6           |

Procedure Description of RNAV 5 SID VEBIT 4W

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | BREGO    | Y       | +5000         | -                | -              | -             |
| TF              | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF              | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF              | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

**SID RWY 28 - RNP 1 (RF required) (by ATC only)**  
(see chart LSZH AD 2.24.7.3 - 3 / 5)

| DESIGNATOR   | RWY 28 - RNP 1 (RF required) (by ATC only)   |                                 |   |              |        |
|--|--|---------------------------------|---|--------------|--------|
|  | ROUTE  |                                 |   | Contact      | Remark |
|  | Lateral  | Vertical                        |   |              |        |
| <b>DEGES 1Y</b><br>PDG 7.7% to 2200ft<br>MNM climb gradient 7.7% to 4800ft due to airspace restrictions. | Climb straight ahead to ZH540. At ZH540 turn left to ZH548. At ZH548 proceed via ZH541 to ZH552. At ZH552, turn left direct to ZH553 (MAX IAS 210kt during turn). At ZH553 proceed via ZH501, MOMOL, KOLUL, ZH504, ZH525 to DEGES. | INITIAL CLIMB CLEARANCE 5000ft. | When instructed contact Zurich DEP 125.955. | RF required. |        |

| Procedure Description of RNP 1 (RF required) (by ATC only) SID DEGES 1Y |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator   | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF  | RWY28    | -       | -             | -                | -              | -             |
| TF  | ZH540    | N       | -             | -                | 273° (276.0°T) | 3.3           |
| RF<br>(Centre ZH545<br>r = 1.215 NM)                                    | ZH548    | N       | -             | -                | -              | 1.2           |
| TF  | ZH541    | N       | -             | -                | 215° (217.6°T) | 1.2           |
| TF  | ZH552    | Y       | -             | -                | 252° (254.8°T) | 2.2           |
| DF  | ZH553    | N       | -             | -210             | -              | -             |
| TF  | ZH501    | N       | -             | -                | 051° (053.9°T) | 4.5           |
| TF  | MOMOL    | N       | -             | -                | 084° (086.9°T) | 5.1           |
| TF  | KOLUL    | N       | -             | -                | 084° (086.9°T) | 6.2           |
| TF  | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF  | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF  | DEGES    | N       | -             | -                | 099° (102.0°T) | 8.0           |

| DESIGNATOR   | RWY 28 - RNP 1 (RF required) (by ATC only)  |  |   |   |        |
|--|---|--|---|---|--------|
|  | ROUTE   |  |   | Contact   | Remark |
|  | Lateral   | Vertical   |   |   |        |
| <b>VEBIT 1Y</b><br>PDG 7.7% to 2400ft<br>MNM climb gradient 7.7% to 4800ft due to airspace restrictions. | Climb straight ahead to ZH540. At ZH540 turn left to ZH544. At ZH544 turn right to ZH546 (MAX IAS 210kt during turn). At ZH546 proceed via BREGO, ZH554 and ZH558 to VEBIT. | INITIAL CLIMB CLEARANCE 5000ft.<br>Cross BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above. | When instructed contact Zurich DEP 125.955. | RF required.<br>TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 - 1). |        |

| Procedure Description of RNP 1 (RF required) (by ATC only) SID VEBIT 1Y |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator   | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF  | RWY28    | -       | -             | -                | -              | -             |
| TF  | ZH540    | N       | -             | -                | 273° (276.0°T) | 3.3           |
| RF<br>(Centre ZH545<br>r = 1.215 NM)                                    | ZH544    | N       | -             | -                | -              | 1.5           |
| RF<br>(Centre ZH547<br>r = 2.936NM)                                     | ZH546    | N       | -             | -210             | -              | 1.5           |
| TF  | BREGO    | N       | +5000         | -                | 232° (235.0°T) | 4.5           |
| TF  | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF  | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF  | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

**SID RWY 28 - RNAV 1 (by ATC only)**  
(see chart LSZH AD 2.24.7.3 - 7)

| DESIGNATOR   | RWY 28 - RNAV 1 (by ATC only)   |  |   |   |        |
|--|---|--|---|---|--------|
|  | ROUTE   |  |   | Contact   | Remark |
|  | Lateral   | Vertical   |   |   |        |
| <b>DEGES 1X</b><br>PDG 7.7% to 2200ft<br>MNM climb gradient 7.7% to 4800ft due to airspace restrictions. | Climb straight ahead to ZH540. At ZH540 turn left direct to ZH541 (MAX IAS 210kt during turn). At ZH541 proceed to ZH552. At ZH552 or when instructed by ATC, turn left direct to ZH553 (MAX IAS 210kt during turn). At ZH553 proceed via ZH501, MOMOL, KOLUL, ZH504, ZH525 to DEGES. | INITIAL CLIMB CLEARANCE 5000ft.  | When instructed contact Zurich DEP 125.955. | NIL   |        |
| <b>VEBIT 1X</b><br>PDG 7.7% to 2400ft<br>MNM climb gradient 7.7% to 4700ft due to airspace restrictions. | Climb straight ahead direct to ZH540. At ZH540 turn left direct to ZH542. At ZH542 proceed via BREGO, ZH554, ZH558 to VEBIT.  | INITIAL CLIMB CLEARANCE 5000ft.<br>Cross BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above. | When instructed contact Zurich DEP 125.955. | TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 - 1). |        |

**Procedure Description of RNAV 1 (by ATC only) SID DEGES 1X**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY28    | -       | -             | -                | -              | -             |
| TF              | ZH540    | Y       | -             | -                | 273° (276.0°T) | 3.3           |
| DF              | ZH541    | N       | -             | -                | -              | -             |
| TF              | ZH552    | Y       | -             | -                | 252° (254.8°T) | 2.2           |
| DF              | ZH553    | N       | -             | -210             | -              | -             |
| TF              | ZH501    | N       | -             | -                | 051° (053.9°T) | 4.5           |
| TF              | MOMOL    | N       | -             | -                | 084° (086.9°T) | 5.1           |
| TF              | KOLUL    | N       | -             | -                | 084° (086.9°T) | 6.2           |
| TF              | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF              | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF              | DEGES    | N       | -             | -                | 099° (102.0°T) | 8.0           |

**Procedure Description of RNAV 1 (by ATC only) SID VEBIT 1X**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | RWY28    | -       | -             | -                | -              | -             |
| TF              | ZH540    | Y       | -             | -                | 273° (276.0°T) | 3.3           |
| DF              | ZH542    | N       | -             | -                | -              | -             |
| TF              | BREGO    | N       | +5000         | -                | 232° (235.0°T) | 5.8           |
| TF              | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF              | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF              | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

**1.1.4 SID RWY 32 - RNAV 1**  
(see chart LSZH AD 2.24.7.4 - 1)

| DESIGNATOR                            | RWY 32 - RNAV 1  |   |   |   |        |
|---------------------------------------|--|---|---|---|--------|
|                                       | ROUTE  |   |   | Contact   | Remark |
|                                       | Lateral  | Vertical  |   |   |        |
| <b>DEGES 5L</b><br>PDG 5.6% to 3100ft | Climb straight ahead. Intercept TR327 to ZH580. At ZH580 turn left (MAX IAS 210kt). Intercept TR241 to ZH569. At ZH569 turn left direct to ZH568 (MAX IAS 210kt). At ZH568 proceed via ZH501, MOMOL, KOLUL, ZH504, ZH525 to DEGES. | INITIAL CLIMB CLEARANCE 5000ft. Cross ZH580 at 3500ft or above. (2) Cross ZH568 at 5000ft or above. 1 Cross MOMOL at FL080 or above. 1                | When instructed contact Zurich DEP 125.955. | NIL   |        |
| <b>VEBIT 4N</b><br>PDG 5.6% to 2900ft | Climb straight ahead. Intercept TR327 to ZH580. At ZH580 turn left (MAX IAS 210kt). Intercept TR241 to ZH577 (MAX IAS 210kt during turn). Proceed via BREGO, ZH554, ZH558 to VEBIT.  | INITIAL CLIMB CLEARANCE 5000ft. Cross ZH580 at 3500ft or above. 2 Cross BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above. | When instructed contact Zurich DEP 125.955. | TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 - 1). |        |
| <b>ZUE 5L</b><br>PDG 5.6% to 3100ft   | Climb straight ahead. Intercept TR327 to ZH580. At ZH580 turn left (MAX IAS 210kt). Intercept TR241 to ZH569. At ZH569 turn left direct to ZH568 (MAX IAS 210kt). At ZH568 proceed via ZH501 to ZUE.                               | INITIAL CLIMB CLEARANCE 5000ft. Cross ZH580 at 3500ft or above. 2 Cross ZH568 at 5000ft or above. 1 Cross ZUE at 6000ft or above.                     | When instructed contact Zurich DEP 125.955. | NIL   |        |

1. If unable to comply, advise ATC on CLR DEL.
2. Average climb gradient to reach ZH580 at 3500ft is 14.6%. Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH580. Average climb gradient to reach ZH580 at 2500ft is 7.6%.

| Procedure Description of RNAV 1 SID DEGES 5L |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                              | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| CA   | -        | N       | +1810         | -                | 314° (317.2°T) | -             |
| CF (Navaid KLO)                              | ZH580    | Y       | +3500 (1)     | -                | 327° (330.1°T) | -             |
| CF (Navaid KLO)                              | ZH569    | Y       | -             | -                | 241° (244.2°T) | -             |
| DF   | ZH568    | N       | +5000         | -210             | -              | -             |
| TF   | ZH501    | N       | -             | -                | 087° (090.1°T) | 4.8           |
| TF   | MOMOL    | N       | +FL080        | -                | 084° (086.9°T) | 5.1           |
| TF   | KOLUL    | N       | -             | -                | 084° (086.9°T) | 6.2           |
| TF   | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF   | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF   | DEGES    | N       | -             | -                | 099° (102.0°T) | 8.0           |

(1) Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH580.

**Procedure Description of RNAV 1 SID VEBIT 4N**

| Path terminator    | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|--------------------|----------|---------|---------------|------------------|----------------|---------------|
| CA                 | -        | N       | +1810         | -                | 314° (317.2°T) | -             |
| CF<br>(Navaid KLO) | ZH580    | Y       | +3500 (1)     | -                | 327° (330.1°T) | -             |
| CF<br>(Navaid KLO) | ZH577    | N       | -             | -210             | 241° (244.2°T) | -             |
| TF                 | BREGO    | N       | +5000         | -                | 189° (192.5°T) | 7.9           |
| TF                 | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF                 | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF                 | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

(1) Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH580.

**Procedure Description of RNAV 1 SID ZUE 5L**

| Path terminator    | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|--------------------|----------|---------|---------------|------------------|----------------|---------------|
| CA                 | -        | N       | +1810         | -                | 314° (317.2°T) | -             |
| CF<br>(Navaid KLO) | ZH580    | Y       | +3500 (1)     | -                | 327° (330.1°T) | -             |
| CF<br>(Navaid KLO) | ZH569    | Y       | -             | -                | 241° (244.2°T) | -             |
| DF                 | ZH568    | N       | +5000         | -210             | -              | -             |
| TF                 | ZH501    | N       | -             | -                | 087° (090.1°T) | 4.8           |
| TF                 | ZUE      | N       | +6000         | -                | 051° (053.7°T) | 13.7          |

(1) Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH580.

