

to Distribution list

LoA 44

---

from S. Borchert, CC/FB-N phone 0421 5372 180 date 15.11.2011  
DRF until 29.12.2011

---

## Amendment of the LoA between Neubrandenburg TWR/APP and Bremen ACC wef 17.11.2011

### 1. Essentials

Annex G: **G.2.2.5**, change of the MFC numbers at CRC Schönewalde.

### 2. List of Changes

Date	Parts	Page(s)	insert, replace, delete
17.11.2011	amendment	all	replace
	LoA		

\_\_\_\_\_  
Axel Brandt  
Chief of Support

\_\_\_\_\_  
Jun Kurokoshi  
Chief of Section

Sector families affected:													
	North A	North B	East A	East B*	South	FDS	FIS	FMP	DA	SV CC	SV FDA	office	
mandatory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
* only applicable to sector(s): MRZ													
This LoA is valid for:													
North A	North B	East A	East B	South	FDS	FIS	FMP	DA	SV CC	SV FDA	office		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
* only applicable to sector(s):													

Distribution list: LoA I Mr T. Teichert

**Page intentionally left blank.**

# LETTER OF AGREEMENT

between

**DFS Deutsche Flugsicherung GmbH  
Branch North, Center Bremen  
Bremen ACC**

**Fliegerhorststaffel  
Trollenhagen  
Neubrandenburg TWR/APP**

In the following referred to as „parties“.

Effective: June 07, 2007

## **1 General.**

### **1.1 Purpose.**

The purpose of this Letter of Agreement is to define the coordination procedures to be applied between Bremen ACC, Neubrandenburg TWR and Neubrandenburg APP, when providing ATS to General Air Traffic (GAT) and/or Operational air traffic (OAT).

These procedures are supplementary to BA FVK and BesAnMilFS 2-100.

### **1.2 Operational Status.**

Both parties 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 and Delegation of the Responsibility for the Provision of ATS.**

### **2.1 Areas of Responsibility.**

ICAO airspace classification for the areas of responsibility along the common boundary of the areas of responsibility of Bremen ACC and Neubrandenburg TWR/APP, is described in Annex B to this Letter of Agreement.

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

#### **2.1.1 Bremen ACC.**

Lateral limits: Bremen FIR as published in the AIP Germany

Vertical limits: GND - FL245

and

Lateral limits: Munich FIR as published in the AIP Germany,

Vertical limits: GND - FL245

and

Lateral limits: Rhein UIR as published in the AIP Germany,

Vertical limits: FL245 - FL285

#### 2.1.2 Neubrandenburg TWR.

Lateral limits Neubrandenburg CTR as published in the AIP Germany

Vertical limits: GND – 2300 ft MSL

#### 2.1.3 Neubrandenburg APP.

Area of Responsibility Neubrandenburg as defined in Appendix 1 to this LoA.

### **3 Procedures.**

3.1 The procedures to be applied by Bremen ACC and Neubrandenburg TWR/APP 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: Radar Based Coordination Procedures

Annex G: Supplementary Procedures

3.2 These procedures shall be promulgated to the operational staff of the ATS-units concerned.

### **4 Revisions and Deviations.**

#### **4.1 Revision of the Letter of Agreement.**

The revision of the present Letter of Agreement, excluding Annexes, requires the mutual written consent of the parties.

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

The revision of Annexes to the present Letter of Agreement requires the mutual consent of the parties (representative Bremen ACC and Senior Air Traffic Control Officer [SATCO] Fliegerhorststaffel Trolenhagen) and the written confirmation of the mutual consent of one of both parties at least.

#### **4.3 Temporary Deviations.**

When necessary, the Supervisors of the ATS units concerned may introduce, by mutual agreement and for a specified time period, 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 parties may take place at any time.
- 5.2 Cancellation of this Letter of Agreement by either party is possible at any time, provided that the cancelling party declares its intention to cancel the Letter of Agreement with a minimum pre-notification time of 3 months before the date the cancellation is to take effect.

**6 Validity.**

This Letter of Agreement becomes effective June 07, 2007 and supersedes the Letter of Agreement between DFS Deutsche Flugsicherung GmbH, Branch North, Center Bremen and Fliegerhorststaffel Trolenhagen dated December 16, 2006.

Bremen, date

Neubrandenburg, date

\_\_\_\_\_  
i.V. Werner Spier  
DFS Deutsche Flugsicherung GmbH  
Head of Operations Bremen ACC

