

AO.001.FLAS

**Flight Level Allocation Scheme
and
Standing Agreements**

**concerning ACC, APP and TWR(APP) sectors within
Bucureşti (LRBB) FIR**

Change Log

Date	Author	Description
01.04.2020	335177	Initial publication

Table of Contents

CHANGE LOG	2
TABLE OF CONTENTS	3
0. INTRODUCTION	4
0.1. PURPOSE.....	4
0.2. AUDIENCE.....	4
0.3. WHERE TO FIND THIS DOCUMENT	4
0.4. ABBREVIATIONS.....	4
0.5. GENERAL AGREEMENTS.....	5
0.6. SPECIAL NOTES	5
1. INTERNAL ARRIVALS.....	6
2. INTERNAL DEPARTURES	9
3. LETTER OF AGREEMENT WITH BUDAPEST (LHCC) ACC	11
3.1. SPECIAL AGREEMENTS	11
3.2. FLIGHTS LEAVING TO LHCC	11
3.3. FLIGHTS ENTERING FROM LHCC	12
4. LETTER OF AGREEMENT WITH BEOGRAD (LYBA) ACC.....	13
4.1. SPECIAL AGREEMENTS	13
4.2. FLIGHTS LEAVING TO LYBA	13
4.3. FLIGHTS ENTERING FROM LYBA	13
5. LETTER OF AGREEMENT WITH SOFIA (LBSR) ACC	14
5.1. SPECIAL AGREEMENTS	14
5.2. DELEGATED AIRSPACE	14
5.3. FLIGHTS LEAVING TO LBSR	15
5.4. FLIGHTS ENTERING FROM LBSR	15
6. LETTER OF AGREEMENT WITH CHIȘINĂU (LUUU) ACC.....	16
6.1. SPECIAL AGREEMENTS	16
6.2. FLIGHTS LEAVING TO LUUU	16
6.3. FLIGHTS ENTERING FROM LUUU	16
7. LETTER OF AGREEMENT WITH ODESSA (UKOV) ACC	17
7.1. SPECIAL AGREEMENTS	17
7.2. FLIGHTS LEAVING TO UKOV	17
7.3. FLIGHTS ENTERING FROM UKOV	17
8. LETTER OF AGREEMENT WITH LVIV (UKLV) ACC.....	18
8.1. SPECIAL AGREEMENTS	18
8.2. FLIGHTS LEAVING TO UKLV	18
8.3. FLIGHTS ENTERING FROM UKLV	18

0. Introduction

0.1. Purpose

The purpose of this document is:

- to familiarize virtual air traffic controllers working on approach and area control positions with the local standing agreements and standard practices concerning the transfer of traffic to/from their adjacent positions;
- to ensure a well-regulated but also expeditious flow of traffic by avoiding possible conflicts as well as negative operational impact caused by level-offs, steep descents, and indirect routings;
- to reduce the frequency and complexity of coordination dialogues between adjacent positions;
- to keep the virtual environment on IVAO as close to reality as possible.

0.2. Audience

This document is aimed at all members rated AS3 and higher providing approach and area control on positions within București (LRBB) FIR. As this is a consolidated list of agreements, not all sections will be relevant for all positions, so a selective reading is encouraged.

Internalizing the structure of this document and learning how to find the required information quickly is strongly encouraged, especially in preparation for the IVAO Approach Controller (APC) and Area Controller (ACC) practical exams.

0.3. Where to Find This Document

This document shall be published solely on the official website of the Romanian division (i.e. <https://ro.ivao.aero>) and on the division Discord server.

The document will be updated as required to comply with changes in real-life procedures. Upon publication of an updated version, a circular will be issued to all members, informing them of the update.