**SID RWY 32 - RNAV 5**

(see chart LSZH AD 2.24.7.4 - 3)

| DESIGNATOR   | RWY 32 - RNAV 5  |   |   |  |        |
|--|--|---|---|--|--------|
|  | ROUTE  |   |   | Contact  | Remark |
|  | Lateral  | Vertical  |   |  |        |
| <b>DEGES 4N</b><br>PDG 6.3% to 1800ft                | Climb straight ahead. At D2 KLO turn right. Establish TR329. At D4 KLO turn right (MAX IAS 210kt during turn). Intercept R254 ZUE. Proceed via ZH503, ZH506, KOLUL, ZH504, ZH525 to DEGES.                   | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross D4 KLO at 3500ft or above. (2)<br>Cross ZH503 at 6000ft or above. (1)<br>Cross DEGES at FL080 or above. (1)   | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing ZH503.  |        |
| <b>GERSA 1N</b><br>(SUSPENDED)<br>PDG 5.3% to 3300ft | Climb straight ahead. At D2 KLO turn right. Establish TR330. At D4 KLO turn left (MAX IAS 210kt during turn). Establish TR244 to intercept R190 TRA. Proceed via BREGO, ZH556, ZH557, AFOLT, ARTAG to GERSA. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross D4 KLO at 3500ft or above. (2)<br>Cross BREGO at 5000ft or above, ZH556 at 8000ft or above, ZH557 at 9000ft or above, AFOLT at 10000ft or above, GERSA at 14000ft or above. | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing BREGO.<br>TFC via GERSA file VEBIT T53 GERSA. |        |

(1) If unable to comply, advise ATC on CLR DEL.

DEGES 4N: ATC may approve MNM 5000ft at ZH503, if restricting airspace is not active.

(2) Average climb gradient to reach D4 KLO at 3500ft is 14.6%. Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at D4 KLO. Average climb gradient to reach D4 KLO at 2500ft is 7.6%.

**Procedure Description of RNAV 5 SID DEGES 4N**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| IF              | ZH503    | N       | +6000         | -                | -              | -             |
| TF              | ZH506    | N       | -             | -                | 142° (144.6°T) | 5.0           |
| TF              | KOLUL    | N       | -             | -                | 142° (144.6°T) | 2.9           |
| TF              | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF              | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF              | DEGES    | N       | +FL080        | -                | 099° (102.0°T) | 8.0           |

**Procedure Description of RNAV 5 SID GERSA 1N**

| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| -               | BREGO    | N       | +5000         | -                | -              | -             |
| TF              | ZH556    | N       | +8000         | -                | 151° (153.1°T) | 3.5           |
| TF              | ZH557    | N       | +9000         | -                | 151° (153.1°T) | 1.7           |
| TF              | AFOLT    | N       | +10000        | -                | 151° (153.1°T) | 5.2           |
| TF              | ARTAG    | N       | -             | -                | 151° (153.1°T) | 4.8           |
| TF              | GERSA    | N       | +14000        | -                | 173° (174.3°T) | 7.6           |

**SID RWY 32 - RNAV 1 (by ATC only)**  
(see chart LSZH AD 2.24.7.4 - 5)

| DESIGNATOR                            | RWY 32 - RNAV 1 (by ATC only)  |  |   |         |        |
|---------------------------------------|--|--|---|---------|--------|
|                                       | ROUTE  |  |   | Contact | Remark |
|                                       | Lateral  | Vertical   |   |         |        |
| <b>DEGES 1P</b><br>PDG 6.9% to 2000ft | Climb straight ahead to ZH579. At ZH579 turn right to ZH580. At ZH580 turn right direct to ZH571 (MAX IAS 210kt during turn). At ZH571 proceed via ZH503, ZH506, KOLUL, ZH504, ZH525 to DEGES. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH580 at 3500ft or above. (2)<br>Cross ZH503 at 6000ft or above. (1)<br>Cross DEGES at FL080 or above. (1) | When instructed contact Zurich DEP 125.955. | NIL     |        |

(1) If unable to comply, advise ATC on CLR DEL.

ATC may approve MNM 5000ft at ZH503, if restricting airspace is not active.

(2) Average climb gradient to reach ZH580 at 3500ft is 14.6%. Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH580. Average climb gradient to reach ZH580 at 2500ft is 7.6%.

| Procedure Description of RNAV 1 (by ATC only) SID DEGES 1P |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator  | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF   | RWY32    | -       | -             | -                | -              | -             |
| TF   | ZH579    | N       | -             | -                | 314° (317.2°T) | 2.6           |
| TF   | ZH580    | Y       | +3500         | -                | 327° (330.1°T) | 1.6           |
| DF   | ZH571    | N       | -             | -210             | -              | -             |
| TF   | ZH503    | N       | +6000         | -                | 074° (076.6°T) | 5.0           |
| TF   | ZH506    | N       | -             | -                | 142° (144.6°T) | 5.0           |
| TF   | KOLUL    | N       | -             | -                | 142° (144.6°T) | 2.9           |
| TF   | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF   | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF   | DEGES    | N       | +FL080        | -                | 099° (102.0°T) | 8.0           |

**1.1.5 SID RWY 34 - RNP 1 (RF required)**

(see chart LSZH AD 2.24.7.5 - 1)

| DESIGNATOR                            | RWY 34 - RNP 1 (RF required)  |  |   |  |        |
|---------------------------------------|---|--|---|--|--------|
|                                       | ROUTE   |  |   | Contact  | Remark |
|                                       | Lateral   | Vertical   |   |  |        |
| <b>VEBIT 2K</b><br>PDG 4.7% to 3400ft | Climb on course 331. Proceed via ZH570, ZH573, ZH559, BREGO, ZH554, ZH558 to VEBIT.<br>(MAX IAS 210kt until ZH573). | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH570 at 3500ft or above, (1)<br>BREGO at 5000ft or above,<br>ZH554 at 6000ft or above,<br>ZH558 at 7000ft or above. | When instructed contact Zurich DEP 125.955. | TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 -1). |        |

(1) Average climb gradient to reach ZH570 at 3500ft is 12.5%. Four-engined aircraft only: if unable to comply with 3500ft turn may be initiated at MNM 2500ft at ZH570. Average climb gradient to reach ZH570 at 2500ft is 6.6%.

| Procedure Description of RNP 1 (RF required) SID VEBIT 2K |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator   | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| CA  | -        | -       | 1900          | -                | 332° (335.0°T) | -             |
| CF<br>(Navaid KLO)  | ZH570    | N       | +3500 (1)     | -                | 331° (334.1°T) | -             |
| RF<br>(Centre ZH578,<br>r = 2.100NM)                      | ZH573    | N       | -             | -210             | -              | 3.3           |
| TF  | ZH559    | N       | -             | -                | 241° (244.1°T) | 2.3           |
| TF  | BREGO    | N       | +5000         | -                | 189° (191.6°T) | 7.8           |
| TF  | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF  | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF  | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

(1) Four-engined aircraft only: if unable to comply with 3500ft turn may be initiated at MNM 2500ft at ZH570.

**SID RWY 34 - RNAV 1**  
(see chart LSZH AD 2.24.7.5 - 3)

| DESIGNATOR                            | RWY 34 - RNAV 1   |  |   |   |
|---------------------------------------|---|--|---|---|
|                                       | ROUTE   |  | Contact                                     | Remark  |
|                                       | Lateral   | Vertical   |   |   |
| <b>DEGES 5F</b><br>PDG 5.0% to 3200ft | Climb straight ahead.<br>Establish TR331 to ZH570.<br>At ZH570 turn left (MAX IAS 210kt). Intercept TR241 to ZH569. At ZH569 turn left direct to ZH568 (MAX IAS 210kt).<br>At ZH568 proceed via ZH501, MOMOL, KOLUL, ZH504, ZH525 to DEGES. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH570 at 3500ft or above. (1)<br>Cross ZH568 at 5000ft or above. (2)<br>Cross MOMOL at FL080 or above. (2)           | When instructed contact Zurich DEP 125.955. | NIL   |
| <b>VEBIT 4H</b><br>PDG 5.0% to 3200ft | Climb on TR331 to ZH570.<br>At ZH570 turn left (MAX IAS 210kt). Intercept TR241 to ZH577 (MAX 210kt during turn).<br>Proceed via BREGO, ZH554, ZH558 to VEBIT.  | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH570 at 3500ft or above. (1)<br>BREGO at 5000ft or above,<br>ZH554 at 6000ft or above,<br>ZH558 at 7000ft or above. | When instructed contact Zurich DEP 125.955. | TFC via GERSA file VEBIT T53 GERSA, (see LSZH AD 2.24.6 - 1). |
| <b>ZUE 5F</b><br>PDG 5.0% to 3200ft   | Climb straight ahead.<br>Establish TR331 to ZH570.<br>At ZH570 turn left (MAX IAS 210kt). Intercept TR241 to ZH569. At ZH569 turn left direct to ZH568 (MAX IAS 210kt).<br>At ZH568 proceed via ZH501 to ZUE.                               | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross ZH570 at 3500ft or above. (1)<br>Cross ZH568 at 5000ft or above. (2)<br>Cross ZUE at 6000ft or above.                | When instructed contact Zurich DEP 125.955. | NIL   |

(1) Average climb gradient to reach ZH570 at 3500ft is 12.5%. Four-engined aircraft only: if unable to comply with 3500ft turn may be initiated at MNM 2500ft at ZH570. Average climb gradient to reach ZH570 at 2500ft is 6.6%.

(2) If unable to comply, advise ATC on CLR DEL.

| Procedure Description of RNAV 1 SID DEGES 5F |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                              | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| CA   | -        | N       | +1790         | -                | 332° (335.0°T) | -             |
| CF<br>(Navaid KLO)                           | ZH570    | Y       | +3500 (1)     | -                | 331° (334.1°T) | -             |
| CF<br>(Navaid KLO)                           | ZH569    | Y       | -             | -                | 241° (244.2°T) | -             |
| DF   | ZH568    | N       | +5000         | -210             | -              | -             |
| TF   | ZH501    | N       | -             | -                | 087° (090.1°T) | 4.8           |
| TF   | MOMOL    | N       | +FL080        | -                | 084° (086.9°T) | 5.1           |
| TF   | KOLUL    | N       | -             | -                | 084° (086.9°T) | 6.2           |
| TF   | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF   | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF   | DEGES    | N       | -             | -                | 099° (102.0°T) | 8.0           |

(1) Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH570.

| Procedure Description of RNAV 1 SID VEBIT 4H |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                              | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| CA   | -        | N       | +1790         | -                | 332° (335.0°T) | -             |
| CF<br>(Navaid KLO)                           | ZH570    | Y       | +3500 (1)     | -                | 331° (334.1°T) | -             |
| CF<br>(Navaid KLO)                           | ZH577    | N       | -             | -210             | 241° (244.2°T) | -             |
| TF   | BREGO    | N       | +5000         | -                | 189° (192.5°T) | 7.9           |
| TF   | ZH554    | N       | +6000         | -                | 239° (242.5°T) | 4.5           |
| TF   | ZH558    | N       | +7000         | -                | 239° (242.4°T) | 4.8           |
| TF   | VEBIT    | N       | -             | -                | 239° (242.4°T) | 6.4           |

(1) Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH570.

| Procedure Description of RNAV 1 SID ZUE 5F |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                            | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| CA   | -        | N       | +1790         | -                | 332° (335.0°T) | -             |
| CF<br>(Navaid KLO)                         | ZH570    | Y       | +3500 (1)     | -                | 331° (334.1°T) | -             |
| CF<br>(Navaid KLO)                         | ZH569    | Y       | -             | -                | 241° (244.2°T) | -             |
| DF   | ZH568    | N       | +5000         | -210             | -              | -             |
| TF   | ZH501    | N       | -             | -                | 087° (090.1°T) | 4.8           |
| TF   | ZUE      | N       | +6000         | -                | 051° (053.7°T) | 13.7          |

(1) Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH570.

