



LETTER OF AGREEMENT

between

vACC Germany
München ACC

and

vACC Germany
Langen ACC

Effective: [November 28, 2024](#) (AIRAC 2412)

1 General.

1.1 Purpose.

The purpose of this Letter of Agreement is to define the coordination to be applied between München ACC and Langen ACC when providing ATS to air traffic (IFR/VFR) on the VATSIM network.

All information and procedures described in this Letter of Agreement shall not be used for real world purposes.

1.2 Operational Status.

All operational significant information and procedures contained in this Letter of Agreement shall be distributed to all concerned controllers by appropriate means. This Letter of Agreement itself constitutes public information.

1.3 Validity.

This Letter of Agreement becomes effective on [November 28, 2024](#) (AIRAC 2412) and supersedes previous version of the Letter of Agreement between München ACC and Langen ACC dated [May 16, 2024](#) (AIRAC 2405).

1.4 Revision control.

Revision	Date	Author
1.X	30.12.2021	Various authors
2.0	30.11.2023	Jannik Vogel, Konstantin Eierhoff, Phil Hauf
2.1	22.02.2024	Jannik Vogel, Konstantin Eierhoff
2.2	16.05.2024	Jannik Vogel, David Dürr
2.3	28.11.2024	Jannik Vogel

2 Areas of Responsibility and Sectorization.

2.1 Areas of Responsibility.

The lateral and vertical limits of the respective areas of responsibility are as follows:

2.1.1 München ACC.

Lateral limits: München FIR and Rhein UIR as described in AIP Germany

Vertical limits: GND – FL245 (München FIR)
FL245 – FL315 (Rhein UIR)

2.1.2 Langen ACC.

Lateral limits: Langen FIR as described in AIP Germany

Vertical limits: GND – FL245

2.2 Sectorization.

Sector chart EDMM: vats.im/sectors-edmm

Sector chart EDGG: vats.im/sectors-edgg

For detailed coordinates refer to GNG or AIP Germany ENR 2.1.

2.3 Delegation of the Responsibility for the Provision of ATS.

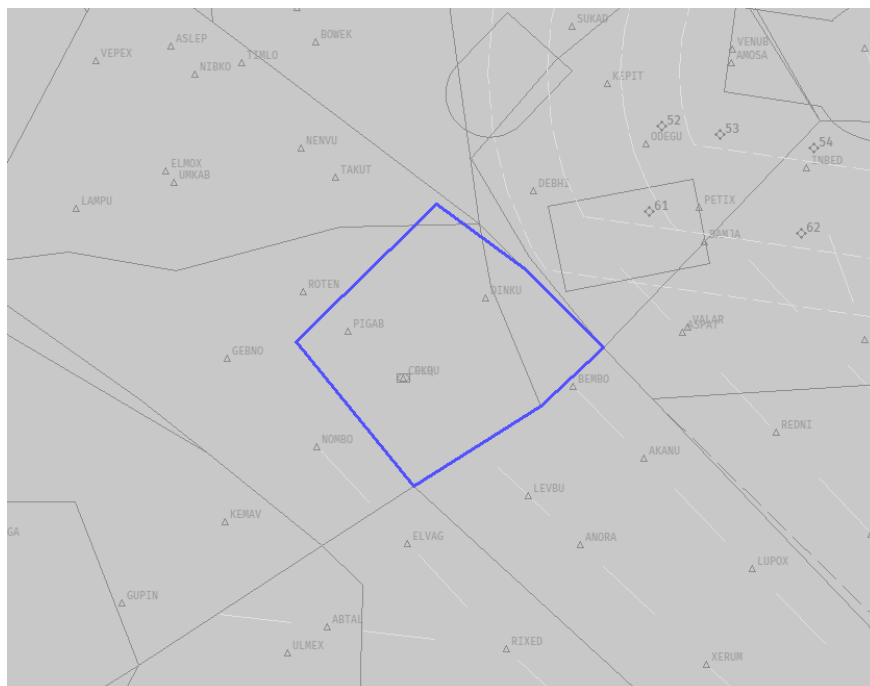
Not applicable.

2.4 Special Areas within the common Area of Interest.

2.4.1 DKB Window

The airspace defined as “DKB Window” shall be delegated to München ACC on request. If it is no longer needed, the airspace shall be returned to Langen ACC.

Vertical limits: FL215 – FL245



3 Procedures for Coordination.

3.1 Definitions.

A release is an authorization for the accepting ATS unit to climb, descend and/or turn (by no more than 45°) a specific aircraft before the transfer of control point. The transferring ATS unit remains responsible for separation within its Area of Responsibility unless otherwise agreed.

Wherever VATSIM callsigns are used to describe the terms of a certain procedure, this procedure is also applicable for all higher stations that take over the responsibilities of said station. E.g., procedures for an APP-stations are also applicable for the respective CTR station fulfilling the duties of said APP station.

