

LETTER OF AGREEMENT

Between

VACC-Austria
Wien FIR

and

vACCHUN
Hungary FIR



Effective: April 22nd, 2021 (AIRAC2104)

1. General

1.1. Purpose.

The purpose of this Letter of Agreement is to define the coordination procedures to be applied between VACCHUN and vACC Wien when providing ATS to air traffic (IFR/VFR) on the VATSIM network.

All information and procedures described in this Letter of Agreement shall not be used for real world purposes.

1.2. Operational Status.

All operational significant information and procedures contained in this Letter of Agreement shall be distributed to all concerned controllers by appropriate means. This Letter of Agreement itself constitutes public information.

1.3. Validity.

This Letter of Agreement becomes effective on April 22nd, 2021 (AIRAC2104)

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2. Areas of Responsibility & Sectorization

2.1. Areas of Responsibility.

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

- 2.1.1. Wien FIR. Lateral limits: Wien FIR as described in AIP Austria Vertical limits: GND – FL660 https://charts.vacc-austria.org/LOVV/LOVV_Enroute_ATC%20Sectors_09092020.pdf
- 2.1.2. Budapest FIR. Lateral limits: Budapest FIR as described in AIP Hungary Vertical limits: GND – FL660 <https://ais-en.hungarocontrol.hu/aip/2021-04-22/>

2.2. Sectorization.

2.2.1. Wien FIR.

2.2.1.1. Sector WW-B (LOWW APP - BALAD).

Lateral limits: WW-B (see Appendix A1)

Vertical limits: GND – FL245

Responsible ATS unit (in order of precedence):

1. LOWW_APP (Wien Radar), 134.670
2. LOWW_P_APP (Wien Radar), 129.050
3. LOWW_N_APP (Wien Radar), 118.770
4. LOWW_M_APP (Wien Radar), 125.175
4. LOVV_L_CTR (Wien Radar), 129.200
5. LOVV_E_CTR (Wien Radar), 135.625
6. LOVV_N_CTR (Wien Radar), 134.350
7. LOVV_CTR (Wien Radar), 132.600
8. LOVV_C_CTR (Wien Radar), 118.725

2.2.1.2. Sector WW-P (LOWW APP - PESAT).

Lateral limits: WW-P (see Appendix A1)

Vertical limits: GND – FL245

Responsible ATS unit (in order of precedence):

1. LOWW_P_APP (Wien Radar), 129.050
2. LOWW_M_APP (Wien Radar), 125.175
3. LOWW_APP (Wien Radar), 134.670
4. LOWW_N_APP (Wien Radar), 118.770
5. LOVV_L_CTR (Wien Radar), 129.200
6. LOVV_E_CTR (Wien Radar), 135.625
7. LOVV_N_CTR (Wien Radar), 134.350
8. LOVV_CTR (Wien Radar), 132.600
9. LOVV_C_CTR (Wien Radar), 118.725

2.2.1.3. Sector WG (LOWG APP).

Lateral limits: WG (see Appendix A1)

Vertical limits: GND – FL165

Responsible ATS unit (in order of precedence):

1. LOWG_APP (Graz Radar), 119.300
2. LOVV_S_APP (Wien Radar), 119.300
3. LOVV_L_CTR (Wien Radar), 129.200
4. LOVV_S_CTR (Wien Radar), 133.800
5. LOVV_B_CTR (Wien Radar), 135.500
6. LOVV_E_CTR (Wien Radar), 135.625
7. LOVV_CTR (Wien Radar), 132.600
8. LOVV_C_CTR (Wien Radar), 118.725

2.2.1.4. Sector E1

Lateral limits: Sector E (see Appendix A2)

Vertical limits: FL245 – FL305

Responsible ATS unit (in order of precedence):

1. LOVV_E_CTR (Wien Radar), 135.625
2. LOVV_N_CTR (Wien Radar), 134.350
3. LOVV_CTR (Wien Radar), 132.600
4. LOVV_C_CTR (Wien Radar), 118.725
5. EURM_CTR (Maastricht Radar), 135.450

Remark: EURM_CTR is an ATS unit of EuroCenter vACC.

