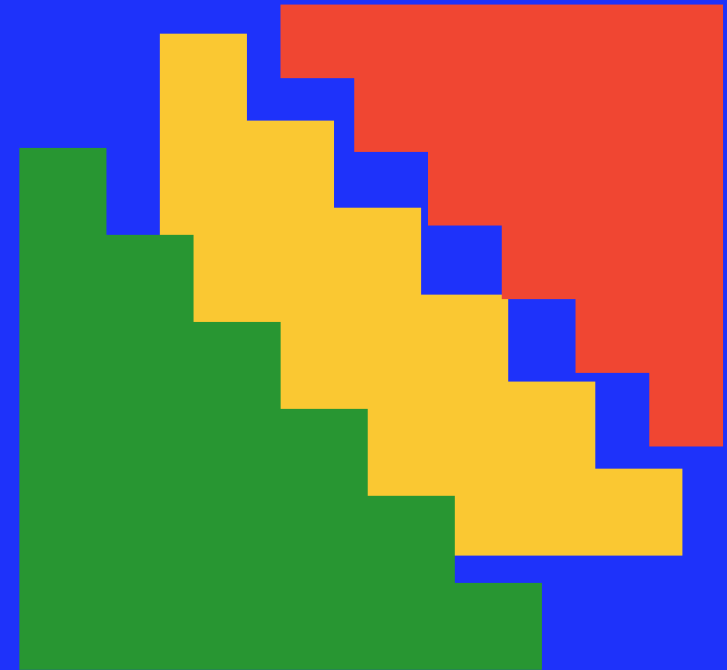


Fifth MID Region Safety Summit

Kuwait, 26-28 November 2024

Data Sharing Program



NOV.2024

Safety Analysis

- Effective April 1, 2019

Safety Report 2018

Issued April 2019

Edition 55

KNOWN

	MI	STATE	TS	OP	LO/RCR	MEAN	MIN	MAX
Alliance	575	5.28	1.00	108	2.04	2.0	0.0	6.21
airOp (Alliance)	108	1.29	0.23	2.46	0.00	0.7	0.0	0.2

ACCIDENTS

All the year's accidents are presented in [Appendix](#).

CIDETS

	MI	STATE	TS	OP	LO/RCR	MEAN	MIN	MAX
airOp (Alliance)	47	0	0	0	0	0	0	0
Alliance	7	1	1	0	0	0	0	0
airOp (Alliance)	40	0	0	0	0	0	0	0
airOp (Alliance)	6	1	0	0	0	0	0	0
airOp (Alliance)	33	43	0	0	0	0	0	0
airOp (Alliance)	20	100	0	0	0	0	0	0
airOp (Alliance)	0	0	0	0	0	0	0	0

OPERATOR REGION

	MI	STATE	TS	OP	LO/RCR	MEAN	MIN	MAX
Alliance	5	0	0	0	0	0	0	0
airOp (Alliance)	2	3	0	0	0	0	0	0
airOp (Alliance)	3	0	0	0	0	0	0	0
airOp (Alliance)	3	0	0	0	0	0	0	0
airOp (Alliance)	2	3	0	0	0	0	0	0
airOp (Alliance)	18	17	0	0	0	0	0	0
airOp (Alliance)	1	20	0	0	0	0	0	0

ALL ACCIDENTS RATE

Jet & Turboprop Aircraft

Region	2018	2017	2018 vs 2017
North	0.00	0.00	0.00
East	0.00	0.00	0.00
West	0.00	0.00	0.00
South	0.00	0.00	0.00
Central	0.00	0.00	0.00
East	0.00	0.00	0.00
West	0.00	0.00	0.00
South	0.00	0.00	0.00
Central	0.00	0.00	0.00

Jet Aircraft

Region	2018	2017	2018 vs 2017
North	0.00	0.00	0.00
East	0.00	0.00	0.00
West	0.00	0.00	0.00
South	0.00	0.00	0.00
Central	0.00	0.00	0.00
East	0.00	0.00	0.00
West	0.00	0.00	0.00
South	0.00	0.00	0.00
Central	0.00	0.00	0.00

Turboprop Aircraft

Region	2018	2017	2018 vs 2017
North	0.00	0.00	0.00
East	0.00	0.00	0.00
West	0.00	0.00	0.00
South	0.00	0.00	0.00
Central	0.00	0.00	0.00
East	0.00	0.00	0.00
West	0.00	0.00	0.00
South	0.00	0.00	0.00
Central	0.00	0.00	0.00