The use of VATSIM callsigns in this document includes any variation of said callsign. E.g., any procedure applicable for EDMM_CTR may also be used by EDMM_X_CTR or EDUU_X_CTR.

3.2 Abbreviations.

ACC	Area Control Center	kts	Knots
AD	Aerodrome	LAU	Local Approach Unit
ADEP	Aerodrome of Departure	LoA	Letter of Agreement
ADES	Aerodrome of Destination	LoR	Line of Responsibility
AoR	Area of Responsibility	NM	Nautical Mile
APP	Approach Facility	NVFR	Night Visual Flight Rules
ATS	Air Traffic Services	REV	Revision
COP	Coordination Point	RFL	Requested Flight Level
CTR	Center/Enroute Facility	RIsd	Released
FIR	Flight Information Region	SSR	Secondary Surveillance
FIS	Flight Information Service	Radar	
FL	Flight Level	TMA	Terminal Maneuvering Area
GND	Ground	UAC	Upper Area Control Center
GNG	Global Nav Generator (gng.aero-nav.com)	VFR	Visual Flight Rules
		WEF	With Effect From

3.3 General Conditions.

Coordination of flights shall take place via the agreed coordination points (COP).

Coordinated flights shall be handed off via a valid COP. Any deviation shall be coordinated verbally, by text or by Euroscope inter-sector coordination.

Traffic shall be handed off at the levels, defined in the regulations below. If a specified level restriction cannot be met due to a lower RFL, traffic shall be handed off at RFL, if this does not cause a conflict with any other traffic. Otherwise, traffic shall be coordinated.

If a traffic situation is not covered herein or closely matching a covered one, individual coordination between the concerned sectors shall be made.

After Transfer of communications, traffic is NOT released for climb, descent or turns until Transfer of control or otherwise specified in this Letter of Agreement.

↓FLxxx / ↑FLxxx means „descending / climbing to a specified FL“, without any further restriction. Any required crossing/speed restriction shall be added separately. At level means that the aircraft shall be in level flight on a published flight level and in accordance with east/west odd/even policy.

FLxxxA means “climbing and above specified FL”, FLxxxB means “descending and below specified FL”.

3.4 IFR flights from Langen ACC to München ACC.

3.4.1 Arrivals.

Arrival AD	COP	Level Allocation	Special Conditions	FROM Sector	TO Sector
EDQM, EDQD, EDQC, EDQA, ETIC	BOKNI	FL170		HEF	FRK
EDDN	VELIS	FL170			FRK
EDDE, EDBA, EDGE, EDOU	MADET ROBEL	FL110	Rlsd		TRS
EDDN	ERTES	↓FL130	Out of FL160, rlsd by HAB approved to cross KTG	HAB	FRK
EDQD, EDQM	SULUS	FL170			
EDQC, EDQT, EDQA	SULUS	FL130			
EDDE	RASPU	FL180			
EDQC, EDQD, EDQM	KEGOS	FL190		KTG	FRK
EDQA, EDQT	KEGOS	FL140			
EDDN	LETKU	↓FL110	Out of FL135, rlsd by DKB	DKB	FRK
EDMA, EDMO, EDJA, ETSN, ETSI, ETSL	ELVAG LEVBU	↓FL110	Out of FL150		NDG/WLD
EDMM FIR (excl. EDDM, EDME, EDMS)	GUPIN	FL170		LBU	NDG
EDDM, EDME, EDMS	GUPIN	FL210			
EDJA, EDMO, ETHL	REUTL	FL90		REU	ILR
ETHL	LUP	FL90			

3.4.2 Departures.

Departure AD	COP	Level Allocation	Special Conditions	FROM Sector	TO Sector
EDDF	SULUS	FL230	Rlsd ↑	HAB (RWY07) KTG (RWY25)	BBG
EDDS, EDSB, EDTY	AMOS A	FL230		KTG	
ETHN	Indiv. Coord.		Verbal Coordination mandatory	KTG/DKB	FRK/BBG
EDDF	ELVAG	FL240	If RFL ≤ FL240	DKB	NDG
EDDF	ELVAG	Indiv. Coord	If RFL > FL240, not able to cross NOMBO FL240A		
EDDF	BEMBO	FL230	If RFL ≤ FL240		WLD
EDDF	BEMBO	Indiv. Coord	If RFL > FL240, not able to cross DINKU FL230A		
EDTY	AKANU LEVBU RIXED	FL110			WLD/NDG
EDDS	ABTAL	FL140	Rlsd ↔ when passing FL100 subject to traffic into STG/REU	REU	NDG
	KUNOD				FUE
EDTY	DINKU	FL100		STG	FRK
EDTO, EDTL	REUTL	FL90		REU	ILR

