

LETTER OF AGREEMENT

between

IVAO ATC HQ
Maastricht UAC

and

IVAO Germany
Langen ACC



Effective – 1 April, 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 Langen 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: HannoverMaastricht UIR as published in the AIP Germany

Vertical limits: FL 245 – UNL

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

2.1.2 Langen ACC

Lateral limits: Langen FIR as published in the AIP Germany

Vertical limits: GND – FL 245

ICAO airspace classification for the area of responsibility of Langen ACC along the common boundary of the areas of responsibility of Maastricht UAC and Langen 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 Langen ACC

Within the HannoverMaastricht UIR the provision of ATS to GAT and OAT in accordance with the airspace classification is performed by Langen ACC within the following area(s):

DEVRU Area – See Appendix 1

Lateral Limits: N503021 E0064855 – N503614 E0065227 – N503637 E0070905 –
N503500 E0070000 – N503310 E0065537 – N503021 E0064855

Vertical limits: FL 245 – FL 255

Airspace Classification: C

RASVO North Area – See Appendix 1

Lateral Limits: N502541 E0063751 – N502821 E0063729 – N503021 E0064855 –
N502541 E0063751

Vertical limits: FL 245 – FL 265

Airspace Classification: C

2.2.2 Delegation of ATS from Langen ACC to Maastricht UAC

Not applicable.

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 Langen 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 Langen 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 April, 2021 and supersedes the Letter of Agreement between Maastricht ACC and Langen ACC dated N/A.

Appendix 1

DEVRU Area – (see para. 2.2.1)



Appendix 2

RASVO North Area – (see para. 2.2.2)



Annex A.

Definitions and Abbreviations

Effective: 2021-04-01

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.

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

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

Annex B.

Area of Common Interest

Effective: 2021-04-01

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 Amsterdam FIR, Brussels UIR and Hannover UIR

Area	Vertical Limits	Airspace Classification
Amsterdam FIR	FL 245 – FL 660	C
Brussels UIR		
Hannover UIR		

B.1.2 Langen FIR

Area	Vertical Limits	Airspace Classification
Langen FIR	GND – FL 245	Above FL 100 - C

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 Langen ACC

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

B.3.1.1.1 RASVO South Area – See Appendix 2 of Annex B

Lateral Limits: N502541 E0063751 – N503021 E0064855 – N503037 E0065055 – N501643
E0065526 – N501814 E0063848 – N502541 E0063751

Vertical limits: FL 245 – FL 265

Airspace Classification: C

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

Lateral Limits: N512001 E0100334 – N512002 E0102315 – N510939 E0102113 – N510615
E0100913 – N510542 E0100321 – N512001 E0100334

Vertical limits: FL 245 – FL 255

Airspace Classification: C

B.3.1.1.3 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.3.1.2 ATS provision by Maastricht UAC – Rhein UIR

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

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

Maastricht UAC is responsible for the provision of Air Traffic Services to GAT within the following part of the Rhein UIR:

Lateral Limits: N494833 E0063010 – N495604 E0063632 – N501628 E0063903 – N502541
E0063751 then along the Hannover/Rhein UIR boundary till N502000 E0062430
then along the boundary line of the Brussels / Rhein UIR to N494833 E0063010.

Vertical limits: FL245 – UNL

Airspace Classification: C

B.3.1.2.2 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.3.1.2.3 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.3.1.2.4 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.3.1.2.5 KOSIT Area – See Appendix 2 of Annex B

Lateral Limits: N493805 E0062541 – N491649 E0064012 – N491305 E0064240 – along the boundary line of the Rhein/Reims UIR, along the boundary line of the Rhein/Brussels UIR to – N493805 E0062541

Vertical limits: FL 245 – FL 660

Airspace Classification: C

B.3.1.3 ATS provision by Maastricht UAC – Reims UIR

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

B.3.1.3.1 SORAL Area – See Appendix 2 of Annex B

Lateral Limits: N484903 E0061635 – N490716 E0061804 – N491700 E0061700 – N492748 E0060331 – along the G-D Luxembourg / German border, along the France / German border to - N491303 E0064109 – N484903 E0061635

Vertical limits: FL 245 – FL 660

Airspace Classification: C

B.3.1.4 ATS provision by Karlsruhe UAC

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

B.3.1.4.1 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.3.1.5 Other Areas

B.3.1.5.1 Transfer line Hohes Venn:

N505442 E0060343 – N505140 E0060441 – N505048 E0060427 – N504515 E0060116 –
N504500 E0060200 – N503611 E0061250 – N502956 E0061544 – N502445 E0062303 –
N502541 E0063751 – N502821 E0063729

B.3.1.5.2 EDEGA line:

N510504 E0084846 – N505531 E0090739 – N505911 E0091510

B.3.1.5.3 GMH release area:

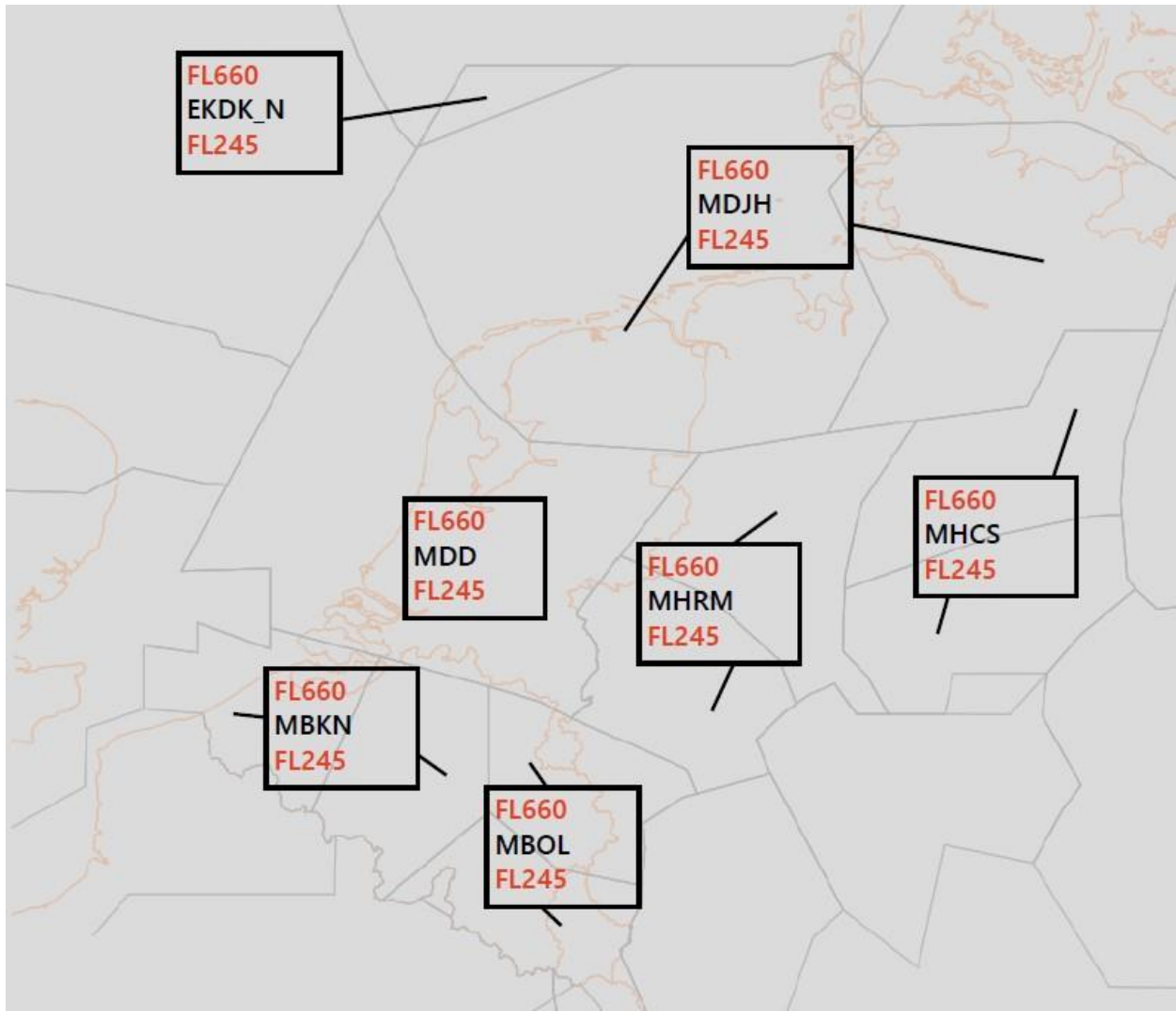
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N505557 E0074056 – N504315 E0074900 – N504146 E0074009

B.4 Non-published Coordination Points within the Area of Common Interest.

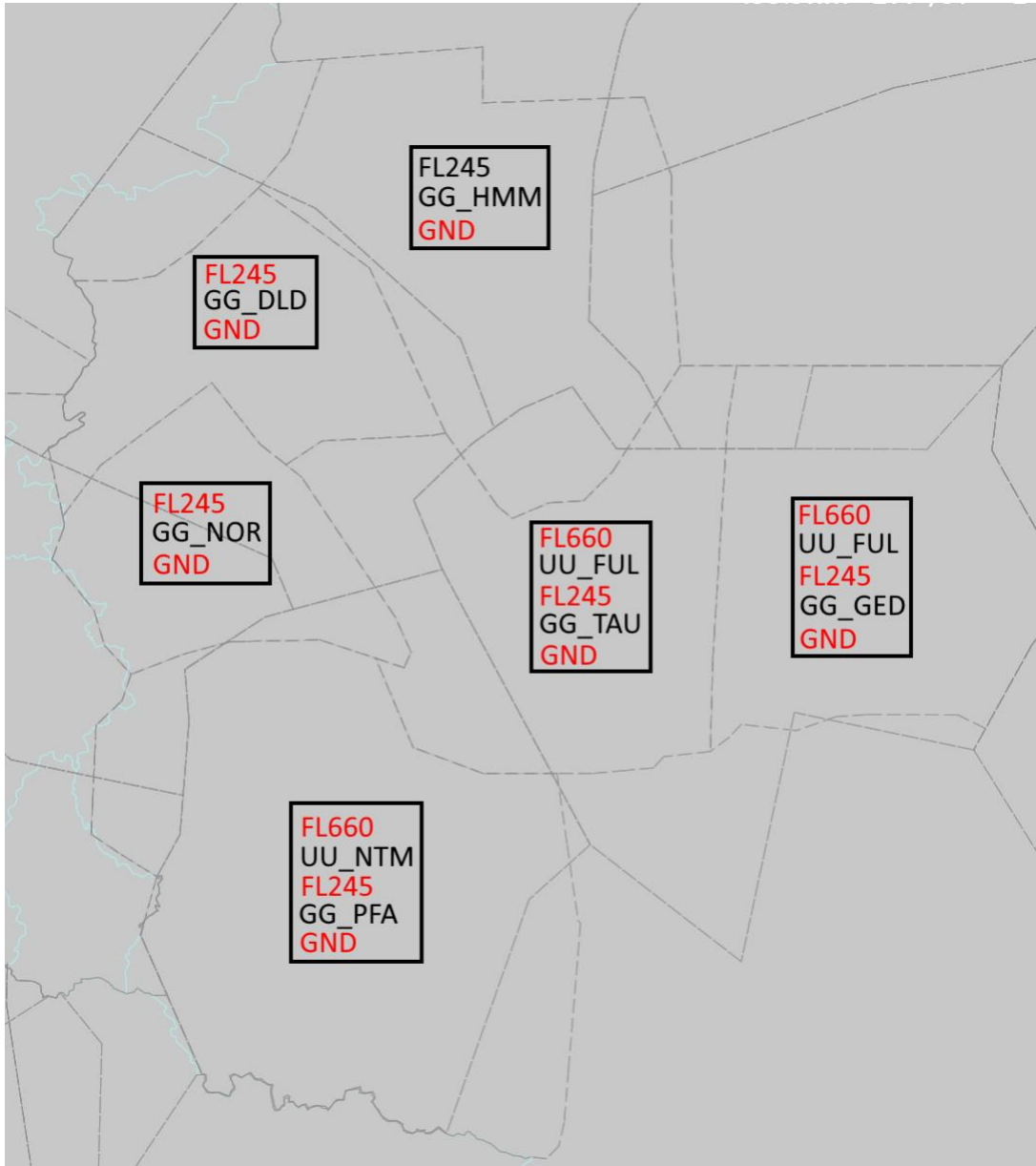
None.

