







Malta vACC/ATO



Air Traffic Control Briefing

(SOP) 12/2014

Standard Operating Procedures



Glossary:

If both sectors use the following indication, standard LoA with other Boundary Sector and SOP the coordination between the sectors are not necessary except for weather cells, congested sectors/airports, aircraft performance limitations.

The transfer with other ATC station such as: LMML_GND, LMML_TWR, LMML_APP, LMMM_CTR & LMMM_E_CTR will be used the procedure in "pending release", to avoid additional workload in relation to the transfer of radar identification and separation on a 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.

The ATC controlling Malta, must always registered the Radar/Audio track, with the Logging and Playback function integrated in Euroscope, in order to avoid any problem with other traffic.

Acronyms and Abbreviation:

IFR: Instrumental Flight Rules

VFR: Visual Flight Rules

vACC: Virtual Area Control Center **PSR**: Primary Surveillance Radar **SSR**: Secondary Surveillance Radar

PSR + SSR: Primary + Secondary Surveillance Radar

UIR: Upper Information Region **FIR:** Flight Information Region **TMA:** Torminal Managements Are

TMA: Terminal Maneuvering Area

CTR: Control Traffic Zone
ATZ: Aerodrome Traffic Zone

SFC: Surface

AMSL: At Mean Sea Level

MEA: Minimum En-route Altitude **MEL**: Minimum En-route Level

TA: Transition Altitude **TL:** Transition Level

LoA: Letter Of Agreement

SOP: Standard Operating Procedures

LM-Dx: Malta Dangerous Areas **RFL:** Requested Flight Level **RPS:** Radar Position Symbols

MRVA: Minima Radar Vector Altitude

NM: Nautical Miles

NDS: Non Deviation Status



1) Organization of Airspace and Runway in use:

The airspace jurisdiction is divided vertically in:

UIR of Malta
The UIR of Malta is classified as "C" and its vertical limits are:
FL 460
FL195
FIR of Malta
The FIR of Malta is classified as "G" and its vertical limits are:
FL 195
SFC
TMA of Malta
The TMA of Malta is classified as "C" and its vertical limits are:
FL 195
2,000 FT AMSL
CTR & ATZ of Malta The CTR and ATZ of Malta is alreadilist day "D" and its ventical limits are:
The CTR and ATZ of Malta is classified as "D" and its vertical limits are:
2,000 FT AMSL
SFC
ATZ of Lampedusa (LICD)
The ATZ of Lampedusa (LICD) is classified as "G" and its vertical limits are:
FL 65
SFC

Runway in use:

Malta Airport has 2 runway, 05/23 and 13/31.

Malta Tower shall be select the optimal runway in use, considering the wind component on the airport. Normally the main runway in use is runway 31 from 06 to 18 local time and runway 13 from 18 to 06 local time. Runway 05/23 shall be used for VFR Traffic, but can be used in high wind situations when the crosswind components exceed 5 knots, also remember that the last decision is on pilot's discretion.



2) Process organization

Subdividing:

The operating segment represents the basic organizational form for the provision of ATS services, is divided into operating positions in function of the workload that normally weighs on the sector itself and in relation to the structure and type of airspace jurisdiction.

The distribution of tasks and tasks between multiple operating positions is to be considered as a technique for sharing the work load, to cope with the needs of supply of services to users, according to various operational contingencies.

The dynamics of work, while respecting specific skills possessed by reason of the rating, it must be characterized by a strongly integrated with each other compensation of any load imbalances that may occur for each position.

