



LETTER OF AGREEMENT

between

vACC Germany
EDGG/UU/YY

and

vACC Belux
EBBU/EDYY

Effective: 26.12.2024

1 General.

1.1 Purpose.

The purpose of this Letter of Agreement is to define the coordination to be applied between vACC Germany and vACC Belux and all their respective FIR and UIR sectors 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 26.12.2024 and supersedes previous version, dated 16.05.2024, of the Letter of Agreement between EDGG and EBBU.

1.4 Revision control.

Revision	Date	Author
3.3	02.11.2023	Erik Wachters, Leon Kleinschmidt
3.4	21.03.2024	Erik Wachters, Leon Kleinschmidt
3.5	16.05.2024	Erik Wachters, David Dürr
3.6	26.12.2024	Erik Wachters, David Dürr

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 vACC Germany.

2.1.1.1 Langen ACC.

Lateral limits: Langen FIR as described in AIP Germany
Vertical limits: GND – FL245

2.1.1.2 Karlsruhe UAC.

Lateral limits: Rhein UIR as described in AIP Germany
Vertical limits: FL245 – FL660

2.1.1.3 Maastricht UAC.

Lateral limits: Hannover UIR as described in AIP Germany
Vertical limits: FL245 – FL660

2.1.2 vACC Belux.

2.1.2.1 Brussels ACC.

Lateral limits: Brussels FIR as described in AIP Belgium and Luxembourg
Vertical limits: GND – FL245

2.1.2.2 Maastricht UAC.

Lateral limits: Maastricht UIR as described in AIP Belgium and Luxembourg
Vertical limits: FL245 – FL660

2.2 Sectorization.

2.2.1 vACC Germany.

Sector	Vertical Limits	Sector Identifier	Responsible ATS unit
EIFEL	GND - FL165	EIF	1. EDFH{EIF}_APP 2. EDGG_RUD_CTR 3. EDGG_GIN_CTR 4. EDGG_KTG_CTR
PFALZ	GND - FL245	PFA	1. EDDR_PFA_APP 2. EDFH{EIF}_APP 3. EDGG_RUD_CTR 4. EDGG_GIN_CTR 5. EDGG_KTG_CTR
RÜDESHEIM	FL165 - FL245	RUD	1. EDGG_RUD_CTR 2. EDGG_GIN_CTR 3. EDGG_KTG_CTR
KIRN	FL165 - FL245	KIR	1. EDGG_KIR_CTR 2. EDGG_RUD_CTR 3. EDGG_GIN_CTR 4. EDGG_KTG_CTR
BOTTROP	GND - FL245	BOT	1. EDDL_BOT_APP 2. EDDL_DEP 3. EDDL_APP 4. EDDL_F_APP 5. EDGG_PAH_CTR
KÖLN APPROACH	GND - FL195	DKA	1. EDDK_APP 2. EDDK_F_APP 3. EDDK_NOR_APP 4. EDGG_PAH_CTR
NÖRVENICH	FL105 - FL245	NOR	1. EDDK_NOR_APP 2. EDGG_PAH_CTR
SPANGDAHLEM GCA	GND – 5000ft	TADA	1. ETAD_APP
RUHR LOW (Maastricht)	FL245 – FL355	RHRL	1. EDYY_RL_CTR 2. EDYY_RH_CTR 3. EDYY_ML_CTR 4. EDYY_MH_CTR 5. EDGG_PAH_CTR
RUHR HIGH (Maastricht)	FL355 – FL660	RHRH	1. EDYY_RH_CTR 2. EDYY_MH_CTR 3. EDYY_RL_CTR 4. EDYY_ML_CTR 5. EDGG_PAH_CTR
NATTENHEIM (Rhein)	FL245 - FL660	NTM	1. EDUU_NTM_CTR 2. EDUU_FUL_CTR 3. EDUU_WUR_CTR 4. EDGG_RUD_CTR 5. EDGG_GIN_CTR 6. EDGG_KTG_CTR

For detailed sectorizations of Langen sectors refer to <https://vats.im/edgg>, <https://vats.im/edyy>, and <https://vats.im/eduu>.

2.2.2 vACC Belux.