**SID RWY 34 - RNAV 5**  
(see chart LSZH AD 2.24.7.5 - 5)

| DESIGNATOR   | RWY 34 - RNAV 5   |   |   |  |
|--|---|---|---|--|
|  | ROUTE   |   | Contact                                     | Remark   |
|  | Lateral   | Vertical  |   |  |
| <b>DEGES 4H</b><br>PDG 4.6% to 1900ft                | Climb on TR332. At D4 KLO turn right (MAX IAS 210kt during turn). Intercept R254 ZUE. Proceed via ZH503, ZH506, KOLUL, ZH504, ZH525 to DEGES.                   | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross D4 KLO at 3500ft or above. (1)<br>Cross ZH503 at 6000ft or above. (2)<br>Cross DEGES at FL080 or above.   | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing ZH503.  |
| <b>GERSA 1H</b><br>(SUSPENDED)<br>PDG 5.2% to 3300ft | Climb on TR332. At D4 KLO turn left (MAX IAS 210kt during turn). Establish TR244 to intercept R190 TRA. Proceed via BREGO, ZH556, ZH557, AFOLT, ARTAG to GERSA. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross D4 KLO at 3500ft or above. (1)<br>Cross BREGO at 5000ft or above, ZH556 at 8000ft or above, ZH557 at 9000ft or above, AFOLT at 10000ft or above, GERSA at 14000ft or above. | When instructed contact Zurich DEP 125.955. | RNAV applicable when passing BREGO.<br>TFC via GERSA file VEBIT T53 GERSA. |

- (1) Average climb gradient to reach D4 KLO at 3500ft is 12.5%. Four-engined aircraft only: if unable to comply with 3500ft, turn may be initiated at MNM 2500ft at D4 KLO. Average climb gradient to reach D4 KLO at 2500ft is 6.6%.  
(2) If unable to comply, advise ATC on CLR DEL. ATC may approve MNM 5000ft at ZH503, if restricting airspace is not active.

| Procedure Description of RNAV 5 SID DEGES 4H |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                              | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF   | ZH503    | N       | +6000         | -                | -              | -             |
| TF   | ZH506    | N       | -             | -                | 142° (144.6°T) | 5.0           |
| TF   | KOLUL    | N       | -             | -                | 142° (144.6°T) | 2.9           |
| TF   | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF   | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF   | DEGES    | N       | +FL080        | -                | 099° (102.0°T) | 8.0           |

| Procedure Description of RNAV 5 SID GERSA 1H |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                              | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| -  | BREGO    | N       | +5000         | -                | -              | -             |
| TF   | ZH556    | N       | +8000         | -                | 151° (153.1°T) | 3.5           |
| TF   | ZH557    | N       | +9000         | -                | 151° (153.1°T) | 1.7           |
| TF   | AFOLT    | N       | +10000        | -                | 151° (153.1°T) | 5.2           |
| TF   | ARTAG    | N       | -             | -                | 151° (153.1°T) | 4.8           |
| TF   | GERSA    | N       | +14000        | -                | 173° (174.3°T) | 7.6           |

**SID RWY 34 - RNAV 1 (by ATC only)**  
(see chart LSZH AD 2.24.7.5 - 7)

| DESIGNATOR                            | RWY 34 - RNAV 1 (by ATC only)  |   |   |         |        |
|---------------------------------------|--|---|---|---------|--------|
|                                       | ROUTE  |   |   | Contact | Remark |
|                                       | Lateral  | Vertical  |   |         |        |
| <b>DEGES 1J</b><br>PDG 4.7% to 2100ft | Climb straight ahead to ZH570. At ZH570 turn right direct to ZH571 (MAX IAS 210kt). Proceed via ZH571, ZH503, ZH506, KOLUL, ZH504, ZH525 to DEGES. | INITIAL CLIMB CLEARANCE 5000ft.<br>Cross ZH570 at 3500ft or above. (2)<br>Cross ZH503 at 6000ft or above. (1)<br>Cross DEGES at FL080 or above. | When instructed contact Zurich DEP 125.955. | NIL     |        |

(1) If unable to comply, advise ATC on CLR DEL.  
 ATC may approve MNM 5000ft at ZH503, if restricting airspace is not active.  
 (2) Average climb gradient to reach ZH570 at 3500ft is 12.5%.  
 Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at ZH570.  
 Average climb gradient to reach ZH570 at 2500ft is 6.6%.

| Procedure Description of RNAV 1 (by ATC only) SID DEGES 1J |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator  | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF   | RWY34    | -       | -             | -                | -              | -             |
| TF   | ZH570    | Y       | +3500         | -                | 331° (334.1°T) | 4.6           |
| DF   | ZH571    | N       | -             | -210             | -              | -             |
| TF   | ZH503    | N       | +6000         | -                | 074° (076.6°T) | 5.0           |
| TF   | ZH506    | N       | -             | -                | 142° (144.6°T) | 5.0           |
| TF   | KOLUL    | N       | -             | -                | 142° (144.6°T) | 2.9           |
| TF   | ZH504    | N       | -             | -                | 099° (102.1°T) | 3.1           |
| TF   | ZH525    | N       | -             | -                | 099° (101.8°T) | 4.7           |
| TF   | DEGES    | N       | +FL080        | -                | 099° (102.0°T) | 8.0           |

1.2 SID NON RNAV

1.2.1 SID RWY 10 - NON RNAV

(see chart LSZH AD 2.24.7.1 - 5)

The following departure is allocated to propeller aircraft only and requires visual conditions as specified.

|  |
|--|
| <p><b>Visual Conditions</b> for departure:<br/>SID is allocated only if the relevant hill tops for the visual part are clearly visible by TWR.</p> |
|--|

| DESIGNATOR              | RWY 10 - NON RNAV   |   |   |        |
|-------------------------|---|---|---|--------|
|                         | ROUTE   |   |   |        |
|                         | Lateral   | Vertical  | Contact                                     | Remark |
| WILLISAU 3C<br>(WIL 3C) | Climb straight ahead. Short visual right turn, but not before D2.1 KLO or when instructed by ATC. Turn within 2NM south of RWY 10. Establish TR268 to intercept R052 WIL. Proceed via BREGO, ZH555, ZH551 to WIL. | INITIAL CLIMB CLEARANCE 5000ft. Maintain visual ground contact to 4400ft. Cross BREGO at 5000ft or above, ZH555 at 6000ft or above, ZH551 at 7000ft or above. | When instructed contact Zurich DEP 125.955. | NIL    |

1.2.2 SID RWY 16 - NON RNAV

(see chart LSZH AD 2.24.7.2 - 7)

The following departure is allocated to propeller aircraft only and requires visual conditions as specified.

|  |
|--|
| <p><b>Visual Conditions</b> for departure:<br/>SID is allocated only if the relevant hill tops for the visual part are clearly visible by TWR.</p> |
|--|

| DESIGNATOR              | RWY 16 - NON RNAV  |   |   |        |
|-------------------------|--|---|---|--------|
|                         | ROUTE  |   |   |        |
|                         | Lateral  | Vertical  | Contact                                     | Remark |
| WILLISAU 3Q<br>(WIL 3Q) | Climb straight ahead. Short visual right turn, but not before D1 KLO or when instructed by ATC. Turn within 3NM south of KLO. Establish TR268 to intercept R052 WIL. Proceed via BREGO, ZH555, ZH551 to WIL. | INITIAL CLIMB CLEARANCE 5000ft. Maintain visual ground contact to 4400ft. Cross BREGO at 5000ft or above, ZH555 at 6000ft or above, ZH551 at 7000ft or above. | When instructed contact Zurich DEP 125.955. | NIL    |

1.2.3 SID RWY 28 - NON RNAV

(see chart LSZH AD 2.24.7.3 - 9)

| DESIGNATOR   | RWY 28 - NON RNAV  |   |   |        |
|--|--|---|---|--------|
|  | ROUTE  |   |   |        |
|  | Lateral  | Vertical  | Contact                                     | Remark |
| ZURICH EAST 3V<br>(ZUE 3V)<br>PDG 6.6% to 2100ft<br>MNM climb gradient 7.0% up to 5000ft<br>due to airspace restrictions | Climb straight ahead. At D2.3 KLO turn left. Intercept R252 KLO. At ZH552/D6.5 KLO or when instructed by ATC, turn left (MAX IAS 210kt during turn). Intercept R231 ZUE. Proceed to ZUE. | INITIAL CLIMB CLEARANCE 5000ft. Cross ZUE at 6000ft or above. | When instructed contact Zurich DEP 125.955. | NIL    |

**1.2.4 SID RWY 32 - NON RNAV**

(see chart LSZH AD 2.24.7.4 - 7)

| DESIGNATOR   | RWY 32 - NON RNAV  |   |   |   |        |
|--|--|---|---|---|--------|
|  | ROUTE  |   |   | Contact                                       | Remark |
|  | Lateral  | Vertical  |   |   |        |
| <b>ZURICH EAST 2M<br/>(ZUE 2M)</b><br>PDG 6.9% to 1800ft | Climb straight ahead. At D2 KLO turn right. Establish TR329. At D4 KLO turn right (MAX IAS 210kt during turn). Proceed to ZUE. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross D4 KLO at 3500ft or above. (1)<br>Cross D5 ZUE before the station at 5000ft or above, ZUE at 6000ft or above. | When instructed contact Zurich DEP 125.955. | For routing after ZUE, see LSZH AD 2.24.6 - 1 |        |

(1) Average climb gradient to reach D4 KLO at 3500ft is 14.6%. At turn at 3500ft continue to climb at MNM climb gradient 4.3% up to 5600ft due to airspace restrictions. Four-engined aircraft only: If unable to comply with 3500ft, turn may be initiated at MNM 2500ft at D4 KLO. Average climb gradient to reach D4 KLO at 2500ft is 7.6%. At turn at 2500ft continue to climb at MNM climb gradient 7.6% to 5000ft due to airspace restrictions.

**1.2.5 SID RWY 34 - NON RNAV**

(see chart LSZH AD 2.24.7.5 - 9)

| DESIGNATOR   | RWY 34 - NON RNAV   |   |   |         |        |
|--|---|---|---|---------|--------|
|  | ROUTE   |   |   | Contact | Remark |
|  | Lateral   | Vertical  |   |         |        |
| <b>ZURICH EAST 2G<br/>(ZUE 2G)</b><br>PDG 4.7% to 1900ft | Climb on TR332. At D4 KLO turn right (MAX IAS 210kt during turn). Proceed to ZUE. | INITIAL CLIMB<br>CLEARANCE 5000ft.<br>Cross D4 KLO at 3500ft or above. (1)<br>Cross D5 ZUE before the station at 5000ft or above, ZUE at 6000ft or above. | When instructed contact Zurich DEP 125.955. | NIL     |        |

(1) Average climb gradient to reach D4 KLO at 3500ft is 12.5%. At turn at 3500ft continue to climb at MNM climb gradient 4.3% up to 5600ft due to airspace restrictions. Four-engined aircraft only: if unable to comply with 3500ft, turn may be initiated at MNM 2500ft at D4 KLO. Average climb gradient to reach D4 KLO at 2500ft is 6.6%. At turn at 2500ft continue to climb at MNM climb gradient 6.6% up to 5600ft due to airspace restrictions.