3) Malta Airspace Classification, Operative Frequency, Sector Ownership Transition Altitude, & Sectors

Airspace Classification:

UNL		MALTA WEST		UNL	MA) EA	LTA ST UNL
FL460		CLASS G			CLA	SS G FL460
FL195		CLASS C			CLA	SS C FL195
CLASS G	MEL	l		MEL	MEL	CLASS G
	CLASS G	CLASS G CLASS D	2000FT CLASS G	CLASS G	CLASS G	
		IUQA ATZ				
		LUQA CTR				
OTHER AIRSPACE	DESIGNATED AIR ROUTES	TERMINAL CONTRO	OL AREA	DESIGNATED AIR ROUTES	DESIGNATED AIR ROUTES	OTHER AIRSPACE



Operative Frequency:

VATSIM Callsign	Sector Name	Frequency (MHz)	Airspace Classification	Airspace Limit
LMMM_CTR	Malta Radar	130.970	Class C*	MEA/MEL to FL460
LMMM_E_CTR	Malta East Radar	133.620	Class C*	MEA/MEL to FL460
LMML_APP	Luqa Approach	128.150	Class D	2000FT AMSL to FL195
LMML_TWR	Luqa Tower	135.100	Class C	SFC to 2000FT AMSL
LMML_GND	Luqa Ground	121.600	//	//

^{*}Below MEA/MEL or outside ATS Route, is class G with only Traffic Information Service.

Sector Ownership:

SECTOR	1 st ALT	2 nd ALT	3 rd ALT
LMMM_CTR	LMMM_E_CTR*	EURS_FSS (≥ FL245)	//
LMMM_E_CTR	LMMM_CTR	EURS_FSS (≥ FL245)	//
LMML_APP	LMMM_CTR	//	//
LMML_TWR	LMML_APP	LMMM_CTR	//
LMML_GND	LMML_TWR	LMML_APP	LMMM_CTR

^{*}Only for East Sector

Transition Altitude:

- Transition Altitude of Malta Luqa (LMML): 5000ft
 Transition Level of Malta Luqa (LMML): FL 70
- Transition Altitude of Lampedusa (LICD): 3000ft
 Transition Level of Lampedusa (LICD): by QNH

QNH	Transition Level of LICD
<977	FL55
977hPa ≤ / <995	FL50
995 hPa ≤ /<1013	FL45
≥ 1013	FL40

ACC Sector:

Malta Radar is divided into two sector call Malta West (LMMM_CTR) and Malta East (LMMM_E_CTR), each sector Classified "C" have the responsibility on the ATS Route from MEA/MEL to FL460.

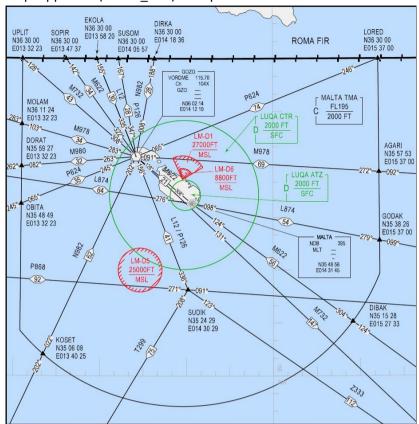
Handoff of communication shall be made at least 15 NM prior to the established limit of jurisdiction from Malta West (LMMM_CTR) to Malta East (LMMM_E_CTR) and vice versa.



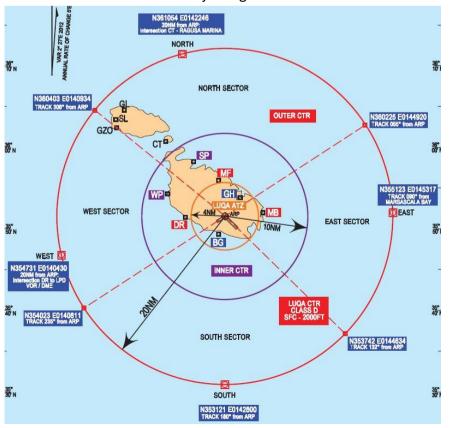


APP Sector:

Luga Approach (LMML APP) is responsible for the traffic into the TMA Classified "C" from 2000ft AMSL to FL195.