2.2.1.5. Sector E25

Lateral limits: Sector E (see Appendix A3)

Vertical limits: FL305 – FL660

Responsible ATS unit (in order of precedence):

1. LOVV_U_CTR (Wien Radar), 131.350
2. LOVV_E_CTR (Wien Radar), 135.625
3. LOVV_N_CTR (Wien Radar), 134.350

4. LOVV_CTR (Wien Radar), 132.600
 5. LOVV_C_CTR (Wien Radar), 118.725
 6. EURM_CTR (Maastricht Radar), 135.450
- Remark: EURM_CTR is an ATS unit of EuroCenter vACC.

2.2.1.6. Sector S1 (lower limit MURA Sector FL125)

Lateral limits: Sector E (see Appendix A2)

Vertical limits: FL165/ FL125 – FL305

Responsible ATS unit (in order of precedence):

1. LOVV_S_CTR (Wien Radar), 133.800
2. LOVV_B_CTR (Wien Radar), 135.500
2. LOVV_E_CTR (Wien Radar), 135.625
3. LOVV_CTR (Wien Radar), 132.600
4. LOVV_C_CTR (Wien Radar), 118.725
5. EURM_CTR (Maastricht Radar), 135.450

Remark: EURM_CTR is an ATS unit of EuroCenter vACC.

2.2.1.7. Sector S25

Lateral limits: Sector E (see Appendix A3)

Vertical limits: FL305 – FL660

Responsible ATS unit (in order of precedence):

1. LOVV_U_CTR (Wien Radar), 131.350
2. LOVV_S_CTR (Wien Radar), 133.800
3. LOVV_B_CTR (Wien Radar), 135.500
4. LOVV_E_CTR (Wien Radar), 135.625
5. LOVV_CTR (Wien Radar), 132.600
6. LOVV_C_CTR (Wien Radar), 118.725
7. EURM_CTR (Maastricht Radar), 135.450

Remark: EURM_CTR is an ATS unit of EuroCenter vACC.

2.2.2. Hungary FIR.

BUDAPEST ACC							
Sector	FL	Configurations WEST					
		C1	C2	C3	C4	C5	C6
Top	FL660 FL365	LHCC_CTR 120.375	LHCC_W_CTR 133.200	LHCC_U_CTR Upper 127.105	LHCC_U_CTR Upper 127.105	LHCC_2_CTR Top 135.205	LHCC_2_CTR Top 135.205
Upper	FL365 FL345			LHCC_CTR Lower 120.375	LHCC_W_CTR West Lower 133.200	LHCC_2_CTR Lower 120.375	LHCC_W_CTR West Lower 133.200
Lower	FL345	LHCC_I_CTR 119.350					
FIC	9500'AMSL	LHCC_I_CTR 119.350					

2.2.2.1. Sector FIC.

Lateral limits: Sector East (see Appendix B1)

Vertical limits: GND – 9500' AMSL

Responsible ATS unit (in order of precedence):

1. LHCC_Q_CTR (Budapest Information), 125.500
2. LHCC_I_CTR (Budapest Information), 119.350
3. LHCC_W_CTR (Budapest Radar), 133.200
4. LHCC_CTR (Budapest Radar) 120.375

2.2.2.2. Sector LHPR.

Lateral limits: Sector East (see Appendix B1)

Vertical limits: GND – 9500' AMSL

Responsible ATS unit (in order of precedence):

1. LHPR_TWR (Per Info), 129.900
2. LHCC_Q_CTR (Budapest Information), 125.500
3. LHCC_I_CTR (Budapest Information), 119.350
4. LHCC_W_CTR (Budapest Radar), 133.200
5. LHCC_CTR (Budapest Radar) 120.375

2.2.2.3. Sector West Lower.

Lateral limits: Sector East (see Appendix B2)

