# LETTER OF AGREEMENT

between

and

## VATSIM Germany Bremen FIR

Dutch vACC Amsterdam FIR

Effective: TBD

## 1 General.

#### 1.1 Purpose.

The purpose of this Letter of Agreement is to define the coordination procedures to be applied between Bremen FIR and Amsterdam FIR 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 TBD and supersedes the Letter of Agreement between Bremen FIR and Amsterdam FIR dated 2007-04-12.

[Place, date]

[Place, date]

[name] VATSIM Germany [name] Dutch vACC

## 2 Areas of Responsibility & Sectorization

#### 2.1 Areas of Responsibility.

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

#### 2.1.1 Bremen FIR.

Lateral limits: Bremen FIR Vertical limits: GND – UNL

#### 2.1.2 Amsterdam FIR.

Lateral limits: Amsterdam FIR Vertical limits: GND – UNL

#### 2.2 Sectorization.

2.2.1 Bremen FIR.

Sector: Eider (EID) Lateral limits: TBD, see Appendix A Vertical limits: GND – FL245 Responsible ATS unit (in order of precedence):

- 1. EDWW\_E\_CTR (Bremen Radar), 120.22
- 2. EDWW\_A\_CTR (Bremen Radar), 123.92
- 3. EDWW\_CTR (Bremen Radar), 125.02

Sector: Aller East High (ALEH) Lateral limits: TBD, see Appendix A Vertical limits: GND – FL245 Responsible ATS unit (in order of precedence):

EDWW\_A\_CTR (Bremen Radar), 123.92
EDWW CTR (Bremen Radar), 125.02

Sector: Deister (DST) Lateral limits: TBD, see Appendix A Vertical limits: GND – FL245

Responsible ATS unit (in order of precedence):

- 1. EDWW\_D\_CTR (Bremen Radar), 128.75
- 2. EDWW\_A\_CTR (Bremen Radar), 123.92
- 3. EDWW CTR (Bremen Radar), 125.02

Sector: Holstein (HOL) Lateral limits: TBD, see Appendix A Vertical limits: FL245 – FL660 Responsible ATS unit (in order of precedence):

- 1. EDYY\_C\_CTR (Maastricht Radar), 133.95
- 2. EDWW\_A\_CTR (Bremen Radar), 123.92
- 3. EDWW\_CTR (Bremen Radar), 125.02
- 4. EURM\_CTR (Maastricht Radar), 135.45

Remark: EURM\_CTR is an ATS unit of EuroCenter vACC.

Sector: Celle (CEL)

Lateral limits: TBD, see Appendix A

Vertical limits: FL245 – FL660

Responsible ATS unit (in order of precedence):

- 1. EDYY\_C\_CTR (Maastricht Radar), 133.95
- 2. EDWW\_D\_CTR (Bremen Radar), 128.75
- 3. EDWW\_CTR (Bremen Radar), 125.02
- 4. EDGG\_P\_CTR (Langen Radar), 135.65
- 5. EDGG\_H\_CTR (Langen Radar), 129,17
- 6. EURM\_CTR (Maastricht Radar), 135.45

Remark: EURM\_CTR is an ATS unit of EuroCenter vACC.

#### 2.2.2 Amsterdam FIR

Sector: Lateral limits: Vertical limits: Responsible ATS unit (in order of precedence):

- 1.
- 2.
- 3.
- 4.

#### 2.2.3 Joint Sectors

Sector: Jever (JEV) Lateral limits: TBD, see Appendix A Vertical limits: FL245 – FL660 Responsible ATS unit (in order of precedence):

- 1. EDYY\_J\_CTR (Maastricht Radar), 134.70
- 2. EDYY\_D\_CTR (Maastricht Radar), 132.07
- 3. EHAA\_W\_CTR (Amsterdam Radar), 125.75
- 4. EDYY\_C\_CTR (Maastricht Radar), 133.95
- 5. EDWW\_A\_CTR (Bremen Radar), 123.92
- 6. EDWW\_CTR (Bremen Radar), 125.02
- 7. EURM\_CTR (Maastricht Radar), 135.45

Remark: Sector Jever is a joint sector of Bremen FIR and Amsterdam FIR and is controlled as a single sector by the responsible ATS unit. EURM\_CTR is an ATS unit of EuroCenter vACC.

#### 2.2.4 Relevant Adjacent Sectors

Sector: Muenster (MNS) Lateral limits: TBD, see Appendix A Vertical limits: FL245 – FL660

Remark: Sector Muenster belongs to Langen FIR (EDGG) and is staffed by ATS units from Bremen FIR when no responsible ATS unit from Langen FIR is online. The list of responsible ATS units shall be described authoritatively in the Letter of Agreement between Langen FIR and Amsterdam FIR.

### 2.3 **Delegation of the Responsibility for the Provision of ATS.**

Besides the joint sector Jever (see Section 2.2.3) there is no delegated airspace between Bremen FIR and Amsterdam FIR.

## **3** Procedures for Coordinations.

## 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.

Traffic may be cleared direct to its co-ordination point (COP) without prior coordination.