0.4. Abbreviations

- ACC – Area Control Centre
- ADEP – Departure aerodrome
- ADES – Destination aerodrome
- CFL – Cleared flight level
- COP – Coordination Point
- FIR – Flight Information Region
- FRA – Free Route Airspace
- From Unit – Upstream sector initiating the transfer
- NIL – Nothing (empty section)
- To Unit – Downstream sector accepting the transfer
- RFL – Requested flight level from the flight plan
- RWY – Runway
- “+” – At or above flight level preceding the symbol
- “-” – At or below flight level preceding the symbol

0.5. General Agreements

- *Transfer of communication* shall be initiated latest 10 NM (horizontally) or 2000ft (vertically) before the aircraft reaches the sector boundary.
- The upstream controller shall ensure that the aircraft is clear of any potential conflict and will achieve the required conditions before initiating transfer of communication.
- The upstream controller shall remain responsible for separation until *transfer of control* occurs.
- Transfer of control shall occur at the sector boundary, when an aircraft leaves the upstream sector and enters the downstream sector. The downstream sector shall NOT change the lateral or vertical clearance of the aircraft until transfer of control occurs.
- Transfer of control can take place earlier if the upstream controller issues a *release* for climb/descent, turn, or both. A release shall also occur automatically at a certain point if specified in this document.
- The *Condition* column indicates if the aircraft shall reach the CFL before the sector boundary ("At level") or if the aircraft may still descend or climb to the CFL when passing the sector boundary ("Descending" / "Climbing").
- If the RFL is lower than the CFL required in an agreement, the aircraft shall be transferred at the RFL, provided this does not cause a conflict and airspace structure as well as terrain clearance is considered. If those requirements are not fulfilled, traffic shall be coordinated.
- All aircraft shall be routed via a valid COP, apart from special agreements mentioned in this document allowing direct routings.
- The minimum horizontal separation shall be 10 NM if preceding aircraft is faster, 15 NM otherwise.
- If any condition from this agreement cannot be met or if a situation that is not covered in this document arises, each concerned aircraft shall be coordinated individually.

0.6. Special Notes

- Note **A** – CFL is below FL105 or aircraft may not climb above FL105 before exiting CTR/TMA. In order to keep the aircraft inside controlled airspace and to ensure terrain clearance, it shall remain within the limits of a suitable lower airway. Be careful when issuing shortcuts!
- Note **SR** – Aircraft shall be cleared on the applicable RNAV STAR by the upstream controller. Exception: For traffic to LROP via TOSVI when RWY 26L/R is in use, the STAR (TOSVI3X or 1R) shall be coordinated with LROP_APP.
- Note **SC** – Aircraft shall be cleared on the applicable conventional STAR by the upstream controller.
- Note **◀▶** – Released for turn
- Note **▲** – Released for climb; Note **▼** – Released for descent

1. Internal Arrivals

From Unit	ADES	COP	CFL	Condition	Remark	To Unit
LRBB_CTR	LROP	TOSVI/ SORDU	110	At level	RWY 08L/R in use, SR , ◀▶	LROP_APP
		DENAK	150▼	At level	RWY 08L/R in use, SR , ◀▶	
		NETUL/ IDARU	170▼	At level	RWY 08L/R in use, SR , ◀▶	
		TOSVI/ SORDU	170▼	At level	RWY 26L/R in use, SR , ◀▶	
		DENAK/ NETUL/ IDARU	110	At level	RWY 26L/R in use, SR , ◀▶	
	LRBS	ABRUT/ SORDU	110	At level	RWY 07 in use, SR , ◀▶	
		DENAK/ NETUL/ IDARU	170▼	At level	RWY 07 in use, SR , ◀▶	
		ABRUT/ SORDU	170▼	At level	RWY 25 in use, SR , ◀▶	
DENAK/ NETUL/ IDARU		110	At level	RWY 25 in use, SR , ◀▶		
LRBB_CTR	LRTR	NEKUL/ VASIS	170▼	At level	SR , ◀▶	LRAR_APP
	LRAR	NEKUL/ VASIS	170▼	At level	SR , ◀▶	
LRBB_CTR	LRCK	DIRAL/ DENUB	170▼	At level	SC , ◀▶	LRCK_APP
		RIVOS/ NURPO/ PILAT/ CETUL	170▼	At level	RWY 36 in use, SC , ◀▶	
		RIVOS/ NURPO/ PILAT	110	At level	RWY 18 in use, SC , ◀▶	
		CETUL	060	At level	RWY 18 in use, A, SC	