Appendix 1 of Annex B.

Maastricht UAC Sectorization



Langen ACC Sectorization

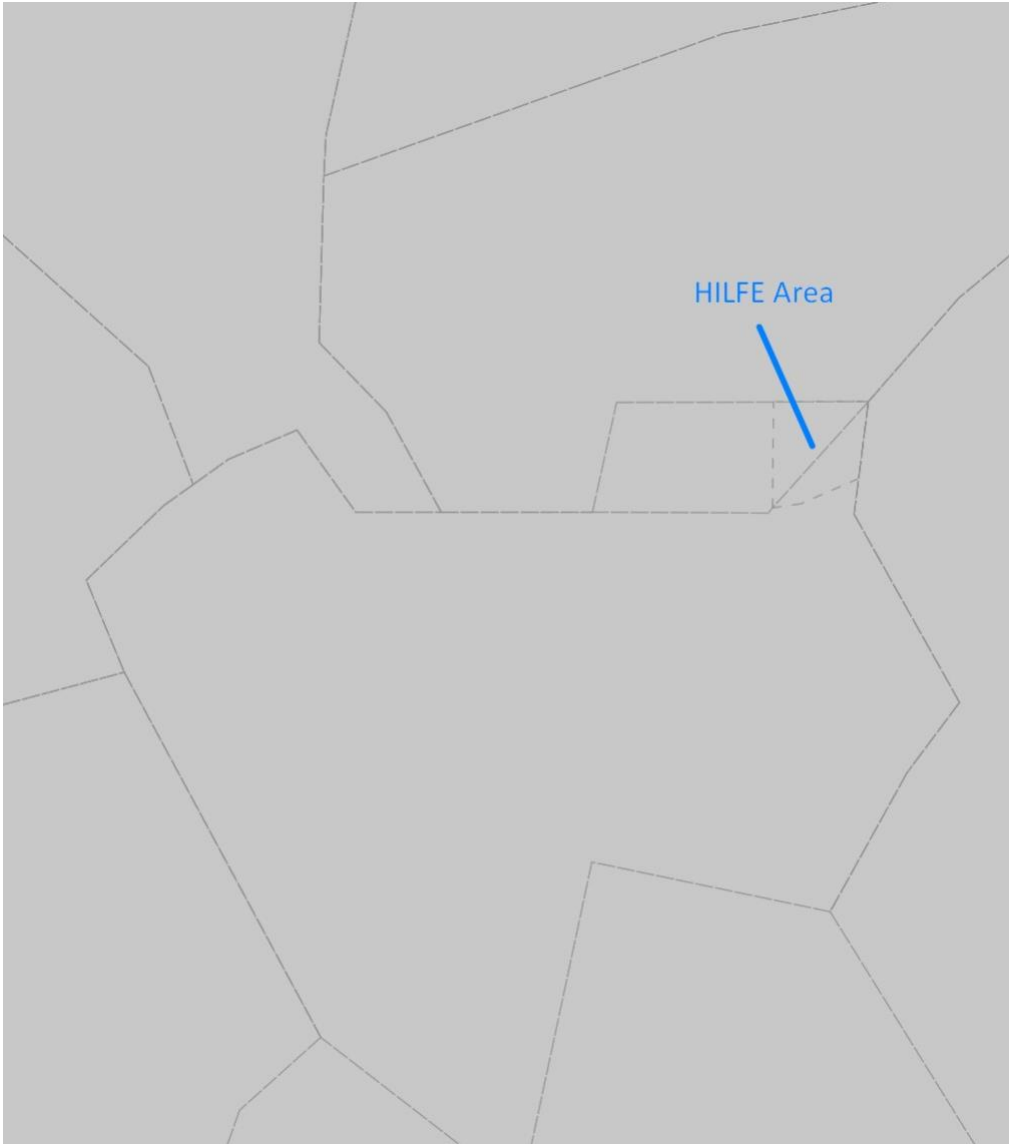


Appendix 2 of Annex B.

