AD 2 AERODROMES

ESOE 2.1 AERODROME LOCATION INDICATOR AND NAME

ESOE - ÖREBRO

ESOE 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

1.	**ARP coordinates and site at AD**	591341N 0150224E RWY 935 m from THR 19
2.	**Direction and distance from (city)**	WSW 5.6 NM from Örebro
3.	**Elevation/Reference temperature**	192 ft/+25.4°C
4.	**Geoid undulation at AD ELEV PSN**	94 ft
5.	**MAG VAR/Annual change**	7° E (2025)/+0.2 increasing
6.	**Name of aerodrome operator, address, telephone, telefax numbers, AFS, e-mail, website**	Örebro Läns Flygplats AB Örebro Airport SE-705 94 Örebro TEL: +46 19 30 70 00 FAX: +46 19 24 11 13 E-mail: handling@orebroairport.se AFS: ESOEZTZX Website: www.orebroairport.se
7.	**Types of traffic permitted (IFR/VFR)**	IFR/VFR. Max RWY ref code 4E
8.	**Remarks**	PPR outside TWR HR of OPS PPR for commercial traffic and aircraft exceeding MTOM 2000 kg. Requests shall be made during hours of AD operator to: handling@orebroairport.se or TEL +46 19 30 70 34.

ESOE 2.3 OPERATIONAL HOURS

1.	**AD operator**	MON-FRI 0700-1500 (0600-1400)
	AD Operating hours	As ATS
2.	**Customs and immigration**	O/R TEL +46 40 661 32 20
3.	**Health and sanitation**	-
4.	**AIS Briefing Office**	FPC, H24, +46 8 797 63 40, www.lfv.se/fpc
5.	**ATS Reporting Office (ARO)**	As ATS
6.	**MET Briefing Office**	FPC, H24, +46 8 797 63 40, www.lfv.se/fpc
7.	**ATS**	Ref AIP SUP/NOTAM
8.	**Fuelling**	As ATS and O/R
9.	**Handling**	O/R
10.	**Security**	O/R
11.	**De-Icing**	O/R
12.	**Remarks**	Marshalling available during hours of TWR. No marshall service on GA apron. Increased charges outside TWR HR of OPS.

ESOE 2.4 HANDLING SERVICES AND FACILITIES

1.	**Cargo-handling facilities**	Available, all types
2.	**Fuel and oil types**	Fuel: Jet A1 Oil: -
3.	**Fuelling facilities and capacity**	Jet A1: 180,000 l stationary, 70,000 l fuel truck
4.	**De-icing facilities**	Available, type I and II, mobile units

5.	**Hangar space for visiting ACFT**	Limited
6.	**Repair facilities for visiting ACFT**	O/R TEL +46 19 24 10 88 (TAM - Täby Air Maintenance AB)
7.	**Remarks**	Fuel Supplier Shell. For payment of fuel Shell Carnet accepted, for Visa and Mastercard assistance is required.

ESOE 2.5 PASSENGER FACILITIES

1.	**Hotels**	In Örebro
2.	**Restaurants**	At AD
3.	**Transportation**	Taxis, rental cars
4.	**Medical facilities**	In Örebro
5.	**Bank and Post Office**	Bank: In Örebro Post: In Örebro
6.	**Tourist Office**	In Örebro
7.	**Remarks**	-

ESOE 2.6 RESCUE AND FIRE FIGHTING SERVICES

1.	**AD category for fire fighting**	CAT 7 for SKED TFC, other O/R. MAX CAT 10.
2.	**Rescue equipment**	3 RFFS trucks.
3.	**Capability for removal of disabled aircraft**	By arrangement, suitable for aircraft up to ref code 4F. Contact : Aerodrome Team leader +46 19 30 70 28
4.	**Remarks**	During periods of reduced aerodrome activity, RFFS level of protection may be lowered to a level corresponding to the largest aircraft using the aerodrome during that period. Non-commercial operations and specialised operation below 5700 kg exempted or O/R.