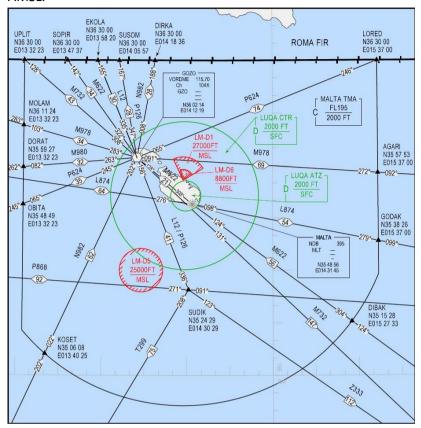
Luqa Approach (LMML_APP) should transfer to Luqa Tower (LMML_TWR) the VFR traffic to the establish VFR Point at least 1 minute before joining the CTR at 2000ft AMSL or below with the follow clearance to continue:



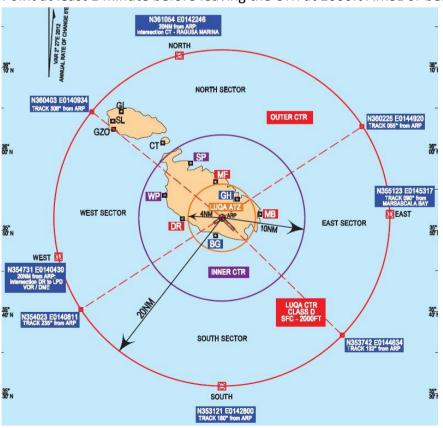


TWR Sector:

Luqa Tower (LMML_TWR) is responsible for the traffic into the Runway, CTR & ATZ Classified "D" from SFC to 2000ft AMSL.



Luqa Tower (LMML_TWR) should transfer to Luqa Approach (LMML_APP) the VFR traffic to the establish VFR Point at least 1 minute before leaving the CTR at 2000ft AMSL or below with the follow clearance to continue:





4) Departures & Arrivals Management

All instructions below may be subject to coordination, also the arrivals are programmed in step descend of 2000ft.

All handover procedures shall be clear of conflict.

Arrivals (Hand-Off from Malta Radar "LMMM CTR" to Luga Approach "LMML APP"):

Sector from Hand-Off	Airway	FIX	Transfer Point or FL*	Cleared FL	
LAMANA CTD > LAMAL ADD	M/UM732	UPLIT	RATOK or FL170	FL150	
LMMM_CTR -> LMML_APP	L/UL12	EKOLA	*** or FL170	FL150	
LIRR S CTR** -> LMML APP	N/UN982	DIRKA	NELDA	FL210 or below	
LIKK_3_CTK -> LIVIIVIL_APP	UM600	LORED	ERNAM or FL290	FL230 or below	
	M/UM978	AGARI			
	L/UL874	GODAK then MLT	*** or FL180	FL160	
	M/UM622	DIBAK then MLT			
LMMM CTR -> LMML APP	UM600	SUDIK	*** or FL170		
LIVIIVIIVI_CTR -> LIVIIVIL_APP	N/UN982	KOSET	OI FL170		
	P/UP624	OBITA	REPTA or FL170	FL150	
	M/UM980	DORAT	DEXOL or FL170		
	M/UM978	MOLAM	ASDAX or FL170		

^{*} Whichever occurs first.

Departures:

Sector to Hand-Off	FIX	Airway	Destination	Transfer Point or FL****	Cleared FL
INANAL ADD SINANANA CTD	GZO	**	//	Loaving C70 or Passing FL120	FL140
LMML_APP ->LMMM_CTR	GZO		//	Leaving GZO or Passing FL120	FL220 or RFL*
LMML_APP ->LICC_APP***	GZO	N/UN982	LICC/LICZ	DIRKA	FL180 or below
LMML_APP ->LICC_APP***	GZO		LICB	DIRKA	FL100 or below
	AGARI		//		FL150
	GODAK		//	Passing FL130	FLISU
LMML_APP ->LMMM_CTR	LORED	All	//		FL210
	OBITA		//	Passing FL120	FI 1 4 O
	SUDIK		//	Passing FL120	FL140

^{*}Only in case if Cleared FL is below the RFL.

