

# LETTER OF AGREEMENT

between

IVAO ATC HQ  
Maastricht UAC

and

IVAO Germany  
Bremen ACC



Effective – 1 May, 2021

# 1 General

## 1.1 Purpose

The purpose of this Letter of Agreement is to define the coordination procedures to be applied between Maastricht UAC and Bremen ACC when providing ATS to General Air Traffic and Operational Air Traffic.

These procedures are supplementary to those specified in IVAO Documentation and/or Divisional website Documents.

## 1.2 Operational Status.

Both Divisions shall keep each other advised of any changes in the operational status of their facilities and navigational aids, which may affect the procedures specified in this Letter of Agreement.

# 2 Areas of Responsibility for the Provision of ATS

## 2.1 Areas of Responsibility

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

Note: See para 2.2 for the description of the areas where delegation of the responsibility for the provision of ATS is applicable.

### 2.1.1 Maastricht UAC

Lateral limits: Hannover MaastrichtUIR as published in the AIP Germany

Vertical limits: FL 245 – FL 660

ICAO airspace classification for the area of responsibility of Maastricht UAC along the common boundary of the areas of responsibility of Maastricht UAC and Bremen ACC is described in Annex B to this Letter of Agreement.

### 2.1.2 Bremen ACC

Lateral limits: Bremen FIR and Rhein UIR as published in the AIP Germany

Vertical limits: North and South Sectors GND – FL 245  
East Sectors GND – FL 285

ICAO airspace classification for the area of responsibility of Bremen ACC along the common boundary of the areas of responsibility of Maastricht UAC and Bremen ACC is described in Annex B to this Letter of Agreement.

## 2.2 Areas for Cross Border Provision of ATS (ATS Delegation)

The provision of ATS in respect of this LoA means the following services:

Air Traffic Control Service (ATC), Flight Information Service (FIS) for controlled flights, Alerting Service (ALRS)

### 2.2.1 Delegation of ATS from Maastricht UAC to Bremen ACC

Not applicable.

### 2.2.2 Delegation of ATS from Bremen ACC to Maastricht UAC

Within the Bremen FIR / Rhein UIR the provision of ATS to GAT and OAT in accordance with the airspace classification is performed by Maastricht UAC within the following area(s):

SCHWERIN SOUTH LOW Area – See Appendix 2

Lateral Limits: N541500 E0115334 – N524350 E0110626 – N540800 E0111530 –  
N541745 E0113811 N541500 E0115334

Vertical limits: FL 245 – FL 285

Airspace Classification: C

RISOK LOW Area – See Appendix 2

Lateral Limits: N514816 E0110825 – N515028 E0111230 – N515430 E01107389 –  
N514816 E0110825

Vertical limits: FL 245 – FL 285

Airspace Classification: C

### 2.2.3 Other Areas for Cross Border Provision of ATS

Areas for cross-border provision of ATS defined with other coordinating air traffic services units along the common boundary of the areas of responsibility of Maastricht UAC and Bremen ACC are described in Annex B to this Letter of Agreement.

### 2.2.4 Alerting Service

The ATS unit responsible for the provision of ATS, by virtue of delegation, shall provide alerting service and shall notify immediately the supervisor of the delegating ATS unit. The supervisor of the delegating ATS unit shall notify the appropriate rescue coordination centre as required.

### 2.2.5 Territorial Matters

- Not applicable -

## 2.3 Special Provisions

- Not applicable -

### 3 Procedures

The procedures to be applied by Maastricht UAC and Bremen ACC are detailed in the Annexes to this Letter of Agreement:

Annex A	Definitions and Abbreviations
Annex B	Area of Common Interest
Annex C	Exchange of Flight Data
Annex D	Procedures for Coordination
Annex E	Transfer of Control and Transfer of Communications
Annex F	ATS Surveillance Based Coordination Procedures
Annex G	Checklist of Pages

### 4 Revisions and Deviations.

#### 4.1 Revision of this Letter of Agreement

The revision of the present Letter of Agreement, excluding Annexes and their Appendices, requires the mutual written consent of the signatories.

#### 4.2 Revision of the Annexes to the Letter of Agreement.

The revision of Annexes to the present Letter of Agreement requires the mutual written consent of the representatives of the respective IVAO Divisions designated by the respective signatories, normally the ATC Operations Coordinator at the respective Division.

#### 4.3 Temporary Deviations.

When necessary, the ATC Department of the IVAO Divisions concerned may introduce, by mutual agreement and for a specified period of time, temporary modifications to the procedures laid down in the Annexes to the present Letter of Agreement.

#### 4.4 Incidental Deviations.

Instances may arise where incidental deviations from the procedures specified in the Annexes to this Letter of Agreement may become necessary. Under these circumstances air traffic controllers are expected to exercise their best judgement to ensure the safety and efficiency of air traffic.

### 5 Cancellation.

5.1 Cancellation of the present Letter of Agreement by mutual written agreement of the respective IVAO Divisions may take place at any time.

5.2 Cancellation of this Letter of Agreement by either IVAO Division is possible at any time, provided that the cancelling party declares its intention in writing to cancel the Letter of Agreement with a minimum pre-notification time of 6 months before the date the cancellation is to take effect.

## 6 Interpretation and Settlement of Disputes.

- 6.1 Should any doubt or diverging views arise regarding the interpretation of any provision of the present Letter of Agreement or in case of dispute regarding its application, the parties shall endeavor to reach a solution acceptable to both of them.
- 6.2 Should no agreement be reached, each of the parties shall refer to IVAO HQ ATC Operations Department, to which the dispute shall be submitted for settlement.

## 7 Validity

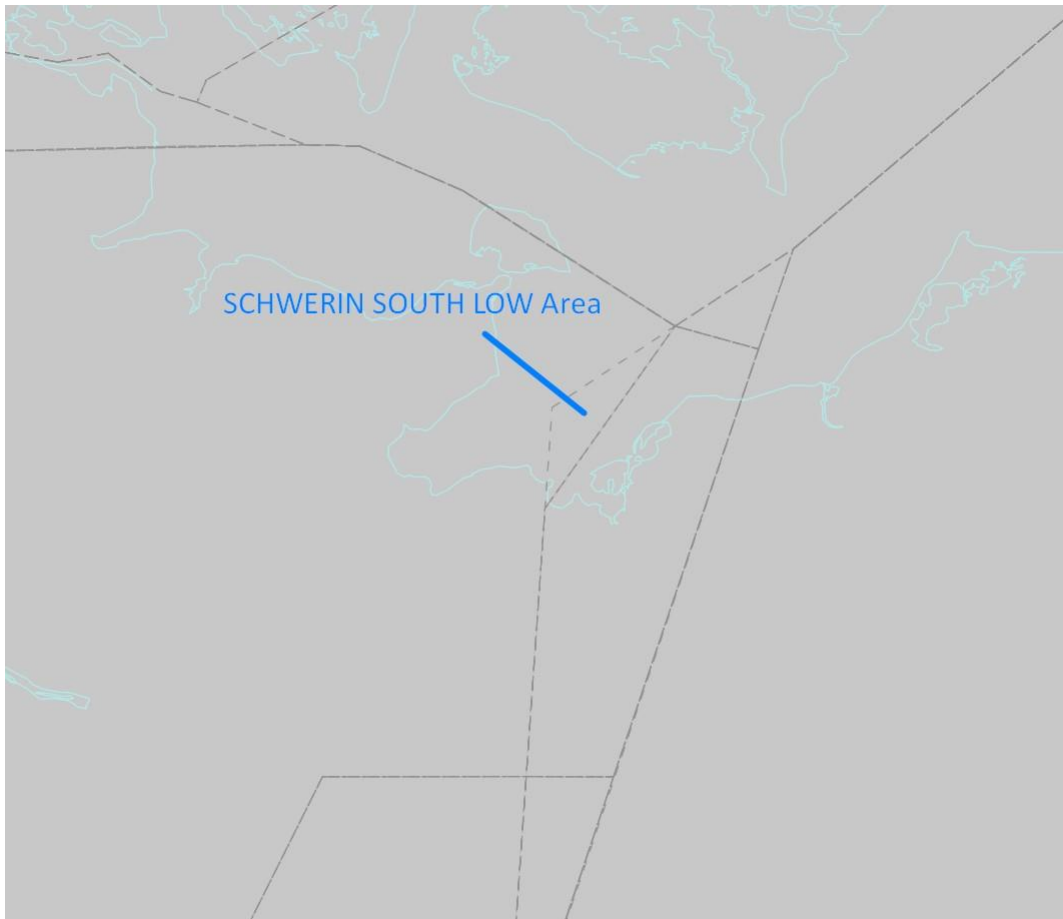
This LoA becomes effective 1 May, 2021 and supersedes the Letter of Agreement between Maastricht ACC and Bremen ACC dated N/A.