3.5 IFR flights from München ACC to Langen ACC

3.5.1 Arrivals

Arrival AD	COP	Level Allocation	Special Conditions	FROM Sector	TO Sector
EDDF	ESEGU	FL220	Rlsd passing FL245	HAL	GED
EDDF	ROBEL	↓FL200	ROBEL at FL200, rlsd passing FL245		
EDDF	RUNEN	↓FL210	RUNEN at FL210, rlsd passing FL245	BBG	GED
EDDS	RUFGA	FL240	Rlsd ↔ passing GORKO		HAB
ETAR, EDDR, EDRZ, EDSB	RUFGA	FL220			
EDFM, EDFV, EDRY	RUFGA	FL200	Rlsd ↔ passing GORKO		
EDTY	RUFGA	FL200	Rlsd ↔ passing GORKO		KTG
EDFM, EDFV, EDRY	BARSU	FL220			
EDDS, EDMA	KEGOS	FL200			
EDTY	AMOSAS	FL100	Rlsd ↓ by FRK	FRK	STG
EDQG	Indiv. Coord	FL80			DKB
ETHN	Indiv. Coord	FL80			
ETIK	ILM	A5000 ft			
EDDF	ASPAT	FL240	DEBHI at FL240	ALB	KTG
EDDF	DAMJA	FL240			
EDDK, ELLX	BEMBO	FL220	DEP EDDM Rlsd ↑, may be revised FL240	WLD	DKB
EDDS	TEKSI	FL110	May be cleared direct TEKSI south of T127/T129	NDG	REU
EDDF	HAFUN	FL220	Rlsd ↔		LBU
EDDF	GUPIN	FL220	Rlsd ↔ passing TEKSI		
EDFM, EDSB, ETAR	RIXED	FL200			
EDTY	ELVAG AKANU	FL100		SWA	STG
EDDS	DITBA	FL130		FUE	REU
EDTM, EDTO, EDTL	PELOG	FL80		ILR	REU

3.5.2 Departures.

Departure AD	COP	Level Allocation	Special Conditions	FROM Sector	TO Sector
EDDE	ERSIL	↑FL140		TRS	HEF
EDQM, EDQD, EDQA, EDQT, EDQC	GORKO	FL210		BBG	HEF
EDDN	GORKO	FL220	Rlsd ↑ by BBG after passing FL195 or SULUS		
EDDN	DKB, SUKAD	FL130	Rlsd by FRK, DEPs via BOLSI shall be cleared DCT DKB	FRK	DKB/KTG
EDQC, EDQA, EDQT	RUNEN SULUS	FL130			HAB/HEF
EDQC, EDQA, EDQT	AMOSAS	FL150			KTG
ETEB	Indiv. Coord	A5000 ft			
EDDN, EDQM, EDQD	SULUS KOMIB	FL180			HAB
EDQM, EDQD	AMOSAS	FL180			KTG
EDMM FIR	ABTAL NOMBO	FL200		NDG	LBU/DKB
EDJA, EDM*	ELVAG	FL200			DKB
EDJA	KUNOD	FL190, RFL ≤ FL240	If TRA not active, rlsd ↑ by FUE	FUE	BAD
EDJA	KUNOD	FL230, RFL ≥ FL250	If TRA not active, able to cross KUNOD at level		TGO (EDUU)
EDJA	LUPOL	FL80	If TRA active	ILR	REU
ETHL, EDMO	PELOG	FL80			

3.6 VFR flights from München FIR to Langen FIR.

For controlled VFR flights and NVFR flights above 2500 feet GND coordination, transfer of control and transfer of communication shall take place as for IFR flights. Uncontrolled VFR flights shall be transferred to the appropriate sector if in radio contact. If online, EDXX_GG_CTR (Langen Information), 123.525, shall be the primary sector for uncontrolled VFR flights.

3.7 VFR flights from Langen FIR to München FIR.

For controlled VFR flights and NVFR flights above 2500 feet GND coordination, transfer of control and transfer of communication shall take place as for IFR flights. Uncontrolled VFR flights shall be transferred to the appropriate sector if in radio contact. If online, EDXX_MM_CTR (Langen Information), 120.650, shall be the primary sector for uncontrolled VFR flights.

4 Special Procedures.

4.1 Flights from Langen ACC to München ACC.

- 4.1.1 Separation between departures from and arrivals to aerodromes in sector FRK shall be provided by FRK.

4.2 Flights from München ACC to Langen ACC.

4.2.1 EDDF Inbounds via T161 or PETIX STAR.

If the minimum spacing of 10 NM between two inbounds on T161 cannot be achieved, München should use REV at FL220, level revision shall be announced verbally. KTG may cancel REV procedure on T161 for a specified time.

