

FWC2022 TF/8

8th February 2023



FIFA WORLD CUP
Qatar 2022

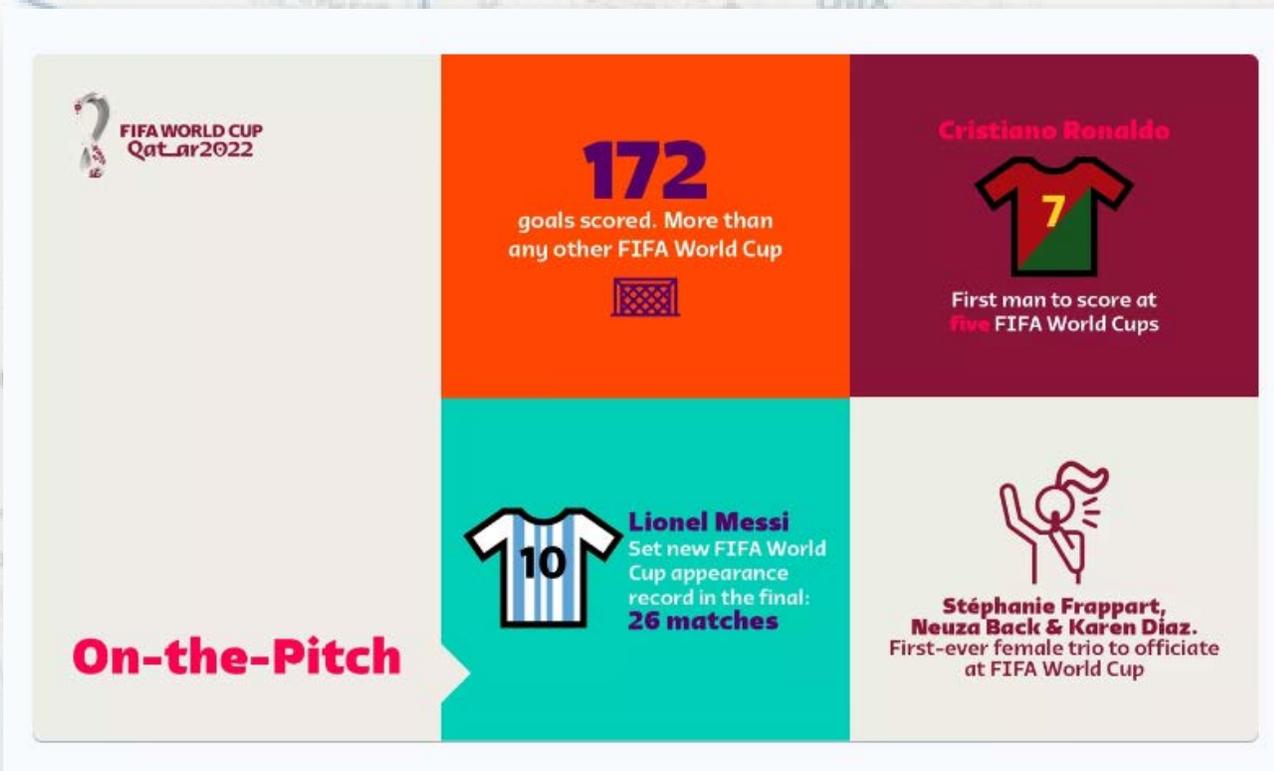


FWC 2022

The Tournament of 64 games was held between 20th November 2022 and 18th December 2022.

There were 32 teams which attracted 1.4 million visiting fans from across the globe.

A cumulative attendance of over 3.4 million spectators which is an overall capacity in excess of 96%.



FIFA WORLD CUP Qatar 2022

| | | |
|---|--|---|
|  | 172 goals scored. More than any other FIFA World Cup  | Cristiano Ronaldo  First man to score at five FIFA World Cups |
| On-the-Pitch |  Lionel Messi Set new FIFA World Cup appearance record in the final: 26 matches |  Stéphanie Frappart, Neuza Back & Karen Diaz. First-ever female trio to officiate at FIFA World Cup |

Operational Plan

Use of two airports and three (3) runways at Hamad and Doha International Airports