ISSUED APRIL 2019 | REPORT 2018 | PAGE 02

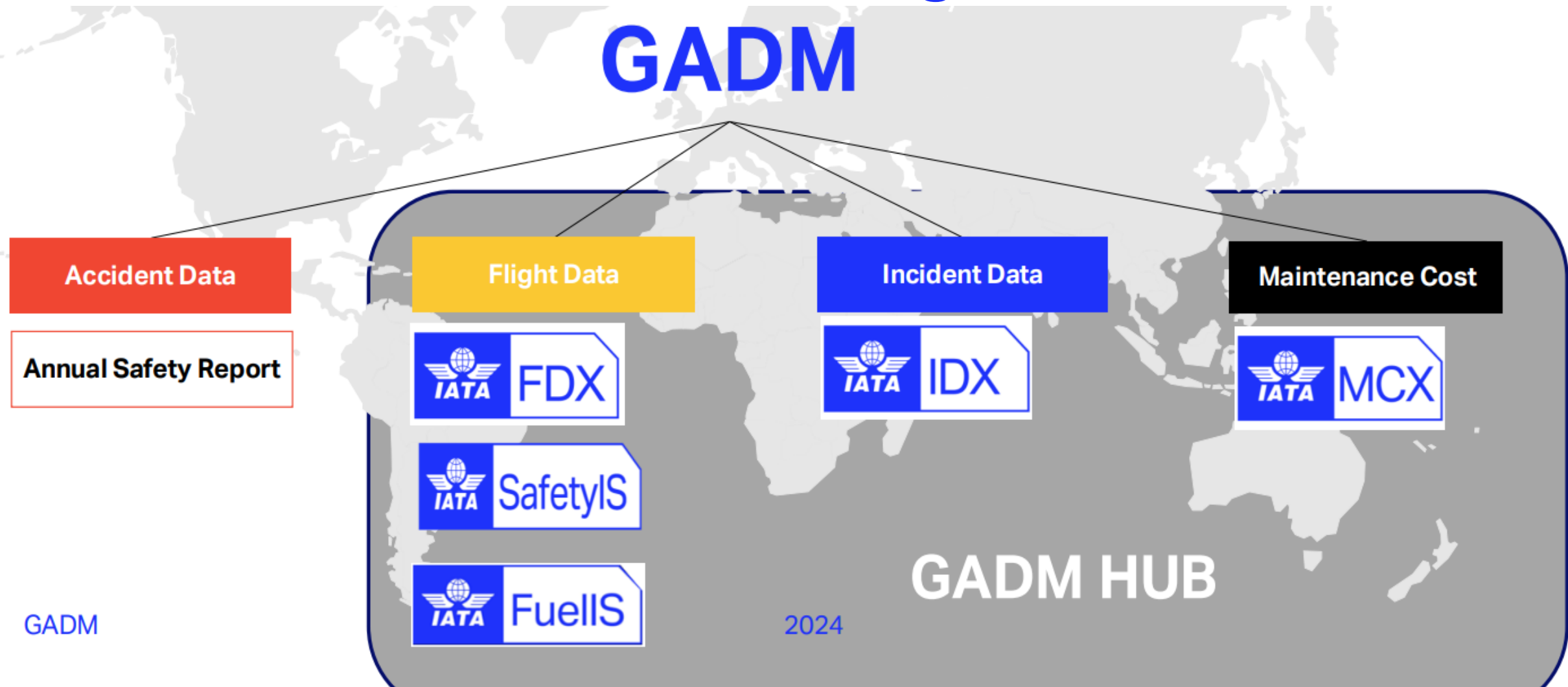
ISSUED APRIL 2019 | REPORT 2018 | PAGE 03