IVAO ROMANIA ATC OPERATIONS DEPARTMENT

AO.001.FLAS

Version 1.0

April 1, 2020

Page 7

From Unit	ADES	COP	CFL	Condition	Remark	To Unit	
LRBB_CTR	LRCL	DOKUD	170▼	At level	SR, ◀▶	LRCL_(N)_APP	
		LARMU	110	At level	SR, ◀▶		
		AKUPO	170▼	At level	RWY 07 in use, SR, ◀▶		
		ATSOS	110	At level	RWY 07 in use, SR, ◀▶		
		AKUPO	110	At level	RWY 25 in use, SR, ◀▶		
		ATSOS	170▼	At level	RWY 25 in use, SR, ◀▶		
		EDETA	170▼	At level	SR, ◀▶		LRCL_(S)_APP
	LRTM	IBINU/ EDETA/ MOBRA	170▼	At level	SR, ◀▶	LRCL_(S)_APP	
		AKUPO/ LARMU/ ATSOS	170▼	At level	SR, ◀▶	LRCL_(N)_APP	
		DOKUD	110	At level	RWY 07 in use, SR, ◀▶		
		DOKUD	100	At level	RWY 25 in use, A, SR		
	LRSB	DOKUD/ AKUPO	170▼	At level	SR, ◀▶	LRCL_(N)_APP	
		IBINU	110	At level	RWY 09 in use, SR, ◀▶	LRCL_(S)_APP	
		EDETA	170▼	At level	RWY 09 in use, SR, ◀▶		
		MOBRA	170▼	At level	RWY 09 in use, SR, ◀▶		
		IBINU	170▼	At level	RWY 27 in use, SR, ◀▶		
		EDETA	110	At level	RWY 27 in use, SR, ◀▶		
		MOBRA	110	At level	RWY 27 in use, SR, ◀▶		
	LRBB_CTR	LRCV	TITEK/ PEMOK	050	At level		A
			PANZU	060▼	At level	Cross PANZU at FL60, A	

IVAO ROMANIA ATC OPERATIONS DEPARTMENT

AO.001.FLAS

Version 1.0

April 1, 2020

Page 8

From Unit	ADES	COP	CFL	Condition	Remark	To Unit
LRBB_CTR	LROD	BAVMA	110 ▼	At level	Via N133 ORA, cross RULES at FL110	LROD_TWR
		RUPUG	100 ▼	At level	Via Y559 ORA, cross RULES at FL100, A	
		RULES	080 ▼	At level	Via Z650 RULES M423 ORA, cross RULES at FL80, A	
		TUVNU	060 ▼	At level	Cross TUVNU at FL60, A	
		RULES	060 ▼	At level	Via M423, cross RULES at FL60, A	
LRBB_CTR	LRSM	TISAD/SOMET	050	At level	A	LRSM_TWR
LRBB_CTR/ LRCL_(N)_APP		JIBOU	060 ▼	At level	Cross JIBOU at FL60, A	
LRBB_CTR/ LRCL_(N)_APP	LRBM	TAFRO	050	At level	A	LRBM_TWR
LRBB_CTR		UBASA	060 ▼	At level	Cross UBASA at FL60, A	
		GUNKA/SAT	050	At level	A	
LRBB_CTR	LRSV	HUMOR	100 ▼	At level	Cross HUMOR at FL100, A	LRSV_TWR
		PASKA	060	At level	A	
		TOMUK	040	At level	A	
LRBB_CTR	LRIA	ABOLO	050	At level	A	LRIA_TWR
		ARPIG/LESVO	040	At level	A	
LRBB_CTR	LRBC	ANTAL/KENUX	060	At level	A , SC	LRBC_TWR
		REDKU/MIRON/TULNU	050	At level	A , SC	
		MOLID	060	Descending	Cross MOLID at FL70, A , SC	
LRBB_CTR	LRTC	DUNAV	060	At level	A	LRTC_TWR
LRBB_CTR/ LRCK_APP		DANUL/TURIR	060	At level	A	

