

Madrid ACC (LECM) and Lisboa ACC (LPPC)

1. Purpose

The purpose of this Letter of Agreement (LoA) is to define the coordination procedures to be applied between **Lisboa ACC** and **Madrid ACC** when providing Air Traffic Services (ATS) under IFR or VFR flight rules.

The content of the agreement is approved by the concerned ATC Operations Department and FIR Chiefs and its application is mandatory for all IVAO members providing ATS within an active position concerned by this LoA.

2. General Procedures

Traffic in sequence at the same flight level shall be handed over with minimum spacing of 10 NM.

This separation must be constant (aircrafts restrained to the same speed) or increasing (succeeding aircraft is not faster).

Coordination of speed control should be granted via entries in radar labels and does not need neither approval nor acknowledgement by receiving sector.

Traffic shall be handed over as soon as practical and, whenever possible, **at latest 3000 ft before reaching the cleared flight level** and in case the transfer point is not defined within this LoA, at latest ten (10) miles before the airspace limits.

Traffic in sequence shall be handed over properly separated and clear of any conflict. The receiving ATC unit cannot issue a clearance modifying the traffic's route, altitude, or speed (unless by direct

coordination between ATC units) until it enters his sector and therefore leaves the area of responsibility from the transferring ATC unit, which remains responsible for separation.

Regarding flight levels for transfers between ATC positions:

From	To	Flight Level (1)
Madrid	Lisboa	ODD
Lisboa	Madrid	EVEN

(1) Exceptions listed in [section 4](#)

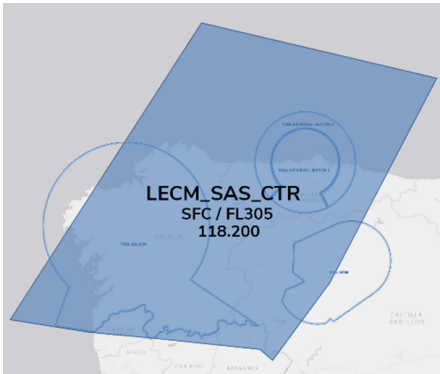
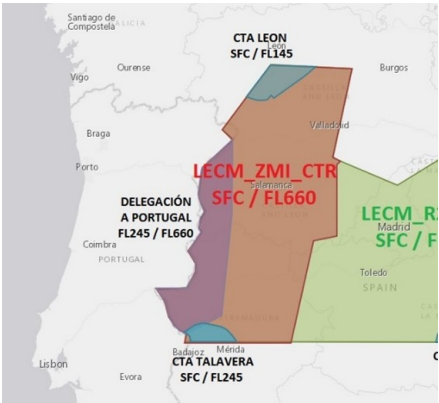
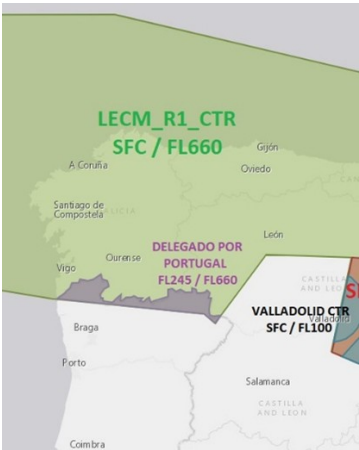
Free Route Airspace Operations within Spanish airspace (HISPAFRA) is defined in Spain (FRA CELL 1) from FL245 to FL660. However, the use of the traditional ATS route network is compatible with HISPAFRA.

Free Route Airspace (FRA) is a specified airspace within which users may freely plan a route between a defined entry point and a defined exit point, with the possibility of routing via published intermediate significant points, without reference to the ATS route network.

