Muscat International Airport Standard Operating Procedures (SOP)

Revision No	Changes	Editor	Effective Date
1.0	Initial Release	William Dennis	August 20th 2023

Document Information

Purpose

This document prescribes the procedures to be utilized for providing air traffic control services at the Muscat Air Traffic Control Tower (OOMS) and APC. The procedures described herein are supplemental to the Muscat Facility Operating Guidelines and the Muscat eAIP, as well as any published guidelines or procedures.

Cancellation

This Document cancels any pre-existing SOP for OOMS This SOP shall become the procedures in use on the effective date.

Disclaimer

Information contained in this document is designed specifically for use in a **virtual** air traffic control environment.

Procedural Deviation

Deviation from this document may **not** occur unless otherwise announced by the FIR-CH and/or XG ATC Operations Department.

General information

Hamad International Airport									
ICAO-ID	OOMS	**IATA-ID**	MCT	**Time Zone**	UTC+4	**Elevation**	25 feet / 7.6 meters	**Magnetic Variation**	001° E
Location	Latitude: 23.60080					Longitude: 58.28760			

Airspace Information					**Transition Level (TL)**	**Transition Altitude (TA)**
	CTR	TMA			FL150	13000ft
Class	D	C				
Vertical Limit	GND-5500ft	5500ft-FL150				

Parking Stands

- Domestic flights park on stands 601-608 and 501-504 (Near taxiway M).
- Economy flights park on stands 311L-313R and 412R to 416. This also applies to private flights.
- Cargo flights have their own specified cargo terminal located to the east of the aerodrome.
- Royal flights park on the Royal Flight Apron in-between R1 and R2.
- Military flights park on the apron below S1, S2 and S3.
- Police aircraft park on the apron below P1 and P2, to the left of the Royal flight apron.
- VFR traffic park on the apron below C1-C5, this is the GA apron.

Runway Information

Runway	Length x width	Surface Type	TDZ- Eleve
26R	4000 x 60m	Asphalt	25ft
08L	4000 x 60m	Asphalt	25ft

Takeoff Run Available

Runway	Intersection	Takeoff Run Available
26R	Y8	4000m
	Y6	3306m
08L	Y1	4000m
	Y3	3312m

ATC positions

Primary Positions

Position	Radio Name	Callsign	Frequency
Clearance Delivery	Muscat Delivery	OOMS_DEL	125.575
Ground	Muscat Ground	OOMS_GND	121.800
Tower	Muscat Tower	OOMS_TWR	118.825
Radar	Muscat Radar	OOMS_APP	121.200
Control	Muscat Control	OOMS_CTR	124.700

Chapter 1. Clearance Delivery

1.1 Responsibilities

- Issue ATC clearances to all departing VFR and IFR aircraft.
- All departing aircraft contact Muscat Delivery on 125.575 MHZ for IFR enroute clearance or VFR departure instructions prior to start-up.

1.2 IFR Departure Procedures

- Due to current single runway operations, temporary departure procedures are in use within Muscat International Airport.
- The two SIDs in use at this time are ITLAK 1N (ITLA1N 26R) & MURMA 1N (MURM1N 08L). The initial climb for both of these SIDs is 3000ft.

1.3 IFR Departure Instructions

- All routes must be checked for compliance with neighboring FIRs LOAs. Aircraft who do not file these routes should have them amended appropriately.
- Aircraft unable to accept preferred routes must **not** be cleared until coordination has occurred between affected/staffed facilities.
- As stated in departure procedures, there are only 2 SIDs used in Muscat International Airport at this time.
- Aircrafts unable to accept published departure procedures shall not be cleared on a radar-vectored departure unless prior coordination with OOMS_APP (121.200) is met.
- Charts can be used as a reference for the initial climb clearance as the altitude constraint on the SID ending waypoint.
- Substitute Initial Climb altitude mentioned above for lower if an aircraft's IFR cruise altitude is filed for lower.

1.4 IFR Clearance Example

- "OMA1002, cleared to Dubai, via ITLAK1N departure, runway 26R, initial climb 3000ft, Squawk XXXX".

- Additionally to this**,** if an aircraft is flying through the OOMM FIR, their routing throughout the FIR must be stated in the clearance also. For example, if a pilot is flying from OOMS to OOSA the clearance would look something like…

- "OMA2034, cleared to Salalah, via MURMA1N departure, **FULL ROUTING**, runway 08L, initial climb 3000ft, Squawk XXXX".