ESOE 2.7 RUNWAY SURFACE CONDITION ASSESSMENT AND REPORTING, AND SNOW PLAN

1.	**Types of clearing equipment**	Snowploughs, blowers, sweepers, slingers, spreaders.
2.	**Clearance priorities**	RWY, TWY, Apron, Emergency access road
3.	**Use of material for movement area surface treatment**	RWY, TWY and Apron de-iced with KFOR/SAND.
4.	**Specially prepared winter runways**	-
5.	**Remarks**	Snowclearance/Moving outside TWR HR of OPS can be conducted.

ESOE 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

1.	**Apron surface and strength**	Apron ASPH PCN 41/F/B/X/T CARGO Apron ASPH PCN 54/F/B/X/T
2.	**Taxiway width, surface and strength**	TWY A 24 m ASPH PCN 35/F/B/X/T TWY C 25 m ASPH PCN 58/F/B/X/T
3.	**ACL, location and elevation**	Apron 175 ft
4.	**VOR checkpoints**	-
5.	**INS checkpoints**	-
6.	**Remarks**	-

ESOE 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

1.	**Use of aircraft stand ID signs, TWY guide lines and visual docking/parking guidance system of ACFT stands**	Taxi guide lines and signs. Marshalling compulsory.

2.	**RWY and TWY markings and LGT**	RWY 01/19: Designator, THR, TDZ, CL and edges are day marked. RWY CL LGT, RTHL, REDL, RENL TWY A: HLDG day marked. Edge lights, RGL. TWY C: HLDG day marked. Edge lights, RGL
3.	**Stop bars**	TWY A and C
4.	**Remarks**	-

ESOE 2.10 AERODROME OBSTACLES

In Area 2				
OBST ID/Designation	**OBST type**	**OBST position**	**ELEV/HGT**	**Markings/ Type, colour**
a	**b**	**c**	**d**	**e**
ESOE1	POLE	591426.3N 0150243.9E	204 ft / -	-
ESOE2	TREE	591426.4N 0150243.8E	229 ft / -	-
ESOE3	TREE	591426.9N 0150244.7E	230 ft / -	-
ESOE4	TREE	591434.9N 0150237.0E	240 ft / -	-
ESOE5	TREE	591436.6N 0150236.8E	243 ft / -	-
ESOE6	TREE	591203.6N 0150146.9E	184 ft / -	-
ESOE7	TREE	591203.3N 0150144.9E	194 ft / -	-
ESOE8	TREE	591102.6N 0150117.4E	281 ft / -	-
ESOE9	TREE	591103.0N 0150110.7E	286 ft / -	-
ESOE10	TREE	591102.6N 0150110.4E	295 ft / -	-
ESOE11	TREE	591102.0N 0150115.2E	297 ft / -	-
f Remarks:	-			

In Area 3				
OBST ID/Designation	**OBST type**	**OBST position**	**ELEV/HGT**	**Markings/ Type, colour**
a	**b**	**c**	**d**	**e**
f Remarks:	Not available			

ESOE 2.11 METEOROLOGICAL INFORMATION PROVIDED

1.	**Associated MET Office**	STOCKHOLM/ARLANDA
2.	**Hours of service** **MET Office outside hours**	H24
3.	**Office responsible for TAF preparation** **Periods of validity, interval of issuance**	STOCKHOLM/ARLANDA 9 HR, https://tafplanner.smhi.se/app.php/production-program
4.	**Trend forecast** **Interval of issuance**	-
5.	**Briefing/consultation provided**	FPC H24, +46 8 797 63 40, www.lfv.se/fpc
6.	**Flight documentation** **Language(s) used**	TAF, METAR, SIGMET, Upper air winds Swedish/English
7.	**Charts and other information available for briefing or consultation**	SWC, WC, Nordic SIGWX Chart, Low level forecast
8.	**Supplementary equipment available for providing information**	-
9.	**ATS units provided with information**	ÖREBRO TWR
10.	**Additional information (limitation of service, etc.)**	Flight planning room available