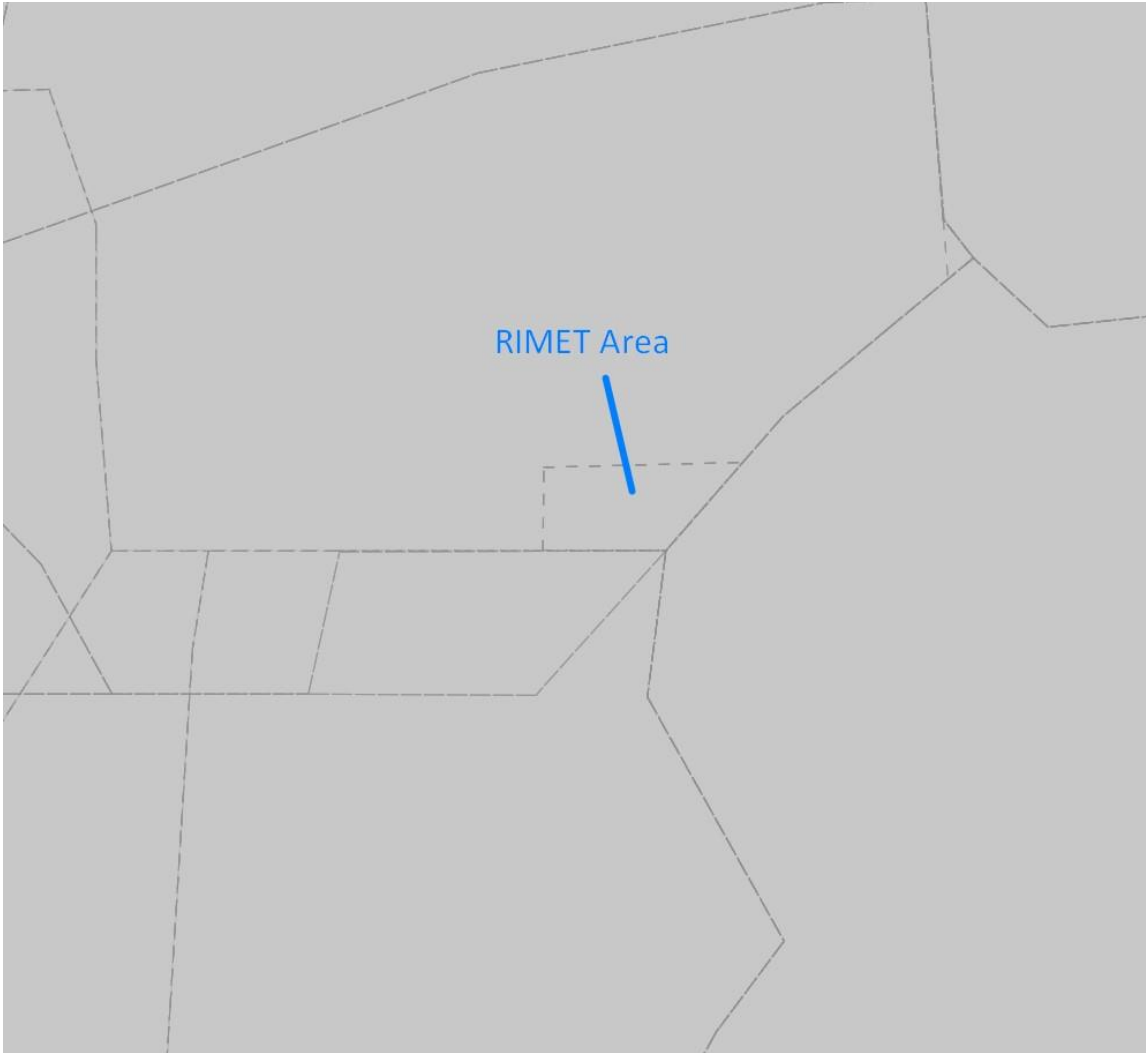
RASVO South Area



HILFE Area



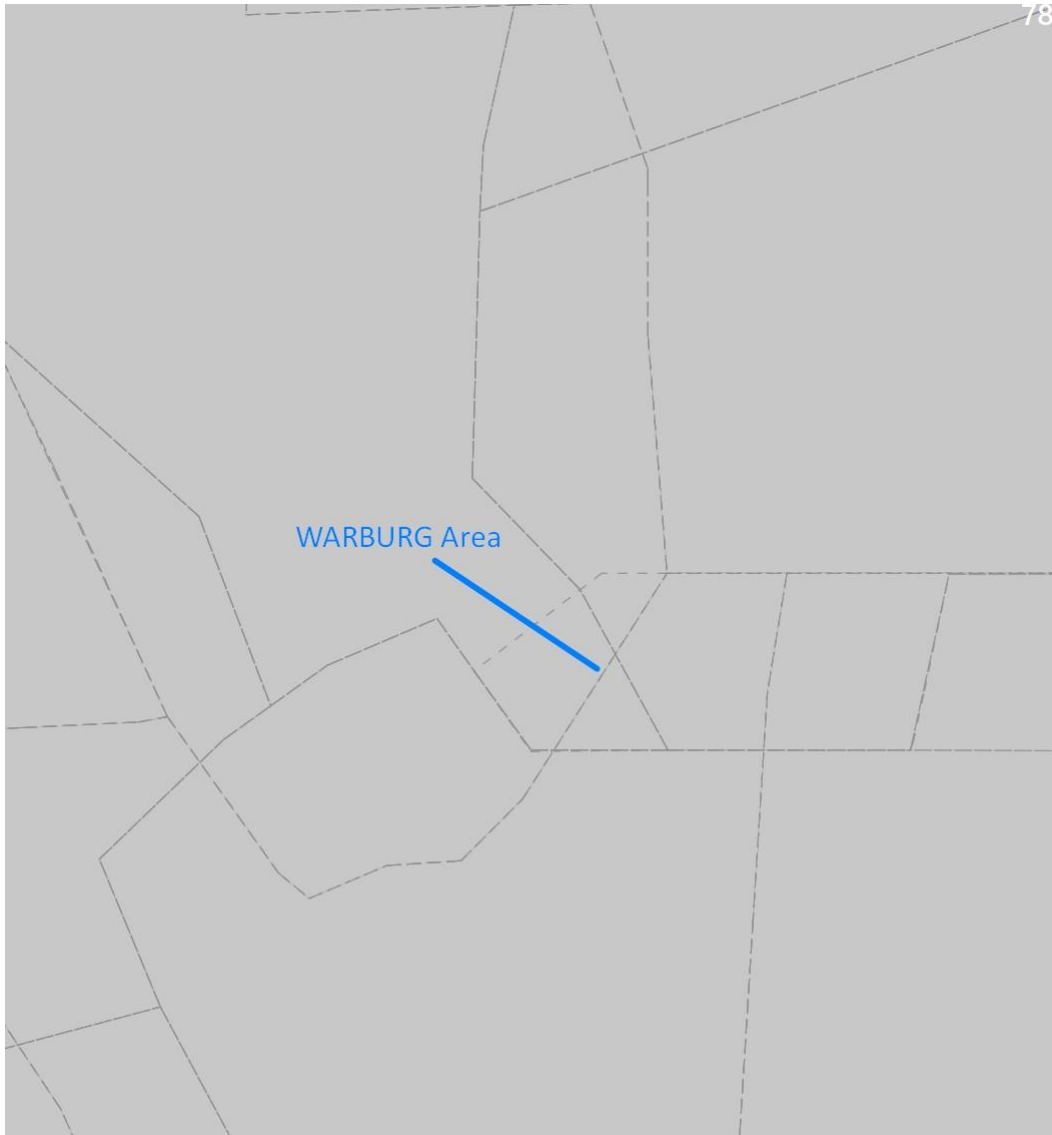
RIMET Area



BITBU Area



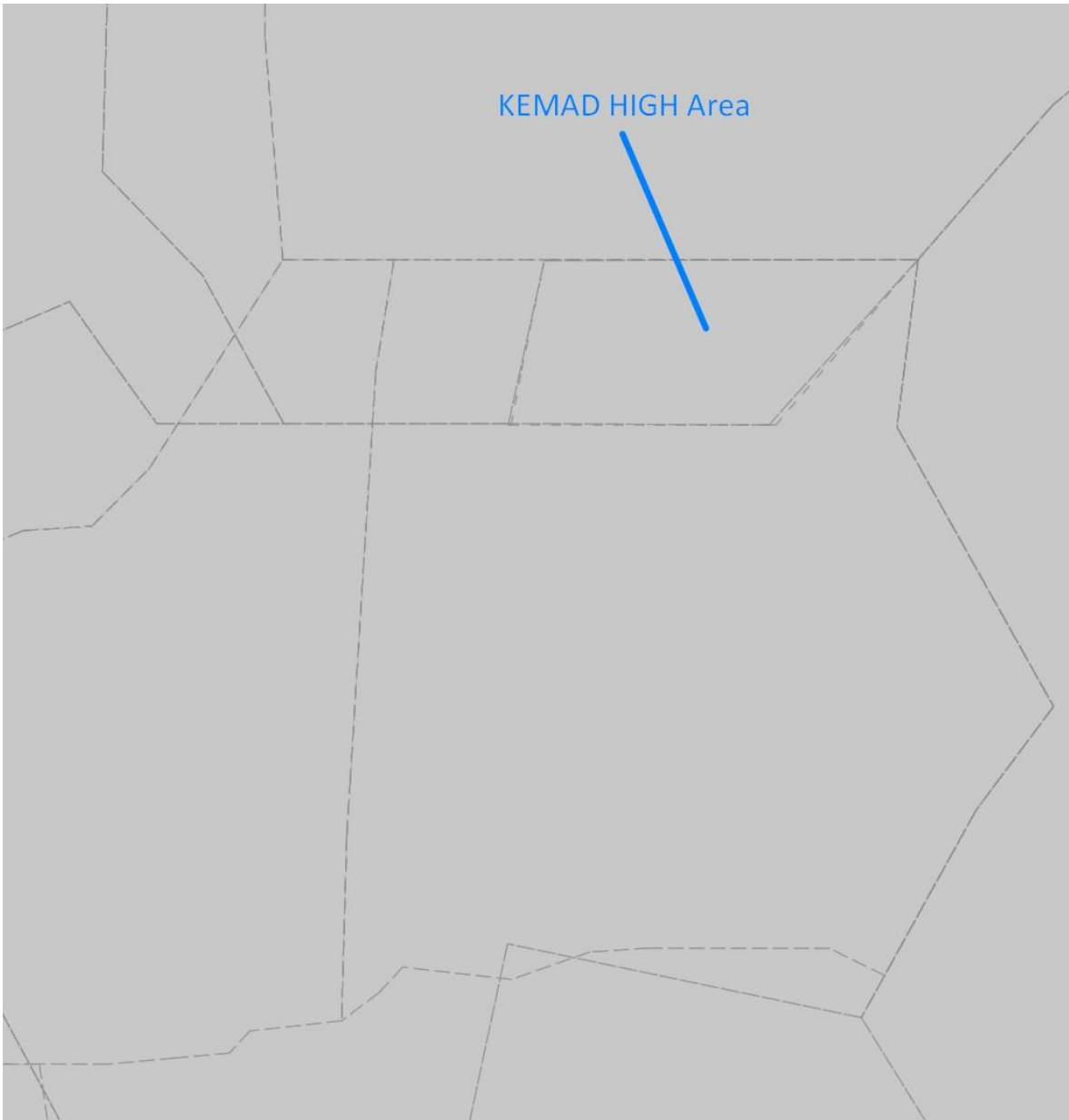
Warburg Area



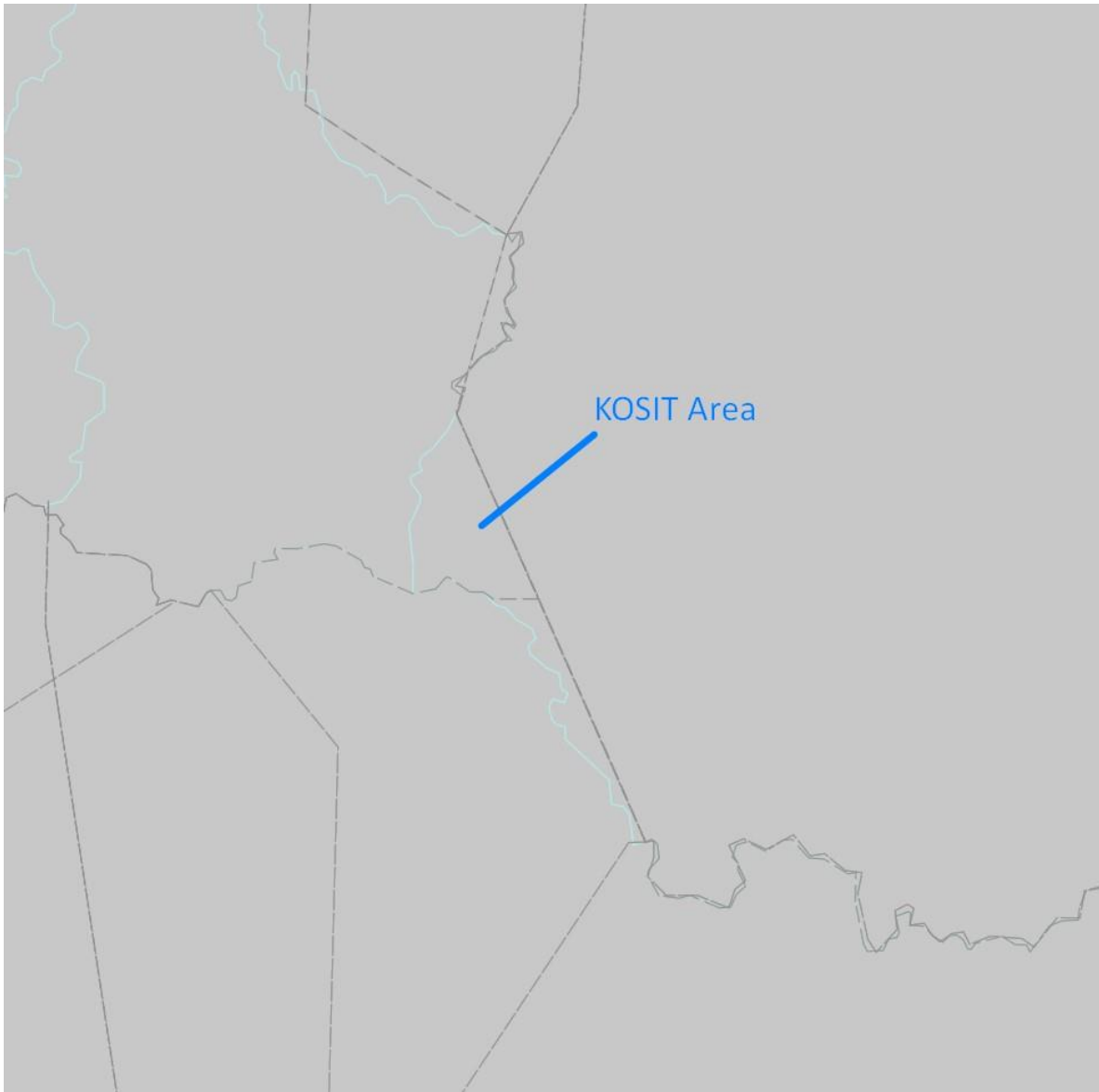
KEMAD Low Area



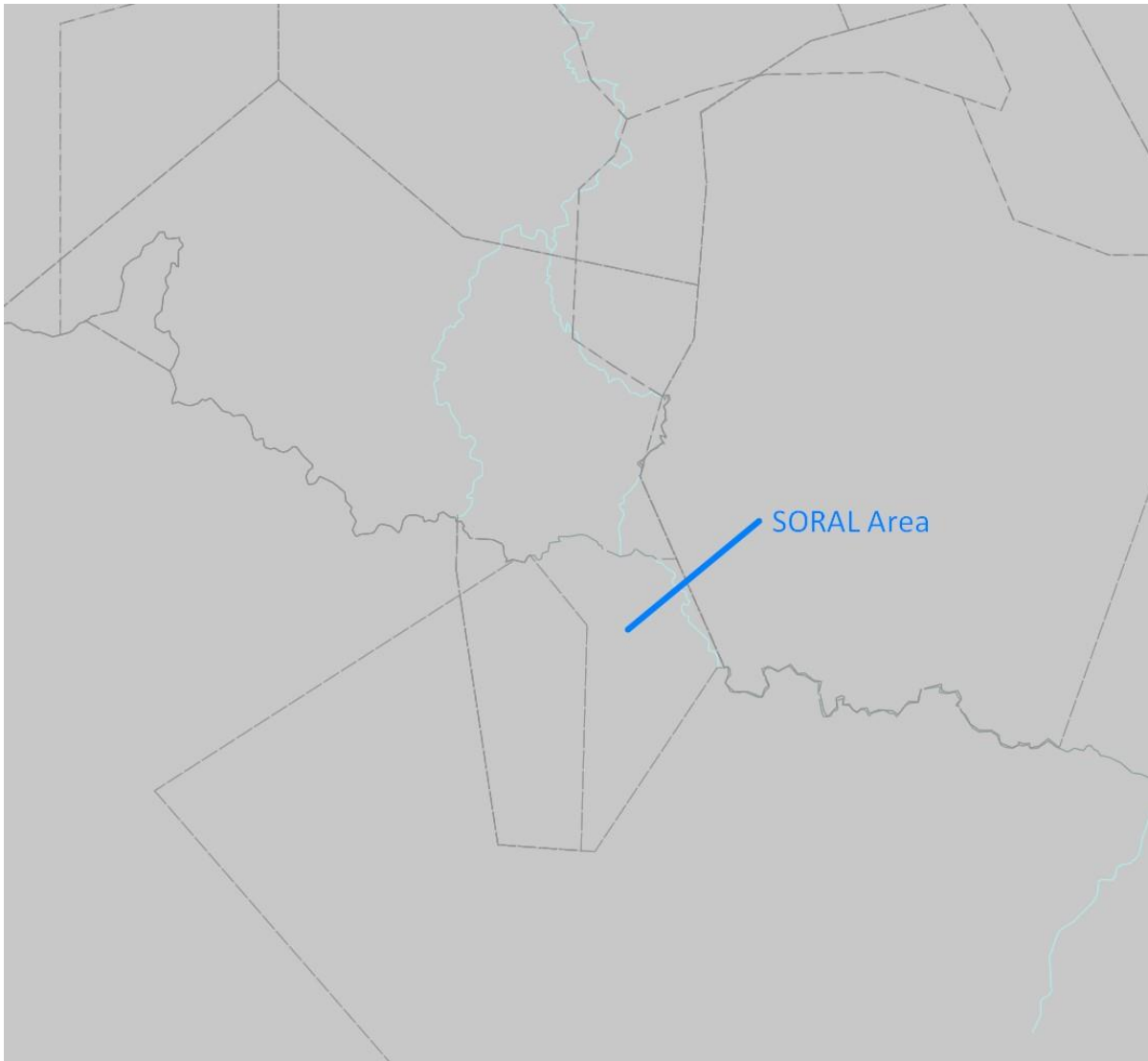
KEMAD High Area



KOSIT Area



SORAL Area



Arpe Area



Annex C.

Exchange of Flight Data

Effective: 2021-04-01

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: 2021-04-01

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 Langen ACC

