



Letter of Agreement

Switzerland – Munich



vACC Switzerland



VATSIM Germany, FIR München

Revision control

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1 General

1.1 Purpose

The purpose of this Letter of Agreement is to define the procedures between:

- vACC Switzerland; and
- VATSIM Germany, FIR München

for providing Air Traffic Service on the VATSIM network.

1.2 Modifications and Revisions

Each party shall coordinate modifications involving

- sectors forming a part of the common AoR boundary
- coordination point (COP) definitions/details
- controller position details
- procedures prescribed in the Letter of Agreement

with the POC of the other party at least 28 days (one AIRAC cycle) in advance.

Agreed modifications and revisions shall be published simultaneously to all VATSIM members concerned.

1.3 Areas of Responsibility

The Areas of Responsibilities are defined as in the database of Global Nav Generator (GNG), used by both parties to produce their sector file data.

1.4 Transfer of Control

Unless prescribed in paragraph 3, the transfer of control point is the common AoR boundary.

1.5 Transfer of Communication

The Transfer of Communication shall take place no later than the Transfer of Control.

1.6 Temporary Deviations

Individual agreements between two or more controllers always have precedence. In case of a shift change, the controller leaving shall inform the next controller about the agreement. The agreement may be cancelled by any party involved at any time but is considered no longer valid latest when an involved controller is leaving without a replacement.

1.7 Validity

This Letter of Agreement becomes effective 2024-11-28.

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2 Coordination Procedures

Electronic means of coordination (via EuroScope) is preferred, where applicable.

2.1 Transfer Conditions

For successive traffic on the same route and at the same flight level, the transferring controller shall establish lateral separation of 10 NM or more, remaining constant or increasing. Otherwise, vertical separation shall be established (successive descending traffic on higher levels, successive climbing traffic on lower levels).

Generally, traffic shall only be transferred if reaching/maintaining the coordinated flight level latest 2.5 NM or 1.5 NM (see paragraph 4.4) prior the common sector boundary is ensured. Exceptions are defined in paragraph 3 or may be coordinated individually.

Unless prescribed in paragraph 3, traffic shall be transferred to the next sector on flight levels according to the east/west Flight Level Orientation Scheme (FLOS):

- a) Eastbound (mag track 000-179): ODD
- b) Westbound (mag track 180-359): EVEN

A handoff shall be initiated only if the traffic is not in conflict with other known traffic of the own or the next sector.

All other handoffs shall be coordinated individually. If there is any doubt about separation rules between the units concerned, prior coordination shall take place in due time.

2.1.1 Recording of Clearances

The following clearances should be recorded:

- CFL
- DCT/HDG
- Horizontal speed (if assigned)
- Vertical speed (if assigned)
- SID and departure runway (by amending the flight plan route)
- STAR and arrival runway (by amending the flight plan route)
- Change of flight rule

2.1.2 Silent Radar Transfer

If continuous radar separation is applied and specified transfer conditions can be met, transfer of communication without prior verbal coordination should be applied, except if the receiving controller has activated the "break" flag. The accepting controller should accept the handoff when contact with the pilot is established.

2.2 Releases

The transferring controller may clear DCT to the COP.

Unless otherwise prescribed in paragraph 3, traffic is released for TURN, CLIMB and DESCENT after passing the COP subject to other traffic between the transferring and accepting controller.

3 Routes, COP and Level Allocation

3.1 Flights from Zurich ACC and ARFA to Munich ACC and Karlsruhe UAC

3.1.1 Arrivals

ADES	Route	COP	FL Allocation
LIPE / LIPK / LIMP	FRA N871	GAMSA	MAX FL 370 ¹⁾
LIPZ / LIPH / LIPX / LIPO / LIPA			MAX FL 350 ¹⁾
LOWS / EDDN / LIPB			MAX FL 310
LOWI			MAX FL 250 MNM FL 120
EDDM / ETSI ²⁾	FRA / T103	NUNRI	MAX FL 270
EDMA / EDMO	T103		MAX FL 190
	Z6 ³⁾		MAX FL 90
ETSL	T103		MAX FL 170
EDJA with ADEP EDNY / LSZR	DCT ALOXO ³⁾		MAX FL 90
EDJA / EDNL / ETHEL / ETSL	Z6 ³⁾		MAX FL 90 ³⁾
	Z601	KPT	MAX FL 90

¹⁾ Flights may be cleared DCT BADVI / BIRGI / GEDSO / OTRES.