Sector	Vertical Limits	Sector Identifier	Responsible ATS unit
Brussels ACC	GND - FL245	ELS	1. EBBU_E_CTR 2. EBBU_H_CTR 3. EBBU_L_CTR 4. EBBU_W_CTR
Brussels ACC	GND - FL245	LUS	1. EBBU_L_CTR 2. EBBU_H_CTR 3. EBBU_E_CTR 4. EBBU_W_CTR
Luxembourg APP	TMA		1. ELLX_APP 2. EBBU_L_CTR 3. EBBU_H_CTR 4. EBBU_E_CTR 5. EBBU_W_CTR
LUX (Maastricht)	FL245 - FL660	LUX	1. EDYY_L_CTR 2. EDYY_O_CTR 3. EBBU_U_CTR 4. EBBU_E_CTR 5. EBBU_W_CTR 6. EUC-MW_CTR
OLNO (Maastricht)	FL245 - FL660	OLNO	1. EDYY_O_CTR 2. EBBU_U_CTR 3. EBBU_E_CTR 4. EBBU_W_CTR 5. EUC-MW_CTR

For detailed sectorizations of Brussels sectors refer to the BeLux eAIP:

https://ops.skeyes.be/html/belgocontrol_static/eaip/eAIP_Main/html/index-en-GB.html

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 AoR 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 EDGG_KIR_CTR may also be used by EDGG_R_CTR or 1_CTR.

3.2 Abbreviations.

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

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 EDGG/EDUU to EBBU/EDYY.

3.4.1 SF 01 - DUS, BOT.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EBAW	ROMIN via L179 (*1)	FL120		BOT	EBBU ELS

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDLN	MODRU NETEX (*1)	FL100	↑→	BOT	EBBU ELS
EDDL EDLV		FL210 if able, else ↑FL180			

(*1) Note: NETEX–ROMIN–L179 only available at night between 2200LT and 0600LT and during weekends and holidays due to military airspace in the north of the EBBU FIR. Information about the activation of the military areas can be obtained from the EBBU controller.

3.4.2 SF 05 - EIF, PFA, RUD, KIR.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EBBR, EBMB, EBAW, EBCV, EBCI, EBLG, EHBK, EHEH	Z104 TIPUT GESLO	FL220	TIPUT at level ↓→	KIR	EBBU LUS
	Y180, Y181 BITBU		BITBU at level ↓→		
	LIRSU L608 BATTY		LIRSU at level	RUD	EBBU ELS
ELLX	STAR	FL90	(*1)	EIF / PFA	ELLX APP

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDFH	BITBU	↑FL180	released for climb	KIR	EBBU LUS

Arrivals shall stay clear of EDYY sectors.

Note: ↓→ flights are released for descent and right turn

(*1) Note: See 4.2 “Flexible use of airspace for ELLX arrivals”

3.4.3 SF 07 - DKA, NOR.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EBBR, EBMB, EBCI, EBAW, ELLX, EHEH, EHGR	AGENI	↓FL160 out of FL180	↓ to FL110	NOR	EBBU ELS
	GEBSO	FL220	↓↔ to FL200		
EBLG	AGENI	FL120	↓ to FL110		

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDDK	KENUM, NAVAK	↑FL200	↑→	NOR	EBBU ELS
EDLW			↑→ (*1)		

Arrivals shall stay clear of EDYY sectors.

Note: ↑→ flights are released for climb and right turn
 (*1) Note: for flights with RFL245+ a higher level request can be done with EDYY OLNO

3.4.4 EDUU.

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDDF EDFE EDFM	BITBU	max FL300 (*1)	released for climb	NTM	LUX

(*1) Note: flight shall be handed over at any even FL at level, maximum FL300

3.4.5 Tactical Directs.

Karlsruhe UAC may clear flights direct to following waypoints without prior coordination

Waypoint	Special Conditions
DENUT BUB	Flight path shall remain between ADKUV and NOSPA not applicable for traffic ADEP EDDF, EDFE, EDFZ, ETOU
IDOSA	Only for traffic flight planned via NOSPA, BETEX and LIMGO, provided the flight plan remains between BITBU and SUTAL

3.5 IFR flights from EBBU/EDYY to EDGG/EDUU.

3.5.1 From EBBU.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDDK, EDKB, EDGS, EDKL	IBESA	FL190	↓ to FL130 (*1)	EBBU ELS	DKA
	DENOV (KOGES) (PODAT) (PODEN)	FL180	↓← to FL130 (*1)		
EDDL EDLN EDLV	IBESA PODEN (DENOV) (KOGES) (PODAT)	FL230 or below (*2)	←	EBBU ELS	NOR
	ROMIN (*3)	FL130 - FL230 (*2)		EBBU ELS	DUS
EDFH	SUXIM	FL150	↓ to FL140	EBBU ELS	EIF
ETAD			BITBU at level	ELLX APP	EIF
EDDF EDFE EDFZ ETOU	TOBOP T180 UNOKO (*4)	FL230	TOBOP at level	EBBU LUS	RUD
	BETEX Z110 RASVO		BETEX at level		KIR
EDFE, EDFM	PITES	FL230	PITES at level	EBBU LUS	KIR

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EBBR, EBMB, EBAW, EBCV ELLX	KENUM DENOV	max. FL210	↑	EBBU ELS	NOR
EBLG		↑FL150	↑←		
EBLG, EHBK	SUXIM L607	FL230 (*2)	(*5)	EBBU ELS	RUD
ELLX	SID	FL140	released for climb	ELLX APP	EIF

Departing traffic shall stay clear of EDYY sectors.

