

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. | Administration, address, telephone, fax, AFS | Örebro Läns Flygplats AB
Örebro Airport
SE-705 94 Örebro
TEL: +46 (0)19 30 70 00
FAX: +46 (0)19 24 11 13
E-mail: handling@orebroairport.se
AFS: ESOEZTX
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 administration to:
handling@orebroairport.se or TEL: +46 (0)19 30 70 34. |

ESOE 2.3 OPERATIONAL HOURS

- | | | |
|-----|---|--|
| 1. | AD Administration
AD Operating hours | MON-FRI 0700-1500 (0600-1400)
As ATS |
| 2. | Customs and immigration | O/R TEL +46 (0)40 661 32 20 |
| 3. | Health and sanitation | - |
| 4. | AIS Briefing Office | FPC H24, +46 (0)8 797 63 40, www.lfv.se/fpc |
| 5. | ATS Reporting Office (ARO) | As ATS |
| 6. | MET Briefing Office | FPC H24, +46 (0)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/oil types	Fuel Jet A1 Oil -
3.	Fuelling facilities/discharge 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 (0)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	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	Tracked vehicle
3.	Capability for removal of disabled aircraft	By arrangement, suitable for aircraft up to ref code 4F. Contact : Aerodrome Team leader +46 (0)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 SEASONAL AVAILABILITY – CLEARING

1.	Types of clearing equipment	Snowploughs, blowers, sweepers, slingers, spreaders
2.	Clearance priorities	RWY, TWY, Apron, Emergency access road.
3.	Remarks	RWY, TWY and Apron de-iced with KFOR/SAND. Snowclearance/Moving outside TWR HR of OPS can be conducted.

ESOE 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS 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. 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 in feet	Markings/ Type, colour	Remarks
a	b	c	d	e	f
ESOE1	Lamp post	591426.3N 0150243.9E	204 / -	-	-
ESOE2	Forest	591426.4N 0150243.8E	229 / -	-	-
ESOE3	Forest	591426.9N 0150244.7E	230 / -	-	-
ESOE4	Forest	591434.9N 0150237.0E	240 / -	-	-
ESOE5	Forest	591436.6N 0150236.8E	243 / -	-	-
ESOE6	Forest	591203.6N 0150146.9E	184 / -	-	-
ESOE7	Forest	591203.3N 0150144.9E	194 / -	-	-
ESOE8	Forest	591102.6N 0150117.4E	281 / -	-	-
ESOE9	Forest	591103.0N 0150110.7E	286 / -	-	-
ESOE10	Forest	591102.6N 0150110.4E	295 / -	-	-
ESOE11	Forest	591102.0N 0150115.2E	297 / -	-	-

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

ESOE 2.11 METEOROLOGICAL INFORMATION PROVIDED

- Associated MET Office: STOCKHOLM/Arlanda
- Hours of service: H24
MET Office outside hours
- Office responsible for TAF preparation: STOCKHOLM/Arlanda
Periods of validity, interval of issuance: 9 HR, <https://tafplanner.smhi.se/app.php/production-program>
- Type of landing forecast: Not issued
Interval of issuance
- Briefing/consultation provided: FPC H24, +46 (0)8 797 63 40, www.lfv.se/fpc
- Flight documentation: TAF, METAR, SIGMET, Upper air winds
Language(s) used: Swedish/English
- Charts and other information available for briefing or consultation: SWC, WC, Nordic SIGWX Chart, Low level forecast
- Supplementary equipment available for providing information: -
- ATS units provided with information: ÖREBRO TWR
- Additional information (limitation of service, etc.): Flight planning room available

ESOE 2.12 RUNWAY PHYSICAL CHARACTERISTICS

Designations RWY NR	True BRG and MAG 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° GEO 005° MAG	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° GEO 185° MAG	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

Slope of RWY-SWY	SWY dimensions (m)	CWY dimensions (m)	Strip dimensions (m)	OFZ	Remarks
7	8	9	10	11	12
01 See ESOE AOC	-	300 x 150	3390 x 300	-	PCN 70 accepted occasionally. Shoulders available, width 7.5m
19 See ESOE AOC	-	300 x 150	3390 x 300	-	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	-

DECLARED DISTANCES TAKE-OFF INTERSECTIONS

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	Barrette CL CAT I 900 m LIH	Green	PAPI Left/3.00° (50.5 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	Barrette CL CAT I 900 m LIH	Green	PAPI Left/3.00° (50.5 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: LED lights on RCLL.
RWY 19: 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
Anemometer location and LGT Lighted windsock N TWY A. Windsocks at RWY ends
At PAPI 19 and GP 01
3. TWY edge and centre line lighting Edge: TWY 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 -
592413N 0150157E |
| 2. | Vertical limits | ÖREBRO CTR | <u>2000 ft AMSL</u>
GND |
| 3. | Airspace classification | C | |
| 4. | ATS unit call sign
Language(s) | ÖREBRO TOWER
Swedish/English | |
| 5. | Transition altitude | 5000 ft AMSL | |
| 6. | Remarks | CTR established during hours of TWR. | |