2. Internal Departures

From Unit	ADEP	COP	CFL	Condition	Remark	To Unit
LROP_APP	LROP/ LRBS	SOKRU/ BUKEL/ DENAK/ NETUL/ IDARU/ POLUN	280▲	Climbing	Cross NETUL/IDARU at FL60+, SOKRU/BUKEL/ DENAK at FL110+, POLUN at FL90+ (Y88) or FL100+ (N181) or FL110+ (L852), ◀▶	LRBB_CTR
LRAR_APP	LRTR/ LRAR	NOPTI/ DITAX	280▲	Climbing	Cross NOPTI at FL90+, DITAX at FL110+, ◀▶	LRBB_CTR
LRCK_APP	LRCK	DIRAL/ RIVOS/ PILAT/ LEMPA/ CETUL/ MOBLU/ DENUB	280▲	Climbing	Cross RIVOS/CETUL at FL60+, PILAT at FL70+, DENUB at FL100+, LEMPA at FL110+, MOBLU at FL120+, ◀▶	LRBB_CTR
LRCL_(N)_APP	LRCL/ LRTM	ELROM/ LARMU/ AKUPO/ DOKUD/ IRLOX	280▲	Climbing	Cross ELROM/IRLOX at FL110+, LARMU/AKUPO/ DOKUD at FL100+, ◀▶	LRBB_CTR
LRCL_(S)_APP	LRSB	ULMIN/ DOKUD/ IRLOX	280▲	Climbing	Cross ULMIN/IRLOX at FL110+, DOKUD at FL100+, ◀▶	LRBB_CTR
LRCV_TWR	LRCV	LELTI/ BACAM/ PEMOK/ TITEK	110▲	Climbing	Cross LELTI/BACAM at FL60+, PEMOK at FL50+, A	LRBB_CTR
LROD_TWR	LROD	TUVNU/ BAVMA/ RUPUG/ RULES	110▲	Climbing	Cross TUVNU at FL60+, RULES at FL60+ (M423) or FL80+ (Z650), RUPUG at FL100+, BAVMA at FL110+, A	LRBB_CTR

IVAO ROMANIA ATC OPERATIONS DEPARTMENT

AO.001.FLAS

Version 1.0

April 1, 2020

Page 10

From Unit	ADEP	COP	CFL	Condition	Remark	To Unit
LRSM_TWR	LRSM	TISAD/ JIBOU/ SOMET	110▲	Climbing	Cross TISAD/SOMET at FL50+, JIBOU at FL60+, A	LRBB_CTR
LRBM_TWR	LRBM	GUNKA/ UBASA/ TAFRO/ SOMET	110▲	Climbing	Cross GUNKA/TAFRO/ SOMET at FL50+, UBASA at FL60+, A	LRBB_CTR
LRSV_TWR	LRSV	HUMOR/ PASKA/ TOMUC	110▲	Climbing	Cross HUMOR at FL100+, PASKA at FL60+, TOMUC at FL40+, A	LRBB_CTR
LRIA_TWR	LRIA	ARPIG/ ABOLO	110▲	Climbing	Cross ARPIG at FL40+, ABOLO at FL50+, A	LRBB_CTR
LRBC_TWR	LRBC	ANTAL/ MIRON/ MOLID/ TULNU/ KENUX/ APTAN/ REDKU/ INBID	110▲	Climbing	Cross REDKU/MIRON/ TULNU at FL50+, ANTAL/KENUX at FL60+, MOLID at FL70+, APTAN/INBID at FL110+, A	LRBB_CTR
LRTC_TWR	LRTC	DUNAV/ REBDI/ DANUL/ TURIR/ LOBKI	110▲	Climbing	Cross DUNAV/REBDI/ DANUL/TURIR/ LOBKI at FL60+, A	LRBB_CTR