**1.2.6 SID Straight Ahead and Turn RWY 10, 16, 28, 34**

(see chart LSZH AD 2.24.7.6 - 1)

| DESIGNATOR   | Straight Ahead and Turn RWY 10, 16, 28, 34   |   |  |                    |        |
|--|--|---|--|--------------------|--------|
|  | ROUTE  |   |  | Contact            | Remark |
|  | Lateral  | Vertical  |  |                    |        |
| <b>SAT 2E</b> (RWY 10)<br>PDG 7.2% to 5000ft   | Climb straight ahead. At 2500ft turn left on TR078. MNM bank angle 20° and MAX IAS 210kt during turn.  | INITIAL CLIMB CLEARANCE 5000ft. Further clearance by ATC. | When instructed contact ZurichDEP 125.955. | No turn before DER |        |
| <b>SAT 2S</b> (RWY 16)<br>PDG 6.5% to 5000ft   | Climb straight ahead. At 2000ft turn left on TR013. MNM bank angle 20° and MAX IAS 210kt during turn.  | INITIAL CLIMB CLEARANCE 5000ft. Further clearance by ATC. | When instructed contact ZurichDEP 125.955. | No turn before DER |        |
| <b>SAT 2W</b> (RWY 28)<br>PDG 6.1% to 5000ft<br>MNM climb gradient 6.6% to 5000ft due to airspace.         | Climb straight ahead. At 2200ft turn left on TR225. MNM bank angle 20° and MAX IAS 210kt during turn.  | INITIAL CLIMB CLEARANCE 5000ft. Further clearance by ATC. | When instructed contact ZurichDEP 125.955. | No turn before DER |        |
| <b>SAT 2F</b> (RWY 34)<br>PDG 5.8% to 5000ft<br>MNM climb gradient 12.5% to 5000ft due to noise abatement. | Climb straight ahead. At 3500ft turn left on TR241. MNM bank angle 20° and MAX IAS 210kt during turn.  | INITIAL CLIMB CLEARANCE 5000ft. Further clearance by ATC. | When instructed contact ZurichDEP 125.955. | No turn before DER |        |
| <b>SAT 2H</b> (RWY 34)<br>PDG 5.8% to 5000ft<br>MNM climb gradient 12.5% to 5000ft due to noise abatement. | Climb straight ahead. At 3500ft turn right on TR104. MNM bank angle 20° and MAX IAS 210kt during turn. | INITIAL CLIMB CLEARANCE 5000ft. Further clearance by ATC. | When instructed contact ZurichDEP 125.955. | No turn before DER |        |

**1.3 Visual departures**

Visual departures are available at LSZH only during daytime on the grounds of safety (for example, to avoid adverse weather such as TS/CB).

**2. STAR Description****IFR PROCEDURE**

Procedures to be followed by arriving aircraft are contained on the charts STANDARD INSTRUMENT ARRIVAL ROUTES (NON RNAV STAR / RNAV 5 STAR / RNAV 1 STAR).

|   |
|---|
| SPEED LIMITATION:<br>General: Below FL 100 MAX IAS 250kt. |
|---|

**2.1 STAR TO GIPOL - RNAV 1**

(see chart LSZH AD 2.24.9.1 - 1)

| DESIGNATOR                       | STAR TO GIPOL - RNAV 1                                      |                |  |
|----------------------------------|---|----------------|--|
|                                  | ROUTE   |                | Remark   |
|                                  | Lateral   | Vertical       |  |
| <b>BERSU 2G</b>                  | From BERSU proceed via TADOB, ERMUS to GIPOL.               | Refer to chart | NIL  |
| <b>BÂLE-MULHOUSE 3G (BLM 3G)</b> | From BLM proceed via ZH677 to GIPOL.                        | Refer to chart | NOTE: For descent planning, expect to cross 13NM to BLM above FL190, BLM between FL200 and FL150, ZH677 not below FL120. |
| <b>DOPIIL 2G</b>                 | From DOPIIL proceed via NOLKA, ERMUS to GIPOL.              | Refer to chart | NIL  |
| <b>KELIP 3G</b>                  | From KELIP proceed via MOSIT, ZH628, ZH627, ZH501 to GIPOL. | Refer to chart | NIL  |

| Procedure Description of RNAV 1 STAR BERSU 2G |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                               | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF  | BERSU    | N       | -             | -                | -              | -             |
| TF  | TADOB    | N       | -             | -                | 062° (064.8°T) | 6.7           |
| TF  | ERMUS    | N       | +8000         | -                | 062° (065.0°T) | 7             |
| TF  | GIPOL    | N       | +7000         | -                | 330° (333.2°T) | 18.4          |

| Procedure Description of RNAV 1 STAR BLM 3G |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                             | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF  | BLM      | N       | -FL 200       | -                | -              | -             |
| TF  | ZH677    | N       | +FL 120       | -                | 106° (109.0°T) | 10.2          |
| TF  | GIPOL    | N       | +7000         | -                | 106° (109.2°T) | 13.1          |

| Procedure Description of RNAV 1 STAR DOPIIL 2G |          |         |               |                  |                |               |
|--|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                                | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF   | DOPIIL   | N       | -             | -                | -              | -             |
| TF   | NOLKA    | N       | -             | -                | 041° (043.7°T) | 6.5           |
| TF   | ERMUS    | N       | +8000         | -                | 041° (043.8°T) | 7             |
| TF   | GIPOL    | N       | +7000         | -                | 330° (333.2°T) | 18.4          |

| Procedure Description of RNAV 1 STAR KELIP 3G |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                               | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF  | KELIP    | N       | -             | -                | -              | -             |
| TF  | MOSIT    | N       | +14000        | -                | 351° (353.8°T) | 6.8           |
| TF  | ZH628    | N       | +10000        | -                | 347° (349.8°T) | 12.2          |
| TF  | ZH627    | N       | -             | -                | 332° (335.1°T) | 6.8           |

| Procedure Description of RNAV 1 STAR KELIP 3G |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                               | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| TF  | ZH501    | N       | -             | -                | 326° (329.1°T) | 5.9           |
| TF  | GIPOL    | N       | +7000         | -                | 275° (278.2°T) | 20.7          |

**2.2 STAR TO GIPOL - NON RNAV**

(see chart LSZH AD 2.24.9.2 - 1)

| DESIGNATOR              | STAR TO GIPOL - NON RNAV                     |                |        |
|-------------------------|--|----------------|--------|
|                         | ROUTE  |                |        |
|                         | Lateral                                      | Vertical       | Remark |
| WILLISAU 3Z<br>(WIL 3Z) | At WIL intercept R013 WIL. Proceed to GIPOL. | Refer to chart | NIL    |

**2.3 STAR TO AMIKI - RNAV 1**

(see chart LSZH AD 2.24.9.3 - 1)

| DESIGNATOR | STAR TO AMIKI - RNAV 1                |                |        |
|------------|---------------------------------------|----------------|--------|
|            | ROUTE                                 |                |        |
|            | Lateral                               | Vertical       | Remark |
| TRA 2A     | From TRA proceed to AMIKI.            | Refer to chart | NIL    |
| NEGRA 2A   | From NEGRA proceed via MATIV to AMIKI | Refer to chart | NIL    |
| RILAX 2A   | From RILAX proceed via LAMAX to AMIKI | Refer to chart | NIL    |

| Procedure Description of RNAV 1 STAR TRA 2A |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                             | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF  | TRA      | N       | -             | -                | -              | -             |
| TF  | AMIKI    | N       | +7000         | -                | 103° (105.7°T) | 25.3          |

| Procedure Description of RNAV 1 STAR NEGRA 2A |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                               | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF  | NEGRA    | N       | -             | -                | -              | -             |
| TF  | MATIV    | N       | -             | -                | 228° (231.0°T) | 12.3          |
| TF  | AMIKI    | N       | +7000         | -                | 257° (259.7°T) | 6.4           |

| Procedure Description of RNAV 1 STAR RILAX 2A |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                               | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF  | RILAX    | N       | -             | -                | -              | -             |
| TF  | LAMAX    | N       | -             | -                | 138° (140.6°T) | 25.0          |
| TF  | AMIKI    | N       | +7000         | -                | 114° (117.7°T) | 6.1           |

**2.4 Approach procedures:**REF: [ENR 1.5](#)**2.4.1 Initial call**

On initial call to "Zurich Arrival" the pilot shall report:

- Call sign and the word "HEAVY" or "SUPER", if applicable;
- Level, including passing and cleared level, if in climb/descent;
- Speed, if assigned by ATC;
- Aircraft type; and
- IDENT letter of the received ARR ATIS information.

**2.4.2 RNAV 1 Transitions to Final Approach**

The 'RNAV 1 ARRIVAL TRANSITIONS TO FINAL APPROACH' start at the end of the STARs and guide the aircraft to the relevant final approach track of the published instrument approach procedures for the runways 14, 16, 28 or 34.

By utilizing these procedures, reduction in radio telephony communication is possible. The turn to final approach is usually performed by radar vectors to expedite traffic and for separation reasons.

The utilization of the procedure requires a clearance by ATC.

The procedures are at or above ATC surveillance minimum altitude and will be radar monitored.

The flight crew unable to fly RNAV 1 TRANSITIONS shall advise ATC on initial contact with APP by using the phraseology: '**UNABLE RNAV TRANSITION**'. ATC will then issue radar vectors to the final approach track of the relevant instrument approach.

**2.4.3 Procedure description of RNAV 1 Transition to Final Approach RWY 14 (ILS-LOC, GLS, RNP)**

(see chart LSZH 2.24.10.1 - 1)

| From GIPOL      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | GIPOL    | N       | -             | -                | -              | -             |
| TF              | ZH372    | N       | -             | -240             | 106° (109.3°T) | 6.7           |
| TF              | ZH404    | N       | -             | -                | 058° (060.9°T) | 4.8           |
| TF              | ZH406    | N       | -             | -                | 314° (317.0°T) | 4.2           |
| TF              | ZH408    | N       | -             | -                | 314° (317.0°T) | 5.0           |
| TF              | ZH410    | N       | +6000         | -                | 044° (046.9°T) | 6.0           |
| TF              | ZH414    | N       | +4300         | -                | 134° (136.9°T) | 4.9           |
| TF              | OSNEM    | N       | +4000         | -                | 134° (137.1°T) | 4.0           |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | ZH371    | N       | +FL100        | -                | 144° (147.0°T) | 5.6           |
| TF              | ZH373    | N       | +FL080        | -                | 144° (147.0°T) | 2.9           |
| TF              | ZH375    | N       | -             | -                | 144° (146.9°T) | 13.4          |
| TF              | ZH403    | N       | -             | -                | 244° (247.4°T) | 9.0           |
| TF              | ZH405    | N       | +7000         | -                | 314° (317.3°T) | 4.5           |
| TF              | ZH407    | N       | -             | -                | 314° (317.2°T) | 5.0           |
| TF              | ZH409    | N       | -             | -                | 314° (317.2°T) | 5.0           |
| TF              | ZH410    | N       | +6000         | -                | 224° (227.1°T) | 6.0           |
| TF              | ZH414    | N       | +4300         | -                | 134° (136.9°T) | 4.9           |
| TF              | OSNEM    | N       | +4000         | -                | 134° (137.1°T) | 4.0           |

| From AMIKI      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | AMIKI    | N       | -             | -                | -              | -             |
| TF              | ZH375    | N       | -             | -                | 289° (292.0°T) | 10.0          |
| TF              | ZH403    | N       | -             | -                | 244° (247.4°T) | 9.0           |
| TF              | ZH405    | N       | +7000         | -                | 314° (317.3°T) | 4.5           |
| TF              | ZH407    | N       | -             | -                | 314° (317.2°T) | 5.0           |
| TF              | ZH409    | N       | -             | -                | 314° (317.2°T) | 5.0           |
| TF              | ZH410    | N       | +6000         | -                | 224° (227.1°T) | 6.0           |
| TF              | ZH414    | N       | +4300         | -                | 134° (136.9°T) | 4.9           |
| TF              | OSNEM    | N       | +4000         | -                | 134° (137.1°T) | 4.0           |