Shaun Ellis – 471730  
ATC Operations Director - Germany

Kevin Franz – 434522  
ATC Operations Coordinator - Germany

Appendix 1

**Schwerin South Low Area – (see para. 2.2.1)**



Appendix 2

**RISOK LOW Area – (see para. 2.2.2)**



## Annex A.

### Definitions and Abbreviations

Effective: 2021-05-02

Revised: N/A

#### A.1 Definitions.

##### A.1.1 Area of Responsibility

An airspace of defined dimensions where a sole ATS unit has responsibility for providing air traffic services.

##### A.1.2 Area of Common Interest

A volume of airspace as agreed between two ATS units, extending into the adjacent/subjacent Areas of Responsibility, within which airspace structure and related activities may have an impact on air traffic coordination procedures.

##### A.1.3 Approval Request

Request from an ATS-unit to the ATS sector concerned for an approval of:

- an aircraft not yet airborne, whenever the flying time to the transfer of control point is less than the agreed minimum prenotification time, or
- an aircraft in flight intending to operate under conditions other than those described in mutually agreed procedures.

##### A.1.4 Division Level.

The flight level dividing two superimposed AoR for the provision of ATS.

##### A.1.5 General Air Traffic.

All flights which are conducted in accordance with the rules and procedures of ICAO and/or the national civil aviation regulations and legislation.

##### A.1.6 Operational Air Traffic.

All flights which do not comply with the provisions stated for GAT and for which rules and procedures have been specified by appropriate national authorities.

##### A.1.7 Reduced Vertical Separation Minimum.

A vertical separation minimum of 300 m (1 000 ft) which is applied between FL 290 and FL 410 inclusive, on the basis of regional air navigation agreements and in accordance with conditions specified therein.

##### A.1.7.1 RVSM Approved Aircraft

Aircraft that have received State approval for RVSM operations within the EUR RVSM airspace.



## A.1.8 Release

### A.1.8.1 Release for Climb

An authorization for the accepting sector to climb (a) specific aircraft before the transfer of control.

Note: The transferring sector remains responsible within its Area of Responsibility for separation between the transferred aircraft and other aircraft unknown to the accepting unit, unless otherwise agreed.

### A.1.8.2 Release for Descent

An authorization for the accepting sector to descend (a) specific aircraft before the transfer of control.

Note: The transferring sector remains responsible within its Area of Responsibility for separation between the transferred aircraft and other aircraft unknown to the accepting unit, unless otherwise agreed.

### A.1.8.3 Release for Turn

An authorization for the accepting sector to turn (a) specific aircraft away from the current flight path by not more than 45° before the transfer of control

Note: The transferring sector remains responsible within its Area of Responsibility for separation between the transferred aircraft and other aircraft unknown to the accepting unit, unless otherwise agreed.

## A.1.9 State Aircraft

For the purposes of EUR RVSM, only aircraft used in military, customs or police services shall qualify as State aircraft.

## A.2 Abbreviations.

<b>ACC</b>	Area Control Center	<b>NM</b>	Nautical Mile
<b>ACI*</b>	Area of Common Interest	<b>NM</b>	EUROCONTROL Network Management
<b>AIP</b>	Aeronautical Information Publication	<b>OAT*</b>	Operational Air Traffic
<b>AoR*</b>	Area of Responsibility	<b>OLDI*</b>	On-line Data Interchange
<b>APP</b>	Approach Area / Approach ATS Unit	<b>ORCAM</b>	Originating Region Code Assignment Method
<b>ATC</b>	Air Traffic Control	<b>RTF</b>	Radio Telephony
<b>ATS</b>	Air Traffic Services	<b>RVSM</b>	Reduced Vertical Separation Minimum
<b>ATZ</b>	Air Traffic Zone	<b>SFC</b>	Surface
<b>CBA</b>	Cross-Border Area	<b>SID</b>	Standard Instrument Departure
<b>CDR</b>	Conditional Route	<b>SSR</b>	Secondary Surveillance Radar
<b>COP*</b>	Coordination Point	<b>STAR</b>	Standard Instrument Arrival
<b>CRC</b>	Control and Reporting Centre	<b>TMA</b>	Terminal Maneuvering Area
<b>CTA</b>	Control Area	<b>TRA</b>	Temporary Reserved Area
<b>CTR</b>	Control / Enroute ATS Unit	<b>TSA</b>	Temporary Segregated Area
<b>CTZ</b>	Control Zone	<b>TWR</b>	Aerodrome Control Tower
<b>DFL*</b>	Division Flight Level	<b>UAC</b>	Upper Area Control Centre
<b>ETO</b>	Estimated Time Over Significant Point	<b>UHF</b>	Ultra High Frequency
<b>EUR</b>	European	<b>UIR</b>	Upper Flight Information Region
<b>FIR</b>	Flight Information Region	<b>UNL</b>	Unlimited
<b>FLA*</b>	Flight Level Allocation	<b>UTC</b>	Coordinated Universal Time
<b>FIS</b>	Flight Information Services	<b>VCS</b>	Voice Communication System
<b>FL</b>	Flight Level	<b>VFR</b>	Visual Flight Rules
<b>GAT*</b>	General Air Traffic	<b>VHF</b>	Very High Frequency
<b>GND</b>	Ground		
<b>ICAO</b>	International Civil Aviation Organization		
<b>IFR</b>	Instrument Flight Rules		
<b>KHz</b>	Kilohertz		
<b>LoA*</b>	Letter of Agreement		
<b>MHz</b>	Megahertz		

Note: Abbreviations marked with an \* are non-ICAO abbreviations.

## Annex B.

## Area of Common Interest

Effective: 2021-05-02

Revised: N/A

## B.1 Airspace Structure and Classification within the Area of Common Interest.

The Airspace structure within the ACI is shown in Appendix of Annex B

## B.1.1 Hannover Maastricht UIR

Area	Vertical Limits	Airspace Classification
Hannover UIR	FL 245 – UNL	C (FL245 – FL660)

## B.1.2 Bremen and Munich FIRs / Rhein UIR

Area	Vertical Limits	Airspace Classification
Bremen FIR	GND – FL 245	C (FL100 – FL245)
Munich FIR	GND – FL 315	C (FL100 – FL315)
Rhein UIR	FL 245 – UNL	C (FL245 – FL660)

## B.2 Sectorisation within the Area of Common Interest

The Sectorisation within the ACI is shown in Appendix 1 of Annex B

## B.3 Special Areas within the Area of Common Interest

## B.3.1 Areas for Cross/Border Provision of ATS defined with other ATS Units within the ACI.

## B.3.1.1 ATS provision by Copenhagen ACC

Within the Hannover UIR, Rhein UIR and Bremen FIR the provision of ATS in accordance with the airspace classification is performed by Copenhagen ACC within the following areas:

## B.3.1.1.1 Michaelsdorf Area – See Appendix 2 of Annex B

Lateral Limits: N542700 E0120000 – N541745 E0113811 – N543400 E0105900 – N543920 E0104000 – along FIR/UIR boundary to – N542700 E0120000

Vertical limits: GND – FL 660

Airspace Classification: C (at and above FL100)

B.3.1.1.2 Alsie Area – See Appendix 2 of Annex B

Lateral Limits: N545439 E0084000 – along UIR boundary to – N543930 E0103000 – N543800 E0084500 – N544200 E0084000 – N545439 E0084000

Vertical limits: FL 245 – FL 660

Airspace Classification: C

B.3.1.1.3 Schwerin North Area – See Appendix 2 of Annex B

Lateral Limits: N542700 E0120000 – N541500 E0115334 – N541745 E0113811 – N542700 E0120000

Vertical limits: FL 285 – FL 660 from Karlsruhe UAC to Copenhagen ACC  
FL 105 – FL 285 from Bremen ACC to Copenhagen ACC

Airspace Classification: C

B.3.1.2 ATS provision by Karlsruhe UAC

Within the Hannover UIR the provision of ATS in accordance with the airspace classification is performed by Karlsruhe UAC within the following areas:

B.3.1.2.1 Arpe Area – See Appendix 2 of Annex B

Lateral Limits: N511147 E0082929 – N511612 E0082440 – N511215 E0081026 – N510851 E0080308 – N510600 E0075700 – N505557 E0074056 – N504331 E0074850 – along the Hannover / Rhein UIR boundary to – N511147 E0082929

Vertical limits: FL 245 – FL 660

Airspace Classification: C

B.3.1.2.2 ABGUS HIGH Area – See Appendix 2 of Annex B

Lateral Limits: N513400 E0104200 – N514530 E0110845 – N514816 E0110825 – N514316 E0105905 – N513400 E0104200

Vertical limits: FL 315 – FL 660

Airspace Classification: C

B.3.1.3 ATS provision by Munich ACC

Within the Hannover UIR the provision of ATS in accordance with the airspace classification is performed by Munich ACC within the following areas:

B.3.1.3.1 ABGUS LOW Area – See Appendix 2 of Annex B

Lateral Limits: N513400 E0104200 – N514530 E0110845 – N514816 E0110825 – N514316 E0105905 – N513400 E0104200

Vertical limits: FL 245 – FL 315

Airspace Classification: C

B.3.1.4 ATS provision by Langen ACC

Within the Bremen FIR the provision of ATS in accordance with the airspace classification is performed by Langen ACC within the following areas:

B.3.1.4.1 RIMET Area – See Appendix 2 of Annex B

Lateral Limits: N512842 E0100342 – N512913 E0103533 – N512002 E0102315 – N512001 E0100334 – N512842 E0100342

Vertical limits: FL 235 – FL 245

Airspace Classification: C

B.3.1.5 ATS provision by Maastricht UAC

Within the Rhein UIR the provision of ATS in accordance with the airspace classification is performed by Maastricht UAC within the following areas:

B.3.1.5.1 Schwerin South High Area – See Appendix 2 of Annex B

Lateral Limits: N541500 E0115334 – N524350 E0110626 – N540800 E0111530 – N541745 E0113811 – N541500 E0115334

Vertical limits: FL 285 – FL 660

Airspace Classification: C

B.3.1.5.2 Warburg Area – See Appendix 2 of Annex B

Lateral Limits: N511147 E0082929 – N510500 E0083651 – N510508 E0085435 – N510508 E0091443 – N510508 E0092600 – N510549 E0092622 – N511008 E0092750 – N512000 E0093102 – N512000 E0091000 – N512000 E0084600 – N511147 E0082929.

Vertical limits: FL 245 – FL 660

Airspace Classification: C

B.3.1.5.3 KEMAD LOW Area – See Appendix 2 of Annex B

Lateral Limits: N512000 E0093102 – N512000 E0093500 – N512000 E0095610 – N512001 E0100334 – N510542 E0100321 – N510500 E0100227 – N510508 E0092600 – N510549 E0092622 – N511008 E0092750 – N512000 E0093102

Vertical limits: FL 245 – FL 255

Airspace Classification: C

B.3.1.5.4 KEMAD HIGH Area – See Appendix 2 of Annex B

Lateral Limits: N512000 E0093102 – N512000 E0093500 –N512000 E0095610 – N512001 E0100334 –N512002 E0102315 – N510542 E0100321 –N510500 E0100227 – N510508 E0092600 – N510549 E0092622 – N511008 E0092750 –N512000 E0093102

Vertical limits: FL 255 – FL 295

Airspace Classification: C

B.3.1.5.5 NOMKA Area – See Appendix 2 of Annex B

Lateral Limits: N512000 E0095610 – N512001 E0100334 – N512002 E0102315 – N512913 E0103533 –N513400 E0104200 – N512000 E0095610

Vertical limits: FL 245 – FL 660

Airspace Classification: C

B.3.1.5.6 RISOK High Area – See Appendix 2 of Annex B

Lateral Limits: N514816 E0110825 – N515028 E0111230 – N515430 E0110739 – N514816 E0110825