ESOE 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	True BRG	Dimensions of RWY (m)	Strength (PCN) and surface of RWY and SWY	THR coordinates RWY end coordinates THR geoid undulation	THR elevation and highest elevation of TDZ of precision APCH RWY
1	2	3	4	5	6
01	011.68°	3270 x 45	PCN 60/F/B/X/T ASPH	591227.17N 0150153.15E GUND 94.2 ft	THR 161.3 ft TDZ: 161.5 ft
19	191.69°	3270 x 45	PCN 60/F/B/X/T ASPH	591410.70N 0150234.90E GUND 94.0 ft	THR 191.1 ft TDZ: 192.5 ft

Designations RWY NR	Slope of RWY-SWY	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	RESA dimensions (m)
1	7	8	9	10	11
01	See ESOE AOC	-	300 x 150	3390 x 300	90 x 90
19	See ESOE AOC	-	300 x 150	3390 x 300	90 x 90

Designations RWY NR	Location/ description of arresting system	OFZ (Yes/No)	Remarks
1	12	13	14
01	-	NO	PCN 70 accepted occasionally. Shoulders available, width 7.5m
19	-	NO	PCN 70 accepted occasionally. Shoulders available, width 7.5m

ESOE 2.13 DECLARED DISTANCES

RWY Designator	TORA (m)	TODA (m)	ASDA (m)	LDA (m)	Remarks
1	2	3	4	5	6
01	3270	3570	3270	3270	-
19	3270	3570	3270	3270	-

RWY Designator	INTERSECTION	TORA (m)	TODA (m)	ASDA (m)	-	Remarks
1		2	3	4	5	6
01	TWY A	958	1258	958	-	-
01	TWY C	1293	1593	1293	-	-
19	TWY A	2335	2635	2335	-	-
19	TWY C	2002	2302	2002	-	-

ESOE 2.14 APPROACH AND RUNWAY LIGHTING

RWY Designator	APCH LGT Type, LEN INTST	THR LGT Colour WBAR	VASIS (MEHT)	TDZ LGT LEN	RWY Centre Line LGT LEN, Spacing Colour INTST	RWY Edge LGT LEN, Spacing Colour INTST	RWY End LGT Colour WBAR	SWY LGT LEN, Colour
1	2	3	4	5	6	7	8	9
01	CAT I 900 M LIH	Green	PAPI Left side/3.00° 51 ft	-	3270/30 m 0-2370 m white 2370-2970 m white/red 2970-3270 m red LIH	3270/60 m White Caution zone 600 m yellow LIH	Red	-
19	CAT I 900 M LIH	Green	PAPI Left side/3.00° 51 ft	-	3270/30 m 0-2366 m white 2366-2960 m white/red 2960-3270 m red LIH	3270/60 m White Caution zone 600 m yellow LIH	Red	-
10 Remarks:	RWY 01: Barrette CL. LED lights on RCLL. RWY 19: Barrette CL. LED lights on RCLL.							

ESOE 2.15 OTHER LIGHTING, SECONDARY POWER SUPPLY

1.	**ABN/IBN location, characteristics and hours of operation**	-
2.	**LDI location and LGT**	Lighted windsock N TWY A. Windsocks at RWY ends
	Anemometer location and LGT	At PAPI 19 and GP 01
3.	**TWY edge and centre line lighting**	Edge: A, C CL: -
4.	**Secondary power supply/switch-over time**	Available/8 sec, during LVP and RVR less than 800 m, available/1 sec.
5.	**Remarks**	-

ESOE 2.16 HELICOPTER LANDING AREA

RWY 01/19 to be used

ESOE 2.17 ATS AIRSPACE

1.	**Designation and lateral limits**	ÖREBRO CTR	592413N 0150157E - 592319N 0151314E - 591139N 0151231E - 590022N 0150104E - 590115N 0145240E - 591456N 0145137E to point of origin.
2.	**Vertical limits**	ÖREBRO CTR	2000 ft AMSL GND
3.	**Airspace classification**	C	

4.	**ATS unit call sign** **Language(s)**	ÖREBRO TOWER Swedish/English
5.	**Transition altitude**	5000 ft AMSL
6.	**Hours of applicability**	CTR established during hours of TWR.
7.	**Remarks**	-

ESOE 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Channels	Hours of operation	Remarks
1	2	3	4	5
TWR	ÖREBRO TOWER	120.280	HO	PRIMARY
		133.605	HX	-
		121.500	HO	-
	ÖREBRO DE-ICING	121.905	HO	-