Estimated up to 1000 airport movements per day

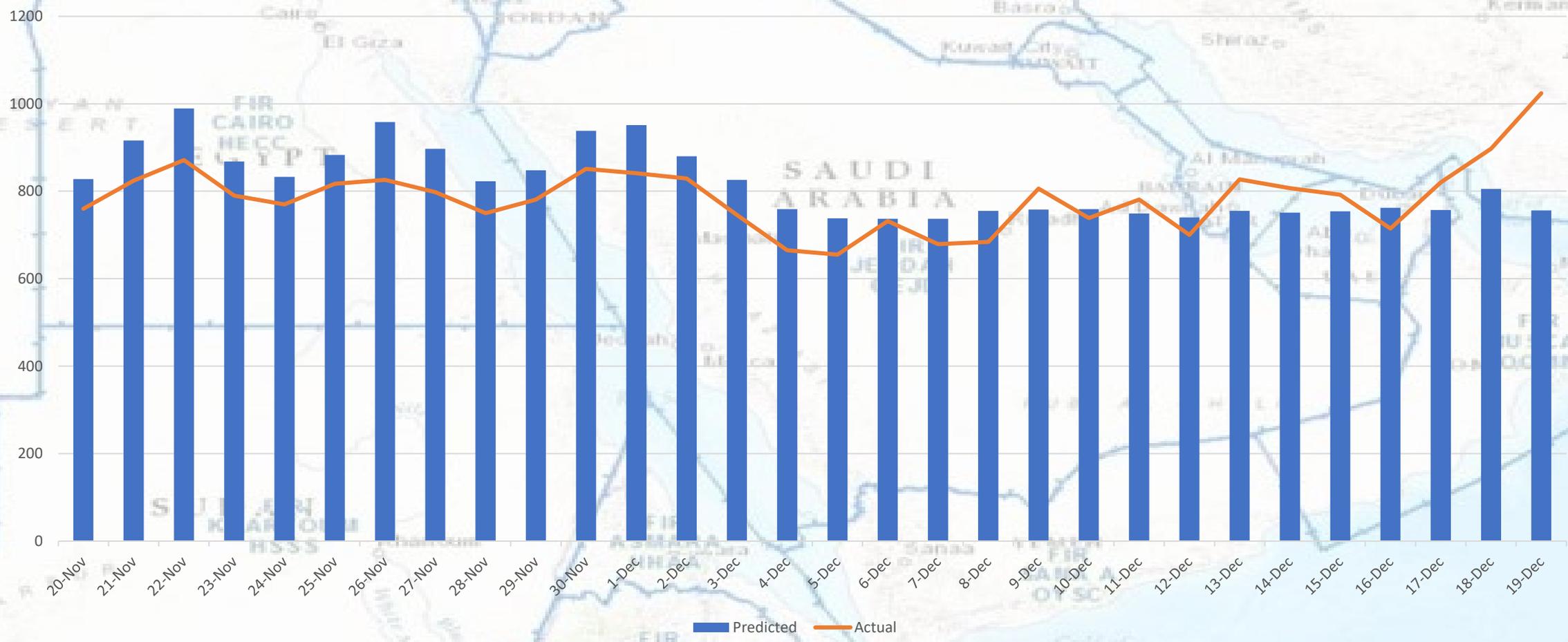
Forecast airspace capacity (Doha TMA) was 1600 movements per day (worst-case) – MIDRMA Assessment conducted.

The demand across both airports was managed via the IATA Level-3 Slot Coordination Principles from 30 October 2022 to 25 December 2022.



Actual and Predicted Traffic

FWC Movements





ATFM Daily Plan



Doha Air Traffic Flow Management Unit
ATFM DAILY PLAN
UTC Date: 18-12-2022

General

- State of Qatar National Day.
- FIFA World Cup Qatar 2022 Final & closing ceremony.
- AIRAC NIL