\_\_\_\_\_  
Thomas Reitze, OTL  
StffChef FlgHStff Trolenhagen

Aurich, date

\_\_\_\_\_  
Kdo 4.Luftwaffendivision A 6 FS

Langen, date

Langen, date

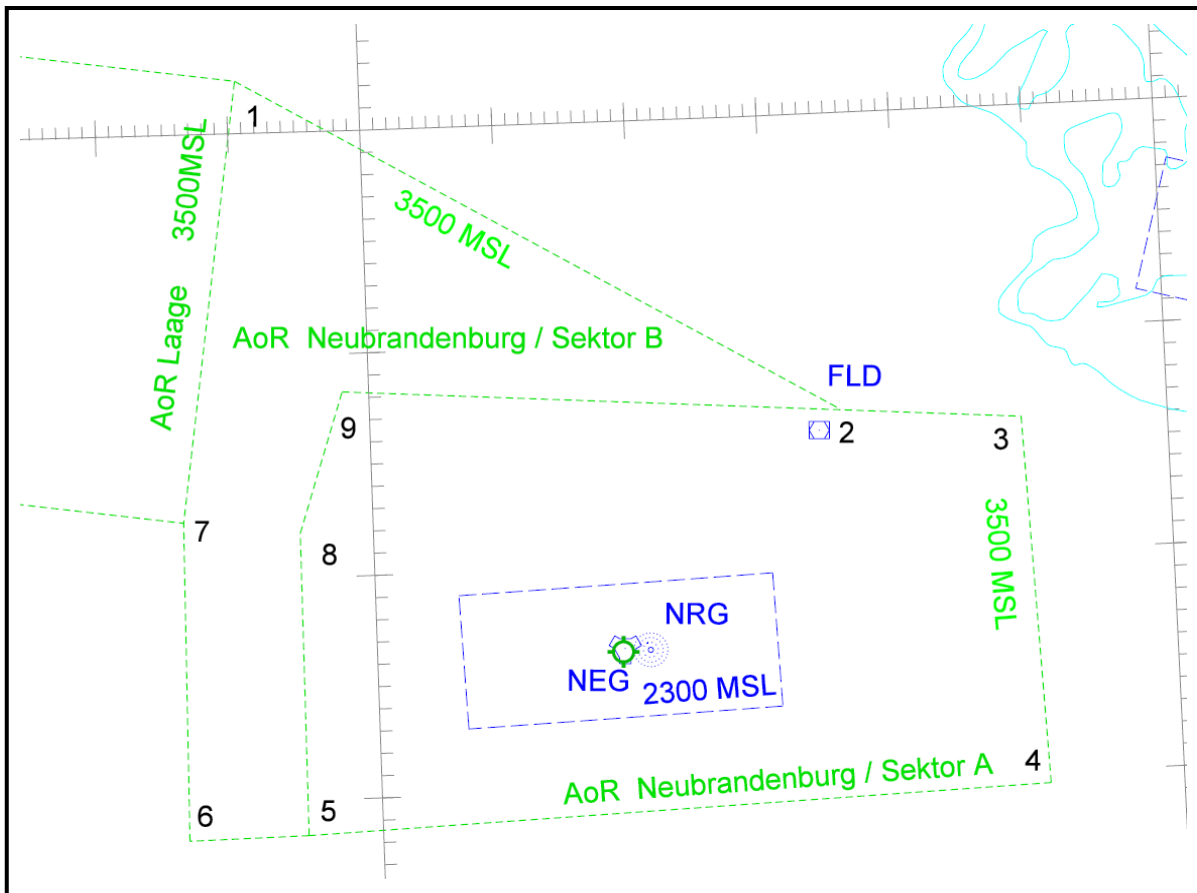
\_\_\_\_\_  
i. V. Dirk Mahns  
Head of ATM Operations  
and Strategy  
DFS GmbH

\_\_\_\_\_  
Dezernat I 2  
Amt für Flugsicherung  
der Bundeswehr

# Appendix 1

## Paragraph 2.1.3 Area of Responsibility Neubrandenburg.

1. Neubrandenburg APP shall be responsible for the provision of Air Traffic Control Service, Alerting Service and Flight Information Service within the airspace depicted (Chart 1) and defined within the coordinates listed below, from GND up to 3500 ft MSL when the AoR is activated.
2. Outside the operational hours of Neubrandenburg APP or when Neubrandenburg ASR is off, responsibility for AoR Neubrandenburg (except CTR Neubrandenburg when active) rests with Bremen ACC.
3. **Chart 1**



### 4. Coordinates AoR Neubrandenburg

#### 4.1 Sektor A

(9) N 53 48 17 E 012 58 00 - (2) N 53 46 41 E 013 35 24 - (3) N 53 46 00 E 013 49 00 -  
(4) N 53 29 30 E 013 50 00 - (5) N 53 28 25 E 012 54 25 - (8) N 53 42 00 E 012 54 30 -  
(9) N 53 28 25 E 012 54 25

#### 4.2 Sektor B

(1) N 54 02 23 E 012 50 39 - (2) N 53 46 41 E 013 35 24 - (9) N 53 48 17 E 012 58 00 -  
(8) N 53 42 00 E 012 54 30 - (5) N 53 28 25 E 012 54 25 - (6) N 53 28 20 E 012 45 30 -  
(7) N 53 42 37 E 012 45 46 - (1) N 54 02 23 E 012 50 39.

## Appendix 2

### RECORD OF AMENDMENTS

AMD No.	DATE	PART	PAGE	add, delete or replace
1	September 27, 2007	Appendix 2	5	replace
		Annex E	E1	replace
2	April 10, 2008	Appendix 2	5	replcae
		Annex D	D1, D3	replace
		Annex E	E1	replace
3	March 12, 2009	Appendix 1	4	replace
		Appendix 2	5, 6	replace, add
		Annex A	A1, A4	replace, add
		Annex B	B1, B2	replace, add
		Annex C	C1, C4	replace, add
		Annex D	D1, D2, D4	replace, add
		Annex E	E1, E2	replace, add
4	April 8, 2010	Appendix 2	5	replace
		Annex G	G1, G2	replace
5	February 10, 2011	Appendix 2	5	replace
		Annex G	G1, G2	replace
6	March 10, 2011	Appendix 2	5	replace
		Annex G	E1	replace
7	September 22, 2011	Appendix 2	5	replace
		Annex A	A1, A3	replace
		Annex B	B1	replace
		Annex C	C1 – C3	replace
		Annex D	D1 – D3	replace
		Annex E	E1	replace
		Annex F	F1	replace
Annex G	G1, G2, G5	replace		
8	November 17, 2011	Appendix 2	5	replace
		Annex G	G1, G2	replace

**Page intentionally left blank.**



## Annex A.

### Definitions and Abbreviations.

Effective: June 07, 2007

Revised: September 22, 2011

#### **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 2 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 Division Level.**

The level dividing two super-imposed areas of responsibility for the provision of ATS.