²⁾ Flights are released for TURN.

³⁾ Flights are released.

3.1.2 Overflights

COP GAMSA, INTEG or KPT.

3.1.3 Departures

ADEP	Route	COP	FL Allocation	Special Condition
LFSB / LFGB / LFSG / LFSM / LSZS	FRA N871	GAMSA	MAX FL 310	
LSZH / LSMD / EDTD ⁵⁾	Z2	DORAP	MAX FL 240 ⁴⁾	CLIMBING
	Z6	NUNRI	MAX FL 240	CLIMBING
	Z601	KPT	MAX FL 110	
EDNY / LSZR	SID	BEMKI KPT	MAX FL 150	CLIMBING
EDTM / LOIH	Z2	DORAP	MAX FL 150	
	T103	NUNRI		
	Z601	KPT	MAX FL 110	
LSZS	Z119	RONAG	FL 210	

⁴⁾ Flights may be cleared DCT XEBIX / TIRUL / OTRES.

⁵⁾ Flights are released for CLIMB FL 280 within the release area DORAP.

3.1.4 Releases

Flights via GAMSA may be cleared DCT MADEB.

3.2 Flights from Munich ACC and Karlsruhe UAC to Zurich ACC and ARFA

3.2.1 Arrivals

ADES	Route	COP	FL Allocation
LSGG / LFLB / LFLI / LFLJ / LFLP	L856	RAVED	MAX FL 380
LSGS			MAX FL 340
LFSB / LFGA / LFGB / LFSM			MAX FL 320
LSZB / LSZC / LSZG / LSGC / LSMA / LSME / LSMM / LSMP / EDTG			MAX FL 280
EDDS / EDSB / EDFM / EDTD / EDRY / EDTL / ETAR / LFST / LSZS			MAX FL 240
LSZH / LSMD	L856 / Y112	RAVED	MAX FL 200
EDTM			MAX FL 100
LSZR / EDNY	STAR	KPT	MAX FL 80 ⁶⁾
LSZS	Z408	TIRUL	FL 190

⁶⁾ Flights may be descending. Cross AoR boundary FL 100-.
Flights are released for DESCENT and LEFT TURN.

3.2.2 Overflights

COP UMTEX, RAVED or GAMSA.

3.2.3 Departures

ADEP	Route	COP	FL Allocation	Special Condition
EDDM	Y109 / Y100	UMTEX	MAX FL 310 ⁷⁾	
	L856 / Y112	RAVED	MAX FL 240	
EDMA / ETSI / LOWI	L856	RAVED	MAX FL 310 ⁷⁾	
EDMO			MAX FL 260	
EDJA ⁸⁾	SID	UMTEX	MAX FL 160	CLIMBING
	L856	RAVED		

⁷⁾ Flights may be cleared DCT TRA.

⁸⁾ Flights are released for CLIMB FL 240 within the release area RAVED.

3.2.4 Releases

Westbound flights FL 245- are released for TURN, DESCENT and SPEED CONTROL within the release area RAVED subject to same directional traffic.