3. ATS Unit Description

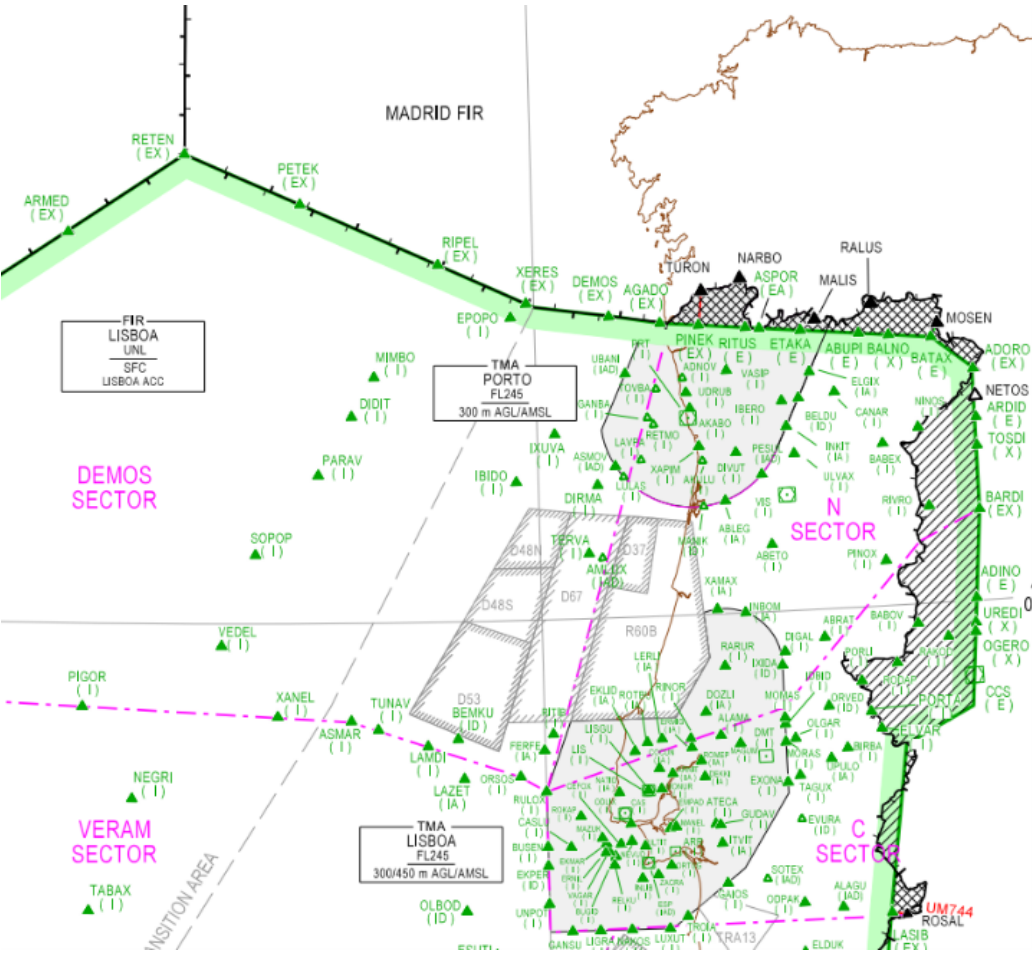
The ATC unit in charge of Madrid airspaces under the responsibility of Madrid ACC is Madrid Control and the relevant sectors for this LoA consist in two independent primary sectors (LECM_R1_CTR and LECM_R2_CTR), two secondary sectors (LECM_SAS_CTR and LECM_ZMI_CTR) and an approach sector (LEST_APP).

LECM_SAS_CTR can be consolidated into a single sector (LECM_R1_CTR) and LECM_ZMI_CTR can be consolidated into a single sector (LECM_R2_CTR).



The ATC unit in charge of Portugal airspaces under the responsibility of Lisboa ACC is Lisboa Control and the relevant sectors for this LoA consist in four main sector (LPPC_CTR, LPPC_P_CTR, LPPC_E_CTR and LPPC_NC_CTR) and three secondary sectors (LPPC_NL_CTR, LPPC_CL_CTR and LPPC_WL_CTR).

The lateral and vertical boundaries of the airspace under the responsibility of the ACC are indicated in the images and tables below.



3.1. Madrid ACC

ATC Position	Callsign	Frequency	Remarks
Primary sectors			
Madrid Control (Ruta 1)	LECM_R1_CTR	135.700	SFC-FL660
Madrid Control (Ruta 2)	LECM_R2_CTR	133.755	SFC-FL660
Secondary Sectors			

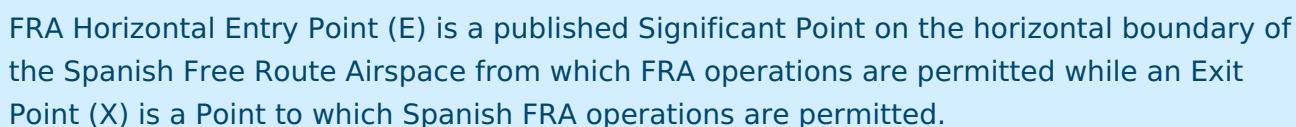
Madrid Radar (Santiago-Asturias)	LECM_SAS_CTR	118.200	SFC-FL305
Madrid Control (Zamora Integrado)	LECM_ZMI_CTR	127.325	SFC-FL660 (req. NOTAM)
Approach Dependencies			
Santiago Approach	LEST_APP	120.200	SFC-FL245 (FL155 if LECM_SAS_CTR connected)

