

## 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 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 P.O. Box CH-8058 Zurich-Airport AFS: LSZHYDYX URL: <a href="http://www.zurich-airport.com/">http://www.zurich-airport.com/</a> <b>Airport Authority:</b> Phone: +41 (0) 43 816 21 11 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 Turbo oil, Aviation oil
3	Fuelling facilities/capacity	No limitations

4	De-icing facilities	OCT 01 - APR 30: De-icing assured MAY 01 - SEP 30: De-icing on request, 60 min reaction time De-icing fluids available: Type I: Kilfrost DF Plus Type IV: Kilfrost ABC S Plus <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>
5	Hangar space for visiting aircraft	Restricted (only at short notice and O/R)
6	Repair facilities for visiting aircraft	Major and minor aircraft and engine repairs: <ul style="list-style-type: none"> <li>5-Star Aviation: Phone +41 (0) 79 465 68 99 Email: 5star@5staraviation.ch</li> <li>Textron Aviation - Cessna Zürich Citation Service Center: Phone +41 (0) 79 597 43 45 Email: ipilpovic@txtav.com</li> <li>Helvetic Maintenance: Phone +41 (0) 79 939 09 21 Email: mcc@helvetic.com</li> <li>Jet Aviation AG: Phone +41 (0) 58 158 84 62 Email: zrhfbo@jetaviation.com</li> <li>Motorfluggruppe Zürich: Phone +41 (0) 44 881 22 22 Email: flightmaintenance@mfgz.ch</li> <li>Northern Aerotech ApS: Phone: +41 (0) 76 470 29 55 Email: zurich@northern-aerotech.com</li> <li>SR-Technics Switzerland AG: Phone +41 (0) 79 320 26 25 Email: zrhline@srtechnics.ch</li> <li>Swiss Line Maintenance: Phone +41 (0) 44 564 40 44 Email: mcc@swiss.com</li> </ul>
7	Remarks	Oxygen and related servicing AVBL.

## LSZH AD 2.5 PASSENGER FACILITIES

1	Hotels	Directly at the airport: Radisson Blu Hotel, Phone +41 (0) 44 800 40 40. Other hotels in vicinity and in town. 13 dayrooms at the airport; Crew restrooms at the OPS centre.
2	Restaurants	Various restaurants for crews and passengers
3	Transportation	Public buses, trains, trams, taxis, car rental agencies
4	Medical facilities	Designated airport according to International Health Regulations (2005). Airport Medical Centre: Open from 0700-1930 (0600-1830) Phone: +41 (0) 43 816 60 00 Airport Dental Services: Open from 0600-1800 (0500-1700) Phone: +41 (0) 43 816 61 61 Airport Eye Clinic: Open from 0700-1600 (0600-1500) Phone: +41 (0) 43 816 70 00 Quarantine station (100 persons sitting); Doctor O/R; 3 ambulances; Hospitals in city. Special vehicle with lifting device available at Goldair AAS Assistance AG. Phone: +41 (0) 43 816 54 41
5	Bank and Post Office	At AP and in city
6	Tourist Office	At AP and in city
7	Remarks	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 - PCN 60 R/B/W/T				
2	Designation, width, surface and strength of Taxiways	WID: 27 m and 23 m CONC - PCN 60 R/B/W/T				
3	ACL location and elevation	Beginning RWY 10: 1391 ft Beginning RWY 28: 1416 ft Beginning RWY 14: 1402 ft Beginning RWY 32: 1402 ft Beginning RWY 16: 1390 ft Beginning RWY 34: 1385 ft Parking sector A: 1400 ft Parking sector C, D: 1390 ft Parking sector B, I: 1397 ft Parking sector E: 1395 ft Parking sector F: 1407 ft Parking sector H: 1404 ft Parking sector P: 1385 ft Parking sector T: 1394 ft Parking sector W: 1382 ft				
4	Location of VOR checkpoints	NIL				
5	Location of INS checkpoints					
	NR	COORD WGS 84	NR	COORD WGS 84	NR	COORD WGS 84
	A02	47 27 12.59N 008 33 31.05E	E4M	47 27 38.86N 008 33 15.85E	P31	47 27 48.26N 008 33 11.51E
	A03	47 27 14.35N 008 33 40.18E	E5M	47 27 39.25N 008 33 08.66E	P32	47 27 48.41N 008 33 09.45E
	A04	47 27 12.40N 008 33 29.08E	E19	47 27 41.16N 008 33 30.08E	P33	47 27 48.55N 008 33 07.38E
	A05	47 27 14.42N 008 33 38.15E	E20	47 27 38.04N 008 33 30.07E	P34	47 27 48.70N 008 33 05.31E
	A07	47 27 14.56N 008 33 36.01E	E23	47 27 40.85N 008 33 27.92E	P35	47 27 49.10N 008 32 58.19E
	A08	47 27 13.03N 008 33 25.29E			P36	47 27 50.38N 008 32 57.32E
	A09	47 27 14.50N 008 33 33.99E	E26	47 27 38.05N 008 33 26.60E	P37	47 27 51.66N 008 32 56.44E
	A10	47 27 12.97N 008 33 23.34E	E27	47 27 41.13N 008 33 24.48E		
	A11	47 27 15.08N 008 33 28.87E			T41	47 26 38.04N 008 34 01.46E
	A13	47 27 15.28N 008 33 26.86E	E32	47 27 38.18N 008 33 23.26E	T42	47 26 37.23N 008 34 00.20E
	A15	47 27 15.29N 008 33 24.82E	E33	47 27 41.85N 008 33 21.81E	T43	47 26 36.40N 008 33 58.33E
	A17	47 27 15.27N 008 33 22.78E	E34	47 27 38.33N 008 33 22.58E	T44	47 26 35.54N 008 33 56.25E
			E35	47 27 41.32N 008 33 21.03E	T45	47 26 46.45N 008 33 59.87E
	A42	47 27 11.77N 008 33 36.63E	E36	47 27 38.07N 008 33 21.15E	T46	47 26 45.07N 008 34 00.23E
	A44	47 27 12.13N 008 33 33.96E	E37	47 27 41.87N 008 33 19.72E		
	A46	47 27 12.38N 008 33 30.37E	E42	47 27 38.61N 008 33 19.14E		
	A48	47 27 12.64N 008 33 27.17E	E43	47 27 41.57N 008 33 17.59E		
	A49	47 27 14.80N 008 33 31.35E	E44	47 27 38.20N 008 33 17.00E		
	A57	47 27 15.58N 008 33 20.44E	E45	47 27 42.10N 008 33 15.58E		
			E46	47 27 38.87N 008 33 15.71E		
	B31	47 27 05.67N 008 33 35.65E	E47	47 27 41.86N 008 33 14.15E	T60	47 26 39.19N 008 33 47.42E
	B32	47 27 01.56N 008 33 35.01E	E48	47 27 38.33N 008 33 14.93E	T61	47 26 39.22N 008 33 46.47E
	B33	47 27 05.87N 008 33 33.66E	E49	47 27 42.05N 008 33 13.48E	T62	47 26 38.57N 008 33 45.47E
	B34	47 27 01.30N 008 33 34.32E	E50	47 27 38.92N 008 33 12.93E	T63	47 26 37.95N 008 33 43.52E
	B35	47 27 05.81N 008 33 32.29E	E51	47 27 42.77N 008 33 10.93E		