### 3.2 IFR flights from Bremen FIR to Amsterdam FIR.

Destination	ATS Route	СОР	Next Sector	Level Allocation	Special Conditions
Amsterdam EHAM	N125	DOBAK	EHAA	RFL (even)	NOTE A
	N872	KUBAT	EHAA	RFL (even)	NOTE A
	P999	SOMPO	EHAA	RFL (even)	NOTE A
	P174	TEMLU	EHAA	RFL (even)	NOTE A
	UN125	DOBAK	EHAA	FL260	NOTE B
	UN872	KUBAT	EHAA	FL260	NOTE B
	UP174	TEMLU	EHAA	FL 260	NOTE B
Groningen EHGG	N125	DOBAK	EHGG	FL80	
Departure	ATS Route	СОР	Next Sector	Level Allocation	Special Conditions
Bremen EDDW	EEL SID	prior AoR	JEV	FL 240	NOTE C
Hamburg EDDH HH-Finkenwerder EDHI Luebeck EDHL	UN125	DOTOB	JEV	FL 240	NOTE D
Kiel EDHK	Any routing	prior AoR	JEV	FL 240	NOTE C
Bremerhafen EDWB Emden EDWE Flensburg EDXF Wilhelmshaven EDWI Wittmund ETNT Jever ETNJ Schleswig ETNS Hohn ETNH	Any routing	Indiv. Coord.		Indiv. Coord.	
Overflights	ATS Route	СОР	Next Sector	Level Allocation	Special Conditions
	N873	LABIL	EHAA	RFL (even)	

P174	TEMLU	EHAA	RFL (even)	
P999	SOMPO	EHAA	RFL (even)	
N872	KUBAT	EHAA	RFL (even)	
N125	DOBAK	EHAA	RFL (even)	
UN872	GOLEN	JEV	RFL (even)	
UN125	WSR	JEV	RFL (even)	
UZ710	Indiv. Coord.	JEV	Indiv. Coord.	

<u>Note A:</u> Unless otherwise coordinated, traffic may be routed direct to EEL. Bremen shall ensure separation of westbound traffic inbound EEL.

<u>Note B:</u> For informational purposes only. Traffic on these routes is normally not handled by Bremen. <u>Note C:</u> Transfer of communication shall take place before the Amsterdam FIR boundary. <u>Note D:</u> Unless otherwise coordinated, traffic may be routed direct to DOTOB.

## 3.3 IFR flights from Amsterdam FIR to Bremen FIR.

Destination	ATS Route	СОР	Next Sector	Level Allocation	Special Conditions
Bremen EDDW	N125	DOBAK	ALEH	RFL (odd)	NOTE A
	UN125	DOBAK	ALEH	FL 250	NOTE A
Hamburg EDDH HH-Finkenwerder EDHI Luebeck EDHL	N125	DOBAK	ALEH	RFL (odd)	NOTE B
	UN125	DOTOB	ALEH	FL 250	NOTE B
Sylt EDXW	UZ703	DHE	EID	FL 250	NOTE C
	UP729	DHE	EID	FL 250	NOTE C
Kiel EDHK	UN125	WSR	ALEH	FL250	
Bremerhafen EDWB Emden EDWE Flensburg EDXF Wilhelmshaven EDWI Wittmund ETNT Jever ETNJ Schleswig ETNS Hohn ETNH	Any routing	Indiv. Coord.	EID	Indiv. Coord.	
Departure	ATS Route	СОР	Next Sector	Level Allocation	Special Conditions
Groningen EHGG	N125	DOBAK	ALEH	FL 70	
Overflights	ATS Route	СОР	Next Sector	Level Allocation	Special Conditions

N873	LABIL	EID	RFL (odd)	
P174	TEMLU	EID	RFL (odd)	
P999	SOMPO	EID	RFL (odd)	
N125	DOBAK	ALEH	RFL (odd)	
UZ303	DHE	HOL	RFL (odd)	
UZ729	DHE	HOL	RFL (odd)	
UN125	REVLA	HOL	RFL (odd)	
UZ170	Indiv. Coord.	HOL	Indiv. Coord.	NOTE D

Note A: Traffic is released for descend and right turns.

<u>Note B:</u> Traffic is released for descend and left turns direct to SORUN or RIBSO. Bremen shall ensure separation from other traffic.

Note C: Unless otherwise coordinated, Amsterdam shall clear EDXW arrivals to cross 30 NM prior DHE at FL250.

Note D: Direct transfer of traffic on route UZ170 to EKDK is subject to individual coordination.

#### 3.4 VFR flights from Amsterdam FIR to Bremen FIR

TBD

### 3.5 VFR flights from Bremen FIR to Amsterdam FIR

For controlled VFR flights 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, EDWW\_I\_CTR (Bremen Information), 119.82, shall be the primary sector for uncontrolled VFR flights.

## 4 Transfer of Control and Transfer of Communications

4.1 Transfer of Control

Transfer of Control shall take place at the AoR boundary.

4.2 Transfer of Communications

Transfer of Communications shall take place no later than Transfer of Control. Transfer of Communication shall take place only after Transfer of Radar Identification (Hand-off) has been accepted by the receiving ATS unit.

4.3 Transfer of Radar Identification (Hand-off)

Transfer of Radar Identification shall take place without prior coordination provided that

- 1. the minimum distance between two successive flights to be transferred is at least 10NM and constant or increasing
- 2. any direct routing which deviates from the flight planned route of the flight to be transferred is indicated in the scratchpad
- 3. any assigned heading is either indicated in the scratchpad or the pilot of the flight to be transferred is advised to report the assigned heading to the next ATS unit.

#### 4.4 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



