

LETTER OF AGREEMENT

Between

Romania vACC

and

Moldova vACC

Bucharest FIR

Chisinau FIR

Effective: 01/12/2015

Version: 1.0

Purpose: The purpose of this Letter of Agreement is to define the coordination procedures to be applied between Romania vACC and Moldova vACC when providing ATS to (GAT/OAT), (IFR/VFR).

Operational Status: Both vACC units 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.

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GENERAL REGULATIONS:

- 1) All traffic, including VFR traffic, intending to cross the international borders shall mandatorily submit a complete and valid flight plan for the entire journey. Traffic not complying with the present rule shall not obtain by the Air Traffic Services any en route clearance beyond the airspace of the originating nation.
- 2) All traffic, IFR and VFR, submitting a complete and valid flight plan shall be considered as authorized to enter the foreign airspace, unless explicit denial is notified as part of the individual controller to controller coordination. Border crossing may be denied only in case of grave and proven operational limitations.
- 3) Handoff of communication shall be made at least 15 **NM** prior the established limit of jurisdiction.
- 4) En route clearance limit of VFR traffic crossing the international borders shall be set to the limit of jurisdiction itself. Handoff of communication for VFR traffic shall be performed at least 5 minutes before the foresaid clearance limit, in order for the traffic to obtain the required en route clearance for transit within the foreign airspace.
- 5) Upon handoff, traffic shall be considered as **NOT released** for climb, descent, turns or change of airspeed unless otherwise specified in the provisions below.
- 6) Traffic is to be transferred clear of conflicts, and complying in particular with the following separation restrictions:
 - 15 NM longitudinal separation between two traffics at same Flight Level, when the preceding traffic is at equal or faster assigned speed or between two traffic at different Flight Level.
- 7) **Traffic** shall be handed off on a valid ATS route or on defined waypoints **at RFL** using the semi-circular cruising level system (even/odd), **(West EVEN, East ODD)**.
- 8) To avoid additional workload in relation to the transfer of radar identification and separation on radar track the accepting unit should not perform the operation of "LABEL ASSUME" until it has made two-way contact with the traffic and the other ATC.
- 9) Both ATS units shall transfer aircraft on verified discrete codes assigned in accordance with the VATSIM Squawk Code Range, any change of SSR code by the accepting ATS Unit may only take place after the transfer of control point and the accepting ATS Unit shall be notified of any observed irregularity in the operation of SSR transponders.
- 10) Individual coordination between the active controllers takes priority over the provisions specified in the present LoA. In order to prevent unnecessary workload, individual coordination shall be limited to cases of effective need (e.g. weather cells, congested sectors/airports, aircraft performance limitations).
- 11) All Handover procedures described below they need to be verbalize in the SEL and SIL, in order not to cause further confusion to the controller.
- 12) VFR flights are not permitted in the AoR of Romania ACC and Moldova ACC above FL195, unless specific coordination has been coordinated between the ATS Units.

ABBREVIATION:

vACC: Virtual Area Control Center
RFL: Requested Flight Level
ATS: Air Traffic Service
LoA: Letter Of Agreement
IFR: Instrumental Flight Rules
VFR: Visual Flight Rules
SEL: Sector Exit List
SIL: Sector Inbound List
FIR: Flight Information Region
ACC: Area Control Centre
GAT: General Air Traffic
OAT: Operational Air Traffic
UNL: Unlimited
AoR: Area of Responsibility
SFC: Surface

DEFINITIONS:

General Air Traffic (GAT):

All movements of civil aircraft, as well as all movements of State aircraft (including military, customs and police aircraft) when these movements are carried out in conformity with the procedure of ICAO.

Operational Air Traffic (OAT):

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.

Release for Climb:

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

Note:

The transferring unit remains responsible for separation within its Area of Responsibility unless otherwise agreed.

Release for Descent:

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

Note:

The transferring unit remains responsible for separation within its Area of Responsibility unless otherwise agreed.

Release for Turn:

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

Note:

The transferring unit remains responsible for separation within its Area of Responsibility unless otherwise agreed.

Area of Responsibility:

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

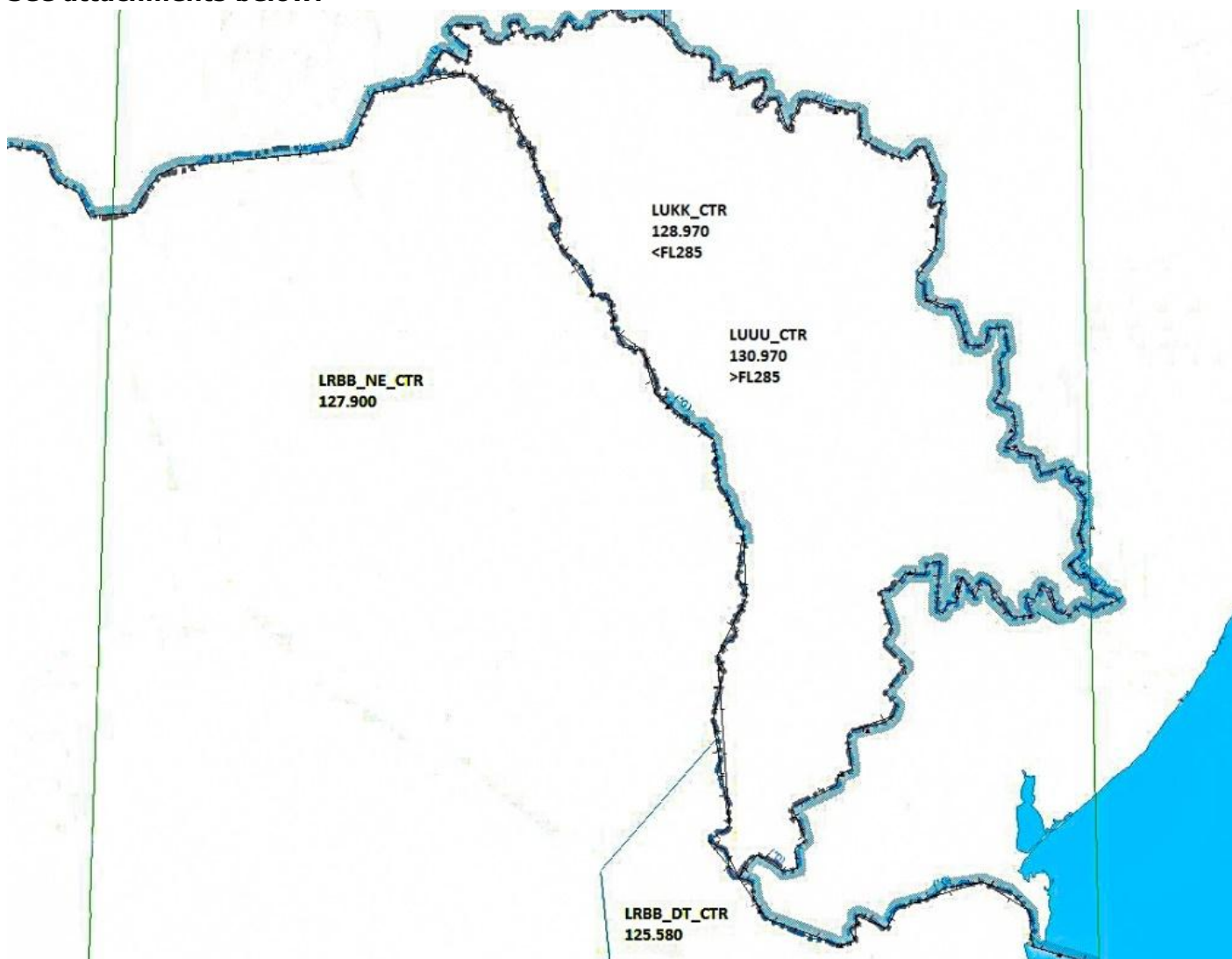
AREA OF RESPONSIBILITY & AIRSPACE DELEGATION:

For the purpose of this LoA the boundary between Romania Bucharest FIR and Moldova Chisinau FIR consists of a line connecting the waypoints:

DOBOK – VILIS – UNIRA – NUNTA – BUSES – POGAV – ASKUT – KODRU.

In case of LUKK_CTR or LUUU_CTR is offline, LRBB_NE_CTR will be take the control of Moldavia vACC above FL195.

See attachments below:



ATC SECTOR INFORMATION:

| SECTOR | FREQUENCY | CALLSIGN | VERTICAL LIMITS |
|-------------|-----------|-------------------|-----------------|
| LRBB_NE_CTR | 127.900 | Bucharest Radar | SFC – UNL |
| LRBB_DT_CTR | 125.575 | | |
| LUKK_CTR | 128.970 | Moldova Radar | SFC – FL285 |
| LUUU_CTR | 130.970 | Chisinau Control | FL285 – UNL |
| LRIA_APP | 129.200 | Iasi Approach | SFC – FL55 |
| LUKK_APP | 133.300 | Chisinau Approach | SFC – FL95 |

SECTOR OWNERSHIP:

| SECTOR | 1st ALT | 2nd ALT | 3rd ALT | 4th ALT |
|---------------|---------------------------|---------------------------|---------------------------|---------------------------|
| LRBB_NE_CTR | LRBB_N_CTR | LRBB_S_CTR | // | |
| LRBB_DT_CTR | LRBB_S_CTR | | | // |
| LUKK_CTR | // | | // | |
| LUUU_CTR | LUKK_CTR | LRBB_NE_CTR | LRBB_N_CTR | LRBB_S_CTR |
| LRIA_APP | LRBB_NE_CTR | LRBB_N_CTR | LRBB_S_CTR | |
| LUKK_APP | LUUU_CTR | | // | // |

HANDOVER FREQUENCY:**Frequencies from Moldova ACC to Romania vACC**

>LRBB_NE_CTR Sector Frequency: 127.900 MHz

For Traffic via: DOBOK – VILIS – UNIRA – NUNTA – BUSES – POGAV – ASKUT – KODRU.

