



LETTER OF AGREEMENT

between

Vatsim Germany

and

VATSIM Scandinavia

Bremen ACC

Copenhagen ACC

Maastricht UAC

Karlsruhe UAC

Effective: March 20, 2025 (AIRAC 2503)

1 General.

1.1 Purpose.

The purpose of this Letter of Agreement is to define the coordination to be applied between EDWW and EKDK 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 March 20, 2025 (AIRAC 2503) and supersedes previous version, dated November 28, 2024, of the Letter of Agreement between Bremen ACC, Maastricht UAC, Karlsruhe UAC and Copenhagen ACC.

1.4 Revision control.

Revision	Date	Author
1.0	25.08.2021	Lukas Agerskov, Chris Gutierrez
1.1	22.12.2021	Lukas Agerskov, Chris Gutierrez, Hannes Altmann
2.0	12.11.2022	Lukas Agerskov, Hannes Altmann
2.1	18.02.2023	Lukas Agerskov, Hannes Altmann
3.0	13.07.2023	Lukas Agerskov, Hannes Altmann
3.1	22.02.2024	Lukas Agerskov, Hannes Altmann
3.2	08.08.2024	Lukas Agerskov, Hannes Altmann
4.0	28.11.2024	Lukas Agerskov, Hannes Altmann
5.0	20.03.2025	Lukas Agerskov, Hannes Altmann

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 Bremen ACC.

Lateral limits: Bremen FIR and Rhein UIR as described in AIP Germany
Vertical limits: GND – FL245 (Bremen FIR)
FL245 – FL285 (Rhein UIR)

2.1.2 Maastricht UAC.

Lateral limits: Hannover UIR as described in AIP Germany; Amsterdam FIR as described in AIP Netherlands
Vertical limits: FL245 – FL660

2.1.3 Karlsruhe UAC.

Lateral limits: Rhein UIR as described in AIP Germany
Vertical limits: FL285 – FL660

2.1.4 Copenhagen ACC.

Lateral limits: Copenhagen FIR as described in AIP Denmark
Vertical limits: GND – FL660

Airspace delegations between EDWW, EDYY and EDUU are included in the published sectorization (see Appendix A).

2.2 Sectorization.

Sector chart: see Appendix A

For detailed coordinates and sector ownerships refer to GNG, AIP Germany or AIP Denmark.
Both vACCs shall inform each other about changes on sectorization and positions.

2.2.1 EDWW.

Sector	Logon	Frequency
Eider (EID)	EDWW_E_CTR	124.075
Hamburg (HAM)	EDDH_APP	120.540
Heide (HEI)	EDWW_H_CTR	125.855
Müritz (MRZ)	EDWW_M_CTR	124.175
Holstein Low (YYHL)	EDYY_HL_CTR	120.860
Holstein (YYHH)	EDYY_HH_CTR	132.780
Jever Low (YYJL)	EDYY_JL_CTR	136.465
Jever High (YYJH)	EDYY_JH_CTR	129.735

2.2.2 EKDK.

Sector	Logon	Frequency
EKDK-A	EKDK_A_CTR	135.290
EKDK-B	EKDK_B_CTR	119.555
EKDK-C	EKDK_C_CTR	128.215
EKDK-D	EKDK_D_CTR	133.155
EKDK-I	EKDK_I_CTR	121.380
EKDK-N	EKDK_N_CTR	134.680
EKDK-UN	EKDK_UN_CTR	136.555

2.3 Delegation of the Responsibility for the Provision of ATS.

2.3.1 Delegation of ATS from Bremen ACC and Maastricht UAC to Copenhagen ACC.

2.3.1.1 Schwerin North Area.

The airspace overhead Schwerin North Area (see Appendix B) is permanently delegated from Bremen ACC and Maastricht ACC to Copenhagen ACC.

Vertical limits: FL105 - FL660

2.3.1.2 Michaelsdorf Area.

The airspace overhead Michaelsdorf Area (see Appendix B) is permanently delegated from Bremen and Maastricht UAC to Copenhagen ACC.

Vertical limits: GND - FL660

2.3.1.3 Alsie Area.

The airspace overhead Alsie Area (see Appendix B) is permanently delegated from Maastricht UAC to Copenhagen ACC.

Vertical limits: FL245 - FL660

2.3.2 Other Areas.

2.3.2.1 GESKA Release Line.

Lateral limits: see Appendix C

Vertical limits: FL245 - FL660

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 EDWW_CTR may also be used by EDWW_X_CTR or EDWW_1_CTR.