5	Location of INS checkpoints							
NR	COORD WGS 84		NR	COORD WGS 84		NR	COORD WGS 84	
B36	47 27 01.24N	008 33 32.90E	E52	47 27 39.06N	008 33 12.26E	W01	47 26 53.81N	008 32 56.31E
B37	47 27 05.55N	008 33 31.60E	E53	47 27 42.10N	008 33 10.13E	W02	47 26 53.98N	008 32 58.59E
B38	47 27 01.55N	008 33 30.88E	E54	47 27 38.82N	008 33 10.83E	W03	47 26 55.11N	008 33 00.42E
B39	47 27 06.05N	008 33 28.94E	E55	47 27 42.81N	008 33 08.85E	W04	47 26 55.58N	008 33 03.02E
B41	47 27 06.35N	008 33 26.97E	E56	47 27 39.34N	008 33 08.82E	W05	47 26 56.14N	008 33 04.79E
B43	47 27 06.48N	008 33 25.62E	E57	47 27 42.34N	008 33 06.69E	W21	47 26 54.19N	008 32 56.76E
B45	47 27 06.51N	008 33 24.98E	E58	47 27 38.72N	008 33 06.88E	W22	47 26 55.18N	008 32 59.90E
			E62	47 27 39.91N	008 33 05.72E	W23	47 26 56.29N	008 33 03.40E
C50	47 26 54.70N	008 33 41.76E	E64	47 27 41.12N	008 33 04.63E	W30	47 26 55.15N	008 32 59.23E
C51	47 26 53.41N	008 33 42.57E	E67	47 27 42.19N	008 33 04.18E			
C52	47 26 52.57N	008 33 43.22E				W42	47 27 08.31N	008 32 52.07E
C53	47 26 52.13N	008 33 43.45E	F70	47 27 17.95N	008 34 04.41E			
C54	47 26 50.34N	008 33 44.68E	F71	47 27 18.23N	008 34 00.43E			
C55	47 26 49.94N	008 33 45.04E	F72	47 27 18.51N	008 33 56.45E			
C56	47 26 49.06N	008 33 45.56E						
C57	47 26 47.81N	008 33 46.50E						
C58	47 26 46.51N	008 33 47.32E	G01	47 26 33.89N	008 33 38.03E			
C59	47 26 45.72N	008 33 48.10E	G02	47 26 32.51N	008 33 38.97E			
C60	47 26 45.24N	008 33 48.20E	G03	47 26 31.13N	008 33 39.92E			
D01	47 26 55.25N	008 33 29.93E	G04	47 26 29.75N	008 33 40.87E			
D02	47 26 54.92N	008 33 30.01E	G05	47 26 28.37N	008 33 41.82E			
D03	47 26 53.90N	008 33 30.86E	G06	47 26 27.08N	008 33 43.05E			
D04	47 26 52.95N	008 33 31.26E						
D05	47 26 52.58N	008 33 32.00E	G11	47 26 32.90N	008 33 46.37E			
D06	47 26 49.00N	008 33 34.74E	G12	47 26 31.55N	008 33 47.13E			
D07	47 26 48.09N	008 33 34.47E	G13	47 26 30.28N	008 33 48.12E			
D08	47 26 47.70N	008 33 35.45E	G14	47 26 28.97N	008 33 49.02E			
D09	47 26 46.35N	008 33 36.38E						
D10	47 26 45.49N	008 33 36.25E	H11	47 27 20.38N	008 33 41.52E			
D11	47 26 45.11N	008 33 37.24E	H12	47 27 20.56N	008 33 38.07E			
D12	47 26 43.76N	008 33 38.17E	H13	47 27 20.70N	008 33 36.04E			
D13	47 26 42.90N	008 33 38.04E	H14	47 27 20.91N	008 33 34.04E			
D14	47 26 42.51N	008 33 39.03E						
D15	47 26 41.16N	008 33 39.96E	I01	47 27 21.39N	008 33 26.87E			
D16	47 26 40.30N	008 33 39.83E	I02	47 27 21.51N	008 33 24.72E			
D17	47 26 39.91N	008 33 40.81E	I03	47 27 21.74N	008 33 21.50E			
			I04	47 27 21.89N	008 33 19.36E			
			I05	47 27 22.04N	008 33 17.22E			
6	<b>Remarks</b>		Transverse slopes of following taxiway strips partially exceeding downward slope of 5 % beyond graded portion: - TWY BRAVO (western part) - TWY ECHO (between E3 and E1, between TWY DELTA and CHARLIE) - TWY FOXTROTT (between TWY DELTA and CHARLIE) - TWY GOLF (eastern part)					