##### **A.1.4 Approval Request.**

Request from an ATS unit to the ATS unit 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 pre-notification time, or
- an aircraft in flight intending to operate under conditions other than those described in mutually agreed procedures.
- a change of the coordinated flight level within 5 minutes of the ETO for the transfer of control point

##### **A.1.5 Expedite Clearance.**

An urgent clearance request from an ATS unit to the ATS unit concerned for an aircraft in flight whenever the flying time to the transfer of control point is less than the agreed minimum pre-notification time.

**A.1.6 Release.**

In any of the below listed cases of release of aircraft/formation of aircraft, the transferring ATS unit remains responsible for separation within its AoR unless otherwise agreed.

**A.1.6.1 Release for Climb.**

An authorization for the accepting ATS unit to climb (a) specific aircraft / formation of aircraft before the transfer of control.

**A.1.6.2 Release for Descent.**

An authorization for the accepting ATS unit to descend (a) specific aircraft / formation of aircraft before the transfer of control.

**A.1.6.3 Release for Turn.**

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

**1.7 General Air Traffic (GAT).**

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

**1.8 Operational Air Traffic (OAT).**

"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.2 Abbreviations

<b>ACC</b>	Area Control Centre	<b>IAF</b>	Initial Approach Fix
<b>ACI*</b>	Area of Common Interest	<b>ICAO</b>	International Civil Aviation Organization
<b>AFTN</b>	Aeronautical Fixed Telecommunication	<b>IFR</b>	Instrument Flight Rules
<b>AIP</b>	Aeronautical Information Publication	<b>KDAS</b>	Knots Displayed Air Speed
<b>AoR*</b>	Area of Responsibility	<b>KIAS</b>	Knots Indicated Air Speed
<b>ASR</b>	Aerodrome Surveillance Radar	<b>KHz</b>	Kilohertz
<b>ATC</b>	Air Traffic Control	<b>LoA*</b>	Letter of Agreement
<b>ATS</b>	Air Traffic Services	<b>MFC*</b>	Multi Frequency Coding (telephone system)
<b>AutoFüFmNLw*</b>	Automatisiertes Führungs- und Fernmeldenetz Luftwaffe	<b>MHz</b>	Megahertz
<b>BesAnMilIFS*</b>	Besondere Anweisung für die Militärische Flugsicherung	<b>MRZE*</b>	Center Bremen Mueritz Executive
<b>CA*</b>	Contingency Area	<b>MRZP*</b>	Center Bremen Mueritz Planner
<b>CCP*</b>	Contingency Contact Point	<b>MRZLB*</b>	Center Bremen Mueritz Low Executive
<b>COP*</b>	Coordination Point	<b>MRZLQ*</b>	Center Bremen Mueritz Low Planner
<b>CRC*</b>	Control and Reporting Center	<b>NM</b>	Nautical Mile
<b>CTR</b>	Control Zone	<b>OAT*</b>	Operational Air Traffic
<b>DL*</b>	Division Level	<b>PAR</b>	Precision Approach Radar
<b>EAT</b>	Expected Approach Time	<b>RTF</b>	Radio Telephony
<b>ETO</b>	Estimated Time Over Significant Point	<b>SSR</b>	Secondary Surveillance Radar
<b>ED-R*</b>	Restricted Area within Germany	<b>UHF</b>	Ultra High Frequ. (300-3000 MHz)
<b>FIR</b>	Flight Information Region	<b>VCS*</b>	Voice Communication System
<b>FIS</b>	Flight Information Service	<b>VFR</b>	Visual Flight Rules
<b>FSInfoSysBw*</b>	Flugsicherungsinformationssystem der Bundeswehr	<b>VHF</b>	Very High Frequency (30-300 MHz)
<b>GAT*</b>	General Air Traffic	<b>WWC1M*</b>	Center Bremen Supervisor ATC
		<b>WWC3I*</b>	Center Bremen FIS
		<b>WWC3S*</b>	Center Bremen TRAMON 206
		<b>WWC4A*</b>	Center Bremen Assistant 4

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

**Page intentionally left blank.**

## Annex B.

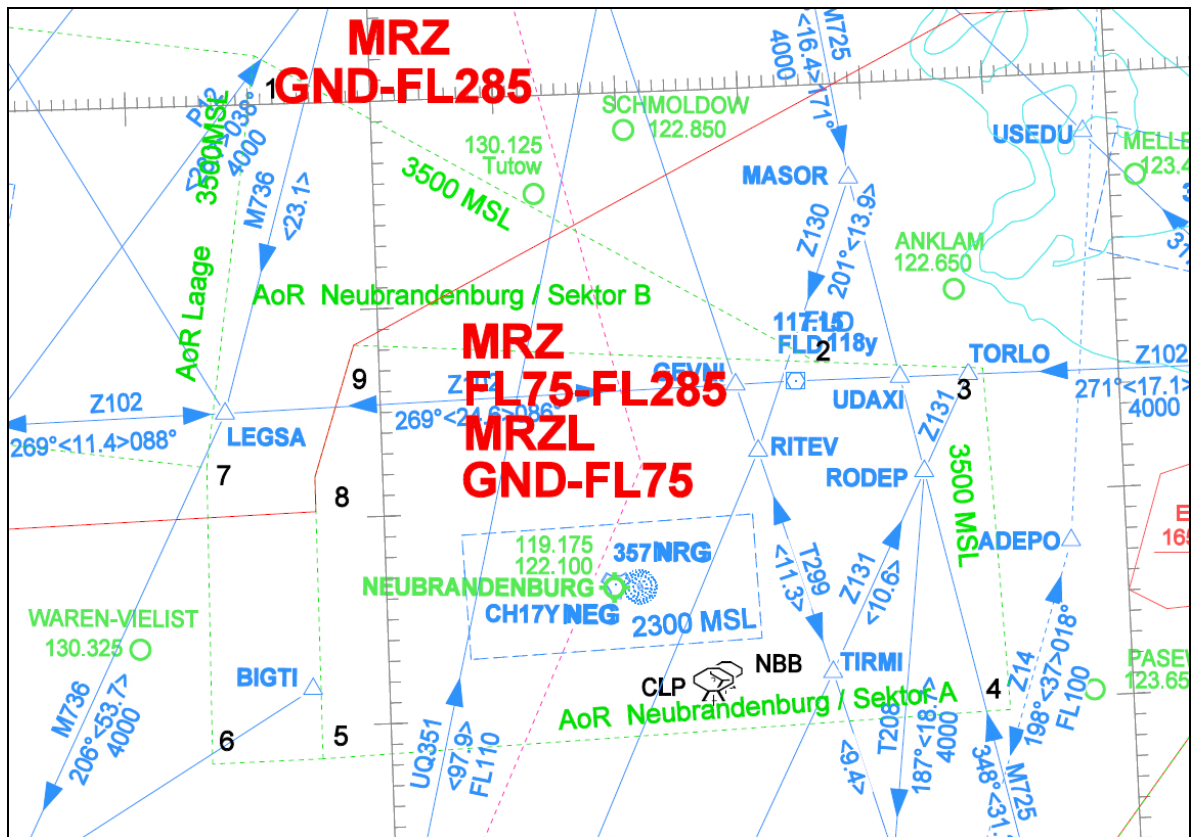
### Area of Common Interest.