Vertical limits: FL 285 – FL 660

Airspace Classification: C

B.3.1.6 Other Areas

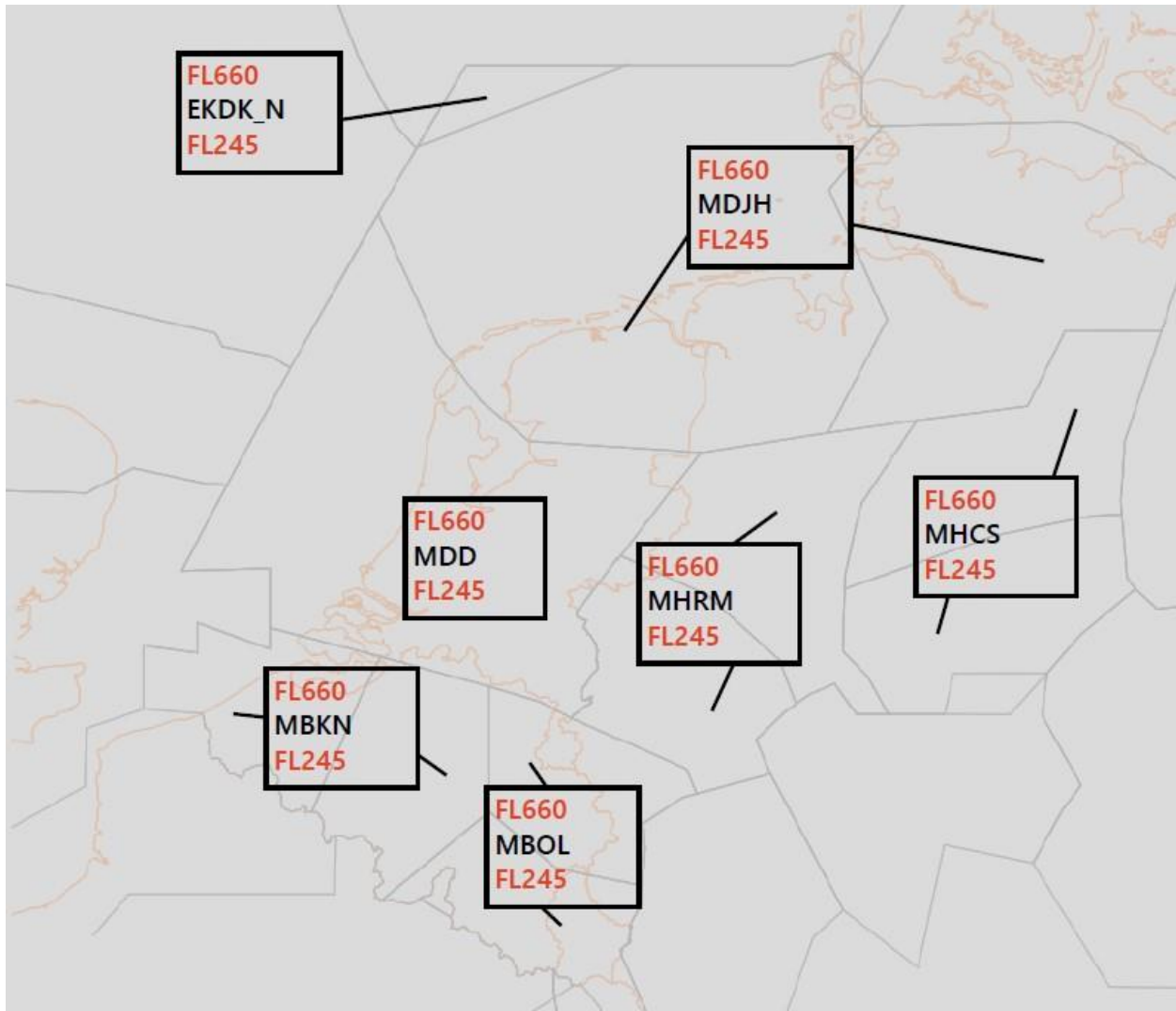
Not Applicable

B.3.2 Non-published Coordination Points within the Area of Common Interest.

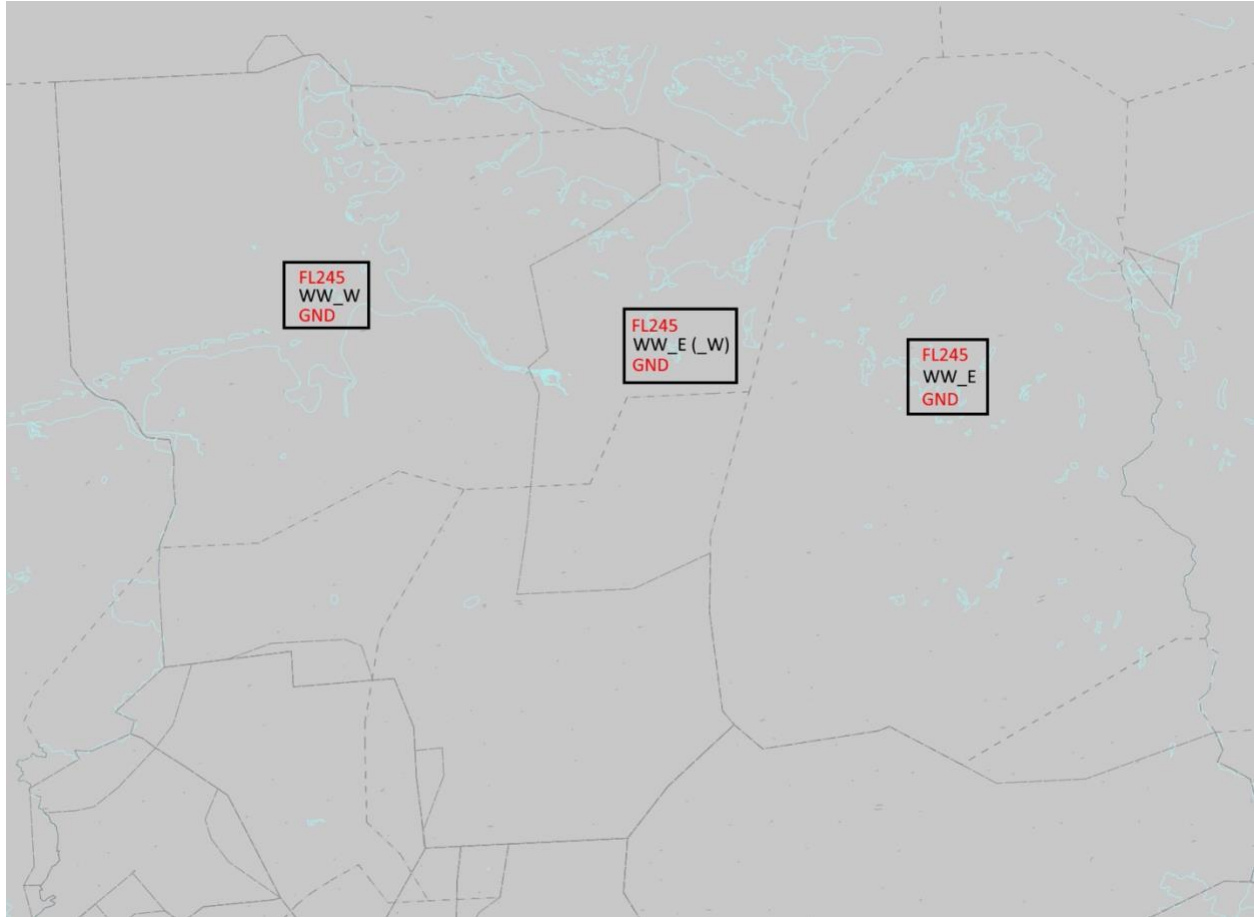
None.

Appendix 1 of Annex B.