(*1) Note: Flights have to stay clear of EBR04 TSA/TRA. EBBU is responsible for informing Langen about the activation of the area. The area can be active up to FL175.

(*2) Note: Odd levels

(*3) Note: Only used by EBBU when TRA/TSA north not active

(*4) Note: Max FL230 for traffic ADEP EBBR

(*5) Note: EBBU is responsible for converging traffic with EDFH arrivals

3.5.2 From EDYY.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDDG, EDLP, EDLW	PODEN LENDO	FL250	25NM prior NVO level at	EDYY OLNO	NOR
	DEPOK	FL270			
EDDL EDLN EDLV	IBESA PODEN (DENOV) (KOGES) (PODAT)	FL250, FL260	25NM prior NVO level at released DCT NVO		
EDDF, EDFE, EDFZ, ETOU	NIVNU		NIVNU level at (*1)		RUD
	PITES Z111 RAMOB		PITES level at		KIR
EDDS, EDSB	OGLOR, BITBU, MATUG, PITES	MAX FL310		EDYY OLNO/LUX	NTM

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EBBR, EBMB, EBAW, EBCI, EBCV, EHEH	ETENO Y863 OGLOR	FL310	released for climb	EDYY LUX	NTM

Arrivals shall stay clear of EDUU sectors.

Flights from EDYY OLNO to EDGG NOR are released when passing the EBBU/EDGG border.

(*1) Note: EDYY responsible for separation of traffic converging over NIVNU

3.5.3 Tactical Directs.

Maastricht UAC may clear flights direct to following waypoints without prior coordination

Waypoint	Special Conditions
GUBAX	not for arrivals within EDGG FIR
BOMBI	
KRH	
TEDGO	
AMASI	
LAMGO	
EMGOD	
VIBOM	
NONKO	
MOVUM	only for EDDM arrivals
EMGOD LADAT	only for EDDS and EDSB arrivals
MASEK	Traffic shall be kept inside the lateral boundaries of the Belux vACC EDYY and EDUU sectors.

3.6 VFR flights from EDGG to EBBU.

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, EBBU_I_CTR (Brussels Info), 126.900, shall be the primary sector for uncontrolled VFR flights.

3.7 VFR flights from EBBU to EDDG.

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. If EDXX_GG_CTR is offline, EDXX_FIS_CTR (Langen Information), 128.950, will cover this area.