ESOE 2.18 ATS COMMUNICATION FACILITIES

Service designation	Call sign	Channel/Frequency	Hours of operation	Remarks
1	2	3	4	5
TWR	ÖREBRO TOWER	120.280	HO	Primary channel
		121.500	HO	-
		133.605	HX	-
	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	Remarks
1	2	3	4	5	6	7
LOC 01 ILS CAT I (7° E 2025)	SOE	109.10 MHz	H24 *	591418.7N 0150238.2E		254 m beyond THR 19 ILS Class I/D/2
GP		331.40 MHz	H24 *	591237.8N 0150149.7E		Angle 3.0° RDH 54.0 ft 311 m past THR 01 left side
OM				590802.2N 0150010.6E		-
MM				591158.5N 0150141.6E		-
NDB 01	RB	375 kHz	H24 *	590802.4N 0150011.0E		Range 30 NM
LOC 19 ILS CAT I (7° E 2025)	NOE	108.50 MHz	H24 *	591218.8N 0150149.8E		264 m beyond THR 01 ILS Class I/D/2
GP		329.90 MHz	H24 *	591401.3N 0150223.4E		Angle 3.0° RDH 54.1 ft 321 m past THR 19 right side
NDB 19	EN	400 kHz	H24 *	591727.8N 0150354.1E		Range 30 NM
DME	NOE	108.50 MHz	H24 *	591401.4N 0150222.9E	204 ft	DME channel 22X

* Monitoring of signal in space limited to ATS HR of OPS

ESOE 2.20 LOKALA TRAFIKFÖRESKRIFTER

1. Förhandstillstånd (PPR)

PPR erfordras utanför flygplatsens/ATS öppethållning. Örebro flygklubb kan endast bevilja tillstånd för VFR-trafik med enmotoriga flygplan, TEL +46 (0)19 24 10 20.

2. Restriktioner för skol- och övningsflygning

PPR för skolflygning enligt IFR inom CTR/TMA.

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

3. Trafikvarv

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

4. Övrig flygplatstrafik

Utanför ATS öppethållning är blindsändning obligatoriskt inom CTR.

LOCAL TRAFFIC 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 (0)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. Other aerodrome traffic

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

5. 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 genomförs 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.

6. 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.

7. Fordonstrafik kan förekomma på manöverområdet utanför ATS öppethållning.

8. Funktionsfel på stoppljus

När stoppljus på taxibana inte går att reglera gäller följande: 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.

9. Avisning

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

10. Varningsljus för bana i användning (RGL)

RGL är aktiverade under ATS öppethållning.

5. 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.

6. 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.

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

8. Malfunctioning stopbar

When a taxiway stopbar is not controllable the following procedure apply: When using taxiway with malfunctioning stopbar manoeuvring, taxiing pass a lighted stopbar is only permitted behind a marshalling car. ATC will inform via clearance.

9. De-icing

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

10. Runway guard lights (RGL)

RGL activated during TWR HR of OPS.

ESOE 2.21 MINSKNING AV BULLERSTÖRNING

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/passrats 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/passrats att markbullernivån underskrider maximala 70 dB(A). Restriktionen ingår i klarering.

Luffartyg 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.

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 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.

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 lufffartyg på manöverområdet.

Guided take-off ej tillåten.

3. VFR-flygning inom Örebro TMA/CTR

Normala in- och utpasseringspunkter
Se ESOE 6-1

Väntlägen
Se ESOE 6-1

Avbrott i radioförbindelse
Se ESOE 6-1

ESOE 2.23 ÖVRIG INFORMATION

1. Restriktioner segelflyg

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

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

3. Reducerad banseparation.

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

4. Instrumentflygningsprocedurerna får inte användas utanför ATS öppethållning.

FLIGHT PROCEDURES

1. Omnidirectional departure procedures

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.

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

Guided take-off not available.

3. VFR flight within Örebro TMA/CTR

Normal entry and exit points
See ESOE 6-1

Holdings
See ESOE 6-1

Communication failure
See ESOE 6-1

ADDITIONAL INFORMATION

1. Restrictions for gliders

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

2. Downdraught may occur on final RWY 19. At wind directions between 210° and 270 ° and wind speeds exceeding 10 kts 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. Prohibited to use instrument approach procedures outside ATS HR of OPS.

ESOE 2.24 TILLHÖRANDE KARTOR**RELATED CHARTS**

AD chart		ESOE 2-1
AOC	RWY 01/19	ESOE-3-1
Area chart	TMA	ESOE 4-1
List of waypoints and significant points		ESOE 4-3
ATC Surveillance Minimum ALT Chart		ESOE 4-91
IAC	ILS z or LOC z RWY 01	ESOE 5-1
IAC	ILS y or LOC y RWY 01	ESOE 5-2
IAC	NDB RWY 01	ESOE 5-3
IAC	ILS z or LOC z RWY 19	ESOE 5-4
IAC	ILS y or LOC y RWY 19	ESOE 5-5
IAC	NDB RWY 19	ESOE 5-6
IAC	RNP RWY 01	ESOE 5-7
IAC	RNP RWY 19	ESOE 5-11
VAC		ESOE 6-1