**Maastricht UAC Sectorization**



## Bremen ACC Sectorization





## Appendix 2 of Annex B.

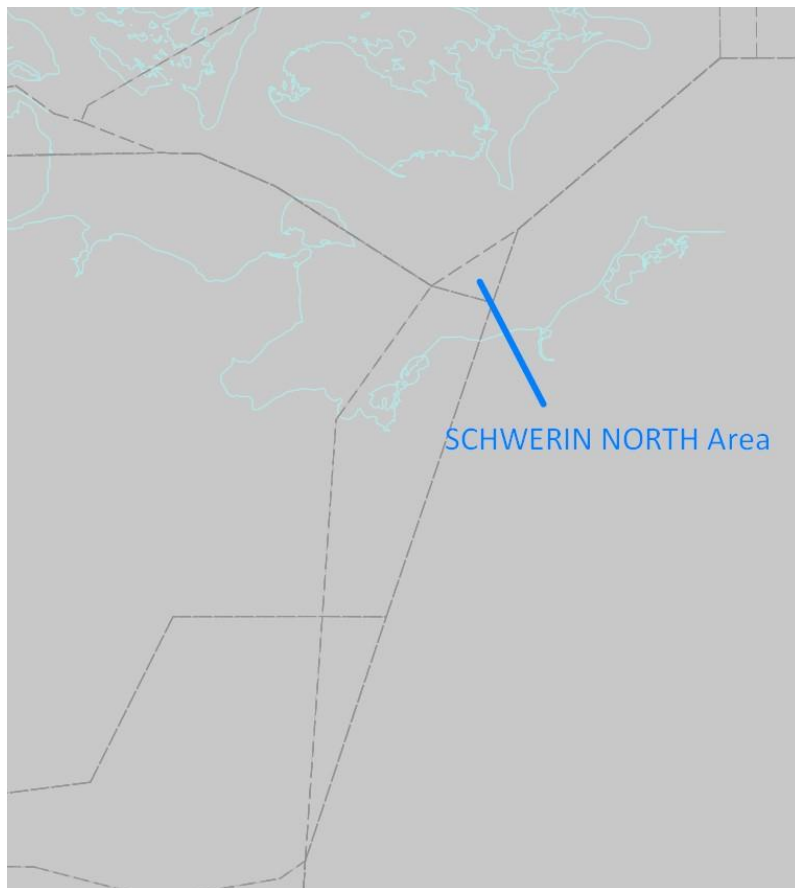
MICHAELSDORF Area



ALSIE Area



SCHWERIN NORTH Area



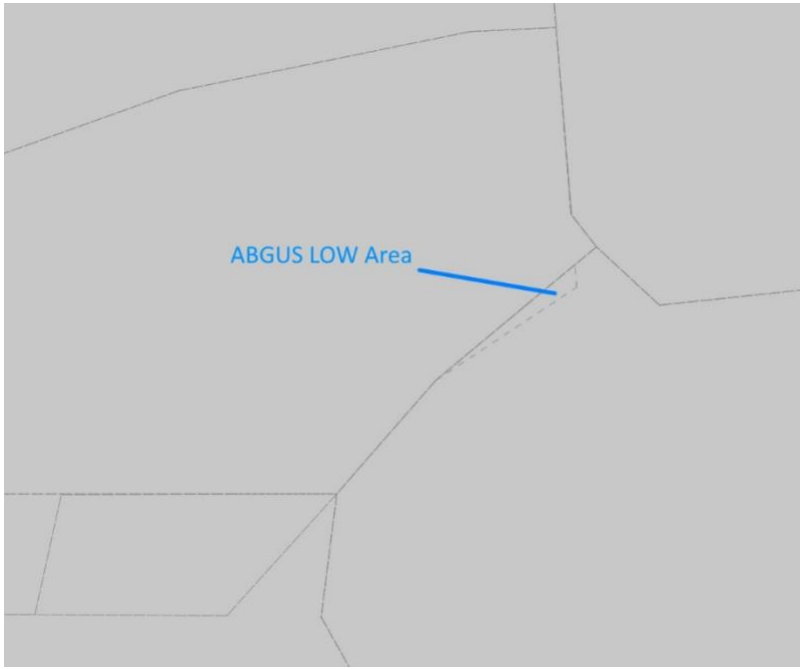
ARPE Area



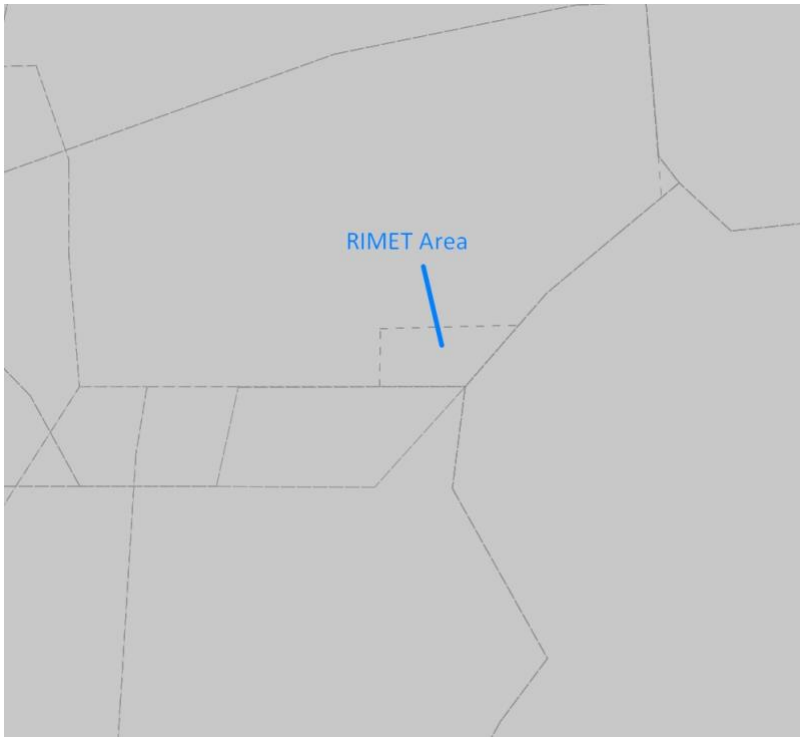
ABGUS HIGH Area



ABGUS LOW Area



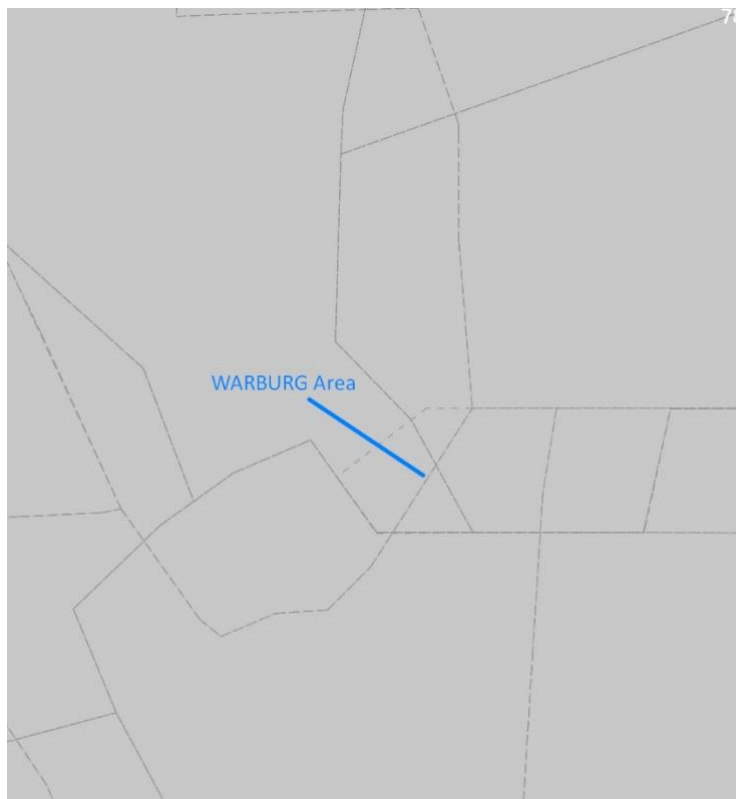
RIMET Area



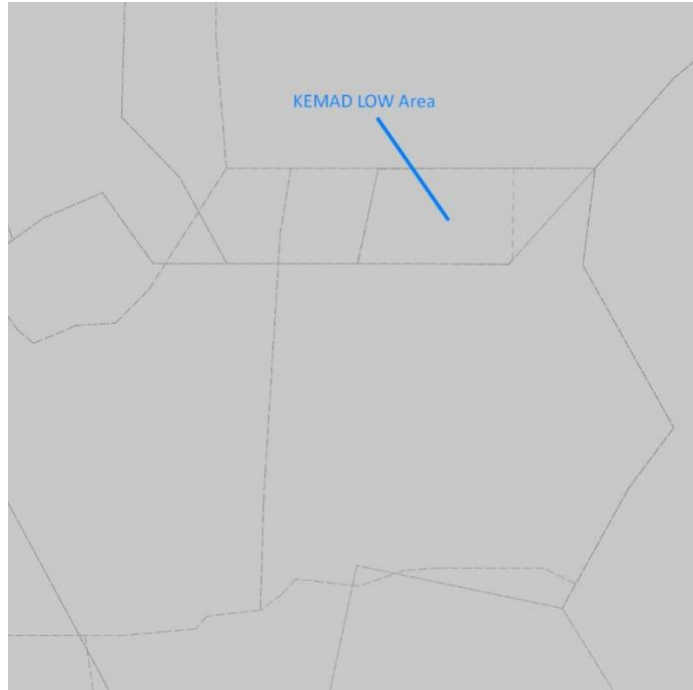
SCHWERIN SOUTH HIGH Area



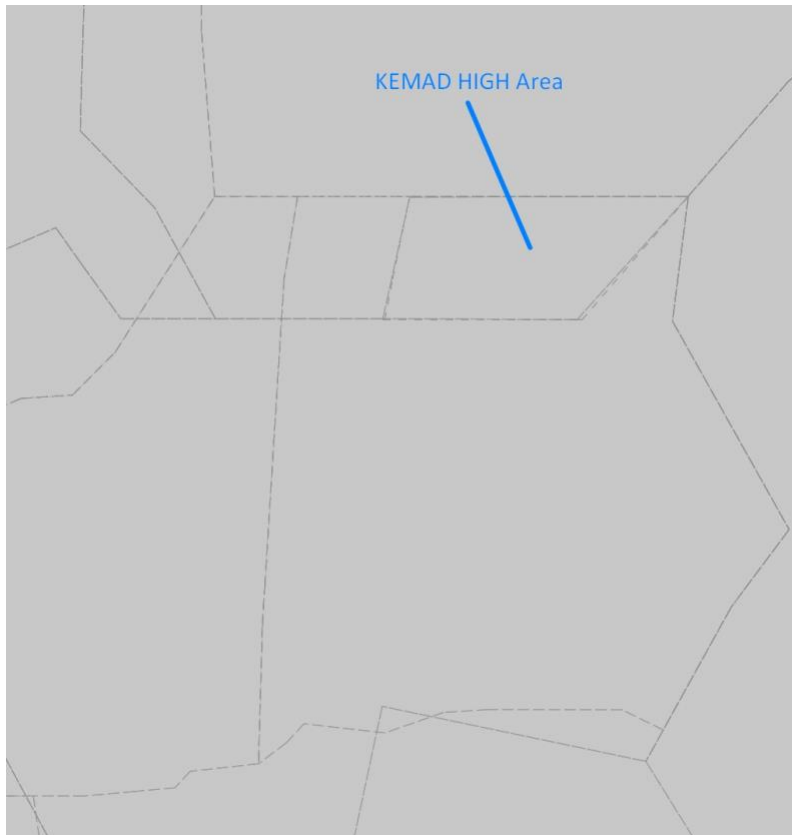
WARBURG Area



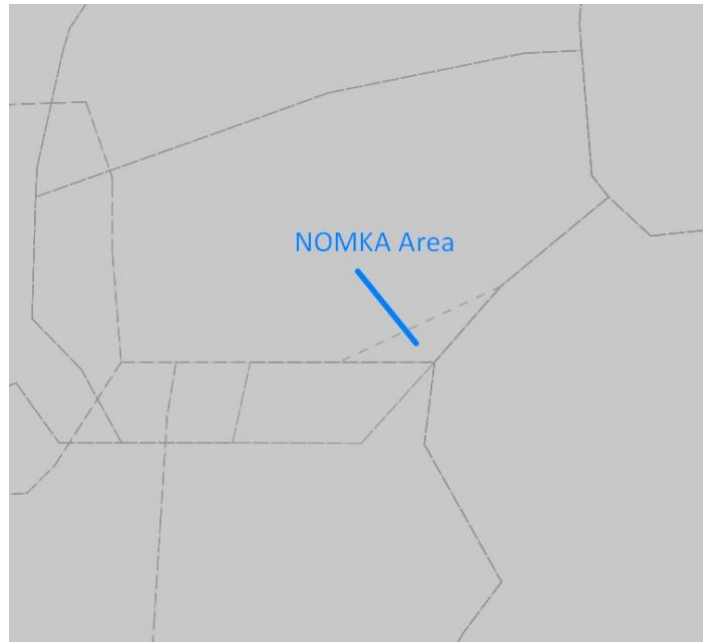
KEMAD LOW Area



KEMAD HIGH Area



NOMKA Area



RISOK HIGH Area





## Annex C.

### Exchange of Flight Data

Effective: 2021-05-02

Revised: N/A

#### C.1 General

##### C.1.1 Basic Flight Plans

Basic Flight plan data should normally be available at both ATS Units.

##### C.1.2 Current Flight Plan Data

Messages, including current flight plan data, shall be forwarded by the transferring ATS unit to the accepting ATS unit either by automatic data exchange or by private text to the appropriate sector/position.

##### C.1.3 Revisions

Any significant revisions to the flight data are to be transmitted to the accepting ATS Unit.

Changes to the coordinated levels within 5 minutes of the ETO for the transfer of control point are subject to an Approval Request.

#### C.2 Means of Communications and their Use

##### C.2.1 Verbal Coordination

Not applicable due to current software limitations.

##### C.2.2 Written Communication

When required, communication can be performed by private text between the relevant sectors or using semi-automatic systems depending on software capability.

## Annex D.

### Procedures for Coordination

Effective: 2021-05-02

Revised: N/A

#### D.1 General Conditions for Acceptance of Flights

- D.1.1 Coordination of flights shall take place by reference to the COP for the relevant route and in accordance with the appropriate flight levels specified for the relevant route (see para D.2 and D.3).
- D.1.2 Flights shall be considered to be maintaining the coordinated level at the transfer of control point unless climb or descent conditions have been clearly stated by use of written coordination, except if otherwise described in paragraphs D.2 or D.3.
- D.1.3 If the accepting ATS Unit cannot accept a flight offered in accordance with the conditions specified above it shall clearly indicate its inability and specify the conditions under which the flight will be accepted.
- D.1.4 For any proposed deviation from the conditions specified in this Annex (e.g. COP, route or level) the transferring Unit shall initiate an Approval Request.