Effective: June 07, 2007  
 Revised: September 22, 2011

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

Area	Vertical Limits	Airspace Classification
Bremen FIR	FL100 - FL245	C
	2500 ft GND - below FL100	E
	below 2500 ft GND	G
Neubrandenburg CTR	GND - 2300 ft MSL	D (HX)
Neubrandenburg AoR	1000/1700/2500 ft MSL - 3500 ft MSL	E
	below 1000/1700/2500 ft MSL	G

#### B.2 Sectorisation within ACI.



**Page intentionally left blank.**

## Annex C.

### Exchange of Flight Data.

Effective: June 07, 2007  
Revised: September 22, 2011

#### **C.1 General.**

##### **C.1.1 Basic Flight Plan Data.**

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

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

Messages, including current flight plan data, shall be forwarded by the transferring unit to the accepting unit by telephone to the appropriate sector/position.

##### **C.1.2.1 Verbal Estimates.**

A verbal estimate shall be passed to the appropriate unit/sector at least **10** minutes prior, but not earlier than 30 minutes before the aircraft is estimated to reach the coordination point, and shall contain:

- a) Callsign.
- b) Type of Aircraft.
- c) SSR code.
- d) ETO for the appropriate COP (e. g. NEG TACAN).
- e) Other information, if applicable.

##### **C.1.3 Non-availability of Basic Flight Plan Data**

If the accepting unit does not have basic flight plan data available, additional information may be requested from the transferring unit to supplement the verbal estimate.

#### C.1.4 Revisions.

Any significant revisions to the flight data shall be transmitted to the accepting unit.

Time differences of 5 minutes or more shall be exchanged.

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

#### C.2.1 Equipment.

The following lines are available between Bremen ACC and Neubrandenburg TWR/APP:

- 1 telephone line (MFC)

#### C.2.2 Telephone Coordination.

Any telephone communication shall be terminated with the initials of both parties concerned.

#### C.2.3 VCS Directory.

##### C.2.3.1 Bremen ACC.

Sector Designator	
Abbreviation	Extension
<b>MRZP</b>	<b>2037</b>
<b>MRZE</b>	<b>2027</b>
<b>MRZLQ</b>	<b>2038</b>
<b>MRZLB</b>	<b>2028</b>
<b>WWC4A</b>	<b>2127</b>
<b>WWC3I</b>	<b>2013</b>
<b>WWC3S</b>	<b>2029</b>
<b>WWC1M</b>	<b>2199</b>

Telefax: +49 421 535533

##### C.2.3.2 Neubrandenburg.

Receiving Unit	Extension
<b>TWR</b>	<b>5201</b>
<b>APP</b>	<b>5202</b>
<b>AIS</b>	<b>5207</b>



### **C.3 Failure of Ground/Ground Voice Communications.**

#### **C.3.1 Fall-Back Procedures for Coordination.**

In the event of failure of the direct lines between the coordinating partners, coordination may be effected via:

- Public telephone:

Bremen ACC	MRZP	0421 51499 80
	MRZE	0421 51499 79
	MRZLQ	0421 51499 52
	MRZLB	0421 51499 81
	WWC1M	0421 5372 120 0421 5963 489
Neubrandenburg	TWR	0395 463 2305/2302
	APP	0395 463 2311/2310

- AutoFüFmNLw:

Bremen ACC	WWC1M	6690 201
Neubrandenburg	TWR	6505 151
	APP	6505 152

### **C.4 Failure of FSInfoSysBw.**

In the event of failure of the FSInfoSysBw Neubrandenburg AIS shall pass domestic OAT flight plans to WWC4A verbally and via fax.

**Page intentionally left blank.**

## Annex D.

### Procedures for Coordination.

Effective: June 07, 2007

Revised: September 22, 2011

#### D.1 General Conditions.

D.1.1 Coordination of flights shall take place by reference to the IAF for the relevant approach procedure. Deviations have to be coordinated.

D.1.2 If not otherwise prescribed or agreed upon, Bremen ACC renounces:

- Transmission of departure times; provided that a take off is performed within 3 minutes after the release has been obtained.
- Transmission of landing times

D.1.3 Neubrandenburg TWR/APP shall inform Bremen ACC, sector MRZL, whenever starting or ceasing operations. When starting operations, Neubrandenburg TWR/APP shall state:

- Operational status of frequencies, radar- and navigational facilities.
- Weathercondition within CTR (IMC/VMC),
- Runway in use and status of aircraft arresting systems.