- ## 1.5 VFR Departure instructions

1.5.1 VFR Altitudes

- VFR Aircrafts (both remaining and not remaining in the pattern) shall be issued the instruction: ‘’not above 1500ft’’

1.6 Facility Beacon Codes

- All Types of flight rules aircraft must be assigned a unique beacon (squawk) code in accordance with the provided SSR codes by the IVAO server.

1.7 Scratchpads

- To assist the Departure controller, Clearance Delivery shall input appropriate scratchpads (WP and ALT) entries into the flight plan, as outlined below, after the clearance has been issued.

- WP shall include the Departure assigned as per **1.4.**
- ALT shall include the Initial Climb clearance issued as per **section 1.4** for IFR aircrafts and **section 1.5.1**. for VFR departures.

Chapter 2. Ground Control

2.1 Responsibilities

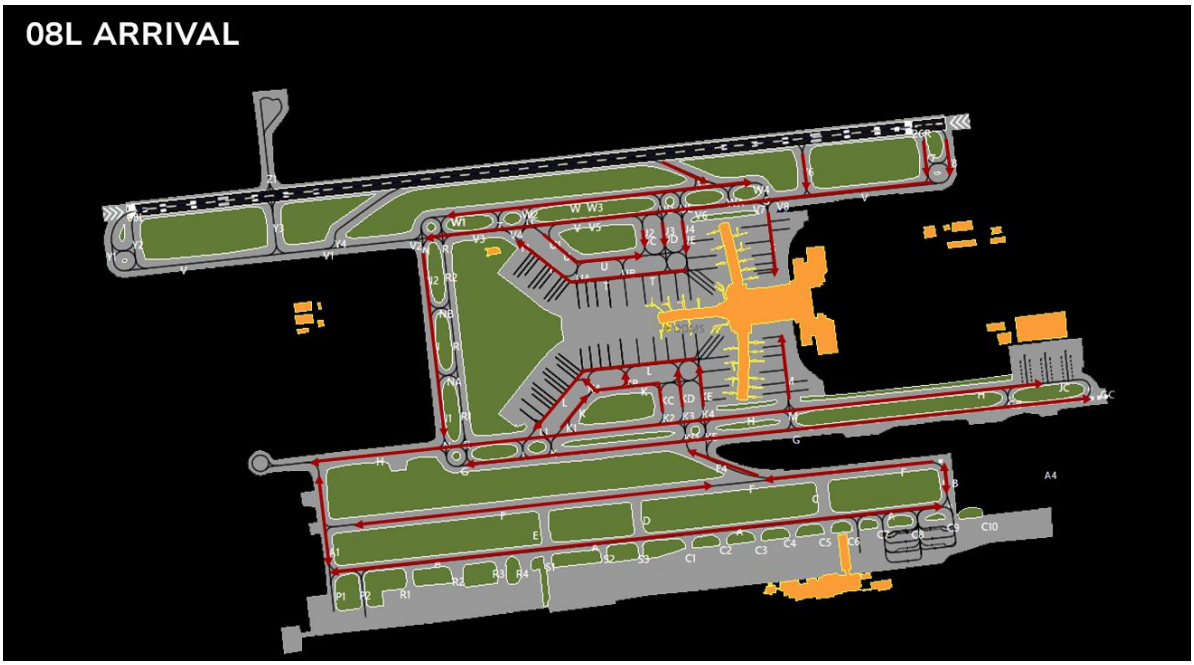
- Ground controls all airport movement areas except the Active Runway.