Vertical limits: 9500' AMSL – FL345

Responsible ATS unit (in order of precedence):

1. LHCC_W_CTR (Budapest Radar), 133.200
2. LHCC_CTR (Budapest Radar) 120.375

2.2.2.4. Sector West Upper

Lateral limits: Sector East (see Appendix B2)

Vertical limits: FL345 – FL365

Responsible ATS unit (in order of precedence):

1. LHCC_U_CTR (Budapest Radar), 127.100
2. LHCC_W_CTR (Budapest Radar), 133.200
3. LHCC_CTR (Budapest Radar) 120.375
4. EURE_FSS (Eurocontrol East), 135.300 (above FL245)

Remark: EURE_FSS is an ATS unit of EuroCenter vACC

2.2.2.5. Sector West Top

Lateral limits: Sector East (see Appendix B2)

Vertical limits: FL365 – FL660

Responsible ATS unit (in order of precedence):

1. LHCC_2_CTR (Budapest Radar), 135.200
2. LHCC_U_CTR (Budapest Radar), 127.100
3. LHCC_W_CTR (Budapest Radar), 133.200
4. LHCC_CTR (Budapest Radar) 120.375
5. EURE_FSS (Eurocontrol East), 135.300 (above FL245)

Remark: EURE_FSS is an ATS unit of EuroCenter vACC

2.3. Delegation of the Responsibility for the Provision of ATS.

2.3.1. Delegation of ATS from Budapest FIR to Wien FIR

- 2.3.1.1. LESMO Area: The airspace overhead the Lesmo Area (see Appendix A2) is permanently delegated from LHCC to LOWW P APP 5500ft – FL245. (Note: For detailed coordinates refer to GNG (<http://www.gng.aero-nav.com/>)).

3. Procedures for Coordination.

3.1. Definitions

A release is an authorisation for the accepting ATS unit to climb, descend and/or turn (by no more than 45°) a specific aircraft before the transfer of control point. The transferring ATS unit remains responsible for separation within its Area of Responsibility unless otherwise agreed.

Wherever VATSIM callsigns are used to describe the terms of a certain procedure, this procedure is also applicable for all higher stations that take over the responsibilities of said station. E.g., procedures for an APP-stations are also applicable for the respective CTR station fulfilling the duties of said APP station.

The use of VATSIM callsigns in this document includes any variation of said callsign. E.g. any procedure applicable for LOVV_CTR may also be used by LOVV_x_CTR.

3.2. General Conditions

Coordination of flights shall take place via the agreed coordination points (COP).

Coordinated flights shall be handed off via a valid COP. Any deviation shall be coordinated verbally, by text or by Euroscope inter-sector coordination.

Traffic shall be handed off at the levels, defined in the regulations below. If a specified level restriction cannot be met due to a lower RFL, traffic shall be handed off at RFL, if this does not cause a conflict with any other traffic. Otherwise, traffic shall be coordinated.

If a traffic situation is not covered herein or closely matching a covered one, individual coordination between the concerned sectors shall be made.

After Transfer of communications, traffic is NOT released for climb, descent or turns until Transfer of control or otherwise specified in this Letter of Agreement.

↓ FLxxx /↑ FLxxx means „descending / climbing to a specified FL“, without any further restriction. Any required crossing/speed restriction shall be added separately.

3.3. IFR flights from Wien FIR to Budapest FIR.

Concerned Airport	COP	Level Allocation	Special Conditions
↑LOWW	STEIN, ARSIN	↑FL230/FL130A	Climbing, released for turns within SOPRO area
↑LOWG	GOTAR	↑FL150/FL130A	Climbing,
	DIMLO	↑FL250/FL130A	Climbing
↓LHBP, LH TL		FL330	At level
↓LHPA, LHPR	STEIN, SASAL	↓FL130/FL170B	Descending
	ACC-S	↓FL190/FL250B	Descending
↓LHSM		FL190/FL250B	Descending
↓LHPP		FL290	At level
↓LYBE, LRTR		FL370	At level
↓LDOS		FL330	At level
↓LDZA	ACC-E	FL330	At level
↓LZIB	ACC-S	FL330	At level
↑LJLA FIR		↑FL310	Climbing