Changes to the conditions stated above during times of operations have to be reported to Bremen ACC.

In case of the AoR is deactivated:

- Missed approaches of IFR-flights.

D.1.4 Coordination shall take place between Bremen ACC, sector MRZL, and:

- Neubrandenburg APP when AoR is activated.
- Neubrandenburg TWR when AoR is deactivated.

## **D.2 Activation and Deactivation of Airspace.**

### **D.2.1 Neubrandenburg CTR (HX).**

D.2.1.1 Neubrandenburg TWR shall inform Bremen ACC, sector MRZL, with a prenotification time of at least 5 minutes about the activation of the CTR.

D.2.1.2 Neubrandenburg TWR shall inform Bremen ACC, sector MRZL, about the deactivation of the CTR.

### **D.2.2 Neubrandenburg AoR.**

D.2.2.1 Neubrandenburg APP shall inform Bremen ACC, sector MRZL, with a prenotification time of at least 5 minutes about the activation of Neubrandenburg AoR or parts of it.

Neubrandenburg AoR or parts of it may be activated only with functional ASR-equipment of Neubrandenburg.

Note: Activation may also take place if ATS is provided by licensed personnel of Neubrandenburg APP by using a working position at Center Bremen.

D.2.2.2 Neubrandenburg APP shall inform Bremen ACC, sector MRZL, about the deactivation of Neubrandenburg AoR or parts of it.

D.2.2.3 Sector B of the AoR Neubrandenburg should only be activated if the AoR Laage is activated.

## **D.3 Special Procedures.**

### **D.3.1 Arrivals.**

#### D.3.1.1 Approach clearances.

Clearances for Instrument Approach procedures shall be issued after coordination with Neubrandenburg TWR/APP.

#### D.3.1.2 Release.

Arrivals Neubrandenburg shall be released for turn and descent after transfer of communication.

### **D.3.2 Departures.**

For all IFR departures planned to enter the AoR of Bremen ACC a release shall be obtained from the appropriate sector.

#### D.3.2.1 ATC Clearances.

Bremen ACC will deliver enroute clearances in principle in short form (short clearance). A short clearance contains of:

- clearance limit
- first point of route
- Altitude/level will be stated with the release
- SSR code
- any other information, if applicable

#### D.3.2.2 NOPLAN clearance request (OAT-flights only).

In cases where a non planned IFR-Departure becomes necessary (e.g. due to change in weathersituation) a NOPLAN clearance request shall be initiated, provided that the flightorder states to comply with:

- a prescribed departure time, or
- a given time over target (TOT).

Neubrandenburg APP/TWR shall transmit with the request the following data:

- Callsign
- Number and type of aircraft
- Aerodrome of destination or target area
- Requested level
- first point of route

### **D.4 Coordination subject to Special VFR and VFR Night Flight.**

D.4.1 During activation of Neubrandenburg AoR coordination, transfer of control and transfer of communication VFR flights at night shall take place as for IFR flights.

D.4.2 During activation of Neubrandenburg CTR without activation of Neubrandenburg AoR, special VFR flights or VFR flights at night may be conducted without coordination with Bremen ACC under responsibility of Neubrandenburg TWR provided:

- the flights are limited to a max altitude of 2000 ft MSL and not entering airspace E,
- special VFR flights and IFR flights do not take place at the same time,
- VFR flights at night and IFR flights do not take place at the same time,
- if IFR flights to/from Neubrandenburg are expected, special VFR flights and VFR flights at night are subject of coordination, to ensure vertical or lateral separation.

For these flights no lateral distance to the CTR boundary applies.

Between special VFR flights, special VFR flights and IFR flights, VFR flights at night and IFR flights in controlled airspace, ETNU TWR may apply reduced separation with the consent of Bremen ACC.

### **D.5 Coordination subject to NLFS GE.**

D.5.1 Bremen ACC is responsible for monitoring flights conducted in the NLFS GE within Bremen AoR.

D.5.2 Coordination subject to NLFS GE, if applicable, shall be executed between Neubrandenburg APP and WWC3S Bremen ACC.

**Page intentionally left blank.**

## Annex E.

### Transfer of Control and Transfer of Communication.

Effective: June 07, 2007

Revised: September 22, 2011

#### E.1 Transfer of Control.

E.1.1 The transfer of control takes place at the common boundary line of responsibility.

E.1.2 In case the Neubrandenburg AoR is not active transfer of control takes place between Bremen ACC and Neubrandenburg TWR on:

- Arrivals
  - when entering Neubrandenburg CTR.
- Departures
  - in VMC when leaving Neubrandenburg CTR,
  - in IMC immediately after take off.

#### E.2 Transfer of Communication.

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

If a radio call of a VFR flight is received by an ATS unit which may not be responsible, the VFR flight will be recommended to establish radio contact with the ATS unit responsible if and when technical and other conditions permit.

#### E.2.2 Frequencies.

##### E.2.2.1 Bremen ACC.

	VHF	UHF
Müritz Low:	134.650 MHz	373.975 MHz
Müritz:	124.175 MHz	259.825 MHz
WWC3I	132.650 MHz	299.775 MHz

##### E.2.2.2 Neubrandenburg APP.

	VHF	UHF
Radar	134.425 MHz	358.750 MHz
Precision		242.000_MHz

##### E.2.2.3 Neubrandenburg TWR.

	VHF	UHF
	119.175 MHz	369.350 MHz
	122.100 MHz	

**Page intentionally left blank.**



## Annex F.

### Radar Based Coordination Procedures.

Effective: June 07, 2007

Revised: September 22, 2011

#### **F.1 SSR Code Assignment.**

F.1.1 Both parties shall transfer aircraft on verified discrete SSR codes.