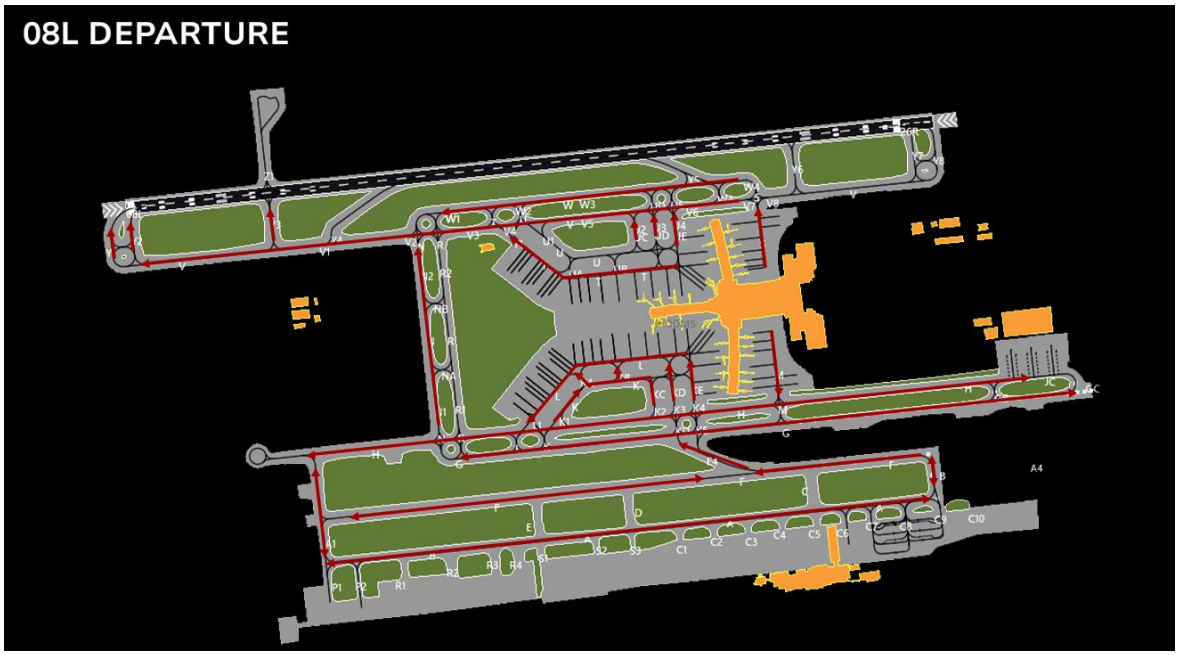
2.2 General Airport Movement

- The following taxi routings can be used for traffic flow management when needed.

2.2.1 Runway 08L Operations

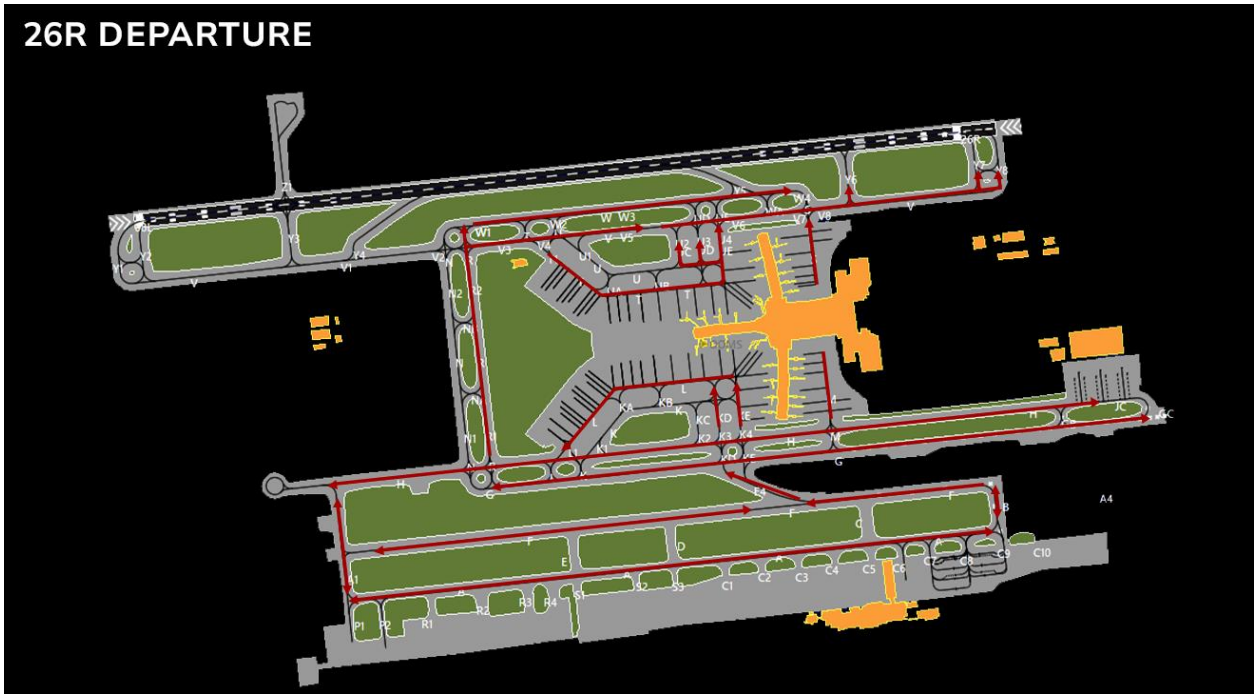
- When runway 08L is in use, arriving traffic must taxi via R or W and departures must taxi via N if taxiing to and from southern terminals. For a better visual understanding, refer to the images below.