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

1	<b>Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of aircraft stands</b>	<p><b>Dock A, B and E</b> Due to system replacement, two different Docking Guidance Systems in operation (only one per stand):</p> <ul style="list-style-type: none"> <li>• Safegate Aircraft Docking Guidance System "Safedock" (existing).</li> <li>• Safegate Aircraft Docking Guidance System "Safedock A-VDGS T1" (new)</li> </ul> <p>During the testing phase the new system will be initially installed at stands A17, B38 and E57.</p> <p><b>Routine docking manoeuvre:</b></p> <ul style="list-style-type: none"> <li>• Check for correct ACFT type displayed (ICAO type designator according ICAO Doc 8643). On the new A-VDGS T1 system, the ATC call sign is displayed in addition. Note that only on the old Safedock systems, 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 longwing versions (E75S/E75L) are displayed as E175.</li> <li>• Do not proceed beyond the 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 on both systems. Additionally, arrows show direction of turn if aircraft is not aligned with CL.</li> <li>• Display of digital countdown in meters starts at 20m (old Safedock) and 15m (new A-VDGS T1) 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>Detailed system description of docking procedure, fault messages and safety procedures with corresponding graphics are AVBL under: URL: <a href="https://www.flughafen-zuerich.ch/en/business/airlines-and-handling/flight-operations/aircraft-docking-guidance-system">https://www.flughafen-zuerich.ch/en/business/airlines-and-handling/flight-operations/aircraft-docking-guidance-system</a></p> <p><b>Stop at parking PSNs C, D, F, G, H, I, P, T, W:</b> 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. ACFT has to be stopped with the pilot seat ABM the stop line. (REF: <a href="#">LSZH AD 2.24.3</a> - 1, inset)</p>
2	<b>RWY/TWY markings and LGT</b>	<p>RWY Centre lines, thresholds, touchdown zone; Taxiway centre line, holding positions, taxi-out lines; apron heliport ICAO markings (REF: <a href="#">LSZH AD 2.24.1</a> - 1)</p> <p>Where no taxiway centre line markings are applied at runway exits, taxiing clearance distances using "cockpit over TWY CL" not ensured.</p>
3	<b>Stop bars and RWY guard lights</b>	<p>LIH (REF: <a href="#">LSZH AD 2.24.3</a> - 1 and <a href="#">LSZH AD 2.24.3</a> - 3) On apron, taxiway centre line light section after stop bars not switchable.</p>
4	<b>Other RWY protection measures</b>	NIL
5	<b>Remarks</b>	<ol style="list-style-type: none"> <li>1. -Backtrack RWY 16: Turn Pad AVBL at THR 16. Turns are executed from left to right only. -Backtrack RWY 34: Turns are executed at E9 from right to left only. -RWY 28: RWY HLDG PSNs are located at 75 m from RCL. (REF: <a href="#">LSZH AD 2.24.1</a> - 1)</li> <li>2. Use of remote de-icing facilities: Aircraft 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 DE-ICING" are located to the left with a 90 degree angle to the de-icing lane. To commence de-icing, aircraft (all types) has to stop with the pilot seat abeam the stop PSN. When entering the de-icing lane as instructed by "Zurich Apron", ACFT shall taxi independently with caution up to de-icing stop PSN. (REF: <a href="#">LSZH AD 2.24.1</a> - 1) Be aware of repositioning of de-icing trucks within the remote de-icing facilities.</li> </ol>

LSZH AD 2.10 AERODROME OBSTACLES

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

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

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

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

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

In approach/TKOF areas				In circling area and at aerodrome		
1				2		3
RWY/Area affected	Obstacle type Elevation Markings/LGT	Co-ordinates		Obstacle type Elevation Markings/LGT	Co-ordinates	RMK
a	b	c		a	b	c
		ft			ft	
AOC 16 (22)	Building	1554	47 25 29 N 008 34 29 E			
AOC 16 (23)	Building	1565	47 25 27 N 008 34 30 E			
AOC 16 (24)	Building	1566	47 25 27 N 008 34 30 E			
AOC 16 (25)	Building	1701	47 23 58 N 008 36 00 E			
AOC 16 (26)	Building	1768	47 23 58 N 008 36 01 E			
AOC 16 (27)	Transmission line	1921	47 22 14 N 008 37 49 E			
AOC 16 (28)	Transmission line	1927	47 22 14 N 008 37 49 E			
AOC 34 (1)	Pole	1396	47 28 36 N 008 32 07 E			
AOC 34 (2)	Pole	1397	47 28 37 N 008 32 07 E			
AOC 34 (3)	Pole	1398	47 28 38 N 008 32 06 E			
AOC 34 (4)	Pole	1398	47 28 39 N 008 32 05 E			
AOC 34 (5)	Pole	1405	47 28 41 N 008 32 04 E			
AOC 34 (6)	Pole	1409	47 28 45 N 008 32 01 E			
AOC 34 (7)	Building	1417	47 28 44 N 008 31 56 E			
AOC 34 (8)	Tree/Trees	1445	47 29 03 N 008 31 41 E			
AOC 34 (9)	Tree/Trees	1458	47 29 05 N 008 31 41 E			
AOC 34 (10)	Tree/Trees	1490	47 29 34 N 008 31 44 E			
AOC 34 (11)	Tree/Trees	1537	47 29 35 N 008 31 43 E			
AOC 34 (12)	Tree/Trees	1564	47 29 48 N 008 31 22 E			
AOC 34 (13)	Tree/Trees	1565	47 29 51 N 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 Periods of validity	MeteoSwiss, Zurich 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 Language(s) used	Digital and hard copy 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). Weather briefing: Phone: 0900 162 737 (Ge); accessible within Switzerland 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 RWY NR	TRUE & MAG BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY and SWY	THR COORD	THR ELEV and highest TDZ ELEV	Slope of RWY-SWY
1	2	3	4	5	6	7
10*	096° GEO 093° MAG	2500 x 60	ASPH*** PCN 86 F/B/W/T	47 27 32.18N 008 32 14.93E GUND 47.3 m / 155.2 ft	1391 ft 1392 ft	Refer to LSZH AOC 16/34/32, 10/28
28*	276° GEO 273° MAG			47 27 23.76N 008 34 13.63E GUND 47.2 m / 155.0 ft	1416 ft 1417 ft	
14	137° GEO 134° MAG	3300 x 60	ASPH** PCN 87 F/A/W/T	47 28 55.53N 008 32 09.87E GUND 47.3 m / 155.3 ft	1402 ft 1402 ft	
32	317° GEO 314° MAG			47 27 40.65N 008 33 52.06E GUND 47.3 m / 155.0 ft	1402 ft 1402 ft	
16*	155° GEO 152° MAG	3700 x 60	ASPH** PCN 87 F/B/W/T	47 28 32.57N 008 32 09.37E GUND 47.3 m / 155.2 ft	1390 ft 1390 ft	
34*	335° GEO 332° MAG			47 26 57.39N 008 33 14.91E GUND 47.3 m / 155.0 ft	1388 ft 1389 ft	