^{**} When Roma Radar (LIRR_S_CTR or LIRR_N_CTR) are not online, expect hand-off from LMMM_CTR.

^{***} Transfer Point 15 NM before the FIX Inbound.

^{**} All except N/UN982.

^{***} If Catania Radar (LICC_APP) are offline transfer to Roma South Radar (LIRR_S_CTR) or Roma North Radar (LIRR_N_CTR), if the aforementioned ACCs are offline handoff to Malta Radar (LMMM_CTR).

^{****} Whichever occurs first.

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Initial Climb:

Luqa Ground (LMML_GND) have to instruct aircraft on Initial Climb of 5000 ft, but may be subject on coordination from Luqa Approach (LMML APP).

Caution SSR SQ Code must be assigned by the Higher Controller.

Final Approach:

Luqa Approach (LMML_APP) will transfer the aircraft at least 5NM before the threshold to Luqa Tower (LMML_TWR).

Use of TAGS:

In aircraft labels assigned flight level and COPX Point should always be updated. For waypoint tags we recommend the following use:

1) Malta Radar (LMMM_CTR) or Malta East Radar (LMMM_E_CTR) when cleared the aircraft on the arrival routes will insert the first three letter of the assigned FIX or navaid, and the last of the destination for arrival traffic. (e.g. LOR-ML for LORED, LMML Destination or PAN-CD for Pantelleria VOR, LICD Destination).

ML= LMML (Malta Luqa Airport). MG= LMMG (Malta Gozo Heliport). CD= LICD (Lampedusa Airport).

2)When the aircraft shall contact Luqa Approach (LMML_APP) will insert as soon as possible the last two letters of the ICAO destination code and the type of assigned approach for the aircraft XX-PROC/RWY "XX is for ML, MG or CD" and "PROC/RWY" is for the Type of Approach & Procedure and Runway shall be notified to the pilots. (e.g. ML-I13 or CD-LZ08).

Type of Approach:

I= ILS (Instrumental Landing System).

L= Localizer.

N= NDB Approach.

V= VOR Approach.

R= R-Nav Approach.

VIS= Visual Approach.

SRA= Surveillance Approach Radar.

PAR= Precision Approach Radar.

Procedure of approach:

Z= Zulu Approach.

X= X-Ray Approach.

Y= Yankee Approach.

3)For departing traffic Luqa Ground (LMML_GND) will insert the initial climb and SID in the following format: GZO3D or VER5A (e.g., for initial climb GZO3D=GOZO3D or VER5A=VERAK5A).



5) Military Corridor, Danger Areas & Special Callsign:

All aircraft involved in air refueling operations shall be in contact with the appropriate Malta ATS unit and will be subject to ATC clearances in accordance with established procedures.

During AAR within the Maltese corridors, ATC will consider the aircraft involved to be in NDS.

Within the airspace of the Malta FIR/UIR, NDS means that ATC will not turn/climb/descend NDS approved aircraft in order to achieve separation with other non-participating aircraft unless absolutely required due to safety, emergency or other exceptional circumstances.

Military Corridor:

Identification	Significant points defining corridor	Upper limit Lower limit	Width of corridor	Remarks
1	2	3	4	5
FALCON CORRIDOR	ARLOS – AMIBO – OMARA – SUBOK	FL280 FL150	5 NM either side of centreline	Air-to-Air refuelling corridor Available bi-directional Activated on a tactical basis
OSPREY CORRIDOR	ARLOS – ALIXA – TISAL	FL280 FL200	5 NM either side of centreline	Air-to-Air refuelling corridor Available bi-directional Activated on a tactical basis
	FALCON CORRIDOR	ATHINAI FIR HELLAS UIR		S S