4 Special Procedures.

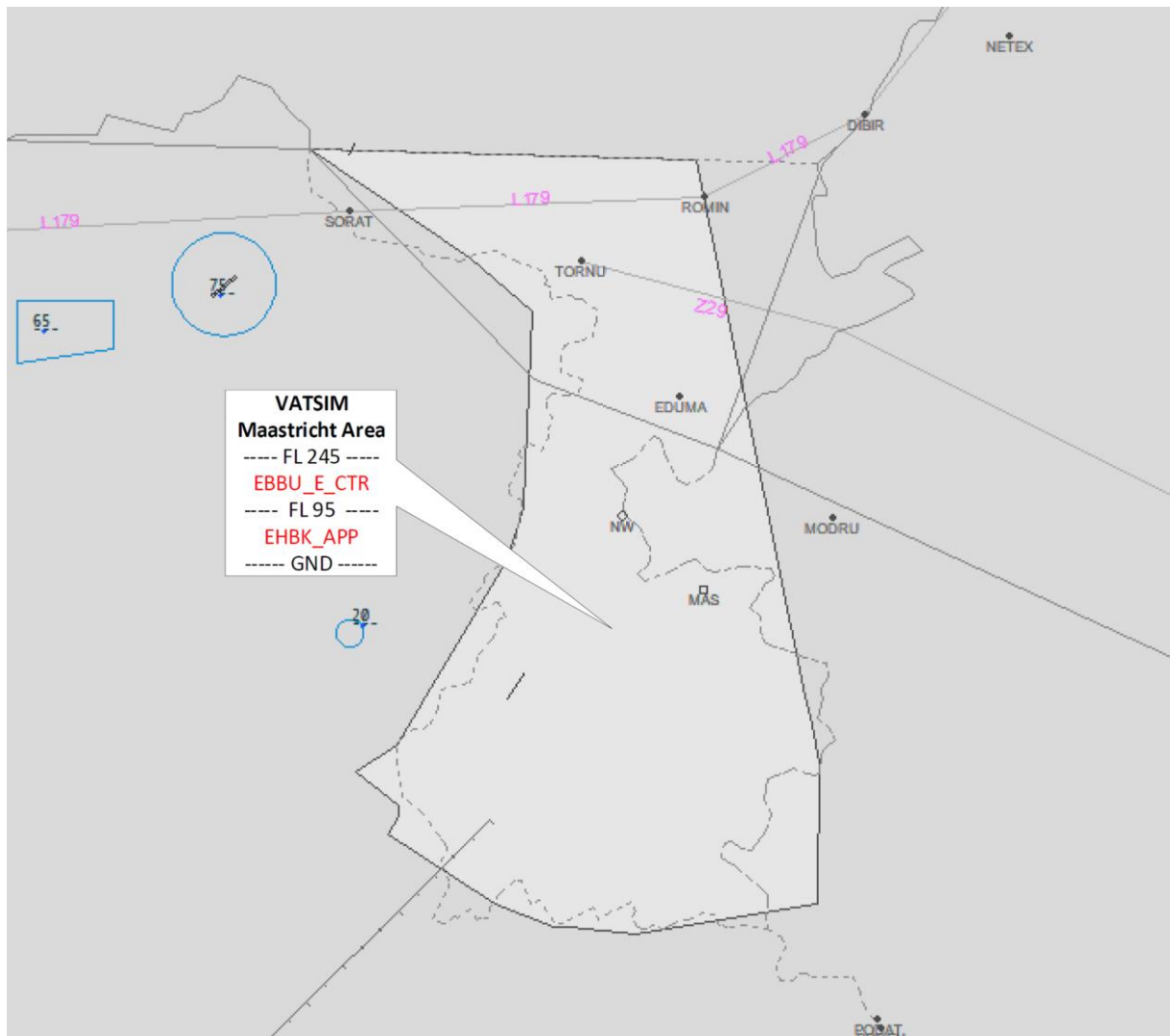
4.1 VATSIM Maastricht Area.

Within the Amsterdam FIR the provision of ATS has been delegated from Amsterdam ACC to Brussels ACC within the following area:

Lateral limits: The part of the Amsterdam FIR that consists of Maastricht TMA 1 and Maastricht TMA 2, as depicted in the image below.

Vertical limits: FL 095 – FL 245

Remarks: Named "VATSIM Maastricht Area" because lateral limits do not correspond with the "Maastricht Area" used in real world.



4.2 Flexible use of airspace for ELLX arrivals.

Langen Radar will clear ELLX arrivals to descend FL 90 and should transfer traffic asap. If traffic is transferred before entering the STAR, Luxembourg approach will issue STAR clearance. If traffic will be transferred abeam the STAR entry point, Langen radar shall issue STAR clearance prior coordination with Luxembourg approach to ensure a correct STAR is issued based on the current traffic situation. After transfer, Luxembourg Approach will ensure traffic adheres to published STAR routings and vertical profiles. Traffic must not deviate from the STAR unless coordinated otherwise. To avoid ambiguity concerning the receipt of STAR clearance, traffic should be transferred either clearly ahead or clearly abeam the STAR entry point.

Luxembourg Director may reroute traffic on transitions via LX242 – OXCAM – PONIG - LX24I; LX242 – OXCAM – LX246 – LX249 – PONIG – LX24I; LX243 – LX245 – PONIG – LX24I or LX243 – LX245 – LX247 – LX249 – PONIG – LX24I between FL 60 and FL 95. Traffic on a transition may receive the instruction to turn towards an intercept heading for the localizer of runway 24, combined with a descent instruction to 4000 FT.

In case Luxembourg Approach is not covered and EDGG wants to issue STAR-clearance, EDGG may issue the E arrival for traffic via BITBU & OLIVI and the S arrival for traffic via MAPIG.

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

4.3.1 Spangdahlem AoR.

Spangdahlem GCA shall announce the activation and deactivation of military AoR Spangdahlem (ETAD) to any stations covering Luxembourg APP and Brussels ACC sectors ELS and LUS.

Additionally, Spangdahlem GCA shall obtain a release for airspace crossing from any station covering Luxembourg APP for all instrument approaches to runway 04.

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:

- If preceding aircraft is faster: 6 NM
- If succeeding aircraft is faster by 20kts / M0.05 or less: 20 NM
- If succeeding aircraft is faster by 40kts / M0.1 or less: 30 NM

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.

Appendix A