3.2. Lisboa ACC

ATC Position	Callsign	Frequency	Remarks
Primary sectors			
Lisboa Control	LPPC_CTR	130.900	SFC-FL660
Lisboa Control (continental - W+E)	LPPC_P_CTR	130.900	SFC-FL660
Lisboa Control (East - NC+S)	LPPC_E_CTR	127.255	SFC-FL660
Lisboa Control (North and Center)	LPPC_NC_CTR	134-855	SFC-FL660
Secondary Sectors			
Lisboa Radar (North Lower)	LPPC_NL_CTR	132.305	SFC-365
Lisboa Radar (Center Lower)	LPPC_CL_CTR	136.030	SFC-365
Lisboa Radar (East Lower)	LPPC_EL_CTR	131.325	SFC-365
Porto TMA			
Porto Approach	LPPR_APP	120.910	SFC-FL245

4. Coordination Procedures

Both units shall keep each other advised about relevant VFR flights.



Transfer Point	Route		Receiving Sector	Flight Level
	Airways	HISPAFRA (7)		
PETEK	-	X (eXit)	LPPC_W_CTR	ODD
RIPEL		FL>245		

XERES			
DEMOS	UN728		
AGADO (2)	-	LPPC_N_CTR	
PINEK(2)(3)			
RITUS			
ASPOR (3)	H3 UT3 UT326, UT328		
ABUPI	-		
BATAX (4)			
ADORO (4)	A43 UL155		
ARDID	UN976		
BARDI	B47 UM191 UN873 UZ405		
ADINO (5)	UL14	LPPC_C_CTR	
CCS (5)	UZ436 B60 UL185 A975 UN975		
MALIS (6)	G414 UT5	-	LPPC_N_CTR
RALUS (6)	H406 UN872 UZ406		
NINOS (6)	UN976		
RIVRO (6)	B47 UM191		LPPC_C_CTR
ELVAR (6)	A975		

- (2) AGADO and PINEK shall be considered a single point. Traffic with same FL shall be transferred clear of conflict
- (3) PINEK and ASPOR shall be considered a single point. Traffic with same FL shall be transferred clear of conflict.
- (4) BATAX and ADORO shall be considered a single point. Traffic with same FL shall be transferred clear of conflict.
- (5) ADINO and CCS VOR/DME shall be considered a single point. Traffic with same FL shall be transferred clear of conflict.
- (6) FL<245
- (7) Free Route Airspace Operations within Spanish airspace (HISPAFRA) is defined from FL245 to FL660

4.2. From Lisboa to Madrid (LPPC → LECM)

Transfer Point	Route		Receiving Sector	Flight Level
	Airways	HISPAFRA (7)		
PETEK	-	E (Entry) FL>245	LECM_R1_CTR	EVEN
RIPEL				
XERES				
DEMOS (8)	UN728		FL>305 LECM_R1_CTR FL<305 LECM_SAS_CTR	
AGADO (8)	-			
PINEK (8)				
BALNO	-		LECM_R1_CTR	
ADORO (9)	A43 UL155		LECM_R2_CTR	
TOSDI(9)(10)	G52 UN745			
BARDI (10)	B47, UM191, UN873, UZ405			
URED I (11)	UN870			
OGERO (11)	UZ409			
CCS	A975			

MOSEN (12)	H406, UZ406	-	LECM_R1_CTR
RIVRO (12)	B47 G52 UM191 UN745		LECM_R2_CTR
PORLI (12)	UN870		
PORTA (12)	B60 UL185, UN873		
ELVAR (12)	A975 UL14 UN975		

(7) Free Route Airspace Operations within Spanish airspace (HISPAFRA) is defined from FL245 to FL660

(8) DEMOS, AGADO and PINEK shall be considered a single point. Traffic with same FL shall be transferred clear of conflict.

(9) ADORO and TOSDI shall be considered a single point. Traffic with same FL shall be transferred clear of conflict.

(10) TOSDI and BARDI shall be considered a single point. Traffic with same FL shall be transferred clear of conflict.

(11) UREDI and OGERO shall be considered a single point. Traffic with same FL shall be transferred clear of conflict.