2.4.4 Procedure description of RNAV 1 Transition to Final Approach RWY 16 (ILS-LOC)

(see chart LSZH 2.24.10.2 - 1)

| From GIPOL      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | GIPOL    | N       | -             | -                | -              | -             |
| TF              | ZH372    | N       | -             | -                | 106° (109.3°T) | 6.7           |
| TF              | ZH424    | N       | -             | -                | 058° (060.9°T) | 6.7           |
| TF              | ZH426    | N       | +6000         | -                | 332° (334.9°T) | 6.2           |
| TF              | ZH428    | N       | -             | -                | 332° (334.8°T) | 4.1           |
| TF              | ZH430    | N       | -             | -                | 062° (064.7°T) | 6.0           |
| TF              | ZH434    | N       | +5000         | -                | 152° (154.9°T) | 4.2           |
| TF              | ENUSO    | N       | +4000         | -                | 152° (154.9°T) | 4.0           |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | ZH371    | N       | +FL100        | -                | 144° (147.0°T) | 5.6           |
| TF              | ZH373    | N       | +FL080        | -                | 144° (147.0°T) | 2.9           |
| TF              | ZH375    | N       | +7000         | -                | 144° (146.9°T) | 13.4          |
| TF              | ZH425    | N       | -             | -                | 255° (257.6°T) | 8.3           |
| TF              | ZH427    | N       | +6000         | -                | 332° (335.0°T) | 6.3           |
| TF              | ZH429    | N       | -             | -                | 332° (335.0°T) | 4.1           |
| TF              | ZH430    | N       | -             | -                | 242° (244.9°T) | 6.0           |
| TF              | ZH434    | N       | +5000         | -                | 152° (154.9°T) | 4.2           |
| TF              | ENUSO    | N       | +4000         | -                | 152° (154.9°T) | 4.0           |

| From AMIKI      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | AMIKI    | N       | -             | -                | -              | -             |
| TF              | ZH375    | N       | +7000         | -                | 289° (292.0°T) | 10.0          |
| TF              | ZH425    | N       | -             | -                | 255° (257.6°T) | 8.3           |
| TF              | ZH427    | N       | +6000         | -                | 332° (335.0°T) | 6.3           |
| TF              | ZH429    | N       | -             | -                | 332° (335.0°T) | 4.1           |
| TF              | ZH430    | N       | -             | -                | 242° (244.9°T) | 6.0           |
| TF              | ZH434    | N       | +5000         | -                | 152° (154.9°T) | 4.2           |
| TF              | ENUSO    | N       | +4000         | -                | 152° (154.9°T) | 4.0           |

**2.4.5 Procedure description of RNAV 1 Transition to Final Approach RWY 28 (ILS-LOC, RNP)**

(see chart LSZH 2.24.10.3 - 1)

| From GIPOL      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | GIPOL    | N       | -             | -                | -              | -             |
| TF              | ZH445    | N       | -             | -                | 046° (049.4°T) | 6.1           |
| TF              | ZH447    | N       | -             | -                | 143° (146.0°T) | 8.8           |
| TF              | ZH449    | N       | -             | -                | 143° (146.1°T) | 6.9           |
| TF              | ZH451    | N       | -             | -                | 093° (095.8°T) | 7.0           |
| TF              | ZH453    | N       | -             | -                | 093° (096.0°T) | 5.0           |
| TF              | ZH455    | N       | -             | -                | 093° (096.1°T) | 5.0           |
| TF              | ZH457    | N       | -             | -                | 093° (096.1°T) | 5.0           |
| TF              | ZH459    | N       | -             | -                | 093° (096.2°T) | 5.0           |
| TF              | ZH460    | N       | +7000         | -                | 003° (006.3°T) | 7.0           |
| TF              | ZH464    | N       | -             | -                | 273° (276.4°T) | 5.4           |
| TF              | RAMEM    | N       | +5000         | -                | 273° (276.2°T) | 4.0           |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | ZH446    | N       | +FL100        | -                | 165° (168.1°T) | 4.8           |
| TF              | ZH448    | N       | +FL080        | -                | 165° (168.1°T) | 3.6           |
| TF              | ZH450    | N       | -             | -                | 165° (168.1°T) | 3.9           |
| TF              | ZH452    | N       | -             | -                | 165° (168.1°T) | 3.9           |
| TF              | ZH454    | N       | -             | -                | 126° (128.9°T) | 11.7          |
| TF              | ZH456    | N       | -             | -                | 093° (096.1°T) | 5.0           |
| TF              | ZH458    | N       | -             | -                | 093° (096.2°T) | 5.0           |
| TF              | ZH460    | N       | +7000         | -                | 183° (186.3°T) | 7.0           |
| TF              | ZH464    | N       | -             | -                | 273° (276.4°T) | 5.4           |
| TF              | RAMEM    | N       | +5000         | -                | 273° (276.2°T) | 4.0           |

| From AMIKI      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | AMIKI    | N       | -             | -                | -              | -             |
| TF              | ZH382    | N       | -             | -                | 312° (314.8°T) | 17.4          |
| TF              | ZH450    | N       | -             | -                | 248° (251.1°T) | 6.7           |
| TF              | ZH452    | N       | -             | -                | 165° (168.1°T) | 3.9           |
| TF              | ZH454    | N       | -             | -                | 126° (128.9°T) | 11.7          |
| TF              | ZH456    | N       | -             | -                | 093° (096.1°T) | 5.0           |
| TF              | ZH458    | N       | -             | -                | 093° (096.2°T) | 5.0           |
| TF              | ZH460    | N       | +7000         | -                | 183° (186.3°T) | 7.0           |
| TF              | ZH464    | N       | -             | -                | 273° (276.4°T) | 5.4           |
| TF              | RAMEM    | N       | +5000         | -                | 273° (276.2°T) | 4.0           |

**2.4.6 Procedure description of RNP RWY 28**

(see chart LSZH AD 2.24.10.3 - 7)

| From RAMEM      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RAMEM    | N       | 5000          | -                | -              | -             |
| TF              | RW28     | Y       | -             | -                | 273° (276.2°T) | 10.1          |
| TF(1)           | ZH465    | N       | -4000         | -                | 273° (276.0°T) | 5.0           |
| TF              | ZH466    | N       | -             | -210             | 193° (196.0°T) | 7.9           |
| TF              | ZH467    | N       | -             | -                | 241° (244.4°T) | 12.2          |
| TF              | ZH468    | N       | -             | -                | 295° (297.5°T) | 7.6           |
| TF              | GIPOL    | N       | +7000         | -230             | 013° (015.7°T) | 12.2          |

(1) The first segment of the missed approach to ZH465 can be replaced by DF instead of TF in order to accommodate for coding issues with some FMS manufacturers.

**2.4.7 Procedure description of RNAV 1 Transition to Final Approach RWY 34 (ILS-LOC)**

(see chart LSZH AD 2.24.10.4 - 1)

| From GIPOL      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | GIPOL    | N       | -             | -                | -              | -             |
| TF              | ZH479    | N       | +7000         | -                | 046° (048.5°T) | 10.9          |
| TF              | ZH481    | N       | -             | -                | 152° (154.7°T) | 6.0           |
| TF              | ZH483    | N       | -             | -                | 152° (154.8°T) | 6.0           |
| TF              | ZH485    | N       | -             | -                | 152° (154.8°T) | 6.0           |
| TF              | ZH487    | N       | -             | -                | 152° (154.9°T) | 6.0           |
| TF              | ZH489    | N       | -             | -                | 152° (154.9°T) | 6.0           |
| TF              | ZH490    | N       | -             | -                | 062° (065.0°T) | 7.0           |
| TF              | UTIXO    | N       | +6000         | -                | 332° (335.0°T) | 2.0           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.9           |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | ZH474    | N       | +FL100        | -                | 185° (187.5°T) | 4.7           |
| TF              | ZH476    | N       | -             | -                | 185° (187.5°T) | 2.8           |
| TF              | ZH478    | N       | +FL080        | -                | 152° (155.1°T) | 6.3           |
| TF              | ZH480    | N       | +7000         | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH482    | N       | -             | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH484    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH486    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH488    | N       | -             | -                | 152° (155.2°T) | 6.0           |
| TF              | ZH490    | N       | -             | -                | 242° (245.2°T) | 7.0           |
| TF              | UTIXO    | N       | +6000         | -                | 332° (335.0°T) | 2.0           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.9           |

| From AMIKI      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | AMIKI    | N       | -             | -                | -              | -             |
| TF              | ZH382    | N       | -             | -                | 312° (314.8°T) | 17.4          |
| TF              | ZH478    | N       | +FL080        | -                | 243° (246.1°T) | 7.9           |
| TF              | ZH480    | N       | +7000         | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH482    | N       | -             | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH484    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH486    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH488    | N       | -             | -                | 152° (155.2°T) | 6.0           |
| TF              | ZH490    | N       | -             | -                | 242° (245.2°T) | 7.0           |
| TF              | UTIXO    | N       | +6000         | -                | 332° (335.0°T) | 2.0           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.9           |

#### 2.4.8 FREQ change

- When changing FREQ from Zurich Arrival to Zurich Final, initial contact shall be restricted to **Zurich Final & call sign**.
- When changing FREQ from Zurich Arrival or Zurich Final to Zurich TWR, initial contact shall be restricted to **Zurich TWR, call sign, type of APCH & RWY**.

#### 2.4.9 Speed restrictions

Speed restrictions are applied for ATC separation purposes and are mandatory. In the event of a new (non-speed related) ATC clearance being issued (e.g. an instruction to descend on ILS/GLS), pilots shall CONT to maintain a previously allocated speed.

All speed restrictions are to be flown as accurately as possible. Pilots unable to comply with the given speeds shall inform ATC and state what speeds may be used.

#### 2.4.10 Procedure description of RNAV Standard Initial APCH Segment to Final Approach RWY 14 (ILS-LOC)

(see chart LSZH AD 2.24.10.1 - 3 and LSZH AD 2.24.10.1 - 5)

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | EDUMI    | N       | +7000         | -                | 189° (191.5°T) | 11.1          |
| TF              | TRA      | N       | +5000         | -                | 188° (191.5°T) | 4.4           |
| TF              | ZH413    | N       | -             | -210             | 224° (227.1°T) | 5.5           |
| TF              | OSNEM    | N       | +4000         | -                | 134° (137.2°T) | 3.9           |

2.4.11 Procedure description of GLS RWY 14

(see chart LSZH AD 2.24.10.1 - 7)

| From GIPOL      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | GIPOL    | N       | +7000         | -                | -              | -             |
| TF              | ZH412    | N       | +6000         | -210             | 052° (055.3°T) | 9.5           |
| TF              | ZH413    | N       | -             | -                | 063° (065.6°T) | 4.6           |
| TF              | OSNEM    | N       | 4000          | -                | 134° (137.2°T) | 3.9           |

| From AMIKI      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | AMIKI    | N       | -             | -                | -              | -             |
| TF              | ZUE      | N       | -             | -                | 274° (277.1°T) | 9.0           |
| TF              | ZH411    | N       | +7000         | -                | 288° (290.9°T) | 6.5           |
| TF              | TRA      | N       | +5000         | -210             | 288° (290.7°T) | 10.0          |
| TF              | ZH413    | N       | -             | -                | 224° (227.1°T) | 5.5           |
| TF              | OSNEM    | N       | 4000          | -                | 134° (137.2°T) | 3.9           |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | EDUMI    | N       | +7000         | -                | 189° (191.5°T) | 11.1          |
| TF              | TRA      | N       | +5000         | -210             | 188° (191.5°T) | 4.4           |
| TF              | ZH413    | N       | -             | -                | 224° (227.1°T) | 5.5           |
| TF              | OSNEM    | N       | 4000          | -                | 134° (137.2°T) | 3.9           |

| Missed approach after precision segment |          |         |               |                  |                |               |
|---|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator                         | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF                                      | ZH415    | Y       | -             | -                | -              | -             |
| DF                                      | ZH416    | N       | -4000         | -210             | -              | -             |
| TF                                      | ZH417    | N       | -             | -                | 013° (015.7°T) | 4.6           |
| TF                                      | ZUE      | N       | +6000         | -                | 052° (054.9°T) | 3.7           |
| TF                                      | AMIKI    | N       | -             | -                | 094° (096.9°T) | 9.0           |