D.2.1.1 Flights from Brussels Sectors

D.2.1.1.1 Flights from Olno Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDF, EDFE, EDFZ	SPI-T180 / DIK-T856	NIVNU	PFA	FL250/FL260	NIVNU at FL250/FL260, Note 1, 2
EDFM, EDFV, EDRY	SPI-T180	TOBOP	PFA	FL250/FL260	TOBOP at FL250/FL260, Note 2
EDDL	DIK-ARCKY-T853	IBESA	NOR	FL250/FL260	
	KOMOB-T859	LENDO	NOR	FL250/FL260	
	SPI-Y862	PODEN	NOR	FL250/FL260	
EDLV	DIK-ARCKY-T853	IBESA	NOR	FL250/FL260	
	KOMOB-T859	LENDO	NOR	FL250/FL260	
EDLW, EDDG, EDLP, EDLA, EDWO, EDLS, EDVK	DIK-T856	DEPOK	NOR	FL270	
	KOMOB-T859	LENDO	NOR	FL250/FL260	
	SPI-Y862	PODEN	NOR	FL250/FL260	

Note 1 – Arrivals via T856 are released for a right turn after transfer of communication.

Note 2 – Arrivals via T180 are released for a right turn and descend when passing TOBOP, provided that Langen ACC stays on T180/T847 or north of it.

D.2.1.1.2 General Conditions for traffic with destination in Langen FIR

- a. Traffic with destination in Langen FIR via NOR sector shall reach the FLA latest at the transfer line “Hohes Venn”.
- b. Traffic via NVO may be sent direct to NVO, provided that they cross the transfer line “Hohes Venn” south of PODEN.
- c. Traffic is released to Langen ACC for turn and descend after crossing the transfer line “Hohes Venn”.

D.2.1.2 Flights from Hannover Sectors

D.2.1.2.1 Flights from Ruhr Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EBBR, EBAW, EBCI, EBCV, EBLG, EBMB, ELLX	DCT	ABAMI	DLD	FL250	Note 1
EDDF, EDFE, EDFH, EDFZ	DIXAT-T149	LIPMI	TAU	FL260	Note 2

Note 1 – Unless otherwise coordinated, these arrivals shall cross FL250 at ABAMI. Langen ACC shall ensure that these flights cross a position abeam DIXAT at FL240 or below.