F.1.2 Any change of SSR code by the accepting unit shall only be initiated after the transfer of control point.

An observed SSR code change caused by Neubrandenburg APP indicates that ground-air communication is established.

F.1.3 The accepting unit shall be notified of any observed irregularity in the operation of SSR transponders.

#### **F.2 Radar Coordination Procedures.**

##### **F.2.1 General**

F.2.1.1 Transfer of radar identification and transfer of radar control between Bremen ACC and Neubrandenburg APP shall be subject to the serviceability of the respective radar systems and two-way direct speech facilities between the positions concerned.

F.2.1.2 If it becomes necessary to reduce or suspend radar transfers, a 5 minutes prior notification shall be observed except in emergency situations.

F.2.1.4 Vectoring may take place without coordination between the units, provided the following minimum distances to the common AoR boundary are observed:

F.2.1.4.1 During activation of Neubrandenburg AoR:

By Bremen ACC: lateral 5 NM / vertical 500 ft.

By Neubrandenburg APP: no lateral / vertical 500 ft.

Note: Neubrandenburg APP shall provide a minimum distance of 2,5 NM to the Laage AoR.

If the Neubrandenburg AoR is delegated higher than 3500 ft MSL, above 3500 ft MSL for both parties the following minimum distances to the AoR boundary shall apply:

lateral 2.5 NM / vertical 500 ft

F.2.1.4.2 During activation of Neubrandenburg CTR without activation of Neubrandenburg AoR:

By Bremen ACC: lateral 5 NM / vertical 700 ft.

Note: The procedures for Neubrandenburg TWR are described under D.4.2.

## F.2.2 **Transfer of Radar Control.**

Transfer of radar control may be effected after prior coordination provided the minimum distance between the aircraft does not fall below **5** NM.

## F.2.3 **Silent Transfer of Radar Control.**

Transfer of radar control may be effected without prior verbal coordination provided the minimum distance between successive aircraft about to be transferred is **15** NM and remains constant or is increasing.

## Annex G.

### Supplementary Procedures.

Effective: June 07, 2007  
 Revised: [November 17, 2011](#)

#### **G.1 Air Traffic Flow Management Procedures.**

##### **G.1.1 General.**

In principle OAT is not subject to flow control measures. Local arrangements could be applied - for short periods of time only - to relieve emergency situations, e.g. system failure, until the problem has been resolved.

#### **G.2 Contingency Plan for Bremen ACC.**

In case of contingency the regulations of this chapter take precedence over the respective provisions of Annexes B to F to this LoA.

##### **G.2.1 Contingency Phase 0.**

When the Operations of Bremen ACC have ceased and its AoR is clear of controlled traffic, the Supervisor Bremen ACC shall declare contingency phase 0 for Bremen ACC.

From this time on

- the AoR of Bremen ACC shall be called the CA until full serviceability of Bremen ACC is recovered,
- the CA is a No-Fly-Zone, entry is prohibited until contingency phase 2 is activated.

##### **G.2.1.1 Emergency Operations Staff Bremen ACC – Communications.**

Supervisor ATC	+49 421 5963 489
	+49 173 3401 129

##### **G.2.2 Contingency Phase 2.**

In contingency phase 2 Bremen ACC re-establishes the provision of ATS within its AoR by opening contingency sectors at aiding units.

##### **G.2.2.1 Activation / Deactivation.**

Bremen chief of CCP shall inform the Neubrandenburg TWR/APP about the activation and deactivation of the contingency sectors

##### **G.2.2.2 ATFM Procedures.**

Necessary ATFM-measures to be applied during contingency phase 2 will be initiated by the Supervisor Bremen ACC.

##### **G.2.2.3 Exchange of Flight Data.**

G.2.2.3.1 Basic flight plan data are available at the contingency working positions only to some extent.

G.2.2.4 Control Procedures.

G.2.2.4.1 General.

Deviations from published ATS-routes shall be coordinated only to prevent dangerous situations or in case of emergencies.

G.2.2.4.2 Separation minima between succeeding aircraft on transfer

- with verbal coordination 15 NM constant or increasing.
- without verbal coordination three minutes, but not less than 20 NM, constant or increasing.

G.2.2.5 Contingency sectors and communications.

<b>Bremen ACC Contingency sectors (Aiding Unit) Combined sectors</b>	<b>Type of message</b>	<b>Position</b>	<b>Communications</b>
<b>CBE1</b> (CRC Schönevalde)	Control Messages, Expedite Clearances, Approval Requests, Revisions, Passing Estimates	Planner CBE1P	MFC: 34 7693 Public network: +49 35389 8633 798
MRZ, MRZL,...	Radar Coordination	Executive CBE1E	MFC: 34 7694 Public network: via Planner <b>Frequencies:</b> <b>VHF 134.650 / UHF 373.975</b>
	Flight Plan Data and Receiving Estimates	Assistant CBEBA	MFC: 34 7695 Public network: +49 35389 8633 797

Note: Bremen ACC contingency working positions will call Neubrandenburg TWR/APP on the extensions agreed in this LoA.