ESOE 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid CAT of ILS/MLS (for VOR/ILS/ MLS give VAR)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from GBAS reference point	Remarks
1	2	3	4	5	6	7	8
LOC 01 ILS CAT I (7° E 2025)	SOE	109.10 MHz	H24 Monitoring of signal in space limited to ATS HR of OPS	591418.7N 0150238.2E	-	-	254 m beyond THR 19 ILS Class I/D/2
GP 01	-	331.40 MHz	H24 Monitoring of signal in space limited to ATS HR of OPS	591237.8N 0150149.7E	-	-	Angle 3.00° RDH 54.1 ft 311 m past THR 01 left side
OM 01	-	-	-	590802.2N 0150010.6E	-	-	
MM 01	-	-	-	591158.5N 0150141.6E	-	-	
LOC 19 ILS CAT I (7° E 2025)	NOE	108.50 MHz	H24 Monitoring of signal in space limited to ATS HR of OPS	591218.8N 0150149.8E	-	-	264 m beyond THR 01 ILS Class I/D/2
GP 19	-	329.90 MHz	H24 Monitoring of signal in space limited to ATS HR of OPS	591401.3N 0150223.4E	-	-	Angle 3.00° RDH 54.1 ft 321 m past THR 19 right side
NDB 01	RB	375 kHz	H24 Monitoring of signal in space limited to ATS HR of OPS	590802.4N 0150011.0E	-	-	Range 30 NM

Type of aid CAT of ILS/MLS (for VOR/ILS/ MLS give VAR)	ID	Frequency	Hours of operation	Site of transmitting antenna coordinates	Elevation of DME transmitting antenna	Service volume radius from GBAS reference point	Remarks
1	2	3	4	5	6	7	8
NDB 19	EN	400 kHz	H24 Monitoring of signal in space limited to ATS HR of OPS	591727.8N 0150354.1E	-	-	Range 30 NM
DME	NOE	108.50 MHz	H24 Monitoring of signal in space limited to ATS HR of OPS	591401.4N 0150222.9E	204 ft	-	DME Channel 22X

ESOE 2.20 LOKALA FLYGPLATSFÖRESKRIFTER

1 Förhandstillstånd (PPR)

PPR erfordras utanför flygplatsens/ATS öppethållning. Örebro flygklubb kan endast bevilja tillstånd för VFR-trafik med enmotoriga flygplan, TEL 019 24 10 20.

2 Restriktioner för skol- och övningsflygning

PPR för skolflygning enligt IFR inom CTR/TMA.

Start- och landningsövningar och upprepade instrumentinflygningar tillåts endast under tiden 0600–2100 (0500–2000).

3 Trafikvarv

Utanför ATS öppethållning ska trafikvarv flygas väster om RWY 01/19.

4 Rutiner utanför ATS öppethållning

Utanför ATS öppethållning är blindsändning obligatoriskt inom CTR.

Vid landning enligt VFR utanför ATS öppethållning ska avsikt att landa samt ETA tydligt aviseras på kanal 120.280 och en s.k. ”visuell överflygning” av banan genomföras på minst 1000 ft AGL för att säkerställa fri tillgänglighet samt att uppmärksamma eventuell flygplatspersonal och annan trafik på banan. Är banan inte tillgänglig i sin fulla längd och bredd ska inte landning genomföras.

Vid start utanför ATS öppethållning ska avsikt att starta tydligt aviseras på kanal 120.280. Är banan inte tillgänglig i sin fulla längd och bredd ska inte start genomföras.

Fordonstrafik kan förekomma på manöverområdet utanför ATS öppethållning.

5 Funktionsfel på stoppljus

När stoppljus på taxibana inte går att reglera gäller följande:

ESOE 2.20 LOCAL AERODROME REGULATIONS

1 Prior permission required (PPR)

PPR outside aerodrome/ATS hours of operation. Örebro flying club will give permission to VFR traffic with single-engined aeroplanes only. Permission obtainable from flying club, TEL +46 19 24 10 20.

2 Restrictions for school and training flights

PPR for IFR training flights within CTR/TMA.