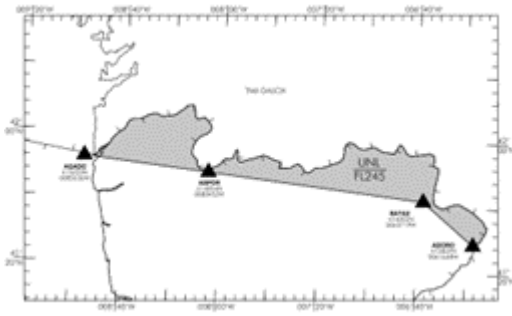
(12) FL<245

5. ATS Delegation

5.1. From Lisboa ACC to Madrid ACC

Within the Lisboa ATS the provision of ATS in accordance with the airspace classification is performed by Madrid ACC within the following area(s):

- Lateral Limits: 415222N 0085536W (AGADO); 414854N 0080452W (ASPOR); 414202N 0063719W (BATAX); 412859N 0061648W (ADORO); following the Spanish-Portuguese border to the North up to 415222N 0085536W (AGADO).
- Vertical Limits: FL245-UNL



5.2. From Madrid ACC to Lisboa ACC

Within the Madrid ATS the provision of ATS in accordance with the airspace classification is performed by Lisboa ACC within the following area(s):

- Lateral Limits: 412859N 0061648W (ADORO); 411827N 0061640W (NETOS); 403501N 0061809W (BARDI); 393128N 0062605W (DVOR CCS); 391946N 0062731W; 390632N 0070142W; following the Spanish-Portuguese border to the North up to 412859N 0061648W (ADORO).
- Vertical Limits: FL245-UNL



6. Departures and Arrivals

6.1. Arrivals to Porto AD

ATC	STAR	Procedure	Remarks
LECM_SAS_CTR	ASPOR MALIS	LECM_SAS_CTR → LPPR_APP	FL190 (12)

(12) Arrivals shall be handed over at FL 240 or below, descending to FL 190, released for further descent. In case RWY 17 in use at Porto, Madrid will endeavor to hand over traffic as low as possible.

6.2. Arrivals to Lisboa AD

ATC	SID	Procedure	Remarks
LECM_R2_CTR	CCS	LECM_R2_CTR → LPPC_C_CTR	Max FL330 (13)

(13) To be used only on request from Lisboa ACC.

6.3. Arrivals to Vigo AD

ATC	COP	Procedure	Remarks
LPPC_N_CTR	AGADO TURON	LPPC_N_CTR → LECM_SAS_CTR (14)	FL200 (15)

(15) If LECM_SAS_CTR is not connected the traffic must be transfer to LEST_APP

(14) Arrivals shall be handed over at FL 240 or below, descending to FL 200, released for further descent clear of LPPR Departures. Traffic below FL155 should be coordinated with Santiago APP.

6.4. Arrivals to Santiago AD

ATC	COP	Procedure	Remarks
LPPC_N_CTR	AGADO TURON	LPPC_N_CTR → LECM_SAS_CTR (16)	FL200 (17)

(16) If LECM_SAS_CTR is not connected the traffic must be transfer to LEST_APP

(17) Arrivals shall be handed over at FL 240 or below, descending to FL 200, released for further descent clear of LPPR Departures. Traffic below FL155 should be coordinated with Santiago APP.

6.5. Departures from Porto AD

ATC	COP	Procedure	Remarks
LPPR_APP	TURON	LPPR_APP → LECM_SAS_CTR	FL180 (18)

(18) Traffic shall cross TURON FL160 or above. Traffic is released for climb up to FL240. Traffic below FL155 and conventional departures should be coordinated with Madrid ACC.

6.6. Departures from Vigo AD

ATC	COP	Procedure	Remarks
LEST_APP	DEMOS	LEST_APP → LPPC_W_CTR	ODD, Max FL190 (19)

(19) Released for further climb.

6.7. Departures from Santiago AD

ATC	COP	Procedure	Remarks
LEST_APP	DEMOS	LEST_APP → LPPC_W_CTR	ODD, Max FL190 (20)

(20) Released for further climb.

6.8. Departures from Madrid and Cuatro Vientos ADs

ATC	COP	Procedure	Remarks
LECM_R2_CTR	ADORO BARDI	LECM_R2_CTR → LPPC_N_CTR	ODD, Max FL310 (21)

7. Contributions

This document has been drafted in coordination between the ATC Operations Department of Spain and Portugal and Madrid FIR.

8. Changelog

Version	Date	Changes
2.0	21/4/2022	New format Implementation of Free Route Airspace in Spain (HISPAFRA)
3.0	23/6/2023	Integration of LECG TACC on LECM FIR