- D.1.5 The accepting ATS Unit shall not notify the transferring ATS Unit that it has established ground-air communications with the transferred aircraft unless specifically requested to do so. The accepting Unit shall notify the transferring Unit in the event that communication with the aircraft is not established as expected.

## D.2 ATS Routes, Coordination Points and Flight Level Allocation

Available (ATS) routes, COPs to be used and flight allocation to be applied, unless otherwise described in paragraph D.3, are described in the tables below.

### D.2.1 Flights from Maastricht UAC to Bremen ACC

#### D.2.1.1 General

D.2.1.1.1 Flights transferred by Maastricht UAC to Bremen ACC Sectors shall reach FL250 latest at the COP, unless other lateral conditions are stated in D.2.1 or coordinated otherwise. If this transfer condition is met and transfer of communication prior to the COP has taken place, Bremen ACC shall ensure that the respective flights cross FL240 or below within 15 NM after the COP or agreed lateral transfer conditions.

D.2.1.1.2 Bremen ACC North/Eider Sector is responsible to inform Maastricht UAC Holstein Sector regarding actual inbound procedure at EDDV (“Hannover East” or “Hannover West”)

D.2.1.1.3 Bremen ACC Sector South/Harz Sector is responsible to inform Maastricht UAC Solling Sector regarding actual inbound procedure at EDDV (“Hannover East” or “Hannover West”)

D.2.1.1.4 Bremen ACC Sector East/Flämming Sector is responsible to inform Maastricht UAC Holstein and Celle Sectors of any changes to the runway direction at Berlin Airports.

### D.2.1.2 Flights from DeCo Sectors to Bremen

#### D.2.1.2.1 Flights from Jever Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDH, EDHI, EDHL	DCT	DHE	<b>W</b>	FL250	
	DOBAK-N125	REVLA		FL260	Note 1/2/3
EDHK		WSN			
EDDW	DCT	DOBAK		FL250	Note 4
EDXW	JUIST-P729	DHE			
EDXF	DCT				
EKBI, EKSP, EKEB, EKVD, EKVJ	N873, DCT	LEGPI			
EHGG, EHLE		WELGO			

Note 1 – Flights are considered to be descending to FL260 released for further descent. Unless otherwise specified and/or coordinated, Bremen ACC shall not descend arriving traffic via EEL until clear of outbound traffic via WSN-DOBAK transferred already to Maastricht UAC Jever Sector

Note 2 – Unless otherwise coordinated, these arrivals are released for left turn to RIBSO.

Note 3 – Unless otherwise coordinated, these arrivals shall cross 16 NM prior WSN at FL260 or below.

Note 4 – Unless otherwise coordinated, these arrivals shall cross 15 NM after DOBAK at FL250 or below.