3.4. IFR flights from Budapest FIR to Wien FIR.

Concerned Airport	COP	Level Allocation	Special Conditions
↑LHSM	ACC-S	↑FL180/FL170A	Climbing
↑LHBP	ACC-E	↑FL320/FL250A	Climbing
	ACC-S	FL320	At level
↑LHPP		↑FL280	Climbing
↑LHPA, LHPR	APP Wien	↑FL120	Climbing
	ACC-S	↑FL200/FL170A	Climbing
↓LOWL, LOXZ		FL300	At level
↓LOWK		FL260	At level
↓LOWG	GOTAR, SUNIS	FL160	At level
	DIMLO	↓FL130/FL160B	Descending, handover to LOWG APP
↓LOWW	NATEX	FL140	At level, cleared NATEX STAR
↓LKTB	APP Wien	FL240	At level
FIR LJLA except LJMB		FL260	At level
↓LDPL, LIPZ, LIPH	ACC-S	FL340	At level
↓LDRI, LDLO, LIPQ	ACC-S	FL320	At level

3.6. VFR flights from Budapest FIR to Wien FIR

For controlled VFR flights and VFR at night flights transfer of control and transfer of communication shall take place as for IFR flights. Uncontrolled VFR flights shall be transferred to the appropriate sector if in radio contact. If online, LOWW_I_APP (Wien Information) TMA Wien, 118.525, and LOVV_I_CTR (Wien Information) whole FIR, 124.400, shall be the primary sector for uncontrolled VFR flights.

3.7. VFR flights from Wien FIR to Budapest FIR

For controlled VFR flights and VFR at night flights coordination, transfer of control and transfer of communication shall take place as for IFR flights. Uncontrolled VFR flights shall be transferred to the appropriate sector if in radio contact. If LHCC CTR is online, LHCC_I_CTR (Budapest Information), 119.350, will be cross coupled and therefore shall be the primary sector for uncontrolled VFR flights.

4. Special Procedures

4.1. Releases from LOVV to LHCC.

4.1.1. LHCC may turn LOWW departures via ARSIN/STEIN within SOPRO area (Appendix B2).

4.1.2. LHCC may clear flights ADES LOWG via GOTAR/SUNIS to PIBIP/GRZ VOR if the flightpath remains between GOTAR and SUNIS.

4.1.3. LHCC may clear any flights not destined for EDDM or LOxx direct LOVV FIR exit point.

4.1.3.1. Does not apply to LHxx departures.

4.1.3.2. Only permitted if the whole flightpath remains within LHCC-LOVV FIRs

4.2. Releases from LHCC to LOVV

4.2.1. LOVV may clear any flights not destined for LHxx direct LHCC FIR exit point.

4.2.1.1. Does not apply to APP positions.

- 4.2.1.2. Only permitted if the whole flightpath remains within LHCC-LOVV FIRs

4.3. LOWW Procedures

4.3.1. PESAT Hold

- 4.3.1.1. LOWW APP shall advise LHCC if PESAT hold will be opened if the traffic load permits.
- 4.3.1.2. PESAT Minimum holding altitude shall be 10000' AMSL.
- 4.3.1.3. LHCC shall not vector aircraft within 5nm of LESMO area when PESAT holding is active

5. Transfer of Control and Transfer of Communications

5.1. Transfer of Control

Transfer of Control shall take place at the AoR boundary. If the downstream sector in EuroScope is set to >.break<, the procedure 5.4 is suspended and transfer of communication can only take place after the downstream sector has assumed the flight via the appropriate function of the radar client. If it becomes necessary to reduce or suspend transfers, a 5-minute prior notification is required. When transfers are suspended, the hand-off procedure (5.4) is suspended.