ENR 5. NAVIGATION WARNINGS

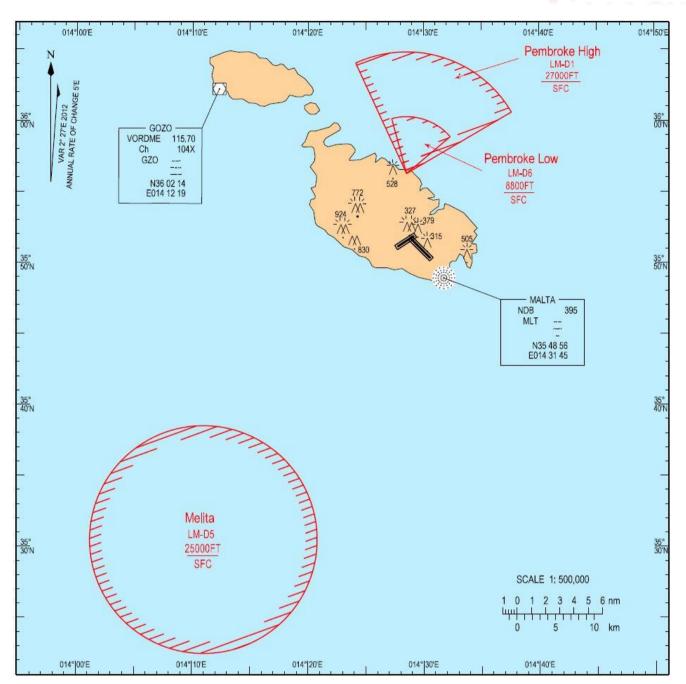
ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS

Identification, name and lateral limits	Upper limit Lower limit 2	Remarks (time of activity, type of restriction, nature of hazard) 3
PROHIBITED AREAS Nil		
RESTRICTED AREAS Nil		
DANGER AREAS		
LM-D1 'PEMBROKE HIGH' Arc with 8.5NM radius, centred on 355554N 0142832E joining the following points: 360337N 0142406E - 360009N 0143736E	27000FT SFC	Gun firing. Activated by NOTAM
LM-D5 'MELITA' Circle, 8NM radius centred at 353030N 0141100E	25000FT SFC	Live firing. Activated by NOTAM
LM-D6 'PEMBROKE LOW' Arc with 4NM radius, centred on 355554N 0142832E joining the following points: 355946N 0142715E - 355829N 0143219E	8800FT SFC	Small-to medium gun firing. Activated by NOTAM

NOTES:

- (1) A graphical representation of these areas is given on page ENR 6-3.
- (2) When these Danger Areas are active, aircraft operators should flight plan their preferred routes and Malta ATC will tactically re-route aircraft clear of these Danger Areas by use of radar vectors, direct routing or vertical separation.
- (3) FL 290 first usable level for GAT above LM-D1.
- (4) FL 100 first usable level for GAT above LM-D6.
- (5) FL 270 first usable level for GAT above LM-D5.
- (6) Aircraft are deemed clear when operating outside the lateral limits of the danger areas.





Special Callsign:

Malta Air Force: MAFxxxx

The callsign listed below, are examinations, careful to mix them for normal aircraft:

P1 Exam: EXM1xx

P2 Exam: EXM2xx

P3 Exam: EXM3xx

P4 Exam: EXM4xx

P5 Exam: EXM5xx



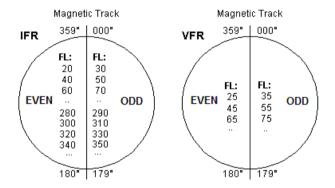
6) Semicircular Level for IFR/VFR:

Cruising Levels:

Within Europe RVSM Airspace are organized in accordance with the Table of Cruising Level contained in ICAO Annex 2, Appendix 3a.