D.2.1.2.2 Flights from Holstein Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDXW	ELSOB-N125, HAM-M852	EKERN	W	FL250	
	ELSOB -P992	BADOS			
EKPB, EKSB, EKSP, EKOD	ELSOB -N125, HAM-M852	EKERN			
EKBI, EKVD, EKVJ, EKEB	DCT				
EKSP, EKOD	ELSOB -P992	BADOS			
EKPB, EKSB, EKOD	DCT	DHE			Note 1
EHGG, EHLE					
EDWF, EDWE, EDWI	ELSOB -N125	WSN		FL247	Note 2
EHGG, EHLE	DCT				
EDDW, ETND	BADOS-P992, EKERN-N125	ELSOB		FL250	
EDDV	DCT	RAMAR			
		RAMAR			
EDVE	DCT	HAM			
		ELSOB			
EDXF	DCT	HAM			
EDBN, EDBH	HAM-L23	BERIM	E	ODD	
EDAH	DCT				
Overflights					ROSOK
					AMISO
		LUWIL			

Note 1 – Unless otherwise coordinated, these arrivals shall cross FL250 or below 25 NM after DHE

Note 2 – Holstein sector shall coordinate the transfer level with EID sector.

### D.2.1.3 Flights from Hannover Sectors to Bremen

#### D.2.1.3.1 Flights from Muenster Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDH, EDHI, EDHL, EDHK	DCT	BASUM	W	FL250	Note 1
EDDG, EDLW	ELSOB-M170				
EDDW, EDWE, EDWI, EDWF	DOMEG-Y348	OSN			
EDVK	DCT				Note 2
Hannover EDDV	DOMEG-Y348, RKN-L980	GEPKO			
	UCEDE-T463				

Note 1 – Unless otherwise coordinated, these arrivals shall cross FL250 or below 15 NM prior to WSN and may be clear direct WSN.

Note 2 – Unless otherwise coordinated, these arrivals shall cross FL250 or below 10 NM prior to OSN.

#### D.2.1.3.2 Flights from Celle Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDH, EDHI, EDHL, EDHK	KEMAD-P605, TOLGI-DCT	DLE/ DIRBO	E (W if E not online)	FL250	Note 1
EDDH, EDHI, EDHL	ABGUS-DCT	DIRBO			Note 2
EDHK	DCT				
EDVE	OSN-L980	ROBEG	W		
EDDG, EDLW, EDLA	DLE-L980				
EHLE	DCT				
EDDL, EDDG, EDLA, EDLW, EDLD, EDLV, EHBK, EHEH, EHBD	KEGAB-UZ706	ENUGA			
EDVK, EDLI	NIE-N850, DLE-L980	ROBEG			
EDLP, EDFQ,	NIE-N850	PIROT			
EDVK, EDFQ, EDLP	AGATI-DCT	DLE			
EDBM, EDBC	DCT	DLE			
		HLZ			
EDOP	AMALI-P717				
EDDT, EDDB, EDAA, EDAV, EDAY, EDAZ, EDBW, EDON	DCT	BUMIL	E	Note 3	

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDT, EDDB	DCT	BATEL	<b>E</b>	FL250	Note 3
EDDP, EDBC	DCT	BUMIL		FL270	
Overflights		NEBUN		Odd	
		GARLU			
		BUMIL			
		HLZ			

Note 1 – Unless otherwise coordinated, these arrivals shall cross MADOR at FL250.

Note 2 – Unless otherwise coordinated, these arrivals may be cleared direct to RARUP.

Note 3 – Arrivals to Berlin airports shall be handed over at FL270 or below, descending to FL250. In case of East Landings, Maastricht UAC will hand over the traffic as low as possible.

#### D.2.1.3.3 Flights from Solling Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDW, EDWE, EDWI, EDWF	KEMAD- P605	NORTA	<b>W</b>	FL250	
EDDV		ELNAT			Note 1
EDVE	EXOBA-P717	PIROT			
	KEMAD-P605	ELNAT			Note 2
EDAC	DCT	POVEL	<b>E</b>		
EDDP, EDDE					
EDLP	HLZ-P12	NORTA	<b>W</b>	FL250	
EDFH, EDDR, EDRZ, EDFM, EDRY, EDFV, EDGS	LARBU-N850, TOLGI-Y867	WRB			Note 3
EDAE, EDAV, EDAY, EDAZ, EDBW, EDON.	L986, DCT	POVEL	<b>E</b>		
Overflights	L986, DCT				Odd

Note 1 – Bremen ACC generally accepts traffic inbound EDDV on a direct to SAS for RWY27 or ROBEG for RWY09. Unless otherwise coordinated, these arrivals shall cross 10 NM after ELNAT at FL250

Note 2 – Bremen ACC generally accepts traffic inbound EDVE on a direct to BABKA for RWY26 or ELKER for RWY08. Unless otherwise coordinated, these arrivals shall cross 10 NM after ELNAT at FL250

Note 3 – Unless otherwise coordinated, these arrivals shall cross 15 NM prior WRB at FL250

#### D.2.1.4 Flights from Bremen ACC to Maastricht UAC

#### D.2.1.5 General

D.2.1.5.1 In general, Bremen ACC shall coordinate a transfer level with the receiving sector of Maastricht UAC, for flights with FLA 245.

For Flights with FLA 241 Bremen ACC may coordinate a transfer level if necessary, otherwise transfer climbing FL240.

#### D.2.1.6 Flights from Bremen North

All sectors below are part of Bremen EID

##### D.2.1.6.1 Flights from Aller Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions		
EDDH, EDHI, EDHK	N125-DOBAK	WSN	JEVER	FL250			
EDWE, EDWI, EDWF	Z78-BASUM, Z612-GESTO, L23-STADE						
EHGG	N125-WSN			REVLA			
EDDH, EDHI, EDHL	N850-NIE	IDEKO	CELLE	FL241			
	M170-OSN	BASUM	MÜNSTER				
EDXW	DCT	ELSOB	HOLSTEIN				
EDDW	N125-EKERN						
EDHK	M170-BASUM, N850-NIE						
EDHL	L23-WSN						
							FL250

##### D.2.1.6.2 Flights from Eider East Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDH, EDHI	M852-ALASA	EKERN	HOLSTEIN	FL241	
EDHL	P992-ATTUS	BADOS			
	EKBI, EKOD, EKEB, EKVD	EKERN DCT			
EKPB, EKSB, EKSP	M852-HAM, N125-ELSOB	EKERN			
EKOD, EKPB, EKSB, EKSP, EKVD	N872-GOLEN	DEGUL			
EKVD	P992-BADOS	GIKOG			
EDXW	P992-ELSOB	BADOS			

	M852-HAM, N125-ELSOB	EKERN			
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#### D.2.1.6.3 Flights from Eider West Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDH, EDHI	DCT	GOLEN	JEVER	FL241	
EDXW	P999-EEL	DHE			
EKBI, EKEB, EKVD	N873-WELGO, DCT	LEGPI			
EHGG	N873-TUSKA, DCT	WELGO			
	DCT	DHE			

#### D.2.1.6.4 Flights from Friesland Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDW	SID EEL, WSN-N125-EEL	DOBAK	JEVER	FL241	Note 1

Note 1 – Maastricht UAC generally accepts traffic direct to EEL.

#### D.2.1.6.5 Flights from Heide Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDH, EDHI	P605-PIBUL	LUGEG	HOLSTEIN	FL241	
EDDH, EDHI, EDHL	DCT LARET/ RIMET	DENIX	CELLE		
EDDW	Z870-NEBUN	RIDNI			
	DCT	HAM	HOLSTEIN		
EDDV, EDVE	M852-HAM, L619-ELSOB	AMLUH			
EDDV, EDVE	DCT	IRKIS	CELLE		
Lübeck EDHL	Z990-DIRBO				
	Kiel-Holtenua EDHK	DCT	HAM		HOLSTEIN
HAM					
IRKIS			CELLE		

Note 1 – Only available for flights with a RFL at or above FL290 and not for flights with a destination within the Bremen FIR.



### D.2.1.7 Flights from Bremen South

All sectors below are part of Bremen HRZ

#### D.2.1.7.1 Flights from Deister Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDV	UL126, UN850	WRB	SOLLING	FL245	Note 1
EDDK	Y867-WRB DCT				
EDLW	ESADU-P12-WRB DCT				

Note 1 – Maastricht UAC generally accepts traffic direct to WRB. Transfer of communication shall take place before the Langen FIR boundary.