## 2.4.12 Procedure description of RNP RWY 14

| From GIPOL      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | GIPOL    | N       | +7000         | -                | -              | -             |
| TF              | ZH412    | N       | +6000         | -210             | 052° (055.3°T) | 9.5           |
| TF              | ZH413    | N       | -             | -                | 063° (065.6°T) | 4.6           |
| TF              | OSNEM    | N       | 4000          | -                | 134° (137.2°T) | 3.9           |
| TF              | RW14     | Y       | -             | -                | 134° (137.1°T) | 8.0           |
| DF              | ZH415    | Y       | -             | -                | 134° (137.1°T) | 5.3           |
| DF              | ZH416    | N       | -4000         | -210             | -              | -             |
| TF              | ZH417    | N       | -             | -                | 013° (015.7°T) | 4.6           |
| TF              | ZUE      | N       | +6000         | -                | 052° (054.9°T) | 3.7           |
| TF              | AMIKI    | N       | -             | -                | 094° (096.9°T) | 9.0           |

(see chart LSZH AD 2.24.10.1 - 9)

| From AMIKI      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | AMIKI    | N       | -             | -                | -              | -             |
| TF              | ZUE      | N       | -             | -                | 274° (277.1°T) | 9.0           |
| TF              | ZH411    | N       | +7000         | -                | 288° (290.9°T) | 6.5           |
| TF              | TRA      | N       | +5000         | -210             | 288° (290.7°T) | 10.0          |
| TF              | ZH413    | N       | -             | -                | 224° (227.1°T) | 5.5           |
| TF              | OSNEM    | N       | 4000          | -                | 134° (137.2°T) | 3.9           |
| TF              | RW14     | Y       | -             | -                | 134° (137.1°T) | 8.0           |
| DF              | ZH415    | Y       | -             | -                | 134° (137.1°T) | 5.3           |
| DF              | ZH416    | N       | -4000         | -210             | -              | -             |
| TF              | ZH417    | N       | -             | -                | 013° (015.7°T) | 4.6           |
| TF              | ZUE      | N       | +6000         | -                | 052° (054.9°T) | 3.7           |
| TF              | AMIKI    | N       | -             | -                | 094° (096.9°T) | 9.0           |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | EDUMI    | N       | +7000         | -                | 189° (191.5°T) | 11.1          |
| TF              | TRA      | N       | +5000         | -210             | 188° (191.5°T) | 4.4           |
| TF              | ZH413    | N       | -             | -                | 224° (227.1°T) | 5.5           |
| TF              | OSNEM    | N       | 4000          | -                | 134° (137.2°T) | 3.9           |
| TF              | RW14     | Y       | -             | -                | 134° (137.1°T) | 8.0           |
| DF              | ZH415    | Y       | -             | -                | 134° (137.1°T) | 5.3           |
| DF              | ZH416    | N       | -4000         | -210             | -              | -             |
| TF              | ZH417    | N       | -             | -                | 013° (015.7°T) | 4.6           |
| TF              | ZUE      | N       | +6000         | -                | 052° (054.9°T) | 3.7           |
| TF              | AMIKI    | N       | -             | -                | 094° (096.9°T) | 9.0           |

CTN: Step down fix at 3.5 NM to RW14 not to be coded as WPT.

**2.4.13 Procedure description of RNAV 1 Standard Initial APCH Segment to Final Approach RWY 16 (ILS-LOC)**

(see chart LSZH AD 2.24.10.2 - 3 and LSZH AD 2.24.10.2 - 5)

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | EDUMI    | N       | +7000         | -                | 189° (191.5°T) | 11.1          |
| TF              | TRA      | N       | +5000         | -                | 188° (191.5°T) | 4.4           |
| TF              | ZH706    | N       | -             | -210             | 188° (191.5°T) | 3.0           |
| TF              | ENUSO    | N       | +4000         | -                | 152° (154.9°T) | 2.9           |

**2.4.14 Procedure description of RNAV 1 Standard Initial APCH Segment to Final Approach RWY 28 (ILS-LOC)**

(see chart LSZH AD 2.24.10.3 - 3 and LSZH AD 2.24.10.3 - 5)

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | EDUMI    | N       | +7000         | -                | 189° (191.5°T) | 11.1          |
| TF              | TRA      | N       | -             | -                | 188° (191.5°T) | 4.4           |
| TF              | KLO      | N       | +6000         | -                | 159° (162.4°T) | 14.6          |

**2.4.15 Procedure description RWY 34**

**2.4.15.1 Procedure description of RNAV 1 Standard Initial APCH Segment to Final Approach RWY 34 (ILS)**

(see chart LSZH AD 2.24.10.4 - 3)

| From GIPOL      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | GIPOL    | N       | -             | -                | -              | -             |
| TF              | ZH479    | N       | +7000         | -                | 046° (048.5°T) | 10.9          |
| TF              | ZH481    | N       | -             | -                | 152° (154.7°T) | 6.0           |
| TF              | ZH483    | N       | -             | -                | 152° (154.8°T) | 6.0           |
| TF              | ZH485    | N       | -             | -                | 152° (154.8°T) | 6.0           |
| TF              | ZH487    | N       | -             | -                | 152° (154.9°T) | 6.0           |
| TF              | ZH489    | N       | -             | -                | 152° (154.9°T) | 6.0           |
| TF              | ZH490    | N       | +6000         | -                | 062° (065.0°T) | 7.0           |
| TF              | ZH492    | N       | -             | -                | 332° (335.1°T) | 2.9           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.0           |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | ZH474    | N       | +FL100        | -                | 185° (187.5°T) | 4.7           |
| TF              | ZH476    | N       | -             | -                | 185° (187.5°T) | 2.8           |
| TF              | ZH478    | N       | +FL080        | -                | 152° (155.1°T) | 6.2           |
| TF              | ZH480    | N       | +7000         | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH482    | N       | -             | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH484    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH486    | N       | -             | -                | 152° (155.1°T) | 6.0           |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| TF              | ZH488    | N       | -             | -                | 152° (155.2°T) | 6.0           |
| TF              | ZH490    | N       | +6000         | -                | 242° (245.2°T) | 7.0           |
| TF              | ZH492    | N       | -             | -                | 332° (335.1°T) | 2.9           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.0           |

| From AMIKI      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | AMIKI    | N       | -             | -                | -              | -             |
| TF              | ZH382    | N       | -             | -                | 312° (314.8°T) | 17.4          |
| TF              | ZH478    | N       | +FL080        | -                | 243° (246.1°T) | 7.9           |
| TF              | ZH480    | N       | +7000         | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH482    | N       | -             | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH484    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH486    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH488    | N       | -             | -                | 152° (155.2°T) | 6.0           |
| TF              | ZH490    | N       | +6000         | -                | 242° (245.2°T) | 7.0           |
| TF              | ZH492    | N       | -             | -                | 332° (335.1°T) | 2.9           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.0           |

#### 2.4.15.2 Procedure description of RNAV 1 Standard Initial APCH Segment to Final Approach RWY 34 (LOC)

(see chart LSZH AD 2.24.10.4 - 5)

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | EDUMI    | N       | -             | -                | 189° (191.5°T) | 11.1          |
| TF              | TRA      | N       | -             | -                | 188° (191.5°T) | 4.4           |
| TF              | KLO      | N       | +7000         | -                | 159° (162.4°T) | 14.6          |

#### 2.4.15.3 Procedure description of RNP RWY 34 (by ATC only)

(see chart LSZH AD 2.24.10.4 - 7)

| From GIPOLE     |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | GIPOLE   | N       | -             | -                | -              | -             |
| TF              | ZH479    | N       | +7000         | -                | 046° (048.5°T) | 10.9          |
| TF              | ZH481    | N       | -             | -                | 152° (154.7°T) | 6.0           |
| TF              | ZH483    | N       | -             | -                | 152° (154.8°T) | 6.0           |
| TF              | ZH485    | N       | -             | -                | 152° (154.8°T) | 6.0           |
| TF              | ZH487    | N       | -             | -                | 152° (154.9°T) | 6.0           |
| TF              | ZH489    | N       | -             | -                | 152° (154.9°T) | 6.0           |
| TF              | ZH490    | N       | +6000         | -                | 062° (065.0°T) | 7.0           |
| TF              | ZH492    | N       | -             | -                | 332° (335.1°T) | 2.9           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.0           |
| TF              | RW34     | Y       | -             | -                | 332° (335.0°T) | 10.1          |
| TF              | ZH495    | N       | -5000         | -185             | 332° (334.6°T) | 7.0           |
| TF              | GIPOLE   | N       | +7000         | -                | 258° (260.7°T) | 18.1          |

| From RILAX      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | RILAX    | N       | -             | -                | -              | -             |
| TF              | ZH474    | N       | +FL100        | -                | 185° (187.5°T) | 4.7           |
| TF              | ZH476    | N       | -             | -                | 185° (187.5°T) | 2.8           |
| TF              | ZH478    | N       | +FL080        | -                | 152° (155.1°T) | 6.2           |
| TF              | ZH480    | N       | +7000         | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH482    | N       | -             | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH484    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH486    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH488    | N       | -             | -                | 152° (155.2°T) | 6.0           |
| TF              | ZH490    | N       | +6000         | -                | 242° (245.2°T) | 7.0           |
| TF              | ZH492    | N       | -             | -                | 332° (335.1°T) | 2.9           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.0           |
| TF              | RW34     | Y       | -             | -                | 332° (335.0°T) | 10.1          |
| TF              | ZH495    | N       | -5000         | -185             | 332° (334.6°T) | 7.0           |
| TF              | GIPOL    | N       | +7000         | -                | 258° (260.7°T) | 18.1          |

| From AMIKI      |          |         |               |                  |                |               |
|-----------------|----------|---------|---------------|------------------|----------------|---------------|
| Path terminator | Waypoint | Flyover | Altitude (ft) | Speed limit (kt) | Track          | Distance (NM) |
| IF              | AMIKI    | N       | -             | -                | -              | -             |
| TF              | ZH382    | N       | -             | -                | 312° (314.8°T) | 17.4          |
| TF              | ZH478    | N       | +FL080        | -                | 243° (246.1°T) | 7.9           |
| TF              | ZH480    | N       | +7000         | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH482    | N       | -             | -                | 152° (155.0°T) | 6.0           |
| TF              | ZH484    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH486    | N       | -             | -                | 152° (155.1°T) | 6.0           |
| TF              | ZH488    | N       | -             | -                | 152° (155.2°T) | 6.0           |
| TF              | ZH490    | N       | +6000         | -                | 242° (245.2°T) | 7.0           |
| TF              | ZH492    | N       | -             | -                | 332° (335.1°T) | 2.9           |
| TF              | MILNI    | N       | +5000         | -                | 332° (335.3°T) | 2.0           |
| TF              | RW34     | Y       | -             | -                | 332° (335.0°T) | 10.1          |
| TF              | ZH495    | N       | -5000         | -185             | 332° (334.6°T) | 7.0           |
| TF              | GIPOL    | N       | +7000         | -                | 258° (260.7°T) | 18.1          |

#### 2.4.16 ILS category III

The CAT III ILS (RWY 14 and 16) and the associated equipment are in compliance with ICAO SARPS. Details are given in [LSZH AD 2.19](#) and IAC.

#### 2.4.17 Visual approach

Visual APCHs are AVBL at LSZH on the grounds of safety only (for example, to avoid adverse weather, such as TS/CB).

**2.5 Land and Hold Short Operation RWY 28 (secondary intersecting RWY)****2.5.1 Introduction**

The land and hold short operation allows VFR APCHs with admitted ACFT types and in compliance with defined conditions on RWY 28 (SRY intersecting RWY) with simultaneous IFR APCHs and DEPs on RWY 16/34 (PRI intersecting RWY).

**2.5.2 Admitted ACFT**

- All single-engine ACFT up to 5700 kg MTOM

**2.6 ICAO Code Letter F Flight Operations**

For ICAO Code letter F ground operations, refer to [LSZH AD 2.20](#) § 3.4 and chart [LSZH AD 2.24.3](#) - 5.