Within the Malta airspace, to accommodate predominant traffic directions:

- 1) From 000° to 179° (Eastbound= ODD FLs)
- 2) From 180° to 359° (Westbound= EVEN FLs)



Flight Level approved in Malta Airspace:

			TRACK	(MAG)						
	From 000° to 179°			*	From 180° to 359°					
IFR	Flights	VFR Flights		IFR Flights		Flights IFR Flights VFR Flights		VFR Flights IFR Flights		Flights
FL	Altitude (feet)	FL	Altitude (feet)	FL	Altitude (feet)	FL	Altitude (feet)			
30	3000	35	3500	40	4000	45	4500			
50	5000	55	5500	60	6000	65	6500			
70	7000	75	7500	80	8000	85	8500			
90	9000	95	9500	100	10000	105	10500			
110	11000	115	11500	120	12000	125	12500			
130	13000	135	13500	140	14000	145	14500			
150	15000	155	15500	160	16000	165	16500			
170	17000	175	17500	180	18000	185	18500			
190	19000	195	19500	200	20000					
210	21000			220	22000					
230	23000			240	24000					
250	25000			260	26000					
270	27000			280	28000					
290	29000			300	30000					
310	31000			320	32000					
330	33000			340	34000					
350	35000			360	36000					
370	37000			380	38000					
390	39000			400	40000					
410	41000			430	43000					
450	45000									



7) Radar Stations, Coverage, RPS, MRVA & Minimum Separation:

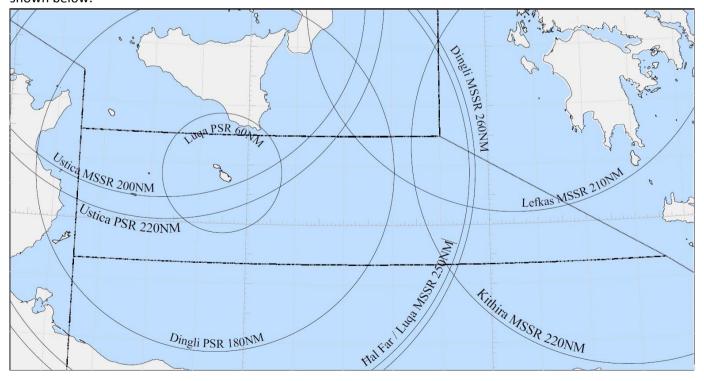
N.B. The present document is valid from the Sector file version 2.8 1409 or later

Radar Stations, Coverage:

Malta ATC Operates in a multiradar tracking environment using the followind radar stations:

Radar	Position	Range PSR	Range SSR
Dingli Radar	355108.55N 0142253.89E	180NM	260NM
Luqa Radar	355107.25N 0142818.67E	60NM	250NM
Hal Far Radar	354917.37N 0143017.36E	-	250NM
Ustica Radar	384228.00N 0131038.00E	220NM	200NM
Kithira Radar	361340.04N 0225625.91E	-	220NM
Lefkas Radar	384228.27N 0203856.79E	-	210NM

The are of radar coverage for primart radar is not identical to that for secondart radar. Grapgic portrayal of the areas is shown below.





RPS:

The visual indication in symbolic form, on a radar display, of the position of an aircraft obtained after automatic processing of positional data derived from primary and/or secondary surveillance radar.

Primary Plot: Primary Radar (PSR) + Secondary Plot: Secondary Radar (SSR)

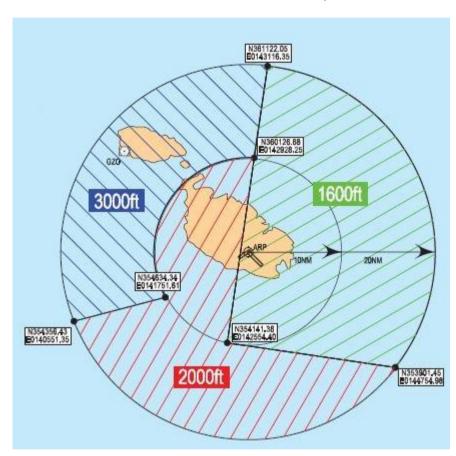
Combined Plot: Primary Radar (PSR) + Secondary Radar (SSR)

Aircraft Coasting: Aircraft lost

MRVA:

Outside Malta TMA is FL100.