Airports

| | |
|----------|---|
| OTHH/DOH | <ol style="list-style-type: none"> Scheduled Runway Closure Suspended. Ref: A0691/22 and A0620/22. Independent Parallel runway Operations at OTHH & OTBD as required. Ref: AIP OTHH AD 2.22 Sec 9 and A0301/22 Runway Capacity Enhancement (HIRO) during peak periods at Hamad International Airport. Ref: AIP SUP 23/22 Reduced Runway Separation Minima (RRSM) ops during daylight hours. Ref: AIP SUP 24/22 Not available as an alternate due to peak operational capacity demand unless approved by the Airport Operator (MATAR), until 20 December 2022. Ref: A0201/22 National Day airshow at Lusail. Ref Item No - 9 under special events. |
| OTBD/DIA | <ol style="list-style-type: none"> Independent Parallel runway Operations at OTHH & OTBD as required. Ref: AIP OTBD AD 2.22 Sec 9, AIP SUP 31/22 & A0249/22. Thirteen (13) Airlines shifted operations to DIA until 30th Dec 2022. Not available as an alternate due to peak operational capacity demand unless approved by the Airport Operator (MATAR). Until 20 December 2022. Ref: A0254/22 Fixed wing GA/BA Flight operations. Ref: AIP SUP 32/2022 National Day airshow at Lusail. Ref Item No - 9 under special events. |

Airspace

| | |
|------|--|
| OTDF | <ol style="list-style-type: none"> Effective 20 November 2022 – 18 December 2022. <ul style="list-style-type: none"> ATS Route L681 segment ORLEK – EGROL closed. ATS Route M430 segment DOH – ULIKA closed. Due to Military Activity. Ref: A0622/22, A0621/22 & AIP SUP 29/2022. ATS route L564 DOH – BATHA available 24H until 31 Dec 2022. Ref: A0521/22 State ACFT flying over the northern part of State of Qatar via ATS routes A453, L602, L703, L768, M600, M677, P559, P699, P708, T308, T872, Y856 are reminded to also address their FPL to OTBDYWYX. Ref: A0025/22. |
| OEJD | <ol style="list-style-type: none"> Jeddah FIR Routing Options, Special Procedures and Requirements. Ref: Kingdom of Saudi Arabia <ul style="list-style-type: none"> AIP SUP 11/22 (Except for the routes M430, L681 & Z511 due to route closures within Doha FIR till 18 December 2022. Routes T142, Y432 & N697 are available for traffic landing or departing within OTDF FIR). AIP SUP 12/22 & A1952/22, A2335/22, A2184/22, A2185/22, A2206/22, A2221/22. Interface of OEJD – OJAC FIRs. Refer to JORDAN AIP Amendment 20/22. |

Weather

Strong wind expected at places daytime. Mild daytime with scattered clouds and chance of light rain at places, relatively cold to cold by night.
Wind: Northwesterly 10-20 KT dusting to 30 KT at places at times.

Special Events

- For FIFA World Cup QATAR 2022. Refer to QATAR AIP Supplement 19/22 titled Managing Airport Slot Coordination During Football World Cup 2022.
- Fireworks, drone shows, and laser shows until 18 December 2022 between 0300 – 2059 UTC at Corniche, Al Bidda Park, Museum of Islamic Art, Souq Waqif, Msheirib & Palm Island (Locations **within OTP 45**). Ref: A0517/22, A0526/22, A0527/22, A0616/22, A0654/22, A0655/22, A0665/22, A0697/22, A0716/22, A0717/22, A0725/22, A0727/22, A0728/22, A0731/22, A0732/22, A0752/22, A0760/22, A0775/22, A0784/22, A0785/22, A0792/22, A0827/22.
- Drone activity & shows, fireworks display & laser beam shows in **Al Wakrah** until 19 Dec 2022. Ref: A0612/22, A0613/22, A0635/22, A0636/22, A0680/22, A0795/22.
- Drone activity & shows within the vicinity of **Stadium974 & Beach974** until 31st December 2022. Ref: A0694/22, A0695/22, A0769/22, A0770/22, A0793/22, A0794/22.
- Drone activity within **Doha Port & Hamad Port** until 31st December 2022. Ref: A633/22, A0718/22, A0719/22, A0720/22, A0747/22, A0748/22, A0767/22, A0768/22, A0791/22.
- Laser Beam show, drone activity/shows at **Lusail Boulevard, West Bay, Katara and The Pearl** until 18 December 2022. Ref: A0687/22, A0688/22, A0784/22, A0786/22, A0787/22, A0788/22, A0789/22, A0790/22, A0826/22. **MDLBEAST & ARCADIA** Music Festivals, laser beam shows, fire show & drone shows at **Ras Bu Fontas** until 19 December 2022. Ref: A0674/22, A0675/22, A0678/22, A0679/22, A0699/22 & A0700/22.
- Laser beam activity at **Doha Golf Club**. Ref: A0755/22.
- Helicopter flights operating between Team Hotels & stadiums 2 hours before kick-off.
- National Day airshow at Lusail. Surface - 6,000ft between 1215-1300 UTC. Ref: A0833/22 & A0834/22.