**2.6.1 Arrival**

APCH via ILS RWY 14 CAT I, II & III, GLS RWY 14, ILS RWY 16 CAT I, II & III, ILS RWY 34 CAT I or ILS RWY 28 UNCAT. Other RWYs are not AVBL for LDG.

**2.6.2 Departure**

DEP from RWY 16, RWY 32 or RWY 34. Other RWYs are not AVBL for DEP.

All published SID on the mentioned RWYs are applicable, refer to [LSZH AD 2.22](#) § 1.

**3. JAA minima for Zurich AP**

| TKOF RWY 16, 28, 32, 34  |  |                 |                                 |                                 |                |
|--|--|-----------------|---------------------------------|---------------------------------|----------------|
| Low Visibility Procedures must be in force   |  |                 |                                 |                                 |                |
|  | REDL, CL LGT and multiple RVR required | REDL and CL LGT | RCL markings (day only) or REDL | RCL markings (day only) or REDL | NIL (day only) |
| A  | 150 m <sup>1) 3)</sup>                 |                 | 250 m                           | 400 m                           | 500 m          |
| B  |  | 200 m           | 300 m                           |                                 | 600 m          |
| C  |  |                 |                                 |                                 | 800 m          |
| D  | 200 m <sup>2) 3)</sup>                 | 250 m           | 400 m                           |                                 |                |
| 1. 125 m provided the conditions under Appendix 1 to JAR-OPS 1.430 (a) (4) (i), (A) to (E) are met<br>2. 150 m provided the conditions under Appendix 1 to JAR-OPS 1.430 (a) (4) (i), (A) to (E) are met<br>3. 75 m provided the conditions under Appendix 1 to JAR-OPS 1.430 (a) (4) (i), (A) to (E) are met and the ACFT has an APV lateral guidance system for TKOF |  |                 |                                 |                                 |                |

| Take-off RWY 10 |                                 |                |
|-----------------|---------------------------------|----------------|
|                 | RCL markings (day only) or REDL | NIL (day only) |
| A               | 400 m                           | 500 m          |
| B               |                                 | 600 m          |
| C               |                                 |                |
| D               |                                 | 800 m          |

4. Minima for IFR departures (TKOF minima)

| RWY        | ACFT CAT | Vis (m) / Ceiling (ft AGL) |                   |                    | RMK        |
|------------|----------|----------------------------|-------------------|--------------------|------------|
|            |          | No LGT AVBL                | REDL or RCLL AVBL | REDL and RCLL AVBL |            |
| 10         | A        | 500/---                    | 400/---           | 400/---            | Due to LIL |
|            | B        | 600/---                    | 400/---           | 400/---            |            |
|            | C        | 600/---                    | 400/---           | 400/---            |            |
|            | D        | 800/---                    | 400/---           | 400/---            |            |
| All EXC 10 | A        | 500/---                    | 250/---           | 150/---            | NIL        |
|            | B        | 600/---                    | 300/---           | 150/---            |            |
|            | C        | 600/---                    | 300/---           | 150/---            |            |
|            | D        | 800/---                    | 400/---           | 200/---            |            |

## LSZH AD 2.23 ADDITIONAL INFORMATION

## 1. List of significant points (Terminal)

| NAV point | COORD WGS84  |               | Purpose                    |
|-----------|--------------|---------------|----------------------------|
|           | LAT          | LONG          |                            |
| 1         | 2            |               | 3                          |
| AFOLT     | N 47 14 11.2 | E 008 27 38.2 | SID LSZH                   |
| BREGO     | N 47 23 22.8 | E 008 20 46.5 | SID LSZH                   |
| ENUSO     | N 47 35 47.1 | E 008 27 09.2 | IAC / RNAV Transition LSZH |
| ERMUS     | N 47 13 56   | E 008 14 41   | STAR LSZH                  |
| KOLUL     | N 47 28 02.0 | E 008 49 22.0 | SID LSZH                   |
| LAMAX     | N 47 37 14   | E 008 54 14   | STAR LSZH                  |
| MILNI     | N 47 17 47.0 | E 008 39 33.0 | IAC / RNAV Transition LSZH |
| MOMOL     | N 47 27 42   | E 008 40 16   | SID LSZH                   |
| NOLKA     | N 47 08 53   | E 008 07 34   | STAR LSZH                  |
| OSNEM     | N 47 34 46.9 | E 008 24 08.7 | IAC / RNAV Transition LSZH |
| RAMEM     | N 47 26 19.7 | E 008 49 00.5 | IAC / RNAV Transition LSZH |
| TADOB     | N 47 10 59   | E 008 05 23   | STAR LSZH                  |
| UTIXO     | N 47 15 09.0 | E 008 41 20.0 | IAC / RNAV Transition LSZH |
| ZH371     | N 47 51 52.2 | E 008 35 21.0 | RNAV Transition            |
| ZH372     | N 47 28 05.8 | E 008 11 46.4 | RNAV Transition            |
| ZH373     | N 47 49 25.5 | E 008 37 42.1 | RNAV Transition            |
| ZH375     | N 47 38 10.1 | E 008 48 32.5 | RNAV Transition            |
| ZH382     | N 47 46 40.0 | E 008 43 55.0 | RNAV Transition            |
| ZH403     | N 47 34 43.1 | E 008 36 18.7 | RNAV Transition            |
| ZH404     | N 47 30 27.0 | E 008 18 00.5 | RNAV Transition            |
| ZH405     | N 47 38.01.3 | E 008 31 47.9 | RNAV Transition            |
| ZH406     | N 47 33 31.1 | E 008 13.47.0 | RNAV Transition            |
| ZH407     | N 47 41 41.2 | E 008 26 46.3 | RNAV Transition            |
| ZH408     | N 47 37 10.3 | E 008 08 44.6 | RNAV Transition            |
| ZH409     | N 47 45 20.9 | E 008 21 44.0 | RNAV Transition            |
| ZH410     | N 47 41 15.3 | E 008 15 12.9 | RNAV Transition            |
| ZH411     | N 47 37 51.0 | E 008 40 04.0 | IAC LSZH                   |
| ZH412     | N 47 35 43.1 | E 008 14 01.3 | IAC LSZH                   |
| ZH413     | N 47 37 37.5 | E 008 20 15.1 | IAC LSZH                   |
| ZH414     | N 47 37 42.7 | E 008 20 07.5 | RNAV Transition            |
| ZH415     | N 47 25 02.9 | E 008 37 28.1 | IAC LSZH                   |
| ZH416     | N 47 29 00.6 | E 008 42 45.0 | IAC LSZH                   |
| ZH417     | N 47 33 23.7 | E 008 44 34.4 | IAC LSZH                   |
| ZH424     | N 47 31 21.2 | E 008 20 26.0 | RNAV Transition            |
| ZH425     | N 47 36 22.8 | E 008 36 32.1 | RNAV Transition            |
| ZH426     | N 47 36 58.6 | E 008 16 32.2 | RNAV Transition            |

| NAV point | COORD WGS84  |               | Purpose         |
|-----------|--------------|---------------|-----------------|
|           | LAT          | LONG          |                 |
| 1         | 2            |               | 3               |
| ZH427     | N 47 42 04.2 | E 008 32 36.4 | RNAV Transition |
| ZH428     | N 47 40 41.0 | E 008 13 57.1 | RNAV Transition |
| ZH429     | N 47 45 46.9 | E 008 30 02.2 | RNAV Transition |
| ZH430     | N 47 43 14.2 | E 008 21 59.2 | RNAV Transition |
| ZH434     | N 47 39 24.3 | E 008 24 38.8 | RNAV Transition |
| ZH445     | N 47 34 14.9 | E 008 09 14.6 | RNAV Transition |
| ZH446     | N 47 51 52.0 | E 008 32 17.6 | RNAV Transition |
| ZH447     | N 47 26 56.8 | E 008 16 29.7 | RNAV Transition |
| ZH448     | N 47 48 18.2 | E 008 33 24.5 | RNAV Transition |
| ZH449     | N 47 21 12.4 | E 008 22 10.1 | RNAV Transition |
| ZH450     | N 47 44 30.5 | E 008 34 35.6 | RNAV Transition |
| ZH451     | N 47 20 29.2 | E 008 32 24.4 | RNAV Transition |
| ZH452     | N 47 40 41.7 | E 008 35 46.9 | RNAV Transition |
| ZH453     | N 47 19 57.8 | E 008 39 43.1 | RNAV Transition |
| ZH454     | N 47 33 20.3 | E 008 49 14.2 | RNAV Transition |
| ZH455     | N 47 19 26.0 | E 008 47 01.6 | RNAV Transition |
| ZH456     | N 47 32 48.0 | E 008 56 34.5 | RNAV Transition |
| ZH457     | N 47 18 53.6 | E 008 54 20.0 | RNAV Transition |
| ZH458     | N 47 32 15.3 | E 009 03 54.7 | RNAV Transition |
| ZH459     | N 47 18 20.9 | E 009 01 38.2 | RNAV Transition |
| ZH460     | N 47 25 18.2 | E 009 02 46.3 | RNAV Transition |
| ZH464     | N 47 25 53.5 | E 008 54 56.3 | RNAV Transition |
| ZH465     | N 47 27 55.1 | E 008 26 50.2 | IAC LSZH        |
| ZH466     | N 47 20 20.6 | E 008 23 38.0 | IAC LSZH        |
| ZH467     | N 47 15 04.1 | E 008 07 33.2 | IAC LSZH        |
| ZH468     | N 47 18 35.5 | E 007 57 36.0 | IAC LSZH        |
| ZH474     | N 47 51 55.2 | E 008 29 54.1 | RNAV Transition |
| ZH476     | N 47 49 08.3 | E 008 29 21.4 | RNAV Transition |
| ZH478     | N 47 43 28.5 | E 008 33 15.6 | RNAV Transition |
| ZH479     | N 47 37 31.8 | E 008 14 30.5 | RNAV Transition |
| ZH480     | N 47 38 02.4 | E 008 37 00.8 | RNAV Transition |
| ZH481     | N 47 32 06.5 | E 008 18 17.1 | RNAV Transition |
| ZH482     | N 47 32 36.2 | E 008 40 45.2 | RNAV Transition |
| ZH483     | N 47 26 40.9 | E 008 22 03.0 | RNAV Transition |
| ZH484     | N 47 27 09.9 | E 008 44 28.8 | RNAV Transition |
| ZH485     | N 47 21 15.2 | E 008 25 48.1 | RNAV Transition |
| ZH486     | N 47 21 43.5 | E 008 48 11.7 | RNAV Transition |
| ZH487     | N 47 15 49.4 | E 008 29 32.4 | RNAV Transition |