2.2.2 Runway 26R Operations

- When runway 26R is in use, arriving traffic must taxi via V, N and departures must taxi via R if taxiing to and from southern terminals.



2.3 Startup and Pushback

- Ground controller shall authorize pushback upon checking the selected transponder code assigned by Muscat Delivery, with phraseology: "Push and start approved facing (direction)''. Additionally, adding the QNH in this clearance is recommended as well.

2.4 Intersection Departures

- Ground must notify the Tower Controller of all intersection departure verbally or via the combox.

2.5 Current ATIS

- Ground controller shall ensure pilots have the current ATIS and/or the Local QNH prior handoff to the tower controller.

Chapter 3. Tower Control

3.1Responsibilities

- Tower controller has responsibility for every aircraft which takes off or lands in Muscat International Airport.
- This also includes VFR traffic who may request to fly a local traffic pattern.
- Muscat Tower must always coordinate with the above and below positions (Delivery, Ground , Radar) informing them of needed information like current ATIS and which runways in use

3.2 Arrival Procedures

- Communication transfer must be completed prior to five nautical miles from the runway.
- Tower controller shall not change the approach sequence without coordination with APC.

3.3 Runway Change Checklist

- When changing runways, the Tower controller must coordinate with the appropriate Dep/App position(s).

  a. Tower shall be responsible for coordinating the last departure off the previously used runway and the first departure off the newly selected active runway.

  b. APC controller shall be responsible for coordinating the last arrival on the previously used runway and the first arrival on the newly selected active runway.

- Notify APC of the new runway configuration and last departure and arrivals.
- When notified by APC, stop all departures on the present configuration.
- Notify the Ground controller of the new runway configurations and divert all departures to the new runways.
- When APC is ready for the new configuration, APC will notify Tower. Upon completion of notification, departures may resume with the new configuration.
- Ensure ATIS has been updated to reflect the new configuration.

3.4 Go Around/Missed Approach procedure

- Missed approach procedure depends on the runway configuration.
- On connection, Muscat tower must specify their preferred missed approach procedure with APP/CTR. This may either be to follow published missed approach procedure or to fly runway heading and climb to a specified altitude (e.g. 4000ft).
- If an aircraft has to go around, Muscat tower shall give the instruction to either ''Follow published missed approach procedure'' or "Fly runway heading, climb altitude xxxx ft".
- The instructions and initial altitudes for each standard missed approach procedure can be found on the final approach charts for OOMS. (Jeppesen 11-1, 11-2, 12-1, 12-2, 13-1,13-2)

3.5 VFR Patterns

- VFR patterns are conducted at or below 1,500 feet.
- Runways **26R** utilize **right** traffic
- Runways **08L** utilize **left** traffic

Chapter 4. Departure & Approach Radar

4.1 Departure Procedures

- At this time, only two SIDs (Standard Instrument Departure) are used in Muscat International Airport. These can be found in Departure Procedures.

4.2 Arrival Procedures

- All aircraft who may fly into Muscat International Airport can expect radar vectors only as no STARs (Standard Terminal Arrival Route) are used.
- Muscat Radar controls below FL150 and handles aircraft 50 DME Maximum from the MCT (Muscat) VOR.

4.3 Automatic Releases

- Muscat Tower is authorized for automatic releases from the APC controller as long as the aircraft departs on the pre-coordinated active departing runway on approved procedures shown in the Departure Procedures page.

4.4 Go-Around Procedures

- Tower controller shall assign go around traffic published standard missed approach procedures as outlined in section 4 of Tower Control prior to APC handoff.

4.5 Arrival Holdings

	VUSET	**ELIGO**	**NONKA**	**KANOL**	**BUBIL**
TRK	246°	281°	345°	121°	087°
Turn	Right	Left	Left	Left	Right
Lower limit	8000ft	8000ft	8000ft	8000ft	8000ft
Upper limit	12000ft	12000ft	12000ft	12000ft	12000ft

References

- The procedures described are supplemental to the Muscat Facility Operating Guidelines and the Muscat AIP, as well as any published guidelines or procedures.