Tactical 17/12/2022

TACTICAL FOR SATURDAY, 17 DECEMBER 2022

FIFA WORLD CUP 2022
THIRD PLACE
CROATIA VS MOROCCO 1500 UTC / 1800 LT KHALIFA INTL STADIUM

| Topics Discussed | ICAO/IATA Code: OTHH/DOH, OTBD/DIA |
|--------------------|--|
| ARR Before Matches | OTHH/DOH: 1 VVIP, 1 charter from Argentina & 1 Croatian charter. OTBD/DIA: Regional shuttles, 2 charters from Kingdom of Saudi Arabia & GA/BA |
| DEP After Matches | OTBD/DIA: Regional shuttles & GA/BA |
| Remarks | HBS Media / Gulf Helicopters Helicopter operations for media coverage and photography. 1220-1512 UTC |

1. Para Jumping exercise over **Al Bidda Park** (Within **OTP 45**). Surface – 6,000ft. Dec 17. Between 1100–1300 UTC. Ref A0831/22.

Pre-Tactical 18/12/2022

PRE-TACTICAL FOR SUNDAY, 18 DECEMBER 2022

FIFA WORLD CUP 2022
THE FINAL
Argentina vs France 1500 UTC / 1800 LT LUSAIL STADIUM

| Topics Discussed | ICAO/IATA Code: OTHH/DOH, OTBD/DIA |
|------------------|--|
| ARR Before Match | OTHH/DOH: OTBD/DIA: Regional shuttles & GA/BA |
| DEP After Match | OTBD/DIA: Regional shuttles & GA/BA |
| Remarks | HBS Media / Gulf Helicopters Helicopter operations for media coverage 2 hours before the kick-off. 1240-1515 UTC/1615-1750 UTC |

ATFM Measures

| ATFM Measure | Period | Reason |
|-----------------|--------|--------|
| See note below. | | |

Note: Tactical measure may be applied at short notice due VVIP activity.