\* MAG VAR tolerance for RWY designators exceeded.

\*\* Central strip 23 m wide; remaining side strips CONC PCN 60 R/B/W/T.

\*\*\* Central strip 23 m wide; remaining side strips CONC PCN 86 R/B/W/T.

Designations RWY NR	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
1	8	9	10	11	12
10	NIL	60 x 150	2620 x 150	NIL	Non-instrument runway Grooved RESA: 240x150 m
28	NIL	60 x 150	2620 x 150	NIL	RWY strip dimensions according to non- instrument RWY criteria. Grooved RESA: 100x150 m 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 Grooved RESA: 240x150 m Fully frangible LOC (75 m x 3 m) positioned within RESA at 216 m after RWY end. 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 Grooved RESA: 240x150 m
16	NIL	60 x 150	3820 x 300	YES	Precision approach runway CAT III Grooved RESA: 240x150 m 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 Grooved RESA: 240x150 m

## LSZH AD 2.13 DECLARED DISTANCES

RWY 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, INTST	RCLL LEN, spacing, colour, INTST	REDL LEN, spacing, colour, INTST	RENL Colour, INTST	SWY LGT LEN, colour	RMK
1	2	3	4	5	6	7	8	9	10
10	NIL	RTHL G, LIL, -	NIL	NIL	1600 m, 15 m, W, LIH; 600 m, 15 m, R/W, LIH;	1900 m, 45 m, W, LIL; 600 m, 45 m, Y, LIL	R, LIH	NIL	NIL
28	Calvert, 630 m, LIH; SALS, 420 m, LIL	RTHL G, LIH, -; RTIL FLG W	PAPI 3.3°, L, 18.83 m	Simple TZL* 921 m FM THR 28, W, LIH	300 m, 15 m, R, LIH.	1900 m, 45 m, W, LIH; 600 m, 45 m, Y, LIH	R, LIH	NIL	Calvert 28 shorter than standard (900m).
14	Calvert Cat II/III, 900 m, LIH	RTHL G, LIH, WBAR; RTIL FLG W	PAPI 3.0°, L, 17.40 m	LIH 900 m	2400 m, 15 m, W, LIH; 600 m, 15 m, R/W, LIH; 300 m, 15 m, R, LIH	150 m, 30 m, R, LIH; 2550 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH	R, LIH	NIL	NIL
32	NIL	RTHL G, LIH, -; RTIL FLG W	NIL	NIL	300 m, 15 m, R, LIH	2700 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH	R, LIH	NIL	NIL
16	Calvert Cat II/III, 900 m, LIH; SALS, 420 m, LIL	RTHL G, LIH, WBAR; RTIL FLG W	PAPI 3.0°, L, 20.57 m	LIH 900 m	2800 m, 15 m, W, LIH; 600 m, 15 m, R/W, LIH; 300 m, 15 m, R, LIH	3100 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH	R, LIH	NIL	NIL
34	Calvert Cat I, 795 m, LIH	RTHL G, LIH, WBAR; RTIL FLG W	PAPI 3.3°, L, 17.60 m	NIL	600 m, 15 m, R/W, LIH; 300 m, 15 m, R, LIH	450 m, 30 m, R, LIH; 2650 m, 30 m, W, LIH; 600 m, 30 m, Y, LIH	R, LIH	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 Anemometer location and LGT	WDI LGTD
3	TWY edge and centre line lighting	EDGE: LIL, B7; Apron area, L, L7, G, R, S, T, RWY exits, TWY curves. CL: LIH, G; coded Y/G on ILS critical/sensitive areas; 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. RETIL: H1 RGL: 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. Apron + Stop bars: Refer to LSZH AD 2.24.3 - 1 and LSZH AD 2.24.3 - 3.
4	Secondary power supply/switch-over time	CAT I, CAT II & CAT III MAX 1 s.
5	Remarks	Obstacles marked and LGTD

**LSZH AD 2.16 HELICOPTER LANDING AREA**

1	Coordinates TLOF or THR of FATO Geoid undulation	THR 01: 47 26 57.90 N 008 32 51.89 E GUND 47.3m / 155.1 ft THR 19: 47 27 06.77 N 008 32 56.13 E 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	TLOF: 10 stands, diameter 9.5 m Distance between centre of stands: 28 m Surface: ASPH FATO: 25 x 290 m, grass
4	True BRG of FATO	FATO THR H01: 018°  FATO THR H19: 198°
5	Declared distance available	Ref: VFRM Zürich HEL, LSZH AD INFO 3
6	APP and FATO lighting	FATO lighted
7	Remarks	The geographical coordinates of helicopter stands are not published in AIP. The stand protection area is 28 m in diameter instead of 34 m required. Simultaneous operations on Heliport West are not allowed due to overlapping of safety areas. 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. Air taxi shall only take place on RWYs, TWYs and at Heliport West. 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. HEL OPS at GA sectors 1-4 is prohibited, except HEMS. 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. Detailed charts: VFR Manual