LHCC and LOVV units are encouraged to use the release in tag function, as well as other forms of nonverbal communication Topsky offers to increase efficiency.

5.2. Silent transfer of control

Transfer of radar control from one elementary sector to another without the systematic use of bidirectional speech facilities may be affected provided the horizontal distance between the aircraft involved is not less than 10 NM within 5 minutes flying time after passing the transfer of control point unless vertical separation exists.

5.3. Transfer of Communications

Transfer of Communications shall take place no later than Transfer of Control.

5.4. Hand-Off procedure

Unless otherwise agreed between stations online, the following hand-off procedure shall apply:

1. The upstream sector sends the aircraft to the frequency of the downstream

sector by voice or text.

2. The upstream sector initiates a transfer via the appropriate function of the radar client.

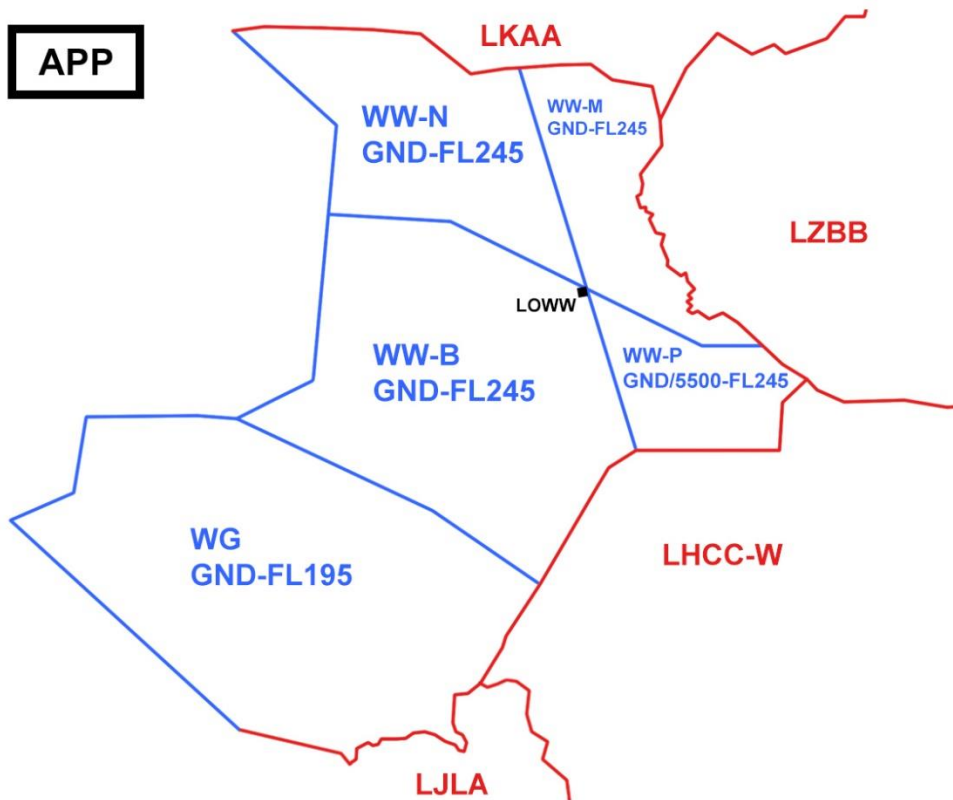
3. Upon initial call the downstream sector assumes the flight via the appropriate function of the radar client.

5.5. **SSR Code Assignment**

Both ATS units shall transfer flights on verified discrete SSR codes. Any change of SSR code by the accepting ATS unit may only take place after the transfer of control point.