Take-off and landing exercises and repeated instrument approaches accepted only between 0600–2100 (0500–2000).

3 Traffic circuit

Traffic circuit west of RWY 01/19 outside TWR HR of OPS.

4 Routines outside ATS opening hours

Outside ATS hours of operations, blind transmission is mandatory within CTR.

For VFR landing outside ATS hours of operation the intention to land and ETA shall be clearly declared on channel 120.280 followed by a “visual fly over check” at 1000 ft AGL or above in order to verify runway availability and alerting any AD personnel and other traffic on the runway. If the runway is not available in its full length and width, the landing shall not be carried out.

For take-off outside ATS hours of operation the intention to take-off shall clearly be declared on channel 120.280. If the runway is not available in its full length and width, the take-off shall not be carried out.

Vehicle traffic may occur in the manoeuvring area outside ATS opening hours.

5 Malfunctioning stopbar

When a taxiway stopbar is not controllable the following procedure apply:

Vid nyttjande av taxibana med fel på manövreringsutrustning för stoppljus gäller att passage av tänt stoppljus endast får ske efter rangerbil. ATC informerar vid klarering.

6 Avisning

Avisning utförs på västra delen av plattan, se flygplatskartan. För instruktioner kontakta avisningen på kanal 121.905.

7 Varningsljus för bana i användning (RGL)

RGL är aktiverade under ATS öppethållning.

ESOE 2.21 BULLERREDUCERANDE FÖRFARANDEN

1 Ankommande

Fram till slutlig inflygning bibehålla en flyghöjd som inte förorsakar en markbullernivå som överstiger 70 dB(A). Restriktionen ingår i klarering. Då förhållandena så medger ska reversering utöver Idle Reverse eller motsvarande ej användas.

2 Avgående RWY 01

Vid start skall rak utflygning tillämpas till sådan höjd uppnåtts/passerats att markbullernivån underskrider maximala 70 dB(A). Restriktionen ingår i klarering.

3 Avgående RWY 19

Vid start skall utflygning ske via RB, därefter högersväng på kurs 240° tills sådan höjd uppnåtts/passerats att markbullernivån underskrider maximala 70 dB(A). Restriktionen ingår i klarering.

Luftfartyg med MTOM mindre än 2000 kg skall tillämpa rak utflygning RWY 01/19 till 1500 ft har uppnåtts innan sväng får påbörjas. Restriktionen ingår ej i klarering.

ESOE 2.22 FLYGPROCEDURER

1 Startprocedurer, omnidirectional

RWY	Procedure	Significant obstacle		
		Obstacle	Elevation (ft)	Direction (GEO)/Dist (m) from THR
01	Climb straight ahead to MNM turning ALT 600 ft. Continue climb to appropriate MSA.	Tree (CIO)	240	014°3582
		Pylon	1873	002°/24729
19	Climb straight ahead to MNM turning ALT 600 ft. Continue climb to appropriate MSA.	Tree (CIO)	235	188°/3990
		Wind Turbine	1329	260°/18912
		Pylon	1873	001°/21508

2 Lågsiktsprocedurer (LVP)

Förberedelsefasen träder i kraft när bansynvidden (RVR) understiger 800 m och/eller molntäckeshöjden är 300 ft eller lägre.

LVP träder i kraft när RVR är lägre än 550 m eller när molntäckeshöjden eller vertikalsikten är lägre än 200 ft. Meddelande om att LVP är i kraft lämnas av ATS.

When using taxiway with malfunctioning stopbar manoeuvring, taxiing pass a lighted stopbar is only permitted behind a marshalling car. ATC will inform via clearance.

6 De-icing

De-icing at western part of the apron, see AD-chart.
Contact de-icing on channel 121.905 for instructions.

7 Runway guard lights (RGL)

RGL activated during TWR HR of OPS.

ESOE 2.21 NOISE ABATEMENT PROCEDURES

1 Arrivals

Maintain a height during approach where the noise emission reaching ground is below 70 dB(A) until on final. Restriction included in ATC clearance. When conditions permit, more than Idle Reverse or equivalent must not be applied.

2 Departure RWY 01

Climb on RWY track until reaching/passing a height where the noise emission reaching ground is below 70 dB(A). Restriction included in ATC clearance.