3.2 Abbreviations.

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

3.4.1 Arrivals.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EKCH, EKRK	NIKDA	FL200	(*1)	MRZ	EKDK-B
	KOSEB				
EKBI, EKEB, EKSP	AMRAK	FL170	(*2)	EID	EKDK-D
EKSB		FL70	Released for descent to 3000ft		
EKBI, EKEB, EKSP	TUSKA	FL170	(*2)		EKDK-N

(*1) Note: Inbounds EKCH may be cleared direct MONAK.

(*2) Note: Inbounds to EKBI may be cleared direct LOKSA (RWY 27) or GELBA (RWY 09).

Special provisions for EKCH:

Inbound traffic to EKCH via NIKDA and KOSEB shall be treated as one inbound flow (at all levels). EDWW ACC sector Müritz shall establish an inbound spacing of 10 NM constant or increasing between traffic via NIKDA/KOSEB at all levels, unless otherwise coordinated.

EKDK ACC sector B may request EDWW ACC sector Müritz to increase the inbound spacing with a 10-minute prior notification. The requested inbound spacing shall not exceed 25 NM.

During times of holding at OLPIB, if at any time spacing is less than the requested spacing from ACC Copenhagen, ACC Sector Müritz shall ensure altitude separation on handover by clearing to a higher level than FL200, however no higher than FL240.

ACC Sector Müritz may employ speed control down to minimum clean speed to achieve the requested separation.

In case ACC Sector Müritz clears flights higher than FL200, subsequent handovers shall not take place until such flights are descended to maximum FL200 by ACC Copenhagen, or after coordination between ACC Sector Müritz and ACC Copenhagen.

In case EKDK ACC sector B requests enroute holdings, EDWW ACC sector shall establish holdings at lowest FL200. In this case traffic is subject to individual release.

3.4.2 Departures.

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDXW, EDXF, EDHK, ETNS, ETNH	ATTUS	FL60	Maximum FL240 after coordination	EID	EKDK-D
	DOSUR				
	AMRAK				
EDHL, ETMN	MEGAR	FL240		HEI	EKDK-B
ETNL, EDBH, EDBN	NEDIK	FL140		MRZ	

3.5 IFR flights from Copenhagen ACC to Bremen ACC.

3.5.1 Arrivals.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDDH, EDHI, EDHL	ALASA	FL230	(*2) (*3)	EKDK-D	EID
EDDH, EDHI, EDHL	ATTUS			EKDK-N	
EDDH, EDHI	MICOS	FL160	(*1) (*2) (*3)	EKDK-I	HEI
EDHL					
EDXW, EDXF, EDHK, ETNS, ETNH	ATTUS	FL80	-	EKDK-D	EID
	DOSUR				
	ALASA				
ETNL, EDBN	NEDIK	FL150	-	EKDK-B	MRZ
EDBH		FL70			

(*1) Note: Unless otherwise coordinated, traffic may be routed direct MICOS provided traffic passes AoR boundary west for the MICOS-OLPIB track.

(*2) Note: Controller must ensure that flights cross the boundary to Bremen at FL245 or below to avoid MUAC sector Holstein.

(*3) Note: Inbounds to EDDH, EDHI and EDHL are released for turn, descent to FL180 and change of speed.

3.5.2 Departures.

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EKCH, EKRK	SONAL	FL190	-	EKDK-B	MRZ

3.6 IFR flights from Maastricht UAC to Copenhagen ACC.

3.6.1 Arrivals.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EKCH, EKRK, ESMS	GESKA	FL280	(*1)	YYHL	EKDK-B
EKBI	OMIMA	FL260	-	YYJL	EKDK-N

(*1) Note: This traffic is generally released for descent to FL250 after crossing the GESKA Release Line (see Appendix C).

Special provisions for EKCH:

Inbound traffic to EKCH via MEGAR, KOKOR and MAKEL to GESKA shall be treated as one inbound flow (at all levels). MUAC sector Holstein shall establish an inbound spacing of 10 NM constant or increasing between traffic via GESKA at all levels, unless otherwise coordinated.

MUAC sector Jever shall establish an inbound spacing of 10 NM between all levels for inbound traffic to EKCH.

EKDK ACC may request MUAC to increase the inbound spacing with a 10-minute prior notification via GESKA or TUDLO. The requested inbound spacing shall not exceed 25 NM.

For arrivals via GESKA, during times of holding at OLPIB, if at any spacing is less than the requested spacing from ACC Copenhagen, MUAC shall ensure altitude separation on handover by clearing to a lower level than FL280, however no lower than FL260.

MUAC may employ speed control down to minimum clean speed to achieve the requested separation.