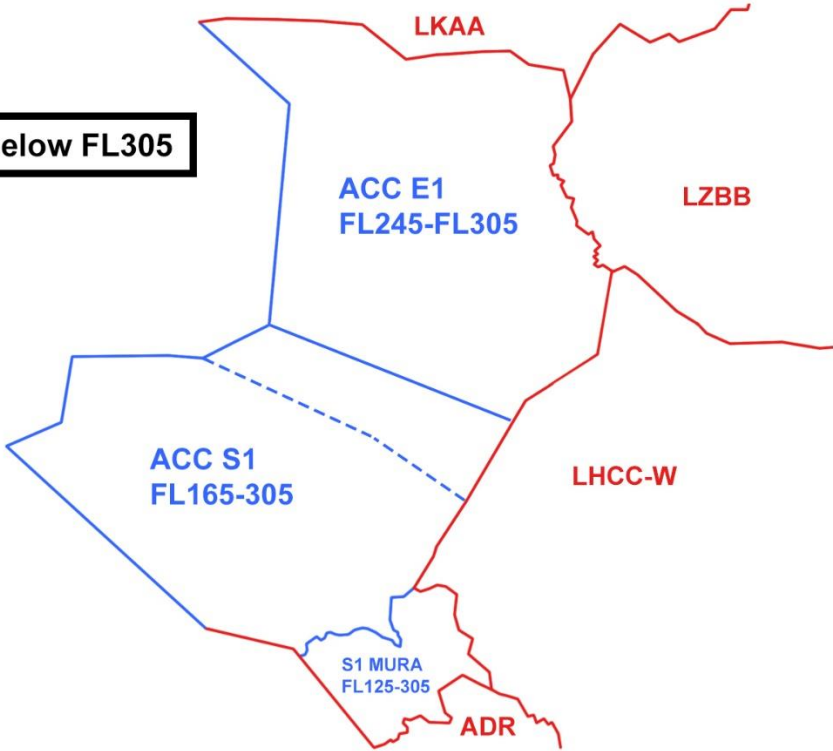
APPENDIX A

A1: APP



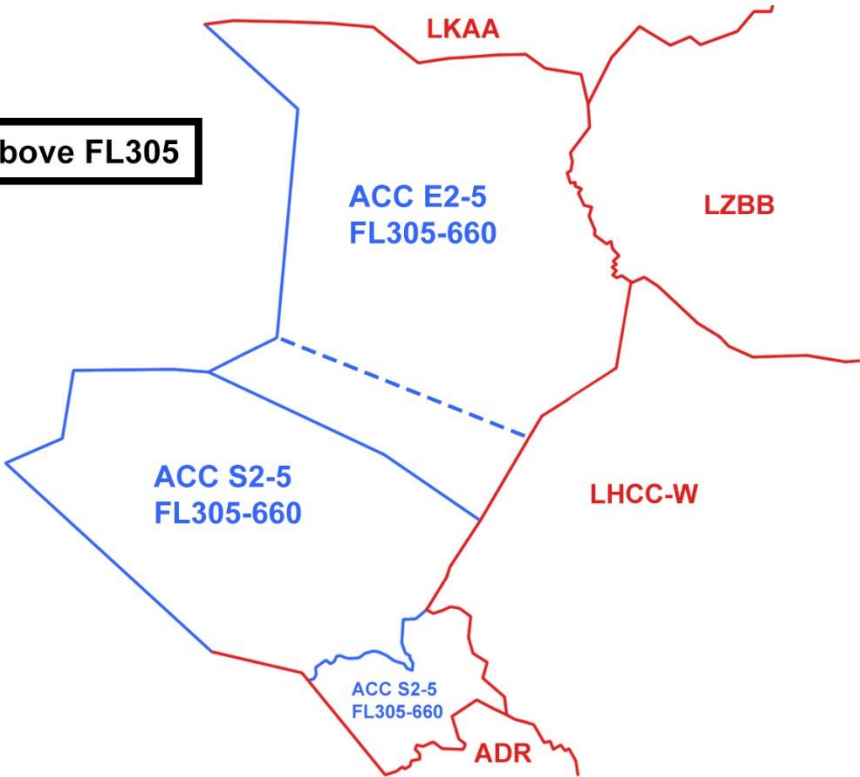
A2: CTR below FL305