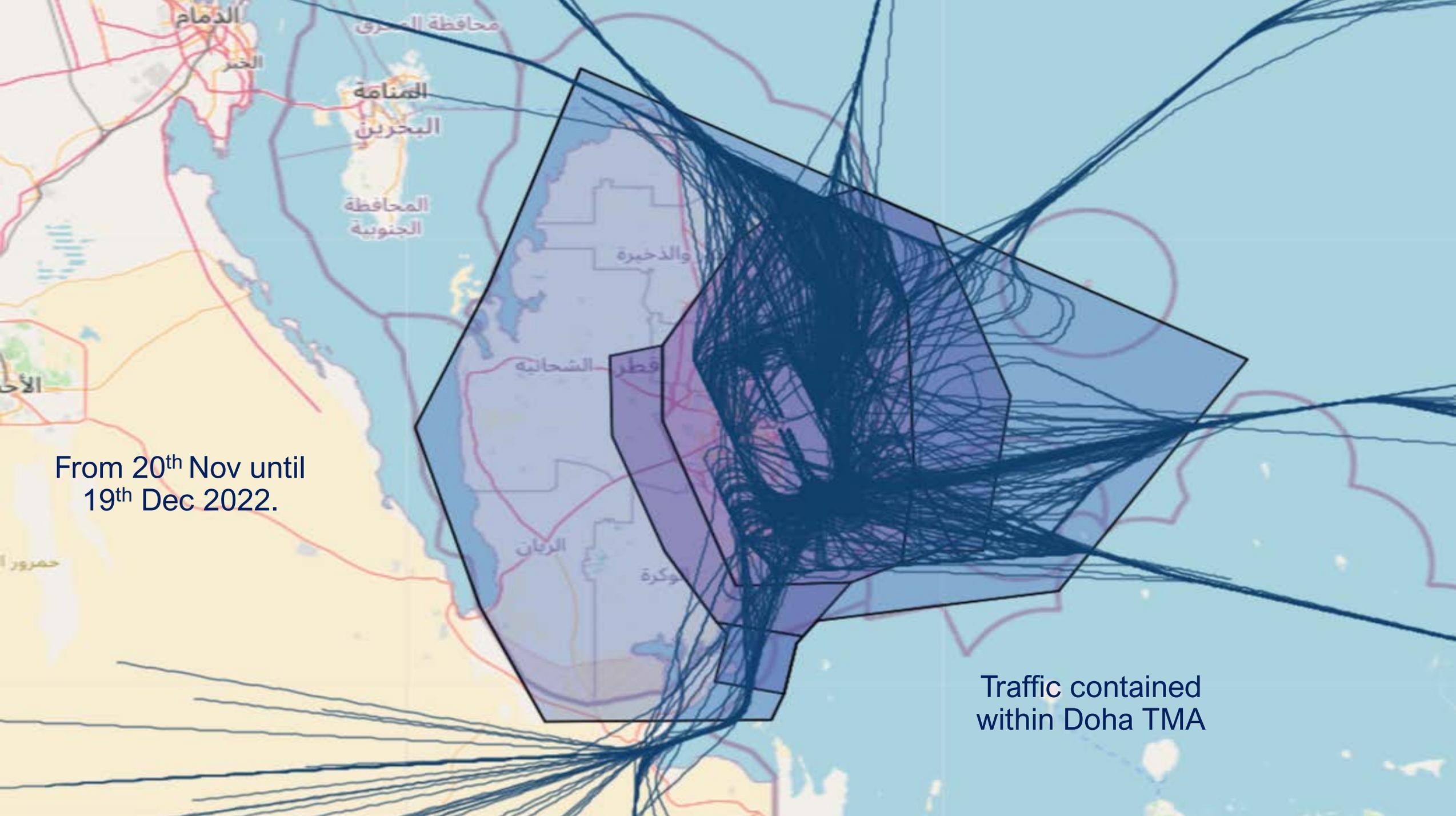
Predicted Demand 18/12/2022

| OTBD/DIA | | | |
|--------------|------------|------------|------------|
| Time | Departure | Arrival | Total |
| 18-Dec | | | |
| 0000-0059 | 3 | 9 | 12 |
| 0100-0159 | 10 | 6 | 16 |
| 0200-0259 | 5 | 10 | 15 |
| 0300-0359 | 9 | 7 | 16 |
| 0400-0459 | 9 | 8 | 17 |
| 0500-0559 | 7 | 6 | 13 |
| 0600-0659 | 5 | 9 | 14 |
| 0700-0759 | 10 | 10 | 20 |
| 0800-0859 | 10 | 10 | 20 |
| 0900-0959 | 10 | 7 | 17 |
| 1000-1059 | 7 | 11 | 18 |
| 1100-1159 | 11 | 7 | 18 |
| 1200-1259 | 7 | 11 | 18 |
| 1300-1359 | 7 | 7 | 14 |
| 1400-1459 | 6 | 8 | 14 |
| 1500-1559 | 8 | 3 | 11 |
| 1600-1659 | 3 | 8 | 11 |
| 1700-1759 | 7 | 5 | 12 |
| 1800-1859 | 8 | 11 | 19 |
| 1900-1959 | 11 | 10 | 21 |
| 2000-2059 | 12 | 7 | 19 |
| 2100-2159 | 8 | 9 | 17 |
| 2200-2259 | 10 | 6 | 16 |
| 2300-2359 | 9 | 8 | 17 |
| Total | 192 | 193 | 385 |

| City pair | Dep | Arr | Total |
|-----------|-----|-----|-------|
| OEDF | 3 | 3 | 6 |
| OKBK | 3 | 4 | 7 |
| OMAA | 7 | 7 | 14 |
| OMDB | 13 | 13 | 26 |
| OMDW | 120 | 119 | 239 |
| OMSJ | 6 | 6 | 12 |