Frequencies from Romania ACC to Moldova ACC

>LUKK_CTR Sector Frequency: 128.970MHz

For Traffic at or below FL285 via: DOBOK – VILIS – UNIRA – NUNTA – BUSES – POGAV – ASKUT – KODRU.

Frequencies from Romania ACC to Moldova ACC

>LUUU_CTR Sector Frequency: 130.970MHz

For Traffic above FL285 via: DOBOK – VILIS – UNIRA – NUNTA – BUSES – POGAV – ASKUT – KODRU.

If RFL is above or below the Cleared FL the climbing/descending condition shall be coordinated verbally with Bucharest ACC or Chisinau ACC as appropriate.

In order to have a suitable altitude for approach in Romania and Moldova Airspace the following limits are established: Page 6

HANDOVER PROCEDURES FROM ROMANIA vACC TO MOLDOVA vACC

Transit Sector (Below FL285):

| ATS Route | FIX | Cleared FL | Vertical Limits | Handover Controller |
|-----------|-------|-------------|-----------------|---------------------|
| P133 | UNIRA | ODD FL, RFL | FL50 – FL195 | LUKK_CTR |
| P90 | NUNTA | | FL110 – FL195 | |
| N978 | | | | |
| T802 | BUSES | | | |
| L140 | POGAV | | | |
| Y572 | | | | |
| Z650 | | | | |
| N180 | | | | |
| P740 | | | | |

Transit Sector (Above FL285):

| ATS Route | FIX | Cleared FL | Vertical Limits | Handover Controller |
|-----------|-------|-------------|-----------------|---------------------|
| UN190 | DOBOK | ODD FL, RFL | FL290 - UNL | LUUU_CTR |
| UP90 | NUNTA | | | |
| UP978 | | | | |
| UT802 | BUSES | | | |
| UL140 | POGAV | | | |
| UY572 | | | | |
| UZ650 | | | | |
| UN180 | | | | |
| UP740 | | | | |

Chisinau Airport (LUKK) Departure:

| FIX | Cleared FL | Handoff | Handover Controller |
|-------|-----------------------------|--------------|-------------------------|
| NUNTA | FL100 released for climb | Passing FL80 | LUKK_APP -> LRBB_NE_CTR |
| POGAV | | | |
| UNIRA | | | |

Chisinau Airport (LUKK) Arrivals:

| FIX | Cleared FL | Handoff | Handover Controller |
|-------|------------------------------|--------------------|-------------------------|
| BUSES | FL90 released for descend | 30 NM before BUSES | LRBB_NE_CTR -> LUKK_APP |

Marculesti/Balti Airport (LUBM/LUBL) Departure:

| FIX | Cleared FL | Handoff | Handover Controller |
|-------|-----------------------------|--------------|-------------------------|
| UNIRA | FL120 released for climb | Passing FL60 | LUBL_APP -> LRBB_NE_CTR |

Marculesti/Balti Airport (LUBM/LUBL) Arrivals:

| FIX | Cleared FL | Handoff | Handover Controller |
|-------|-------------------------------|--------------------|-------------------------|
| UNIRA | FL130 released for descend | 30 NM before UNIRA | LRBB_NE_CTR -> LUKK_CTR |

HANDOVER PROCEDURES FROM MOLDOVA vACC TO ROMANIA vACC

Transit Sector :

| ATS Route | FIX | Cleared FL | Vertical Limits | Handover Controller |
|-----------|-------|--------------|-----------------|---------------------|
| UN190 | DOBOK | EVEN FL, RFG | FL290 - UNL | LRBB_NE_CTR |
| N145 | VILIS | | FL100 - UNL | |
| P133 | UNIRA | | FL60 - UNL | |
| N181 | NUNTA | | FL100 - UNL | |
| P90 | | | FL60 - UNL | |
| N978 | | | | |
| Z924 | BUSES | | FL100 - UNL | |
| N180 | POGAV | | FL60 - UNL | |
| Z650 | | | FL100 - UNL | |
| L140 | | | FL60 - UNL | |
| M406 | ASKUT | | FL290 - UNL | |
| T34 | KODRU | | FL60 - UNL | |
| P740 | | | | |

Iasi Airport (LRIA) Departure:

| FIX | Cleared FL | Handoff | Handover Controller |
|-------|----------------------------|--------------|----------------------|
| UNIRA | FL50 released for climb | Passing FL30 | LRIA_APP -> LUKK_CTR |

Iasi Airport (LRIA) Arrivals:

| FIX | Cleared FL | Handoff | Handover Controller |
|-------|------------------------------|--------------------|----------------------|
| UNIRA | FL60 released for descend | 15 NM before UNIRA | LUKK_CTR -> LRIA_APP |

Suceava Airport (LRSV) Arrivals:

| FIX | Cleared FL | Handoff | Handover Controller |
|-------|---|--------------------|-------------------------|
| UNIRA | FL290 or RFL "if below" released for descend | 15 NM before UNIRA | LUKK_CTR -> LRBB_NE_CTR |