CTR below FL305



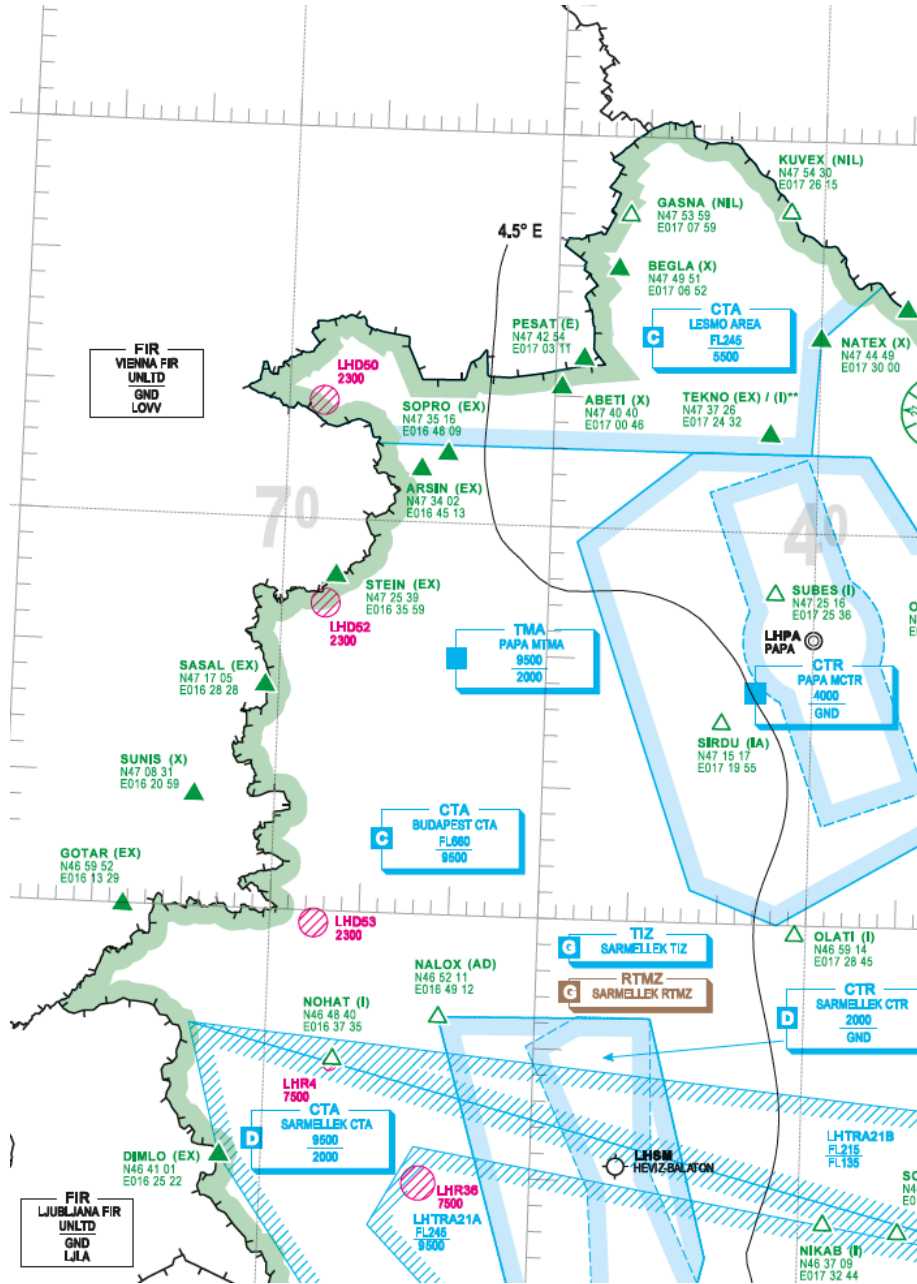
A3: CTR above FL305

CTR above FL305



APPENDIX B

B1: LHCC



B2: SOPRO Area