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## LSZH AD 2.17 ATS AIRSPACE

1	Designation and lateral limits	<b>Zurich CTR 1</b> 47 24 38 N 008 45 30 E - 47 22 31 N 008 39 41 E - 47 21 06 N 008 20 25 E - 47 27 41 N 008 19 48 E - arc of circle with radius 9 NM centred on 47 27 36 N 008 33 02 E - 47 24 38 N 008 45 30 E <b>Zurich CTR 2</b> 47 23 04 N 008 41 11 E - 47 14 54 N 008 47 34 E - 47 13 28 N 008 39 59 E - 47 14 12 N 008 37 08 E - 47 21 57 N 008 31 49 E - 47 22 31 N 008 39 41 E - 47 23 04 N 008 41 11 E
2	Vertical limits	CTR 1: 4500 ft AMSL (1350 m) CTR 2: 5500 ft AMSL (1700 m)
3	Airspace classification	D
4	ATS unit call sign Language(s)	CTR 1: Zurich TWR, En CTR 2: Dubendorf 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> 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 do. Zurich Departure Zurich Final	130.560 MHz 135.230 MHz 125.955 MHz 125.330 MHz 120.750 MHz	H24 H24 HX* HX* HX*	ARR ACFT via GIPOL ARR ACFT via AMIKI and RILAX DEP ACFT *only on ATC instruction ALTN FREQ for all APP services (Zurich Arrival, Departure and Final)
TWR VDF <sup>1)</sup>	Zurich Tower do. do.	118.100 MHz 120.230 MHz 119.700 MHz	H24 H24 H24	Primary APCH RWY 14 and TKOF RWY 32 ALTN FREQ
Dubendorf TWR	Dubendorf Tower	118.975 MHz	HX	See: ENR 2.1 TMA Zurich 5: up to FL095 - if Dubendorf TWR inactive, contact Zurich 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 118.100 MHz 119.700 MHz	H24 H24 H24	Primary
De-icing	Pad Coordinator F	121.635 MHz	AVBL if MET COND requires	REF: LSZH AD 2.20, § 5
	Pad Coordinator C	121.640 MHz	AVBL if MET COND requires	REF: LSZH AD 2.20, § 5
	De-icing Coordination	121.810 MHz	H24	
APRON	Zurich Apron do. do. do.	121.755 MHz 121.705 MHz 121.855 MHz 121.980 MHz	0445-2230 (0345-2130) 0445-2230 (0345-2130) 0445-2230 (0345-2130) 0445-2230 (0345-2130)	South of RWY 28 ALTN FREQ North of RWY 28 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. 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 Category (Variation)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
TRASADINGEN DME	TRA	CH 90X	H24	47 41 22.2N 008 26 13.1E	1850 ft	DOC 100 NM / 50'000 ft Paired VOR FREQ 114.30 MHz
KLOTEN DVOR/DME (VAR 3° E)	KLO	114.85 MHz 95Y	H24	47 27 25.7N 008 32 44.1E	1410 ft	PSN: 234° MAG, 0.12 NM FM ARP. DOC 50 NM / 25'000 ft 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 37Y	H24	47 35 31.8N 008 49 03.6E	1730 ft	PSN: 051° MAG, 13.6 NM FM ARP. DOC 80 NM / 50'000 ft
HOCHWALD DME	HOC	CH 79X	H24	47 27 59.6N 007 39 55.6E	2425 ft	DOC 60 NM / 50'000 ft, DME range 85 NM in sector 30° - 120°. Paired VOR FREQ 113.20 MHz
WILLISAU DVOR/DME (VAR 3° E)	WIL	116.90 MHz CH 116X	H24	47 10 42.1N 007 54 20.9E	2425 ft	DOC 50 NM / 25'000 ft, range 80 NM in sector 0° - 105°.
GBAS	G14A (RWY 14)	114.05 MHz CH 20242	H24	47 28 46.9N 008 31 49.2E	ELEV of GBAS 1416 ft	Restricted coverage (published procedures covered): at 15 NM -35°E to 20°S from CL above 3700 ft AMSL. at 15 NM +/- 35° from CL above 4000 ft AMSL. at 20 NM +/- 10° from CL above 4700 ft AMSL. Ellipsoid height: 478.81 m
ILS 14-LOC CAT III	IKL	111.75 MHz	H24	47 27 35.5N 008 33 59.1E		LOC PSN: 216 m FM THR 32. <b>RWY 14:</b> LOC course 134° MAG. Front course sector width 3.57°. Restricted coverage: (published procedures covered): at 10 NM - +/- 35° from CL above 3800 ft AMSL. at 17 NM - 24° E to 33° W from CL above 3800 ft AMSL. at 25 NM - +/- 10° from CL above 4500 ft AMSL.
GP 14		333.35 MHz	H24	47 28 50.0N 008 32 25.8E		GP Angle 3°. PSN: 350 m FM THR 14. GP HGT THR 14: 53 ft / 16.2 m.
DME 14		54Y	H24	47 28 50.0N 008 32 25.6E	1415 ft	DME co-located with GP. Zero range at DME station. Restricted coverage (published procedures covered): at 10 NM - +/- 35° from CL above 3800 ft AMSL. at 17 NM - +/- 35° from CL above 3800 ft AMSL. at 25 NM - 10° E to 0° W from CL above 4500 ft AMSL.