3. Letter of Agreement with Budapest (LHCC) ACC

3.1. Special Agreements

- Cross-border Free Route Airspace (FRA) in force above FL105 (București FIR) / above 9500ft (Budapest FIR). ATC units may clear aircraft to the exit points of București ACC / Budapest ACC without prior coordination.
- Arrivals within LRBB FIR and LHCC FIR may be cleared to the TMA entry / STAR starting points, with the following exceptions:
 - LOWW and LZIB arrivals shall only be cleared to TORNO,
 - LROP arrivals via TOSVI and LRBS arrivals via ABRUT shall only be cleared to LAMIT.
 - Arrivals to LRCV/LRBM/LRSV/LRIA/LRBC/LRTC shall be exempted from this agreement and shall only be cleared to the exit point of Budapest ACC.
- Cases when direct routings would cause re-entries into other sectors shall be avoided (direct routing affecting Beograd ACC and L'viv ACC).

3.2. Flights Leaving to LHCC

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LRAR_APP	LRTR/ LRAR	All	MOPUG	260	Climbing	Cross MOPUG at 10000ft+	LHCC_CTR
LROD_TWR	LROD	All	NARKA	120	Climbing	Cross NARKA at 10000ft+	
LRSM_TWR	LRSM	All	KARIL	120	Climbing	Cross KARIL at 10000ft+	
LRBB_CTR	LRBM	All	KARIL	120	Climbing	Cross KARIL at 10000ft+	
	LRCL	All	KARIL/ NARKA/ BUDOP/ DEGET	320	Climbing	Cross KARIL/ NARKA/BUDOP/ DEGET at FL290+	
LRBB_CTR	All	LHBP	KARIL/ NARKA/ BUDOP/ DEGET/ MOPUG	320 ▼	At level		LHCC_CTR
	All	LHDC	NARKA	120 ▼	At level		
	All	LZKZ/ LZTT	NARKA	280 ▼	At level		
	All	LZKZ/ LZTT	KARIL	240 ▼	At level		
	All	LZIB	KARIL/ NARKA/ BUDOP/ DEGET/ MOPUG	360	At level		
	All	LOWW	KARIL/ NARKA/ BUDOP/ DEGET/ MOPUG	360	At level		

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LRBB_CTR	All	LDZA	MOPUG	360	At level		LHCC_CTR
	All	EPKK/ EPKT	KARIL	360	At level		

3.3. Flights Entering from LHCC

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LHCC_CTR	LHBP	LROP/ LRBS	INVED	330	Climbing		LRBB_CTR
LHCC_CTR	All	LRTR/ LRAR	TEGRI	130▼	At level		LRBB_CTR
	All	LROD	BADOR/ BUDOP	130▼	At level		
	All	LRSM/ LRBM	KARIL/ BADOR/ NARKA	130▼	At level		
	All	LRCL	KARIL/ BADOR/ NARKA/ BUDOP	270▼	At level		
	All	LRTM	KARIL/ BADOR/ NARKA/ BUDOP	330▼	At level		
	All	LRSB	TEGRI/ NARKA	350	At level		

4. Letter of Agreement with Beograd (LYBA) ACC

4.1. Special Agreements

NIL

4.2. Flights Leaving to LYBA

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LRAR_APP	LRTR/ LRAR	All	MAVIT	160	Climbing		LYBA_CTR
LRBB_CTR	LROP/ LRBS	All	ANASA	340	At level		
	LRCV	All	ANASA	320	Climbing		
LRBB_CTR	All	LYBE	DIRER	200▼	At level		LYBE_APP
			ANASA	280▼	At level		
	All	LQ**	DIRER/ ANASA	360	At level		LYBA_CTR

4.3. Flights Entering from LYBA

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LYBE_APP	LYBE	All	MAVIT/ VELIP	270	Climbing		LRBB_CTR
LYBA_CTR	All	LRTR/ LRAR	MAVIT	170▼	At level		LRBB_CTR
			ROMUX	130▼	At level		
	All	LRCV	VELIP	330▼	At level		