3 Departure RWY 19

Climb on RWY track until passing RB, then turn right heading 240° until reaching/passing a height where the the noise emission reaching ground I below 70 dB(A). Restriction included in ATC clearance.

Aircraft with MTOM not exceeding 2000 kg departing RWY 01/19 shall climb straight ahead to 1500 ft until turn is initiated. Restriction not included in ATC clearance.

ESOE 2.22 FLIGHT PROCEDURES

1 Omnidirectional departure procedures

RWY	Procedure	Significant obstacle		
		Obstacle	Elevation (ft)	Direction (GEO)/Dist (m) from THR
01	Climb straight ahead to MNM turning ALT 600 ft. Continue climb to appropriate MSA.	Tree (CIO)	240	014°3582
		Pylon	1873	002°/24729
19	Climb straight ahead to MNM turning ALT 600 ft. Continue climb to appropriate MSA.	Tree (CIO)	235	188°/3990
		Wind Turbine	1329	260°/18912
		Pylon	1873	001°/21508

2 Low visibility procedures (LVP)

The preparation phase will be implemented when RVR falls below 800 m and/or ceiling is at or below 300 ft.

LVP will be in force when RVR is below 550 m or ceiling or vertical visibility is below 200 ft. The application of LVP will be announced by ATS.

LVP will be terminated when RVR is greater than 550 m and ceiling is greater than 200 ft and continuing improvement in these conditions is anticipated.

LVP upphör när bansynvidden (RVR) är större än 550 m och molntäckeshöjden är högre än 200 ft och en fortsatt förbättring av dessa värden är att vänta.

När LVP tillämpas tillåts endast ett fordon alternativt ett luftfartyg på manöverområdet.

Guided take-off ej tillåten.

When LVP is applied only one vehicle or only one aircraft is allowed in the manoeuvring area.

Guided take-off not available.

3 VFR-flygning inom Örebro TMA/CTR

Normala in- och utpasseringspunkter
Se ESOE VAC.

Väntlägen
Se ESOE VAC.

Avbrott i radioförbindelse
Se ESOE VAC.

3 VFR flight within Örebro TMA/CTR

Normal entry and exit points
See ESOE VAC.

Holdings
See ESOE VAC.

Communication failure
See ESOE VAC.

ESOE 2.23 TILLÄGGSINFORMATION

1 Restriktioner segelflyg

Segelflygstråk E fältet. PPR TEL +46 (0)19 24 10 60.

2 Kända identifierade risker

Nedsvep kan förekomma på final RWY 19. Vid vindriktningar mellan 210° och 270 ° och vindhastigheter överstigande 10 kt risk för turbulens på kort final RWY 19.

3 Reducerad banseparation

Reducerad banseparation tillämpas enligt AD 1.1 mom 10 mellan luftfartyg kategori 1 eller kategori 2 medan bakomvarande luftfartyg är av kategori 1.

4 Användning av instrumentinflygningsprocedurer

Instrumentinflygningsprocedurerna får inte användas utanför ATS öppethållning.

ESOE 2.23 ADDITIONAL INFORMATION

1 Restrictions for gliders

Glider strip E of field. PPR TEL +46 (0)19 24 10 60.

2 Known identified risks

Downdraught may occur on final RWY 19. At wind directions between 210° and 270 ° and wind speeds exceeding 10 kt risk for turbulence on short final RWY 19.

3 Reduced runway separation

Reduced runway separation applies in accordance with AD 1.1 para 10 between aircraft of category 1 or category 2 when the succeeding aircraft is of category 1.

4 Use of instrument approach procedures

Prohibited to use instrument approach procedures outside ATS HR of OPS.

ESOE 2.24 FLYGKARTOR AVSEENDE EN FLYGPLATS

ESOE 2.24 AERONAUTICAL CHARTS RELATED TO AN AERODROME

LIST OF WAYPOINTS AND SIGNIFICANT POINTS

See ESOE ÖREBRO 4

ESOE 2.25 GENOMTRÄNGANDE AV YTAN FÖR VISUELLA SEGMENTET (VSS)

-

ESOE 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

-