If the minimum spacing of 10 NM cannot be achieved, München can as an alternative for level bunching, reclear flights via PETIX-T159-SPESA and transfer them at or descending FL240 to reach level 5 NM behind PETIX.

4.2.2 Departures EDMM FIR via INBED.

Those flights are normally coordinated between Karlsruhe UAC and München ACC. If those flights are not able to stay clear of AoR Langen ACC, a release should be given by Langen ACC on request of München ACC. If Langen ACC is unable to release the flight, the aircraft will be transferred to Langen ACC, who are responsible for further coordination with Karlsruhe UAC.

4.2.3 Tactical direct routings without coordination:

Flights via L173 above FL145	DCT LBU (clear of sector BAD)
Flights via L610	DCT AMOSA
Flights via T161, T159	DCT DEBHI/PETIX

4.2.4 Flights from/to AoR STG/REU.

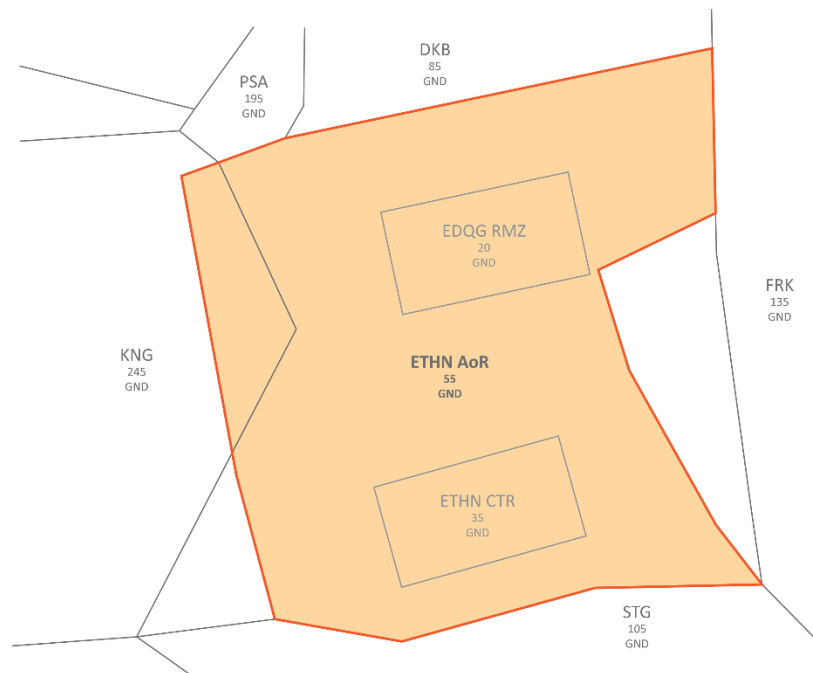
- 4.2.4.1 TEKSI holding is not separated from AoR of München ACC. If holding is in use, München ACC shall provide separation to traffic in the TEKSI holding.

- 4.2.4.2 Flights are released to STG/REU subject traffic leaving AoR STG/REU, speed control by STG/REU is additionally approved.

- 4.2.4.3 Flights entering AoR STG/REU are released for speed control, STG/REU then becomes responsible for separation to succeeding traffic. Additionally, the flights are released:
- for turns and descend to FL110 after transfer of communication if destination is EDDS.
 - for turns and descend passing RIXED/abeam RIXED, if destination is EDTY/ETHN.

4.3 Coordination of the Status of Special Areas within the Area of Common Interest.

- 4.3.1 Stetten Radar shall announce the activation and deactivation of military AoR Niederstetten (ETHN) to any station covering München Radar sector FRK.



5 Transfer of Control and Transfer of Communication.

5.1 Transfer of Control.

Transfer of Control shall take place at the AoR boundary.

If the downstream sector in EuroScope is set to >.break<, the procedure 5.4 is suspended and transfer of communication can only take place after the downstream sector has assumed the flight via the appropriate function of the radar client.

If it becomes necessary to reduce or suspend transfers, a 5-minute prior notification is required.

When transfers are suspended, the hand-off procedure (5.4) is suspended.

5.2 Silent transfer of control.

The following values for silent transfer of control apply:

- 10 NM constant or increasing

5.3 Transfer of Communications.

Transfer of Communications shall take place no later than Transfer of Control.

5.4 Hand-Off procedure.

Unless otherwise agreed between stations online, the following hand-off procedure shall apply:

1. The upstream sector sends the aircraft to the frequency of the downstream sector by voice or text.
2. The upstream sector initiates a transfer via the appropriate function of the radar client.
3. Upon initial call the downstream sector assumes the flight via the appropriate function of the radar client.

5.5 SSR Code Assignment.

Both ATS units shall transfer flights on verified discrete SSR codes. Any change of SSR code by the accepting ATS unit may only take place after the transfer of control point.