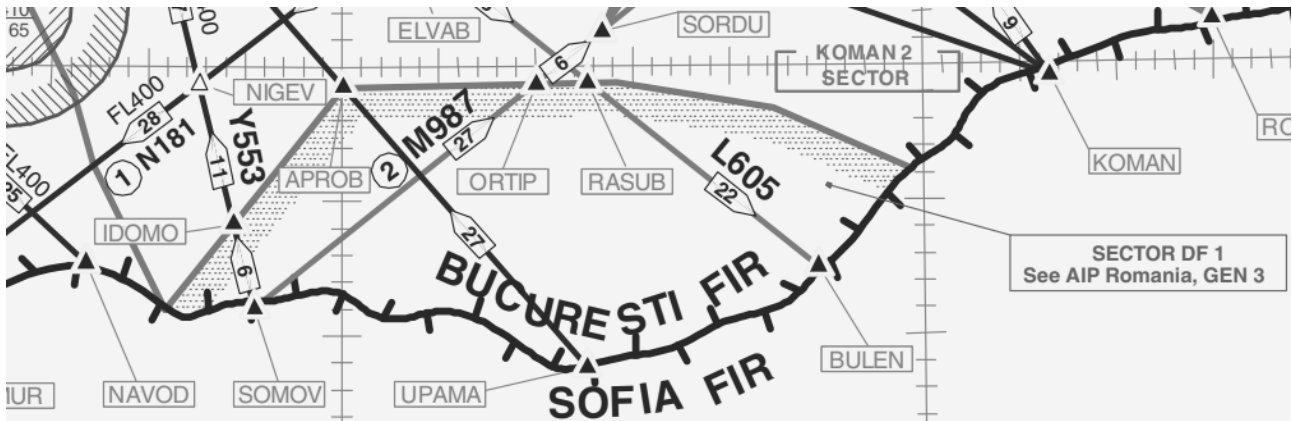
5. Letter of Agreement with Sofia (LBSR) ACC

5.1. Special Agreements

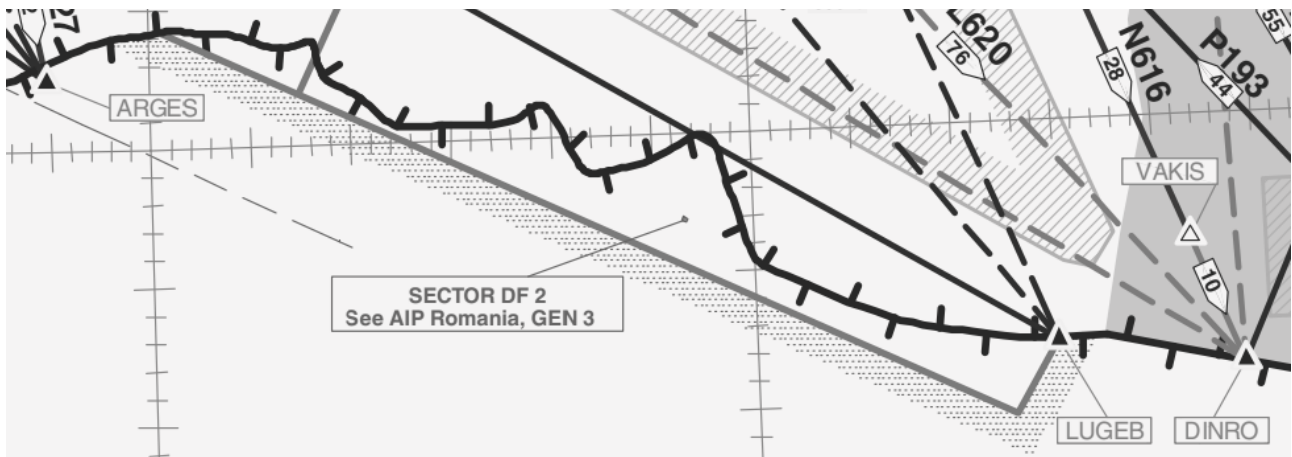
- Cross-border Free Route Airspace (FRA) in force above FL105 (București FIR) / above FL175 (Sofia FIR). ATC units may clear aircraft to the exit points of București ACC / Sofia ACC without prior coordination.
- Arrivals to LROP/LRBS/LRTR/LRAR/LRCL/LRTM/LRSB may be cleared to the TMA entry / STAR starting points. All other arrivals within București ACC / Sofia ACC shall only be cleared to the exit points of București ACC / Sofia ACC.
- Cases when direct routings would cause re-entries into other sectors shall be avoided (direct routing affecting Beograd ACC).