4 Supplementary Procedures

4.1 Positions and Responsibilities

ID	Name (Nickname)	Radio Call Sign	Frequency	Responsibilities
ARFA	LSFA_APP (ARFA)	Alps Radar	119.925	Traffic to/from EDNY, EDTM and LSZR
ZRT	LSZR_TWR	St. Gallen Tower	135.430	All ground movement and traffic in the circuit and in the CTR LSZR, determination of the RWY-in-use in close cooperation with ARFA, broadcast of ATIS
NYT	EDNY_TWR	Friedrichshafen Tower	120.080	All ground movement and traffic in the circuit and in the CTR EDNY, determination of the RWY-in-use in close cooperation with ARFA, broadcast of ATIS
TMI	EDTM_I_TWR	Mengen Info	135.180	All ground movement and traffic in the circuit and to/from EDTM, determination of the RWY-in-use
APE	LSZH_APP (Arrival East)	Zurich Arrival	135.230	Arriving traffic to LSZH via AMIKI Transit traffic through AoR Zurich APP
APW	LSZH_W_APP (Arrival West)	Zurich Arrival	130.560	Arriving Arrival traffic to Zurich via IAF GIPOL Establish approach sequence
DEP	LSZH_DEP	Zurich Departure	125.955	Departing traffic from LSZH Transit traffic through AoR Zurich APP
LSAS	LSAZ_E_CTR LSAZ_S_CTR LSAZ_CTR LSAS_CTR	Swiss Radar	133.905 128.050 133.050 135.015	Traffic to/from EDNY, EDTM and LSZR from/to the west Airspace west and above ARFA
EDDS	EDDS_REU_APP EDDS_STG_APP	Langen Radar	119.200 125.050	Traffic to/from EDDS Lower airspace up to FL 145 north of APE/ARFA/LSAS
ILR	EDJA_ILR_APP (Iller)	München Radar	129.450	Traffic to/from EDJA
EDUU	EDUU_ALP_CTR EDUU_ISA_CTR EDUU_DON_CTR EDUU_ERL_CTR	Rhein Radar	132.140 136.335 132.730 136.405	Airspace east of LSAS above FL 315
EDMM	EDMM_SWA_APP EDMM_ZUG_CTR EDMM_TRU_CTR EDMM_STA_CTR EDMM_RDG_CTR	München Radar	136.525 134.150 132.635 132.455 132.555	Traffic to/from EDJA, EDNL and ETHL Airspace east of ARFA/LSAS (covering also EDUU if not online)

4.1.1 ARFA (LSFA)

If neither APE, DEP, APW nor LSAS is staffed, ARFA is delegated to EDMM. APE/APW/DEP and ARFA shall notify each other and LSAS, EDDS and EDMM of the RWYs-in-use within their AoR.

Note: Parts of the AoR ARFA depend on the RWY concept LSZH. The AoR ARFA is only displayed correctly, if the RWY-in-use of LSZH is selected.

4.1.2 Friedrichshafen (EDNY)

NYT shall notify ARFA of the RWY-in-use. The preferential RWY-in-use is 24.

4.1.3 St. Gallen – Altenrhein (LSZR)

ZRT shall notify ARFA of the RWY-in-use. The preferential concept is LDG 10 / DEP 28. During opposite arrivals and departures, ZRT shall request a release for every departure before line up due to possible conflicts with landing traffic.

4.2 Handoffs

The following handoffs shall be effected unless otherwise agreed:

From	To	Condition(s)	Releases
ARFA	LSAS	CFL 100	Climb
LSAS	ARFA	CFL 110	Descent
ARFA	EDDS	ADEP EDTM via LEBSO: MAX CFL 80	Climb
EDDS	ARFA	ADES EDTM via ARSUT: CFL 90	NIL
ARFA	EDMM	ADES EDJA / EDNL / ETHL: MAX CFL 90 ADEP EDNY / LSZR via BEMKI or KPT: MAX CFL 150	Turn Climb
EDMM	ARFA	ADES EDTM via RAVED: MAX CFL 100 ADES EDNY / LSZR via KPT: MAX CFL 80	NIL
ARFA	ILR	ADES EDJA: MAX CFL 90, cleared DCT ALOXO	Turn, Descent
ILR	ARFA	ADES EDNY / LSZR via UMTEX: MAX CFL 100	
ZRT	ARFA	Crossed the far end of the RWY, stable climb	Climb
ARFA	ZRT	Instrument approach: pilot reports established Visual approach: pilot reports runway in sight, cleared visual approach	NIL
NYT	ARFA	Crossed the far end of the RWY, stable climb	Climb
ARFA	NYT	Instrument approach: pilot reports established Visual approach: pilot reports runway in sight, cleared visual approach	NIL

All other handoffs shall be coordinated individually. If there is any doubt about separation rules between the units concerned, verbal coordination shall take place in due time.

4.3 Separation

The lateral separation minimum based on radar for traffic within the lateral limits of AoR ARFA and in radio contact with ARFA shall be 3 NM. Before initiating a handoff, the required minimum lateral separation of the receiving unit/controller shall be established.

4.4 Spacing to the common AoR boundaries

Aircraft shall not be cleared closer than 2.5 NM to the common AoR boundary.

In derogation, aircraft shall not be cleared closer than 1.5 NM to the common AoR boundaries with Zurich Arrival (minimum radar separation of all units is 3 NM).