To relieve other sectors and holding stacks, EKDK ACC may request MUAC sector Jever and Holstein to clear inbound traffic to EKCH Via TUDLO or TESPI. This should preferably be done via the RTI function of Euroscope.

3.6.2 Departures.

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDDH, EDHI	MEGAR	↑FL270	(*1)	YYHL	EKDK-B
EDDH, EDHI, EDHL	AMRAK ATTUS	↑FL270	-		EKDK-D

(*1) Note: This traffic is generally released for climb after crossing the GESKA Release Line (see Appendix C).

3.7 IFR flights from Copenhagen ACC to Maastricht UAC.

3.7.1 Arrivals.

Arrival AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EDDW, EDDV, EDVE	ALASA ATTUS	FL340	-	EKDK-C	YYHL
	MICOS			EKDK-A	

3.7.2 Departures.

Departure AD	COP	Level Allocation	Special Conditions	From Sector	To Sector
EKCH, EKRK, ESMS	MICOS	FL340	-	EKDK-A	YYHL
EKBI	ALASA	FL280		EKDK-D	
	ISPUB			EKDK-N	YYJL
	OMIMA				

3.8 VFR flights from EDWW FIR to EKDK 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, EKDK_I_CTR (Copenhagen Information), 127.075, shall be the primary sector for uncontrolled VFR flights.

3.9 VFR flights from EKDK FIR to EDWW 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_WW_CTR (Langen Information), 119.525, shall be the primary sector for uncontrolled VFR flights. If EDXX_WW_CTR is offline, EDXX_FIS_CTR (Langen Information), 128.950, will cover this area.

4 Special Procedures.

4.1 Tactical Directs from EDWW, EDYY, EDUU to EKDK.

Note: The mentioned sectors may turn/clear flights direct to the following waypoints without coordination, if the sector sequence remains unchanged:

Waypoint	From Sector	Special Conditions
KARLI, MITSU, DANKO, RADIS, BAVTA, DEKIK, GOTEX, AMTOT, OLPIB, AAL, ODDON, SABAK, DETRO, PIPEX	EDYY (MUAC)	Above FL285
GELBA, LOKSA	EDYY (MUAC) EDWW (Bremen)	EKBI Arrivals
GESKA	EDYY (MUAC) EDWW (Bremen)	FL285 or below at FIR border
MONAK	EDWW (Bremen)	Only for EKCH arrivals via KOSEB & NIKDA
TUDLO	EDYY (MUAC)	Only for EKCH arrivals
OLPIB, AAL, ODDON, LOKSA	EDUU (KUAC)	Above FL285

4.2 Tactical Directs from EKDK to EDWW, EDYY, EDUU.

Note: The mentioned sectors may turn/clear flights direct to the following waypoints without coordination, if the sector sequence remains unchanged:

Waypoint	From Sector	Special Conditions
HLZ, MASEK, NEBUN, RIMET, POVEL, PIROT, KEGAB, BKD, SAS, BUMIL, BERXO, WERRA, XAROL, BLUFA	EKDK	FL285 or above Via EDYY (MUAC) only
EEL	EKDK	Not for EHGG and EHLE arrivals. FL285 or above Via EDYY (MUAC) only
BINKA	EKDK	above FL285 at FIR border Via EDUU (KUAC) only

4.3 Enroute level allocations.

Traffic from EDUU UAC to EKDK ACC may generally be transferred at even levels.
Traffic from EKDK ACC to EDUU UAC may generally be transferred at odd levels.

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.

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.

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:

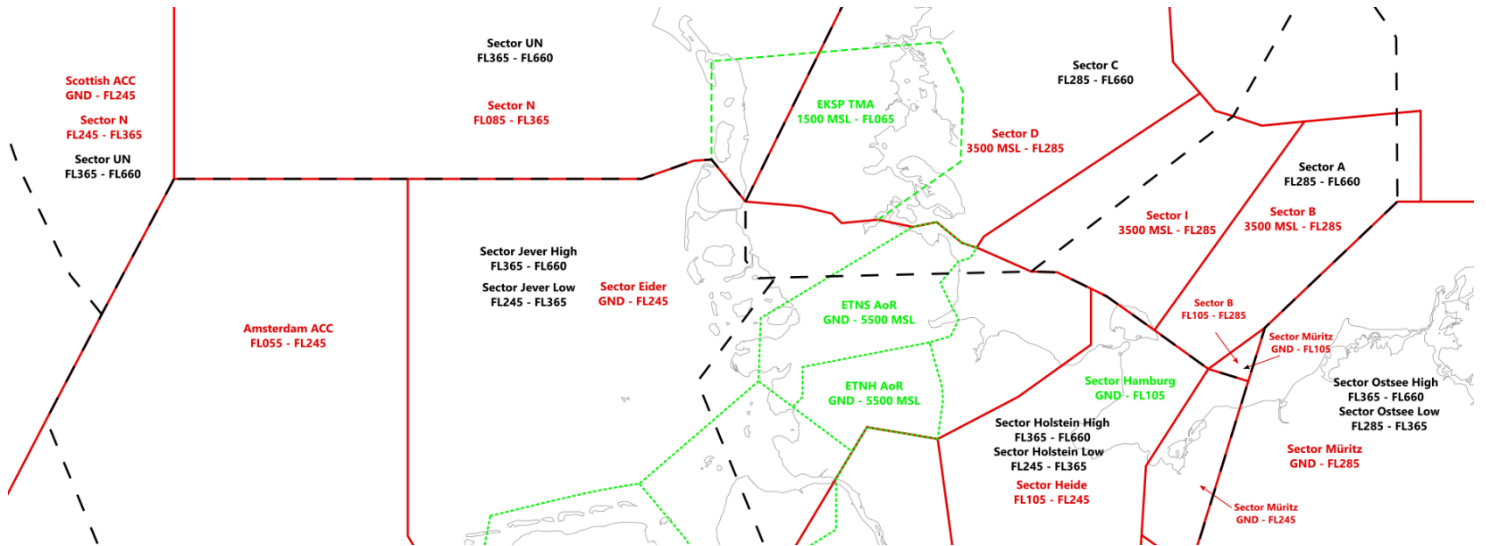
1. The upstream sector sends the aircraft to the frequency of the downstream sector by voice or text.
2. The upstream sector initiates a transfer via the appropriate function of the radar client.
3. Upon initial call the downstream sector assumes the flight via the appropriate function of the radar client.

5.5 SSR Code Assignment.

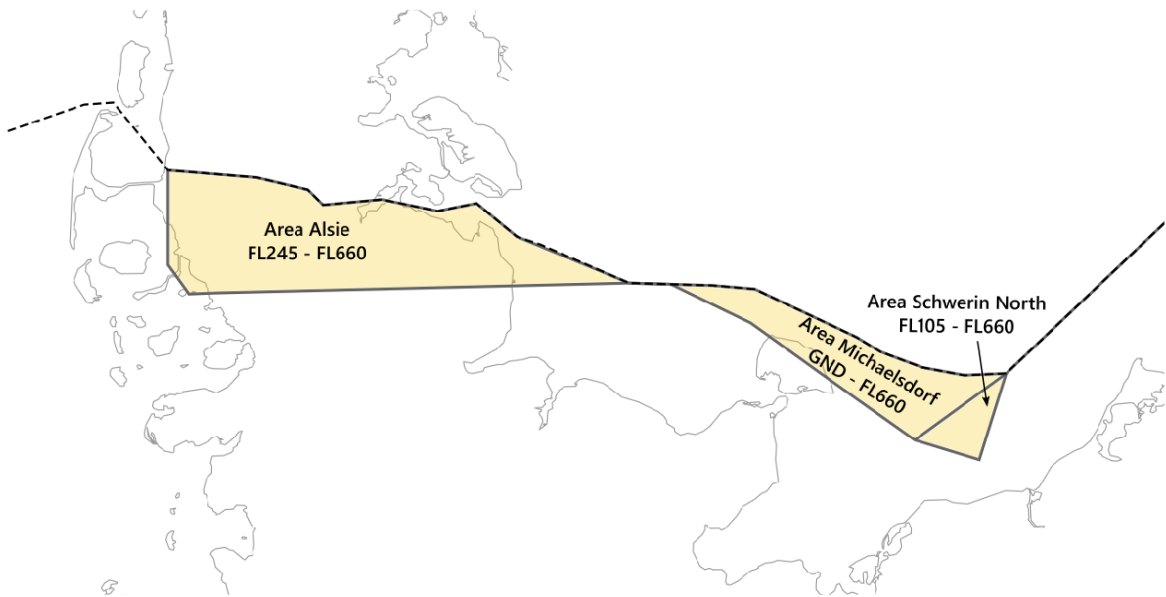
Both ATS units shall transfer flights on verified discrete SSR codes. Any change of SSR code by the accepting ATS unit may only take place after the transfer of control point.

ACC Copenhagen does not accept Mode-S SSR 1000. All IFR flights via EKDK FIR must be on a discrete SSR code!

Appendix A



Appendix B



Appendix C