Type Category (Variation)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS 16-LOC CAT III	IZH	110.50 MHz	H24	47 26 35.2N 008 33 30.2E		LOC PSN: 758 m FM THR 34. <b>RWY 16:</b> LOC course 152° MAG Front course sector width 3.0°. Restricted coverage: at 17 NM; +/- 15° from CL above 3800 ft AMSL. at 25 NM; +/- 10° from CL above 4600 ft AMSL. 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 008 32 22.6E		GP Angle 3°. PSN: 384 m FM THR 16. GP HGT THR 16: 54 ft / 16.5 m.
DME 16		42X	H24	47 28 23.0N 008 32 22.9E	1400 ft	DME co-located with GP. Zero range at DME station. Restricted coverage: at 17 NM; +/- 15° from CL above 3800 ft AMSL. at 25 NM; +/- 10° from CL above 4600 ft AMSL.
ILS 28-LOC UNCAT	IZW	109.75 MHz	H24	47 27 33.6N 008 31 55.3E		LOC PSN: 413 m FM THR 10. <b>RWY 28:</b> LOC course 273° MAG. Front course sector width 4.13°. Uncategorised ILS APCH RWY 28 due to obstacle limitation and restriction according to non-instrument RWY criteria. Restricted coverage: at 17 NM; +/- 35° from CL above 4900 ft AMSL. at 25 NM; +/- 10° from CL above 4900 ft AMSL.
GP 28		333.050 MHz	H24	47 27 26.5N 008 33 59.4E		GP Angle 3.3°. PSN: 304 m FM THR 28. GP HGT THR 28: 51 ft / 15.5 m. Restricted coverage (published procedures covered): above 4900 ft AMSL at 12 NM; - 8° S to - 4° S from CL at 15 NM; - 4° S to 0° from CL at 13 NM; 0° to 3° N from CL at 12 NM; 3° N to 4° N from CL above 5900 ft AMSL at 13 NM; - 8° S to - 4° S from CL at 17 NM; - 4° S to 2° N from CL at 14 NM; 2° N to 4° N from CL
DME 28		34Y	H24	47 27 27.1N 008 33 59.8E	1423 ft	DME co-located with GP. Zero range at DME station. Restricted coverage (published procedures covered): at 16 NM - 8° S to 4° N from CL above 4700 ft AMSL. at 17 NM - +/- 15° from CL above 5700 ft AMSL. at 20 NM - 8° S to 4° N from CL above 5700 ft AMSL.

Type Category (Variation)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS 34-LOC CAT I	IZS	110.75 MHz	H24	47 28 44.6N 008 32 01.1E		LOC PSN: 409 m FM THR 16. <b>RWY 34:</b> LOC course 332° MAG. Front course sector width 3.32°. Restricted coverage: at 17 NM; +/- 35° from CL above 4200 ft AMSL. at 21 NM; +/- 10° from CL above 5000 ft AMSL. at 25 NM; +/- 10° from CL above 6000 ft AMSL.
GP 34		330.05 MHz	H24	Radiating point: 47 27 04.6N 008 33 07.1E		GP Angle 3.3°. PSN: 272 m FM THR 34. GP HGT THR 34: 51 ft / 15.5 m. Restricted coverage (published procedures covered): at 10 NM; - 2° W to + 6° E from CL above 3200 ft AMSL. at 10 NM; - 4° W to + 8° E from CL above 3600 ft AMSL. at 13 NM; - 4° W to +8° E from CL above 4900 ft AMSL. at 17 NM; - 2° W to +6° E from CL above 5900 ft AMSL.
DME 34		44Y	H24	47 27 04.5N 008 33 06.6E	1410 ft	DME co-located with GP. Zero range at DME station. Restricted coverage (published procedures covered): at 17 NM; - +/- 35° from CL above 5000 ft AMSL. at 25 NM; - +/- 10° from CL 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

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 FLT 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 [LSZH AD 2.21](#) §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

- i. Start-up clearance will be issued by "Zurich Apron" at TSAT +/- 5 minutes.
- ii. 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
- iii. 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.
- iv. 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	Yes	No	Yes

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](mailto: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 FLT's 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 FLT's 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  
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  
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  
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  
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  
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  
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

- i. 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).
- ii. TOBT shall not be adjusted to reflect the de-icing process (spraying time).

#### 5.3.1 ACFT de-icing on stand

- i. When all handling activities are completed, except de-icing, FLT Crew shall report ready to "Zurich Delivery" within TOBT +/- 5 minutes.
- ii. The duration of the de-icing process is reflected in the TSAT.
- iii. 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 ARRs 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. iStream Procedure

### 7.1 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 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.

### 7.3 Process

#### 7.3.1 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.

#### 7.3.2 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.

### 7.4 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.

## 8. Restrictions on VEBIT SIDs RWY 16

### 8.1 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.

### 8.2 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 DEGEGS.

**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> PDG 6.3% to 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. 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. At GERSA: - FLT to RESIA proceed on Z50. Cross KELIP at FL160 or above. - Other FLT proceed on N850.	
<b>VEBIT 1D</b> PDG 6.3% to 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. 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.	

**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 (Centre ZH509 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 (Centre ZH509 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> PDG 7.0% to 2400ft	Climb straight ahead to ZH510. At ZH510 turn left to ZH502. At ZH502 turn right to KOLUL. At KOLUL proceed via ZH504, ZH525 to DEGES.	INITIAL CLIMB CLEARANCE 5000ft. 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.		
<b>GERSA 3C</b> 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 CLEARANCE 5000ft. 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.	At GERSA: -FLT to RESIA proceed on Z50. Cross KELIP at FL160 or above. -Other FLT proceed on N850	
<b>GERSA 2E</b> 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 CLEARANCE 5000ft. 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.	At GERSA: -FLT to RESIA proceed on Z50. Cross KELIP at FL160 or above. -Other FLT proceed on N850	
<b>VEBIT 4E</b> 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 CLEARANCE 5000ft. Cross ZH505 at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.	When instructed contact Zurich DEP 125.955.		
<b>ZUE 1E</b> 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 CLEARANCE 5000ft. Cross ZUE at 6000ft or above.	When instructed contact Zurich DEP 125.955.		