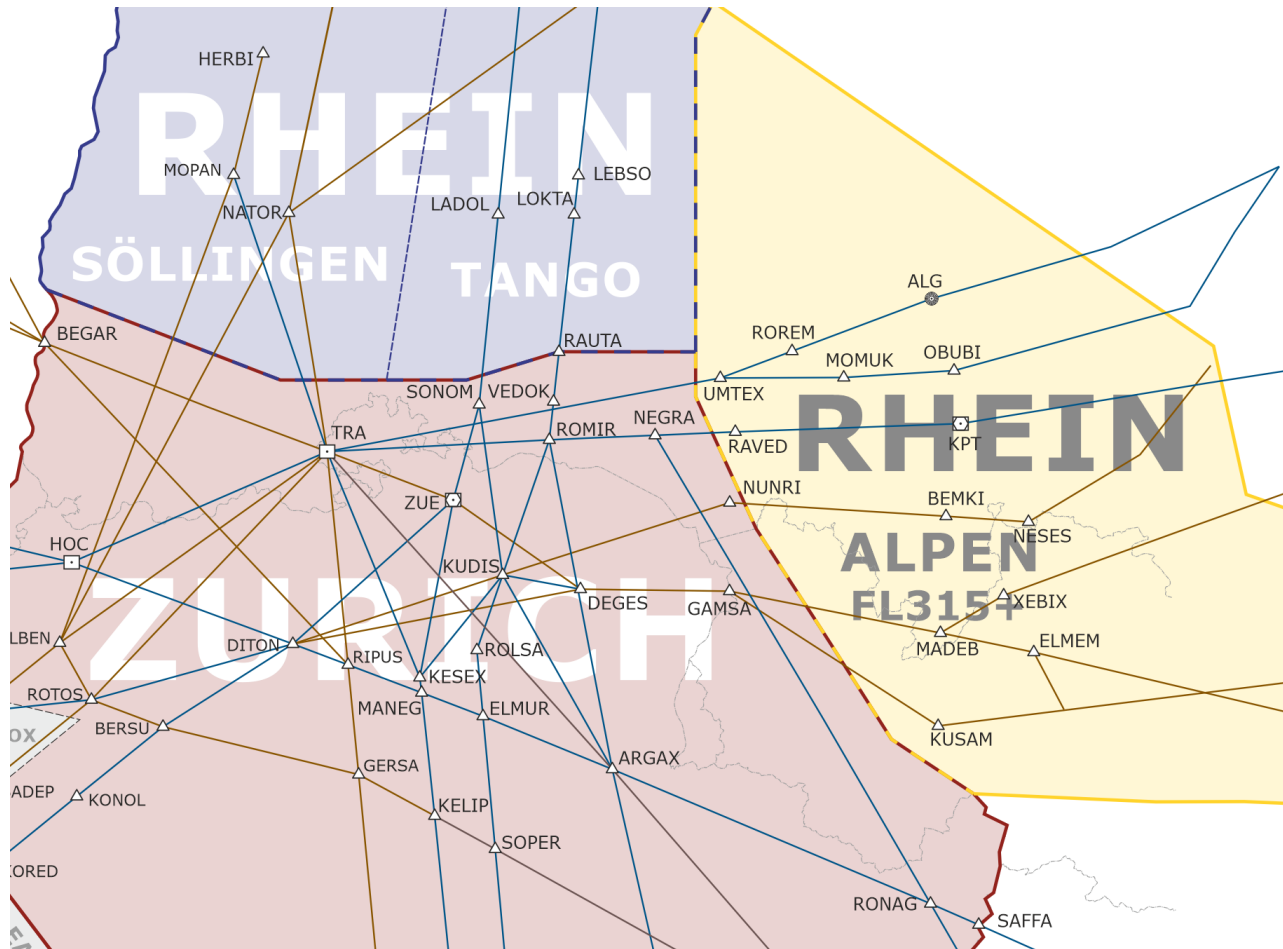
4.5 Staffing

ARFA (LSFA_APP), Friedrichshafen Tower (EDNY_TWR) and St. Gallen Tower (LSZR_TWR) may be staffed by members of both vACC Switzerland and VATSIM Germany. ATC bookings should be done via the VATSIM ATC Bookings API.