| NAV point | COORD WGS84  |               | Purpose                       |
|-----------|--------------|---------------|-------------------------------|
|           | LAT          | LONG          |                               |
| 1         | 2            |               | 3                             |
| ZH488     | N 47 16 17.1 | E 008 51 53.7 | RNAV Transition               |
| ZH489     | N 47 10 23.4 | E 008 33 16.1 | RNAV Transition               |
| ZH490     | N 47 13 20.6 | E 008 42 34.4 | RNAV Transition               |
| ZH492     | N 47 15 58.0 | E 008 40 46.8 | IAC LSZH                      |
| ZH495     | N 47 33 17.2 | E 008 28 53.5 | IAC LSZH                      |
| ZH501     | N 47 27 25.7 | E 008 32 44.1 | RNAV SID / RNAV STAR LSZH     |
| ZH502     | N 47 27 54.8 | E 008 45 58.8 | RNAV SID / NON RNAV SID LSZH  |
| ZH503     | N 47 34 30.0 | E 008 42 35.0 | RNAV SID LSZH                 |
| ZH504     | N 47 27 23.0 | E 008 53 49.0 | RNAV SID LSZH                 |
| ZH505     | N 47 30 52.8 | E 008 36 36.0 | RNAV SID LSZH                 |
| ZH506     | N 47 30 26.0 | E 008 46 51.0 | RNAV SID LSZH                 |
| ZH507     | N 47 27 29.6 | E 008 40 53.1 | RNAV SID LSZH                 |
| ZH508     | N 47 32 32.6 | E 008 43 01.4 | RNAV SID LSZH                 |
| ZH509     | N 47 29 10.9 | E 008 38 20.6 | RNAV SID LSZH (RF arc centre) |
| ZH510     | N 47 27 07.5 | E 008 38 01.4 | RNAV SID LSZH                 |
| ZH521     | N 47 27 39.6 | E 008 38 58.9 | SID LSZH                      |
| ZH524     | N 47 25 14.6 | E 008 48 19.1 | RNAV SID LSZH                 |
| ZH525     | N 47 26 24.4 | E 009 00 39.9 | RNAV SID LSZH                 |
| ZH527     | N 47 16 53.5 | E 008 38 46.7 | RNAV SID LSZH                 |
| ZH530     | N 47 26 34.7 | E 008 33 30.6 | SID / RNAV SID LSZH           |
| ZH531     | N 47 28 14.2 | E 008 36 24.8 | SID / RNAV SID LSZH           |
| ZH533     | N 47 27 58.8 | E 008 32 43.8 | SID / RNAV SID LSZH           |
| ZH540     | N 47 27 44.4 | E 008 29 22.5 | SID / RNAV SID LSZH           |
| ZH541     | N 47 26 19.3 | E 008 26 41.6 | SID / RNAV SID LSZH           |
| ZH542     | N 47 26 40.5 | E 008 27 42.7 | SID / RNAV SID LSZH           |
| ZH544     | N 47 27 03.8 | E 008 27 34.9 | SID / RNAV SID LSZH           |
| ZH545     | N 47 26 31.9 | E 008 29 11.4 | SID LSZH                      |
| ZH546     | N 47 25 56.7 | E 008 26 10.3 | SID / RNAV SID LSZH           |
| ZH547     | N 47 28 21.0 | E 008 23 41.5 | SID LSZH                      |
| ZH548     | N 47 27 16.3 | E 008 27 46.3 | SID / RNAV SID LSZH           |
| ZH551     | N 47 18 08.0 | E 008 10 00.0 | NON RNAV SID LSZH             |
| ZH552     | N 47 25 44.0 | E 008 23 30.0 | SID / RNAV SID LSZH           |
| ZH553     | N 47 24 46.4 | E 008 27 21.4 | SID LSZH                      |
| ZH554     | N 47 21 18.3 | E 008 14 55.5 | RNAV SID LSZH                 |
| ZH555     | N 47 20 48.8 | E 008 15 40.6 | NON RNAV SID LSZH             |
| ZH556     | N 47 20 18.0 | E 008 23 05.0 | RNAV SID LSZH                 |
| ZH557     | N 47 18 47.0 | E 008 24 13.0 | RNAV SID LSZH                 |
| ZH558     | N 47 19 05.0 | E 008 08 41.0 | RNAV SID LSZH                 |

| NAV point | COORD WGS84  |               | Purpose                       |
|-----------|--------------|---------------|-------------------------------|
|           | LAT          | LONG          |                               |
| 1         | 2            |               | 3                             |
| ZH559     | N 47 31 01.5 | E 008 23 04.8 | RNAV SID LSZH                 |
| ZH561     | N 47 15 34.3 | E 008 26 36.4 | RNAV SID LSZH                 |
| ZH568     | N 47 27 26.6 | E 008 25 37.6 | RNAV SID LSZH                 |
| ZH569     | N 47 31 14.0 | E 008 23 40.2 | RNAV SID LSZH                 |
| ZH570     | N 47 31 04.8 | E 008 30 20.1 | RNAV SID LSZH                 |
| ZH571     | N 47 33 20.6 | E 008 35 21.8 | SID / RNAV SID LSZH           |
| ZH573     | N 47 32 03.0 | E 008 26 12.0 | RNAV SID LSZH                 |
| ZH577     | N 47 31 05.5 | E 008 23 17.0 | RNAV SID LSZH                 |
| ZH578     | N 47 30 09.7 | E 008 27 33.0 | RNAV SID LSZH (RF arc centre) |
| ZH579     | N 47 29 32.9 | E 008 31 18.9 | SID LSZH                      |
| ZH580     | N 47 30 57.2 | E 008 30 07.4 | SID LSZH                      |
| ZH627     | N 47 22 20.7 | E 008 37 13.7 | RNAV STAR LSZH                |
| ZH628     | N 47 16 09.1 | E 008 41 28.0 | RNAV STAR LSZH                |
| ZH677     | N 47 34 38.0 | E 007 44 13.0 | STAR / RNAV STAR LSZH         |
| ZH703     | N 47 29 06.4 | E 008 56 11.4 | IAC LSZH                      |
| ZH704     | N 47 38 48.7 | E 008 25 13.9 | IAC LSZH                      |
| ZH706     | N 47 38 24.8 | E 008 25 19.8 | IAC LSZH                      |
| ZH712     | N 47 36 01.4 | E 008 21 24.5 | IAC LSZH                      |
| ZH726     | N 47 14 50.4 | E 008 47 14.9 | ILS/DME APCH 34 LSZH          |

**LSZH AD 2.24 AERONAUTICAL CHARTS RELATED TO AN AERODROME**

| Name  | Page                  |
|---|-----------------------|
| Aerodrome Chart                               | LSZH AD 2.24.1 - 1    |
| Aircraft Parking / Docking Chart - Area South | LSZH AD 2.24.3 - 1    |
| Aircraft Parking / Docking Chart - Area North | LSZH AD 2.24.3 - 3    |
| Ground Movement Chart - Code F                | LSZH AD 2.24.3 - 5    |
| Aerodrome Obstacle Chart - Type A - RWY 10    | LSZH AD 2.24.4 - 1    |
| Aerodrome Obstacle Chart - Type A - RWY 28    | LSZH AD 2.24.4 - 3    |
| Aerodrome Obstacle Chart - Type A - RWY 14    | LSZH AD 2.24.4 - 5    |
| Aerodrome Obstacle Chart - Type A - RWY 32    | LSZH AD 2.24.4 - 7    |
| Aerodrome Obstacle Chart - Type A - RWY 16    | LSZH AD 2.24.4 - 9    |
| Aerodrome Obstacle Chart - Type A - RWY 34    | LSZH AD 2.24.4 - 11   |
| Precision Approach Terrain Chart - RWY 14     | LSZH AD 2.24.5 - 1    |
| Precision Approach Terrain Chart - RWY 16     | LSZH AD 2.24.5 - 3    |
| Transition Route after SID (VEBIT)            | LSZH AD 2.24.6 - 1    |
| Transition Routes - TMA                       | LSZH AD 2.24.6 - 3    |
| SID RWY 10 - RNP 1                            | LSZH AD 2.24.7.1 - 1  |
| SID RWY 10 - RNAV 1                           | LSZH AD 2.24.7.1 - 3  |
| SID RWY 10 - NON RNAV                         | LSZH AD 2.24.7.1 - 5  |
| SID RWY 16 - RNAV 1                           | LSZH AD 2.24.7.2 - 1  |
| SID RWY 16 - RNAV 5                           | LSZH AD 2.24.7.2 - 3  |
| SID RWY 16 - RNAV 1 (by ATC only)             | LSZH AD 2.24.7.2 - 5  |
| SID RWY 16 - NON RNAV                         | LSZH AD 2.24.7.2 - 7  |
| SID RWY 28 - RNAV 5                           | LSZH AD 2.24.7.3 - 1  |
| SID RWY 28 - RNP 1 (DEGES) (RF) (by ATC only) | LSZH AD 2.24.7.3 - 3  |
| SID RWY 28 - RNP 1 (VEBIT) (RF) (by ATC only) | LSZH AD 2.24.7.3 - 5  |
| SID RWY 28 - RNAV 1 (by ATC only)             | LSZH AD 2.24.7.3 - 7  |
| SID RWY 28 - NON RNAV                         | LSZH AD 2.24.7.3 - 9  |
| SID RWY 32 - RNAV 1                           | LSZH AD 2.24.7.4 - 1  |
| SID RWY 32 - RNAV 5                           | LSZH AD 2.24.7.4 - 3  |
| SID RWY 32 - RNAV 1 (by ATC only)             | LSZH AD 2.24.7.4 - 5  |
| SID RWY 32 - NON RNAV                         | LSZH AD 2.24.7.4 - 7  |
| SID RWY 34 - RNP 1                            | LSZH AD 2.24.7.5 - 1  |
| SID RWY 34 - RNAV 1                           | LSZH AD 2.24.7.5 - 3  |
| SID RWY 34 - RNAV 5                           | LSZH AD 2.24.7.5 - 5  |
| SID RWY 34 - RNAV 1 (by ATC only)             | LSZH AD 2.24.7.5 - 7  |
| SID RWY 34 - NON RNAV                         | LSZH AD 2.24.7.5 - 9  |
| SID (SAT) RWY 10 / 16 / 28 / 34               | LSZH AD 2.24.7.6 - 1  |
| STAR to GIPOL - RNAV 1                        | LSZH AD 2.24.9.1 - 1  |
| STAR to GIPOL - NON RNAV                      | LSZH AD 2.24.9.2 - 1  |
| STAR to AMIKI - RNAV 1                        | LSZH AD 2.24.9.3 - 1  |
| APCH Transition RWY 14 - RNAV 1               | LSZH AD 2.24.10.1 - 1 |
| IAC ILS RWY 14 (CAT A/B/C/D)                  | LSZH AD 2.24.10.1 - 3 |
| IAC LOC RWY 14 (CAT A/B/C/D)                  | LSZH AD 2.24.10.1 - 5 |
| IAC GLS RWY 14 (CAT A/B/C/D)                  | LSZH AD 2.24.10.1 - 7 |
| IAC RNP RWY 14 (CAT A/B/C/D)                  | LSZH AD 2.24.10.1 - 9 |
| APCH Transition RWY 16 - RNAV 1               | LSZH AD 2.24.10.2 - 1 |
| IAC ILS RWY 16 (CAT A/B/C/D)                  | LSZH AD 2.24.10.2 - 3 |
| IAC LOC RWY 16 (CAT A/B/C/D)                  | LSZH AD 2.24.10.2 - 5 |
| APCH Transition RWY 28 - RNAV 1               | LSZH AD 2.24.10.3 - 1 |
| IAC ILS RWY 28 (CAT A/B/C/D)                  | LSZH AD 2.24.10.3 - 3 |
| IAC LOC RWY 28 (CAT A/B/C/D)                  | LSZH AD 2.24.10.3 - 5 |
| IAC RNP RWY 28 (CAT A/B/C/D)                  | LSZH AD 2.24.10.3 - 7 |
| APCH Transition RWY 34 - RNAV 1               | LSZH AD 2.24.10.4 - 1 |
| IAC ILS RWY 34 (CAT A/B/C/D)                  | LSZH AD 2.24.10.4 - 3 |
| IAC LOC RWY 34 (CAT A/B/C/D)                  | LSZH AD 2.24.10.4 - 5 |

---

| Name  | Page                  |
|---|-----------------------|
| IAC RNP RWY 34 (by ATC only) (CAT A/B/C/D)              | LSZH AD 2.24.10.4 - 7 |
| ATC Surveillance Minimum Altitude Chart (-20°C to -7°C) | LSZH AD 2.24.13 - 1   |

**LSZH AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION**

The information on visual segment surface penetration is published on the respective instrument approach chart.  
See [LSZH AD 2.24](#) for details.