Note 2 – Unless otherwise coordinated, these arrivals shall cross FL260 at LIPMI and transfer of communications should be not later than (abeam) DIXAT. These flights are released for descent after crossing passing (abeam) DIXAT

D.2.1.2.2 Flights from Muenster Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EHEH, EHTE, EHBD, EHBK, EHLE	BIGGE-T281	HMM	HMM	FL250	Note 1
	KEMAD-L602				

Note 1 – Unless otherwise coordinated, these arrivals shall cross FL250 at a position 20 NM prior to HMM. Langen ACC shall ensure that these flights cross HMM at FL240 or below.

D.2.1.2.3 Flights from Solling Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDK	LARBU-Z189, POVEL-Q201, TOLTA-DCT	PODER	PADH	FL250	Note 1
EDDF, EDFE, ETOU, EDFZ	DCT	RIMET	GED	FL250	

Note 1 – Unless otherwise coordinated, these arrivals shall cross FL250 not later than PODER. Langen ACC shall ensure that these flights cross Solling/Muenster sector boundary at FL240 or below.

D.2.1.2.4 Flights from Celle Sector

Destination	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDL, EDLV, EDLN, EDLE, EHEH, EHBK, EHBD, EHTE	PIROT-T851	DENOL	HMM	FL250	Note 1

Note 1 – Unless otherwise coordinated, these arrivals shall cross FL250 not later than DENOL. Langen ACC shall ensure that these flights cross a position 30 NM prior to HMM at FL240 or below.

D.2.2 Flights from Langen ACC to Maastricht UAC

D.2.2.1 Flights from NOR Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDLW, EDLA, EDWO, EDVK	Y841-KENUM	NVO	Olno	FL245	
EBBR FIR	N853-ONUNE	ELDAR	Ruhr	FL245	Note 1
EDDF, EDFE, ETOU, EDFZ	Z29-TORNU	ROCUH		FL250	
EDDF, EDFE, ETOU, EDFZ	Z28-DIBIR	OLPEX		FL250	

Note 1 – If NOR sector is unable to ensure these departures cross (abeam) NEREL at or above FL250, the clearance to FL250 is cancelled. In this case, NOR sector transfers the traffic to DLD and informs the Ruhr Sector.

D.2.2.2 Flights from DLD Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDF, EDFE, EDFZ, ETOU	Z28-DIBIR, Z29-TORNU	ROCUH/OLPEX	Ruhr	FL245	see Note 1
EHEH, EHBK	L179-MEVEL, DCT XAMOD	LUSIX			
EDLP, EDDG, EDLS, EDLI	Y841-KENUM	ANAVI			see Note 2

Note 1 – Only applicable in case these flights are transfer from NOR Sector to DLD Sector under Note 1 of D.2.2.1

Note 2 – Maastricht UAC will issue a clearance into the upper airspace to Langen ACC DLD to enable a climb into upper airspace before entering NOR Sector

D.2.2.3 Flights from HMM Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EHAM	L620-HMM, Z718-OSN	SUVOX	Muenster	FL245	
EDDL/LN/LV/	L179-MISRI, Y850-ARTER	MEVEL	Muenster	FL245	Note 1
EDLS, EDLV	Z841-GMH	TUVTI	Ruhr	FL245	
EDDF, EDFE, EDFZ, EDDS	Z850-ABILU	BADGO	Muenster	FL245	
EDDK	PELUN DCT WRB	PELUN	Solling*	FL245	

Note 1 – Departures with destination in the Berlin TMA and beyond may be cleared by Langen ACC direct to OSDIK without need of coordination.

D.2.2.4 Flights from TAU Sector

Departure	Routing	COP	Receiving Sector	FLA	Special Conditions
EDDF, EDFE, ETOU, EDFZ	Y150-TOLGI	NATSU	Solling	FL240	Note 1

Note 1 – Langen ACC shall ensure traffic reaches FL240 by NATSU. Transfer of communication shall take place between MARUN and NATSU. Maastricht UAC shall ensure to climb traffic clear of the AoR of Bremen ACC.

D.3 Special Procedures

Not applicable.

D.4 VFR Flights

Not applicable.

Annex E.

Transfer of Control and Transfer of Communications

Effective: 2021-04-01

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
Solling	FL 245 – FL 660	131.380 MHz
Ruhr	FL 245 – FL 660	133.215 MHz
Munster	FL 245 – FL 660	
Olno	FL 245 – FL 660	125.980 MHz

E.2.3 Frequency allocation and sector arrangement of Langen ACC

E.2.3.1 Langen ACC Sectors

Receiving Sector	Vertical Limits	VHF
HMM	GND – FL 245	129.300 MHz
DLD	GND – FL 245	121.355 MHz
NOR	GND – FL 245	127.365 MHz
PFA	GND – FL 245	129.675 MHz
TAU	GND – FL 245	127.625 MHz
GED	GND – FL 245	124.430 MHz

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

Not applicable.

Annex F.

ATS Surveillance Based Coordination Procedures

Effective: 2021-04-01

Revised: N/A

F.1 General

F.1.1 Transfer of identification and transfer of control between Maastricht UAC and Langen 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 Langen 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: 2021-04-01

Revised: N/A

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LoA		2021-04-01
Appendix 1		2021-04-01
Appendix 2		2021-04-01
Annex A	A1	N/A
Annex B	B1	N/A
Annex C	C1	N/A
Annex D	D1	N/A
Annex E	E1	N/A
Annex F	F1	N/A
Annex G	G1	N/A