Annex A. List of Abbreviations

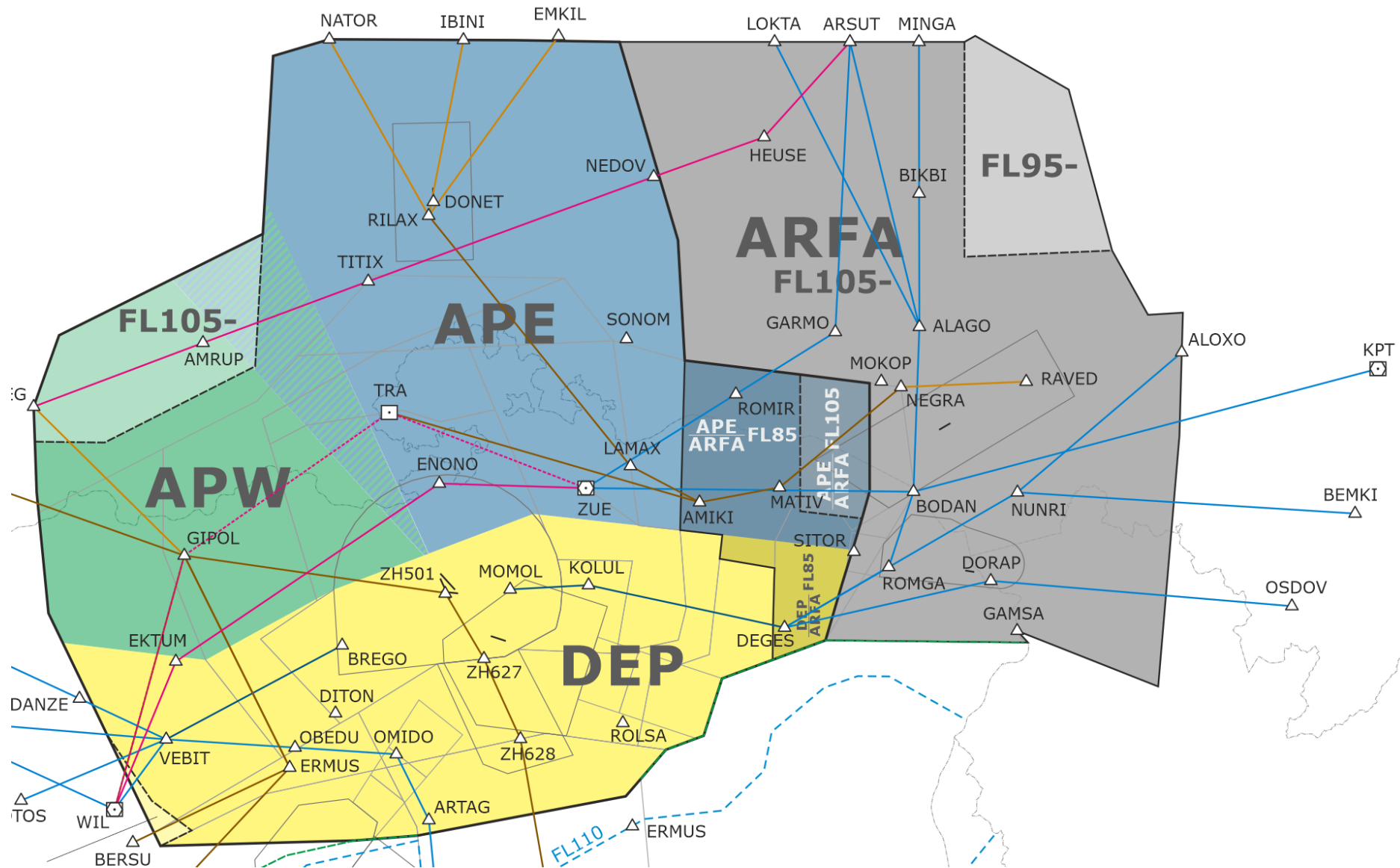
Abbreviation	Meaning
ADEP	Aerodrome of Departure
ADES	Aerodrome of Destination
AoR	Area of Responsibility
ARFA	ACC Regionalsektor Friedrichshafen / St. Gallen (Altenrhein)
ATS	Air Traffic Service
CFL	Cleared Flight Level
COP	Coordination Point
DCT	Direct
ES	EuroScope
FIR	Flight Information Region
FL	Flight Level
FRA	Free Route Airspace
POC	Point of Contact

Annex C. AoRs ACC (Upper)





Annex E. Areas of Responsibility during LSZH LDG RWY 14



Annex F. Areas of Responsibility during LSZH LDG RWY 28