Inside Malta TMA but outside 20 NM from Malta Airport is 3000ft AMSL.



Separation in Malta Airspace:

The separations listed below are only for airplanes with the same symbols radar "Only IFR Rules":

5 NM Within the Malta TMA/Lampedusa ATZ (SFC-FL195)/(SFC-FL65)

10 NM Outside Malta TMA (SFC-FL460)

(SFC-FL460) 15 NM on East Sector

The separations listed below are only for airplanes with different symbols radar:

- 15NM between 2 PSR
- 15NM between 1 SSR and 1 PSR
- 10NM between 2 SSR inside an area of Primary Coverage
- 5NM between 2 PSR+SSR



8) Controller List and Euroscope Controller Abbreviations:

- **F** Displays FSS stations on line (Flight Service Stations).
- **C** Displays CTR stations on line (Center positions).
- A Displays APP stations on line (Approach positions).
- T Displays TWR stations on line (Tower positions).
- G Displays GND stations on line (Ground positions).
- S Displays ATIS stations on line (ATIS positions).
- **O** Displays OBS stations on line (Observers positions).
- U Displays unidentified stations on line (Non identified positions).





ATC List inside Malta vACC:

Abbreviation	Identification	Frequency	Callsign
MLG	Luqa Ground	121.600	LMML_GND
MLT	Luqa Tower	135.100	LMML_TWR
MLA	Luqa Approach	128.150	LMML_APP
MLC	Malta Radar	130.970	LMMM_CTR
MLE	Malta East Radar	133.620	LMMM_E_CTR
LPD	Lampedusa Information	123.500	LICD_I_TWR
MLI	Malta ATIS	127.400	LMML_ATIS

ATC List outside Malta vACC:

;Eurocontrol (Coverage LIRR and LGGG, ≥ FL245)

Abbreviation	Identification	Frequency	Callsign
EUS	Euro Control South	135.550	EURS_FSS

;North Africa Control (Coverage HLLL, DTTC, ≥ FL145)

Abbreviation	Identification	Frequency	Callsign
AFR	North Africa Center	134.520	AFRN_FSS



;Italy

Abbreviation	Identification	Frequency	Callsign
IUP	Italy Radar (≥ FL195)	132.900	LIUP_CTR
RRS	Roma South Radar	128.800	LIRR_S_CTR
RRN	Roma North Radar	124.200	LIRR_N_CTR
RRI	Roma Information	134.200	LIRR_I_CTR
RRM	Roma Military	123.220	LIRR_M_CTR
CCA	Catania Approach	119.050	LICC_APP
CCF	Catania Director	120.800	LICC_F_APP
CGT	Pantelleria Tower	11.450	LICG_TWR
CGA	Pantelleria Approach	119.350	LICG_APP
CJA	Palermo Approach	120.200	LICJ_APP

;Greece

Abbreviation	Identification	Frequency	Callsign
GGG	Athens Radar	129.800	LGGG_CTR
GGW	Athens West Radar	134.320	LGGG_W_CTR
GGP	Athens Peleochora Radar	126.620	LGGG_P_CTR

;Libya

Abbreviation	Identification	Frequency	Callsign
HTC	Tripoli Radar	120.900	HLLL_T_CTR
HBC	Benghazi Radar	129.200	HLLL_B_CTR
HNW	Tripoli North West Radar	128.400	HLLL_NW_CTR

;Tunis

Abbreviation	Identification	Frequency	Callsign
TTC	Tunis Radar	DTTC_CTR	130.800
TTC	Tunis Radar	DTTC_CTR	132.800
TTC	Tunis Radar	DTTC_CTR	119.500