**G.3 Vertical Dispersal (VD) Holding Pattern ETNU.**

**G.3.1 General.**

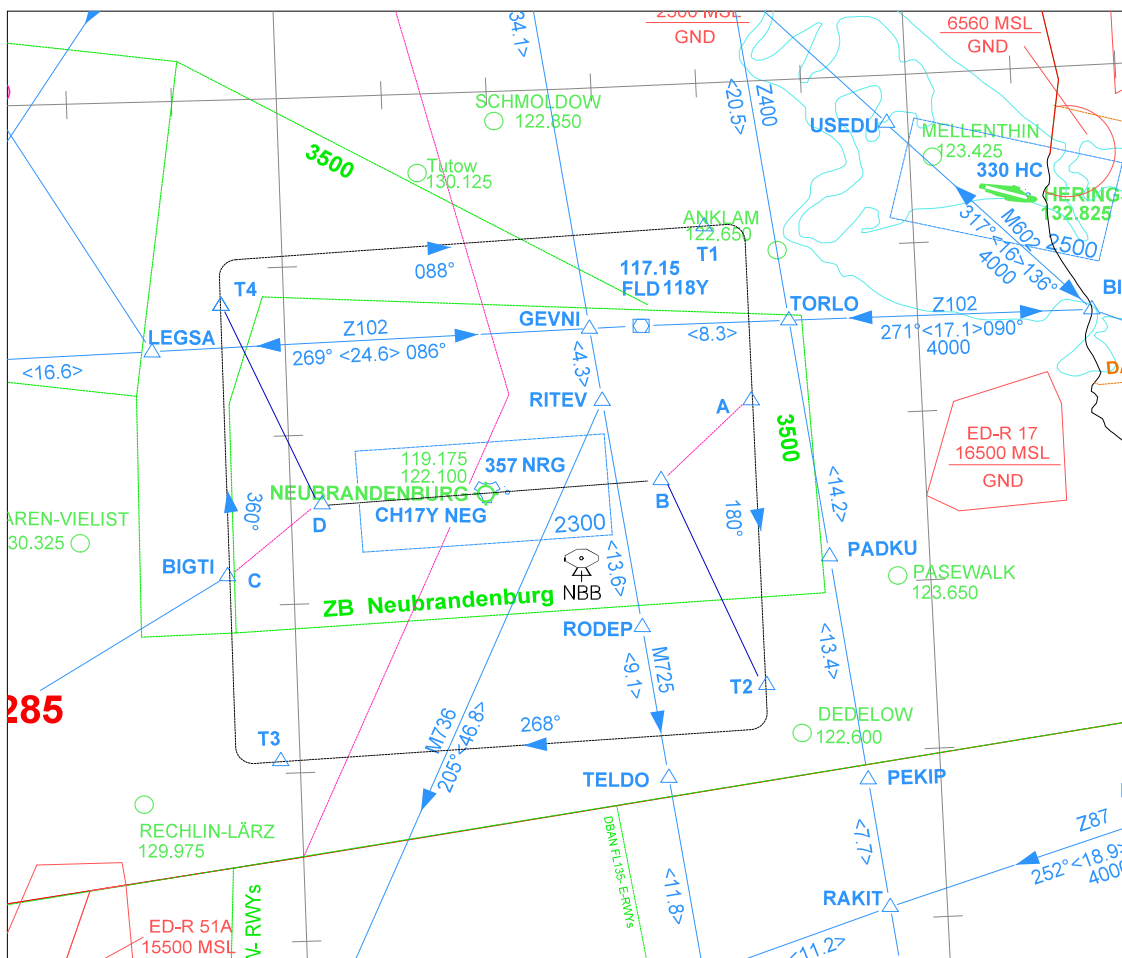
G.3.1.1 For review reasons (TACEVAL/OPEVAL), NATO or GAF may transfer squadrons/ wings or parts there of to Neubrandenburg.

G.3.1.2 One review point is the evacuation of aircraft into a so called vertical dispersal holding pattern. Upon activation of the pattern Neubrandenburg APP shall request the additional airspace from Bremen ACC. As a rule within the pattern the altitudes 4000 ft MSL and 5000 ft MSL will be needed. On request of Neubrandenburg APP the AoR will be delegated up to 4500 ft MSL or 5500 ft.

The pattern may also be used on request for holding reasons within a recovery phase.

**G.3.2 Procedure.**

**G.3.2.1 Pattern figure.**



**G.3.2.2 Description of pattern.**

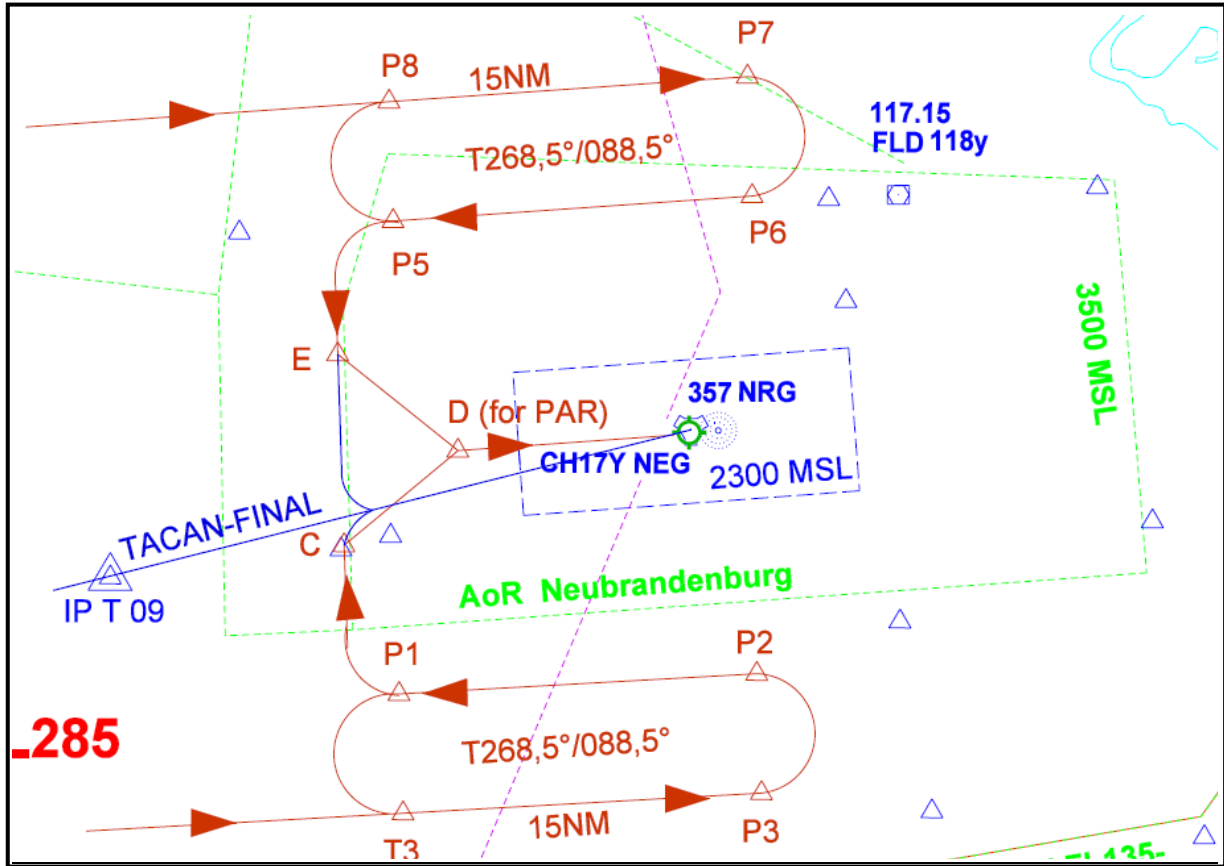
- Turning points are marked T1 – T4.
- Entry and exit points are marked A, B, C and D (E.g. RWY 27: DEP via OID – D – T4 pattern entry).