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> PDG 5.3% to 2000ft	Climb straight ahead.  - 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. 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

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## 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> (SUSPENDED) PDG 6.4% to 2000ft	Climb straight ahead.  - 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 CLEARANCE 5000ft. 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. RNAV 5 applicable when passing 9200ft.
<b>GERSA 2S</b> (SUSPENDED) PDG 6.4% to 2000ft	Climb straight ahead.  - 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 CLEARANCE 5000ft. 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.
<b>VEBIT 4S</b> PDG 5.3% to 2000ft	Climb straight ahead.  - 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 CLEARANCE 5000ft. 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. For routing after VEBIT to 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> 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 CLEARANCE 5000ft. 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.		
<b>VEBIT 1T</b> PDG 5.3% to 2000ft	Climb straight ahead to ZH530. Turn left at 2000ft 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 CLEARANCE 5000ft. 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.	For routing after VEBIT to GERSA, see LSZH AD 2.24.6 - 1 Restrictions B777 Ref. AD 2.20	

**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> PDG 6.6% to 2100ft 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> (SUSPENDED) 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. 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.	
<b>VEBIT 4W</b> PDG 6.6% to 2100ft 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. 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. For routing after VEBIT to 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> PDG 7.7% to 2200ft 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 (Centre ZH545 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> PDG 7.7% to 2400ft 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. 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 For routing after VEBIT to 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 (Centre ZH545 r = 1.215 NM)	ZH544	N	-	-	-	1.5
RF (Centre ZH547 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

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**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> PDG 7.7% to 2200ft 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.		
<b>VEBIT 1X</b> PDG 7.7% to 2400ft 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. Cross BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.	When instructed contact Zurich DEP 125.955.	For routing after VEBIT to 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> 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. <sup>1</sup> Cross MOMOL at FL080 or above. <sup>1</sup>	When instructed contact Zurich DEP 125.955.		
<b>VEBIT 4N</b> 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. <sup>2</sup> Cross BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.	When instructed contact Zurich DEP 125.955.	For routing after VEBIT to GERSA, see LSZH AD 2.24.6 - 1	
<b>ZUE 5L</b> 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. <sup>2</sup> Cross ZH568 at 5000ft or above. <sup>1</sup> Cross ZUE at 6000ft or above.	When instructed contact Zurich DEP 125.955.		

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 (Navaid KLO)	ZH580	Y	+3500 (1)	-	327° (330.1°T)	-
CF (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 (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	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> 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 CLEARANCE 5000ft. Cross D4 KLO at 3500ft or above. (2) Cross ZH503 at 6000ft or above. (1) Cross DEGES at FL080 or above. (1)	When instructed contact Zurich DEP 125.955.	RNAV applicable when passing ZH503.	
<b>GERSA 1N</b> (SUSPENDED) 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 CLEARANCE 5000ft. Cross D4 KLO at 3500ft or above. (2) 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.	

(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

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**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> 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 CLEARANCE 5000ft. Cross ZH580 at 3500ft or above. (2) Cross ZH503 at 6000ft or above. (1) Cross DEGES at FL080 or above. (1)		When instructed contact Zurich DEP 125.955.	

(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> PDG 4.7% to 3400ft	Climb on course 331. Proceed via ZH570, ZH573, ZH559, BREGO, ZH554, ZH558 to VEBIT. (MAX IAS 210kt until ZH573).	INITIAL CLIMB CLEARANCE 5000ft. Cross ZH570 at 3500ft or above, (1) BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.	When instructed contact Zurich DEP 125.955.	RF required. For routing after VEBIT to 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 (Navaid KLO)	ZH570	N	+3500 (1)	-	331° (334.1°T)	-
RF (Centre ZH578, 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> PDG 5.0% to 3200ft	Climb straight ahead. Establish TR331 to ZH570. At ZH570 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 ZH570 at 3500ft or above. (1) Cross ZH568 at 5000ft or above. (2) Cross MOMOL at FL080 or above. (2)	When instructed contact Zurich DEP 125.955.	
<b>VEBIT 4H</b> PDG 5.0% to 3200ft	Climb on TR331 to ZH570. At ZH570 turn left (MAX IAS 210kt). Intercept TR241 to ZH577 (MAX 210kt during turn). Proceed via BREGO, ZH554, ZH558 to VEBIT.	INITIAL CLIMB CLEARANCE 5000ft. Cross ZH570 at 3500ft or above. (1) BREGO at 5000ft or above, ZH554 at 6000ft or above, ZH558 at 7000ft or above.	When instructed contact Zurich DEP 125.955.	For routing after VEBIT to GESA, see LSZH AD 2.24.6 - 1
<b>ZUE 5F</b> PDG 5.0% to 3200ft	Climb straight ahead. Establish TR331 to ZH570. At ZH570 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 ZH570 at 3500ft or above. (1) Cross ZH568 at 5000ft or above. (2) Cross ZUE at 6000ft or above.	When instructed contact Zurich DEP 125.955.	

- (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 (Navaid KLO)	ZH570	Y	+3500 (1)	-	331° (334.1°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 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 (Navaid KLO)	ZH570	Y	+3500 (1)	-	331° (334.1°T)	-
CF (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 (Navaid KLO)	ZH570	Y	+3500 (1)	-	331° (334.1°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	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.

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**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> 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 CLEARANCE 5000ft. Cross D4 KLO at 3500ft or above. (1) Cross ZH503 at 6000ft or above. (2) Cross DEGES at FL080 or above.	When instructed contact Zurich DEP 125.955.	RNAV applicable when passing ZH503.
<b>GERSA 1H</b> (SUSPENDED) 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 CLEARANCE 5000ft. Cross D4 KLO at 3500ft or above. (1) 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.

(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> 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. Cross ZH570 at 3500ft or above. (2) Cross ZH503 at 6000ft or above. (1) Cross DEGES at FL080 or above.		When instructed contact Zurich DEP 125.955.	

