

# Letter of Agreement

Between vACC Morocco and vACC Spain

Revision 1 – 10/01/2020





# INTRODUCTION

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## Purpose

The purpose of this Letter of Agreement (LoA) is to define the coordination procedures between the FIRs of Madrid (LECM), Casablanca (GMMM) and Canarias (GCCC) for the Provision of Air Traffic Services.

The procedures in this LoA are for use on the VATSIM Network only and should never be adopted for real world use.

## GENERAL PROCEDURES

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1. Traffic shall be transferred to the neighboring sector 10nm before reaching its boundary.
2. Traffic shall be transferred complying with the separation guidelines as of RVSM. (5nm horizontally / 1000ft vertically).
3. In case of having a sequence of traffic, all with the same destination. Extra 5nm shall be applied horizontally. Making a total horizontal separation of 10nm.
4. In case of traffic being transferred while climbing or descending. Traffic shall be transferred 3000ft before reaching its Cleared Flight Level.

## Cruising flight levels

- Everything going towards mainland Spain will fly an EVEN Flight Level.
- Everything going towards the Canary Islands will fly an ODD Flight Level.



# SECTOR LAYOUT

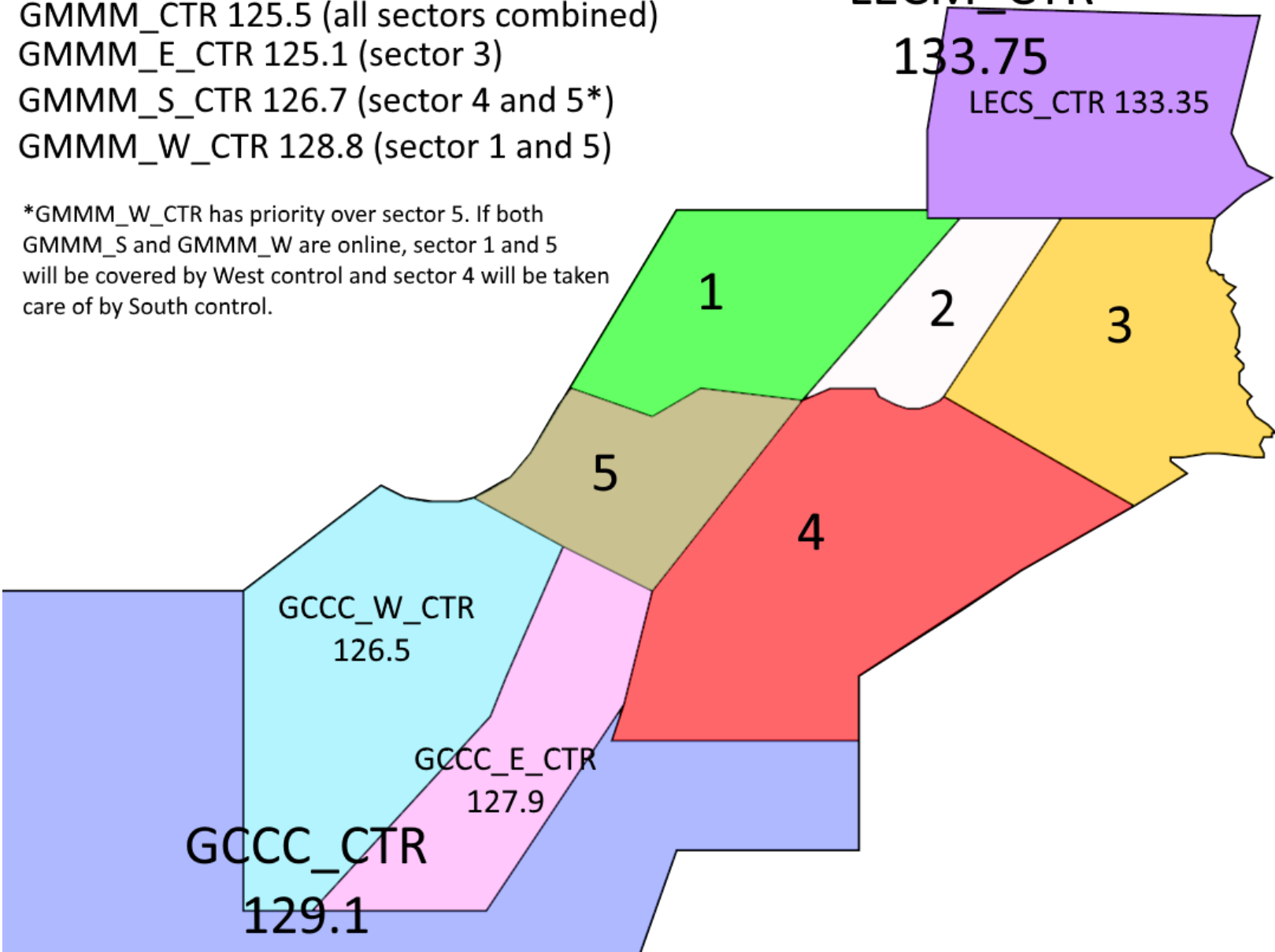
- GMMM\_CTR 125.5 (all sectors combined)
- GMMM\_E\_CTR 125.1 (sector 3)
- GMMM\_S\_CTR 126.7 (sector 4 and 5\*)
- GMMM\_W\_CTR 128.8 (sector 1 and 5)