#### D.2.1.7.2 Flights from Ems Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDW	Y804-PIROT	BUSEP	CELLE	FL241	
	Y348-DOMEG, L980-RKN	OSN	MÜNSTER	FL245	
EDDV	Y348-DOMEG, L980-RKN				
		Y347-OBIBI	RORUS	FL241	
EDLP, EDFQ	L980-DLE, N850-NIE, DCT	ROBEG	CELLE	FL245	
EDLI	L980-DLE, N850-NIE				
EDVK	L980-OSN, N850-NIE				
EDDG	L980-DLE	MOBSA			
EDLW, EDLA	L980-ROBEG				
EDDG, EDLW, EDLA	M170-BASUM	OSN	MÜNSTER		

#### D.2.1.7.3 Flights from Harz Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDW	DCT	DLE	CELLE	FL241	
EDVE	P717-EXOBA, L980-OSN				
		P605-KEMAD, P12-WRB	NORTA	SOLLING	FL245
EDLP, EDVK, EDFQ	P605-DLE				
EDDE, EDDP	L986-DLE, DCT	POVEL			

EDBM, EDBC	L986-DLE				
EDDP	DCT	KUMER			

#### D.2.1.8 Flights from Bremen East

All sectors below are part of Bremen FLG

##### D.2.1.8.1 Flights from Börde Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDT	L980-DLE, DCT DLE, DCT PIROT	HLZ	CELLE	Even	Note 1,3
EDDB					
EDDT	DCT, Q201-PODER	POVEL	SOLLING		
Overflights	L986, DCT				Note 2,3
EDAC					FL260

Note 1 – For departures from Berlin Airports, Maastricht UAC generally accepts traffic direct to DENOL for EDDL/EDLV arrivals and PODER for EDDK arrivals.

Note 2 – Maastricht UAC generally accepts traffic direct to DENOL for EDDL/EDLV arrivals and PODER for EDDK arrivals.

Note 3 – Maastricht UAC generally accepts traffic direct to NVO/ABAMI/WRB without coordination, under the condition that the track remain north of EMBOX.

##### D.2.1.8.2 Flights from Mark Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDBM, EDBC	DCT	BUMIL	CELLE	FL260	
Overflights				Even	
EDBH, EDBN		GARLU		FL260	
Overflights		BUMIL		Even	
		NEBUN			
		LUWIL	HOLSTEIN		

D.2.1.8.3 Flights from Müritz Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDBN, EDAH, Barth EDBH	DCT	BERIM	HOLSTEIN	FL260	
Overflights		AMISO		Even	
		ROSOK			

D.3 Special Procedures

In case there is a high traffic flow for arrivals to EDDH, EDHI and EDHL via NOLGO, Bremen ACC may request the activation of the following procedure:

- D.3.1 Celle Sector shall endeavour to sequence the arrivals to the mentioned airfields by 6 NM or more, constant or increasing and independent of the destination. Silent transfer of communication applies if this condition is met.
- D.3.2 If the above can not be achieved, different levels or parallel headings can be used. Bremen North Sector shall be informed of this, on case by case basis.

D.4 VFR Flights

Not applicable.

## Annex E.

## Transfer of Control and Transfer of Communications

Effective: 2021-05-02

Revised: N/A

## E.1 Transfer of Control

E.1.1 Transfer of control shall take place at the AoR boundary, unless otherwise specified in paragraph E.3.

## E.2 Transfer of Communication

E.2.1 Transfer of communication shall take place not later than the transfer of control, unless otherwise coordinated.

Transfer of CPDLC shall commence concurrently with transfer of voice communications.

## E.2.2 Frequency allocation and sector arrangement of Maastricht UAC

## E.2.2.1 Maastricht UAC Sectors

Receiving Sector	Vertical Limits	VHF
Celle	FL 245 – FL 660	131.380 MHz
Solling	FL 245 – FL 660	
Ruhr	FL 245 – FL 660	133.215 MHz
Muenster	FL 245 – FL 660	
Jever	FL 245 – FL 660	134.705 MHz
Holstein	FL 245 – FL 660	

## E.2.3 Frequency allocation and sector arrangement of Bremen ACC

## E.2.3.1 Bremen ACC Sectors

Receiving Sector	Vertical Limits	VHF
W	GND – FL 245	123.925 MHz
E	GND – FL 245	136.050 MHz

## E.3 Specific Points for Transfer of Control and Transfer of Communications

Not applicable.

## Annex F.

## ATS Surveillance Based Coordination Procedures

Effective: 2021-05-02

Revised: N/A

### F.1 General

- F.1.1 Transfer of identification and transfer of control between Maastricht UAC and Bremen ACC will be subject to the serviceability of the respective surveillance systems.
- F.1.2 In case of any doubt about the identity of an aircraft, nothing in the provisions of this Annex, prevents the use of other methods for the identification of an aircraft.

### F.2 Transfer of Aircraft Identification

- F.2.1 Transfer of aircraft identification between Maastricht UAC and Bremen ACC is normally performed by:
- notification of A1000, indicating that the Mode S aircraft identification feature transmitted by the transponder has been verified; or
  - if the aircraft identification is not correct or has not been verified, or if the aircraft is not Mode S equipped: by notification of the aircraft discrete SSR code.
- F.2.2 When discrete SSR codes are used for transfer of identification, they shall be assigned in accordance with ORCAM.
- F.2.3 Any change of SSR code by the accepting ATS Unit may only take place after the transfer of control point.
- F.2.4 The accepting ATS Unit shall be notified of any observed irregularity in the operation of SSR transponders or ADS-B transmitters.
- F.2.5 In the event that the accepting ATS unit is unable to process code A1000, it shall immediately advise the transferring ATS unit. Thereafter, unless otherwise coordinated, the transferring ATS unit shall change relevant instances of A1000 to a discrete SSR code determined in accordance with ORCAM.

### F.3 Transfer of Control

- F.3.1 Radar Separation minimum shall be **5 NM**.
- F.3.2 A minimum distance of **2.5 NM** to the boundary line of responsibility shall be observed when vectoring aircraft, except when a transfer of radar control has previously been coordinated.

### F.3.3 Transfer of Control without systematic use of direct communication (Silent Transfer of Control)

Transfer of control may be effected without systematic use of bi-directional speech facilities provided the minimum distance between successive aircraft about to be transferred is **10 NM** and constant or increasing.

#### F.3.3.1 The transferring controller shall inform the accepting controller of any level, speed or vectoring instructions given to aircraft prior to its transfer and which modify its anticipated flight progress at the point of transfer.

Note: When using Mach-number speed control, pilots concerned shall be instructed to report their assigned mach-number to the accepting ATS Unit upon initial contact.

#### F.3.3.2 The accepting controller may terminate the silent transfer of control at any time, normally with an advance notice of **10 minutes**.

### F.3.4 Transfer of Control with use of direct communication

Transfer of control may be effected with the use of bi-directional speech facilities, provided the minimum distance between the aircraft does not reduce to less than **5 NM**, and:

- identification has been transferred to or has been established directly by the accepting controller;
- the accepting controller is informed of any level, speed or vectoring instructions applicable to the aircraft at the point of transfer;
- communication with the aircraft is retained by the transferring controller until the accepting controller has agreed to assume responsibility for providing ATS surveillance service to the aircraft. Thereafter, the aircraft should be instructed to change over to the appropriate frequency and from that point is the responsibility of the accepting controller.

## Annex G.

## Checklist of Pages

Effective: 2021-05-02

Revised: N/A

Part of LoA	Page	Date
LoA		2021-05-02
Appendix 1		2021-05-02
Appendix 2		2021-05-02
Annex A	A1	N/A
Annex B	B1	N/A
Annex C	C1	N/A
Annex D	D1	2021-05-02
Annex E	E1	2021-05-02
Annex F	F1	N/A
Annex G	G1	N/A