(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.

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

DESIGNATOR	RWY 10 - NON RNAV			
	ROUTE			
	Lateral	Vertical	Contact	Remark
<b>WILLISAU 3C</b> (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.	

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.

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

DESIGNATOR	RWY 16 - NON RNAV			
	ROUTE			
	Lateral	Vertical	Contact	Remark
<b>WILLISAU 3Q</b> (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.	

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
<b>ZURICH EAST 3V</b> (ZUE 3V) PDG 6.6% to 2100ft MNM climb gradient 7.0% up 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 ZUE. Proceed to ZUE.	INITIAL CLIMB CLEARANCE 5000ft. Cross ZUE at 6000ft or above.	When instructed contact Zurich DEP 125.955.	

**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 (ZUE 2M)</b> 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 CLEARANCE 5000ft. Cross D4 KLO at 3500ft or above. (1) 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 (ZUE 2G)</b> PDG 4.7% to 1900ft	Climb on TR332. At D4 KLO turn right (MAX IAS 210kt during turn). Proceed to ZUE.	INITIAL CLIMB CLEARANCE 5000ft. Cross D4 KLO at 3500ft or above. (1) Cross D5 ZUE before the station at 5000ft or above, ZUE at 6000ft or above.	When instructed contact Zurich DEP 125.955.		

(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) 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) 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) PDG 6.1% to 5000ft 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) PDG 5.8% to 5000ft 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) PDG 5.8% to 5000ft 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: General: Below FL 100 MAX IAS 250kt.
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#### 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	
BERSU 2G	From BERSU proceed via TADOB, ERMUS to GIPOL.	Refer to chart	
BÂLE-MULHOUSE 3G (BLM 3G)	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.
DOFIL 2G	From DOFIL proceed via NOLKA, ERMUS to GIPOL.	Refer to chart	
KELIP 3G	From KELIP proceed via MOSIT, ZH628, ZH627, ZH501 to GIPOL.	Refer to chart	

#### 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 DOFIL 2G

Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
IF	DOFIL	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

Procedure Description of RNAV 1 STAR KELIP 3G						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
TF	ZH627	N	-	-	332° (335.1°T)	6.8
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 (WIL 3Z)	At WIL intercept R013 WIL. Proceed to GIPOL.	Refer to chart	

**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	
NEGRA 2A	From NEGRA proceed via MATIV to AMIKI	Refer to chart	
RILAX 2A	From RILAX proceed via LAMAX to AMIKI	Refer to chart	

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-LOC)**

(see chart LSZH AD 2.24.10.4 - 3 and 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

**2.4.15.2 Procedure description of RNP RWY 34 (by ATC only)**

(see chart LSZH AD 2.24.10.4 - 7)

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° (335.0°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

From GIPOLE						
Path terminator	Waypoint	Flyover	Altitude (ft)	Speed limit (kt)	Track	Distance (NM)
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° (335.0°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 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° (335.0°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

#### 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>	200 m	250 m	400 m	500 m
B			300 m		600 m
C			400 m		800 m
D	200 m <sup>2) 3)</sup>	250 m			
1. 125 m provided the conditions under Appendix 1 to JAR-OPS 1.430 (a) (4) (i), (A) to (E) are met 2. 150 m provided the conditions under Appendix 1 to JAR-OPS 1.430 (a) (4) (i), (A) to (E) are met 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		800 m
D		

## 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/---	
	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

NAV point	COORD WGS84		Purpose
	LAT	LONG	
1	2		3
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
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

NAV point	COORD WGS84		Purpose
	LAT	LONG	
1	2		3
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
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

NAV point	COORD WGS84		Purpose
	LAT	LONG	
1	2		3
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
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
Aerodrome Ground Movement Chart - South	LSZH AD 2.24.3 - 1
Aerodrome Ground Movement Chart - North	LSZH AD 2.24.3 - 3
Aerodrome Ground Movement Chart - ICAO Code Letter F OPS	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 16	LSZH AD 2.24.5 - 1
Precision Approach Terrain Chart - RWY 14	LSZH AD 2.24.5 - 3
Area Chart - Transition Routes (VEBIT)	LSZH AD 2.24.6 - 1
Area Chart - Transit 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 required) (by ATC only)	LSZH AD 2.24.7.3 - 3
SID RWY 28 - RNP 1 (VEBIT) (RF required) (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 Straight Ahead and Turn 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
RNAV Transition to Final Approach RWY 14	LSZH AD 2.24.10.1 - 1
IAC ILS RWY 14 CAT II & III	LSZH AD 2.24.10.1 - 3
IAC LOC RWY 14	LSZH AD 2.24.10.1 - 5
IAC GLS RWY 14	LSZH AD 2.24.10.1 - 7
IAC RNP RWY 14	LSZH AD 2.24.10.1 - 9
RNAV Transition to Final Approach RWY 16	LSZH AD 2.24.10.2 - 1
IAC ILS RWY 16 CAT II & III	LSZH AD 2.24.10.2 - 3
IAC LOC RWY 16	LSZH AD 2.24.10.2 - 5
RNAV Transition to Final Approach RWY 28	LSZH AD 2.24.10.3 - 1
IAC ILS RWY 28	LSZH AD 2.24.10.3 - 3
IAC LOC RWY 28	LSZH AD 2.24.10.3 - 5
IAC RNP RWY 28	LSZH AD 2.24.10.3 - 7
RNAV Transition to Final Approach RWY 34	LSZH AD 2.24.10.4 - 1

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Name	Page
IAC ILS RWY 34	LSZH AD 2.24.10.4 - 3
IAC LOC RWY 34	LSZH AD 2.24.10.4 - 5
IAC RNP RWY 34 (by ATC only)	LSZH AD 2.24.10.4 - 7
ATC Surveillance Minimum Altitude Chart	LSZH AD 2.24.13 - 1

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

To be completed. See relevant approach charts for details.

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