\*GMMM\_W\_CTR has priority over sector 5. If both GMMM\_S and GMMM\_W are online, sector 1 and 5 will be covered by West control and sector 4 will be taken care of by South control.

## LECM\_CTR

133.75

LECS\_CTR 133.35





## NEIGHBOURING AIRPORTS WITH COORDINATED DESCENT

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### Tanger (GMITT)

The location of Tanger airport makes coordination quite challenging as 90% of the descent of planes inbound from the north will be handled by Spanish ATC. In consequence the arrival shall be given by Spanish ATC as well. All transfers regarding planes inbound Tanger from Spanish ATC will be done directly to Tanger Approach (121.2) if online, otherwise to Casablanca Radar.

#### Arrivals

	<b>RWY 28 (Preferential)</b>	<b>RWY 10</b>	<b>ALTITUDE @ FIX</b>	<b>TRANSFER POINT</b>
<b>ABIRO</b>	ABIRO 2A	ABIRO 1A	FL100@BAMBA	10nm prior BAMBA
<b>NOLRO</b>	NOLRO 2A	NOLRO 1A	FL60@ADKIM	10nm prior ADKIM
<b>LAMAD</b>	LAMAD 2A	LAMAD 1A	FL100@GALTO	10nm prior GALTO

#### Departures

All Departures towards Spanish Airspace will be instructed to climb to FL100 and 3000ft before reaching that altitude will be transferred to the appropriate Spanish ATS.

### Tetouan (GMTN)

Just like Tanger Tetouan is quite a challenging airport when it comes to coordination as well. Tetouan doesn't receive as much traffic so the arrival procedures are quite a bit easier. Tetouan does not have any STAR procedure and only one runway has an established approach procedure.

#### Arrivals

Arrivals shall be instructed to descent to FL70 and be transferred 10 nm before reaching GALTO to Tetouan Tower (procedural) 119.0.

#### Departures

Departures will be instructed to climb to FL60 and will be transferred to the appropriate Spanish ATS 3000ft before reaching the cleared flight level.



## Málaga (LEMG)

The sunny airport in Costa del Sol might not be as challenging as Tanger when it comes to ATC coordination but still is situated close enough for it to have some coordination to be done between the two ATS providers.

### Arrivals

	<b>RWY 13/12 (Preferential)</b>	<b>RWY 31</b>
<b>PIMOS</b>	PIMOS 1Q	PIMOS 1J
<b>PEKOP</b>	PEKOP 2Q	PEKOP 2Z
<b>VJF</b>	VJF 2K	VJF 2J

## Gibraltar (LXGB)

The strategically well-situated British airport makes coordination quite complicated. As a reminder, Gibraltar is controlled by VATSIMUK.

### Arrivals

Arrivals from the south to Gibraltar are unlikely but possible. There are two possible entries:

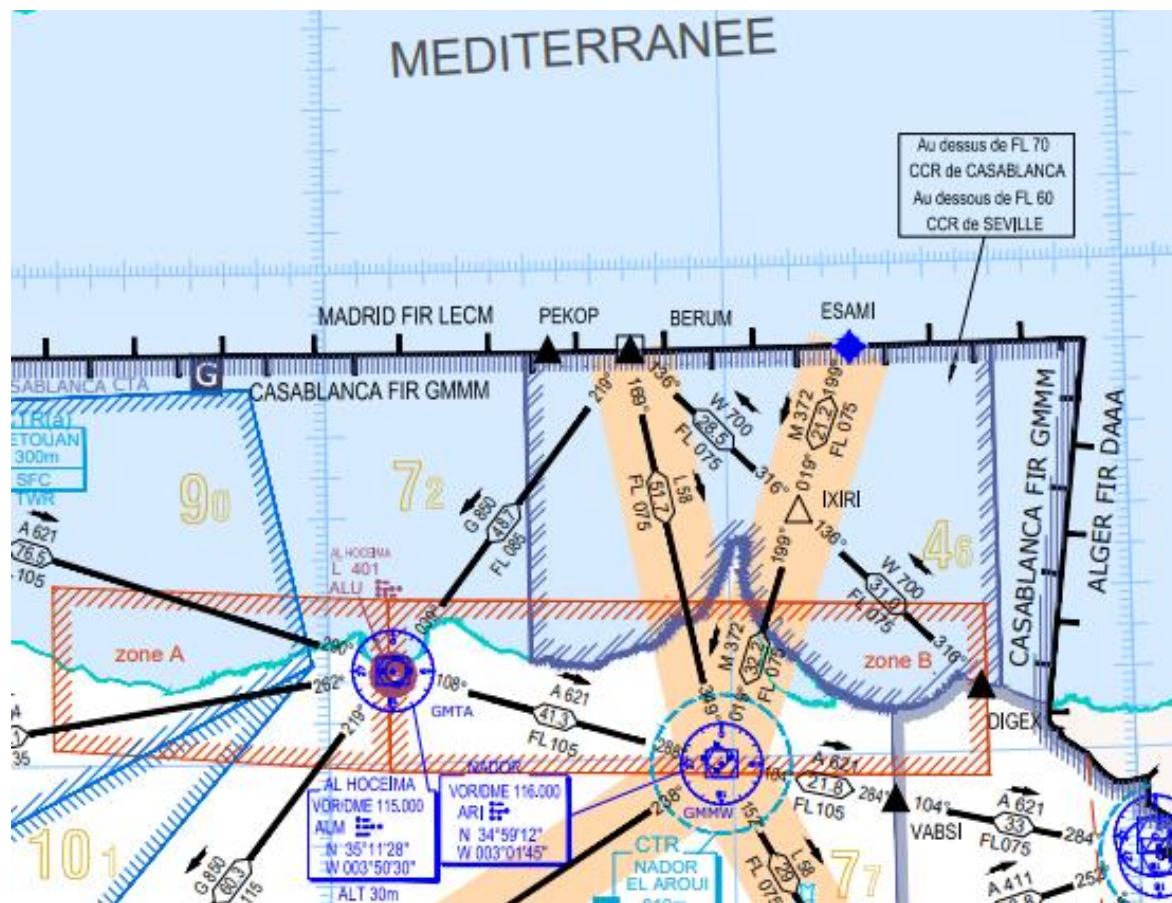
1. Via BAMBA, in which case arrival will be provided by Spanish controllers and later on transferred to Casablanca for further descent. From BARPA to PIMOS the ATC service will be provided by Gibraltar Approach. If offline, traffic may be told to switch over to Unicom.
2. Via GALTO, in which case the arrival will be provided by Casablanca and later on transferred directly to Gibraltar Approach.



# Melilla (GEML)

For the purpose of simplification Casablanca has delegated a box of airspace around Melilla to the Area Control Center of Seville. Thanks to that, planes transiting from Spain to Melilla won't have to change unnecessarily between Frequencies.

As seen in the image below, this delegation of airspace goes from surface up to FL60. From FL70 onwards, this airspace is controlled by Casablanca.





# Western Sahara

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It is not very usual to see planes roaming by this area, in any case, Air Traffic Control is provided to some extent.

## ATC coverage and services provided.

### FIR/UIR CANARIAS

VERTICAL LIMITS	ATS UNIT	AIRSPACE CLASSIFICATION
SFC-FL145	N/a	G
FL145-195	Canarias Radio	C
FL195-660	Canarias Radio	C

Radar surveillance is not available, in consequence, procedural control is used by means of position reports.

### LOCAL AIRPORTS

In this territory there are two main airports, Dakhla (GMMH), also known in Spanish by the name of “Villa Cisneros” and EL-Aiun (GMML). Both airports are controlled by Morocco and have their Approach stations. In any case, the coordination between Canarias and Morocco regarding inbound planes to airports in Western Sahara is zero, as controlled airspace from Canarias ends well before the beginning of Locally controlled Approach/Tower stations.

## Validity

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This Letter of Agreement is valid from the 10<sup>th</sup> of January of 2020 and has a validity of 2 years from which point a revision must be conducted.

- Morocco vACC Director – Mehdi Naguib.
- Spain vACC Director – J. Adolfo Medina.
- Spain vACC Operations Director – Oscar Berenguer.