5.2. Delegated Airspace

- Sector DF1: FL245 – FL660 delegated from București ACC to Sofia ACC.



- Sector DF2: FL245 – FL660 delegated from Sofia ACC to București ACC.



5.3. Flights Leaving to LBSR

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LRCK_APP	LRCK	All	DINRO	170	Climbing		LBSR_CTR
LRBB_CTR	All	LBWN	RASUB	310 ▼	At level		LBSR_CTR
			DINRO/ LUGEB	190 ▼	At level		
	All	LBBG	RASUB	310 ▼	At level		
			DINRO/ LUGEB	290	At level		
	All	LBSF/ LBGO/ LBPD	TIMUR/ OSTOV	290	At level		
All	LTFM/ LTBA	DINRO/ LUGEB/ IRDUM/ MOSOP	350	At level			

5.4. Flights Entering from LBSR

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LBSR_CTR	All	LROP/ LRBS	ARGES	160 ▼	At level	Via OSTAL	LROP_APP
			KOMAN	160 ▼	At level	Via OBUGA	
			SOMOV	240 ▼	At level	Via SORDU	
	All	LRCK	REVDA	160 ▼	At level		LRBB_CTR
	All	LRCV	NAVOD	130	At level	Via PANZU	

6. Letter of Agreement with Chişinău (LUUU) ACC

6.1. Special Agreements

NIL

6.2. Flights Leaving to LUUU

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LRIA_TWR	LRIA	All	UNIRA	090▲	Climbing		LUKK_APP
LRBB_CTR	All	LUKK	UNIRA/ BUSES	130▼	At level		LUUU_APP
			KODRU	170▼	At level		LUUU_CTR

6.3. Flights Entering from LUUU

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LUUU_CTR	LUKK	All	UNIRA/ NUNTA	260	Climbing	Cross UNIRA at FL180+	LRBB_CTR
			KODRU	160	Climbing	Cross KODRU at FL110+	
LUUU_CTR	All	LRIA	UNIRA	100	At level		LRBB_CTR
	All	LRSV	UNIRA	160▼	At level	Via TOMUC	
	All	LRBC	UNIRA	160▼	At level	Via MIRON	
POGAV			160▼	At level	Via MOLID		

7. Letter of Agreement with Odessa (UKOV) ACC

7.1. Special Agreements

NIL

7.2. Flights Leaving to UKOV

NIL

7.3. Flights Entering from UKOV

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
UKOV_CTR	All	LBBG/ LBWN	IRMAM/ BAGRI	350	At level		LRBB_CTR
	All	LRCK	IRMAM/ BAGRI	180 ▼	At level		
	All	LRTC	IRMAM	110	At level		

8. Letter of Agreement with Lviv (UKLV) ACC

8.1. Special Agreements

NIL

8.2. Flights Leaving to UKLV

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
LRSV_TWR	LRSV	All	BUKOV	120	Climbing	Cross BUKOV at 9000ft+	UKLV_CTR
LRBB_CTR	LRSM/ LRBM	All	RUMUK	120	Climbing	Cross RUMUK at 9000ft+	UKLV_CTR
LRBB_CTR	All	UKLN	BUKOV	120▼	At level		UKLV_CTR

8.3. Flights Entering from UKLV

From Unit	ADEP	ADES	COP	CFL	Condition	Remark	To Unit
UKLV_CTR	UKLN	All	BUKOV	110	Climbing	Cross BUKOV at 10000ft+	LRBB_CTR
UKLV_CTR	All	LRSV	BUKOV	110	At level		LRBB_CTR
	All	LRIA/ LRBC	BUKOV	270▼	At level		
	All	LRSM/ LRBM	RUMUK	110	At level		
	All	LROD	RUMUK	280▼	At level		