| OTHH/DOH | | | |
|--------------|------------|------------|------------|
| Time | Departure | Arrival | Total |
| 18-Dec | | | |
| 0000-0059 | 15 | 13 | 28 |
| 0100-0159 | 7 | 13 | 20 |
| 0200-0259 | 9 | 27 | 36 |
| 0300-0359 | 14 | 17 | 31 |
| 0400-0459 | 17 | 9 | 26 |
| 0500-0559 | 28 | 7 | 35 |
| 0600-0659 | 18 | 4 | 22 |
| 0700-0759 | 10 | 11 | 21 |
| 0800-0859 | 8 | 16 | 24 |
| 0900-0959 | 7 | 8 | 15 |
| 1000-1059 | 9 | 7 | 16 |
| 1100-1159 | 13 | 8 | 21 |
| 1200-1259 | 11 | 7 | 18 |
| 1300-1359 | 1 | 12 | 13 |
| 1400-1459 | 8 | 15 | 23 |
| 1500-1559 | 11 | 10 | 21 |
| 1600-1659 | 15 | 11 | 26 |
| 1700-1759 | 22 | 10 | 32 |
| 1800-1859 | 7 | 17 | 24 |
| 1900-1959 | 5 | 19 | 24 |
| 2000-2059 | 10 | 33 | 43 |
| 2100-2159 | 10 | 15 | 25 |
| 2200-2259 | 26 | 9 | 35 |
| 2300-2359 | 27 | 11 | 38 |
| Total | 308 | 309 | 617 |

| TMA | | | |
|--------------|-----|-----|-------------|
| City pair | Dep | Arr | Total |
| EGLL | 6 | 7 | 13 |
| GMMN | 11 | 5 | 16 |
| HECA | 5 | 5 | 10 |
| LTFM | 5 | 6 | 11 |
| OEDF | 5 | 5 | 10 |
| OEJN | 10 | 10 | 20 |
| OERK | 11 | 11 | 22 |
| OJAI | 5 | 5 | 10 |
| OKBK | 10 | 10 | 20 |
| OLBA | 5 | 5 | 10 |
| OMAA | 8 | 7 | 15 |
| VABB | 7 | 7 | 14 |
| VIDP | 6 | 6 | 12 |
| VTBS | 6 | 4 | 10 |
| | | | 37 |
| | | | 32 |
| | | | 37 |
| | | | 44 |
| | | | 43 |
| | | | 45 |
| | | | 62 |
| | | | 42 |
| | | | 51 |
| | | | 55 |
| Total | | | 1002 |



From 20th Nov until
19th Dec 2022.

Traffic contained
within Doha TMA

Challenges

- Limited runways – potential loss due incident
- Uncertain demand – revised schedules needed sooner
- Security requirements – airspace/movement restrictions
- FIFA requirements – demand for information/schedules
- Weather – rainy season
- Contingencies – planning and practice
- Co-operation with other ANSPs and Airspace Users – CDM meeting participation
- Temporary LoAs/working arrangements
- Incorporation of VIPs and VVIPs
- Cruise Ships in Doha Harbour
- Helicopters, Drones, Events – Light/Laser Shows, Fireworks etc

Successes

- Revised home-based airline (Qatar Airways) schedule
 - Smoothing of peaks and spreading throughout H24 period
- IATA Level 3 Slot Co-ordination
- Airport Rules – Financial penalties
- Establishment and operation of a dedicated ATFM Unit (ATFM System)
- Weather – was good – no issues

Successes

- ➔ Availability of all runways – no loss of facilities
- ➔ Availability of adjacent State airports – just in case
- ➔ UAE shuttles – to ease airport parking requirements
- ➔ CDM Calls – Internal at 0700 UTC and Regional/International at 0800 UTC
- ➔ Personalised Tailored briefings to ANSPs, Airspace Users, Airports, QCAA ATC.

Recommendations

- Involve the Region and adjacent States as soon as possible
- Early collaboration with Airspace Users, Aeronautical Data providers is essential
- Use MIDRMA resources to identify regional hotspots and bottlenecks on existing ATS route structures and any temporary enhancements proposed
- Implementation of systems and technologies to support the implementation and provide relevant training, internally and externally within the Region.
- Co-ordination with Airport Operators and Airport Slot Co-ordinators to enhance planning and calculate airspace and airport demand
- Co-ordinate with internal stakeholders within the State for any special event
- Harmonise AIP data with adjacent States including temporary airspace structure changes – temporary LoAs and/or Working arrangements
- Be prepared for changes at short notice – it will happen!

Thank You