	WGS 84	
T1	53° 51,5' N	13° 39,5' E
T2	53° 24,1' N	13° 44,0' E
T3	53° 20,7' N	12° 57,5' E
T4	53° 48,0' N	12° 54,0' E
A	53° 40,0' N	13° 44,0' E
B	53° 36,5' N	13° 34,0' E
C	53° 32,0' N	12° 54,0' E
D	53° 35,8' N	13° 02,2' E

- Unity speeds shall be committed (e.g. 250 kts).
- Compulsory reporting points are T1 (RWY 27) or T3 (RWY 09).
- Aircraft follow the pattern by own navigation, separation and altitude is provided by Neubrandenburg APP

G.3.2.3 Holding Procedure RWY 09.

If necessary arrivals RWY 09 will enter holding via point T3 (holding south) or point P8 (holding north) at or above 4000 ft or cleared by ATC. If approach is possible aircraft will proceed via C / E at or above 3500 ft to intercept TACAN final or via C / E and D for PAR approach.



WGS 84		
P1	53° 25,7' N	12° 57,5' E
P2	53° 26,0' N	13° 22,5' E
P3	53° 21,0' N	13° 22,5' E
P5	53° 45,5' N	12° 58,2' E
P6	53° 46,0' N	13° 23,5' E
P7	53° 51,0' N	13° 23,5' E
P8	53° 50,5' N	12° 58,2' E
E	53°40,0' N	12°54,0' E

G.3.2.4 Departures.

In case the holding is necessary for single departures for join up later or other reasons the following clearances will delivered:

DEP 27: climb OID 127, proceed with LT / RT to P1 / P5, continue climb *Altitude by Bremen ACC* and continue within the holding

DEP 09: climb OID 109, proceed with RT / LT to P2 / P6, continue climb *Altitude by Bremen ACC* and continue within the holding

#### G.3.2.5 Separation and SSR Code management.

A radar separation of at least 5 NM between aircraft elements has to be established and maintained, to ensure an immediate transfer from Neubrandenburg APP to Bremen ACC in case of a sudden outage of Neubrandenburg ASR.

Due to restricted SSR-code availability at Neubrandenburg APP, SSR code management in the VD Holding is as follows:

- a/c at 5000 ft: 1<sup>st</sup> a/c squawk A 7055, following a/c squawk 7056
- a/c at 4000 ft: 1<sup>st</sup> a/c squawk A 7053, following a/c squawk 7054

### **G.4 Special Procedures for Aircraft operating at Neubrandenburg.**

#### G.4.1 **Radio Lost Com Procedure within Radar Pattern.**

##### G.4.1.1 In VMC.

Maintain VMC and contact Neubrandenburg TWR

##### G.4.1.2 In IMC.

###### G.4.1.2.1 Aircraft with TACAN - equipment, NEG TACAN serviceable.

Proceed inbound NEG TACAN, climb altitude 3000 ft and try to contact Neubrandenburg TWR. If negative contact cleared for an ARC10 approach north of the Aerodrome for the runway in use.

If holding is required (i.e. heavy fuel weight) try to contact Bremen Radar and proceed to the published holding and climb FL70 until commencing TACAN Approach.

###### G.4.1.2.2 Aircraft with TACAN - equipment, NEG TACAN unserviceable.

Try to contact Bremen Radar, if unsuccessful divert to the alternate aerodrome.

###### G.4.1.2.3 Aircraft without TACAN - equipment, NRG NDB serviceable.

Proceed inbound NRG NDB, climb altitude 3000 ft and try to contact Neubrandenburg TWR. If negative contact cleared for NDB-DME approach for the runway in use.

If holding is required (i.e. heavy fuel weight) try to contact Bremen Radar and proceed to the published holding and climb altitude 5000 ft until commencing NDB-DME approach.

###### G.4.1.2.2 Aircraft without TACAN - equipment, NRG NDB unserviceable.

Try to contact Bremen Radar, if unsuccessful divert to the alternate aerodrome.

#### G.4.2 **Bail Out.**

##### G.4.2.1 Procedure Ostsee.

Radar guidance to position R 360 LAG TACAN 25 DME. Upon reaching this position the pilot will leave the aircraft at a minimum altitude of 2000 ft ASL and speed is set to 180 - 230 KIAS/KDAS.

**END**