ISSUED APRIL 2019 | REPORT 2018 | PAGE 04



Global Aviation Data Management

GADM

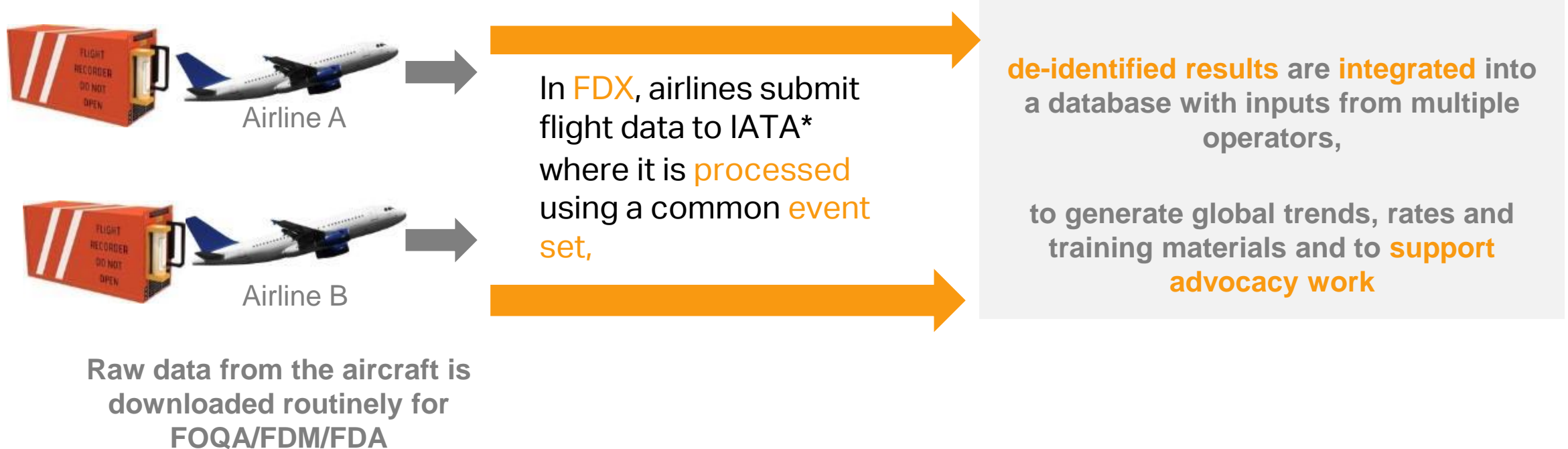


What is FDX?

Objective: to mitigate safety risks and improve flight efficiency

- ❖ **Global aggregate de-identified program** using FDA data to help airlines identify safety trends
- ❖ Allows the airline to look at data **beyond their limited airline dataset**
- ❖ Airlines use **benchmarking tool** to compare safety performance and issues against global and regional safety trends
- ❖ **Not a FOQA program**
- ❖ Allows airlines to query information and compare performance using a web-based platform
- ❖ Supports airlines through providing in-depth analyses when required

How does it work?



(*) IATA works with Flight Data Services as its collaborative partner for FDX data processing. Data is displayed only when there are at least 3 operators with the same aircraft type. De-identification includes: no airline information is available, the tail numbers and the flight numbers are written off, the flight date is set to the first day of the month.



IDX

Incident Data eXchange



IDX in numbers



STEADDES incident reports



GDDB aircraft damage reports

Streamline the Data Submission Process

Enhanced analytic tools & Interactive User Interface

Comprehensive analyses integrating Artificial Intelligence analytics

Benefits

- ✓ Understanding of critical incident trends
- ✓ Identifying targets for improvement
- ✓ Continuous improvement of standards, procedures and recommended practices
- ✓ Easy access to shared safety & security data
- ✓ Benchmarking at the regional and global level
- ✓ Performance Monitoring

IDX

IATA Incident Data Exchange (IDX)

IATA's safety and security incident data management



Your Global Aviation Data Sharing Platform



WHY IDX?



- Helps organizations meet the IATA operational Safety Audit (IOSA) and IATA Standard Safety Assessment (ISSA).
- Grants easy access to shared safety and security data which highlights critical trends on a regional / global scale, as well as anticipates operational challenges at specific airports (IDX).



We offer you **Enhanced Analytics Tools** with easy access to Safety & Security Data and **Comprehensive Analyses** integrating IATA Subject Matter Experts expertise and statistics allowing for:

- ✓ **Benchmark at both the regional and global level;**
- ✓ **Identify critical incident trends whilst setting targets for improvement and;**
- ✓ **Anticipate operational challenges at specific airports.**



IDX – Your Global Aviation Data Sharing Platform

IDX is the **only global aviation safety and security database on a global level**, with IATA serving as a trusted custodian by the industry to do this.



Be the Next One

and let's grow the Program together!

Participation in the Incident Data Exchange (IDX) program is open to Airline Operators, Ground Service Providers and Airports providing ground services.



IDX is an **ISO 9001:2015** certified program - a respected framework of quality assurance.



IDX complies with **ISO 27001** standards - all data exchanged is **protected** and **secured**



IDX Safety Analysts and Data Scientists are here for you!

** IDX is FREE



FDX Statistics



More than
213
Airlines and
growing

More than
18 000 000
flights globally



More than
8000
aircraft

IDX Statistics



289
Airlines
Participants
and growing

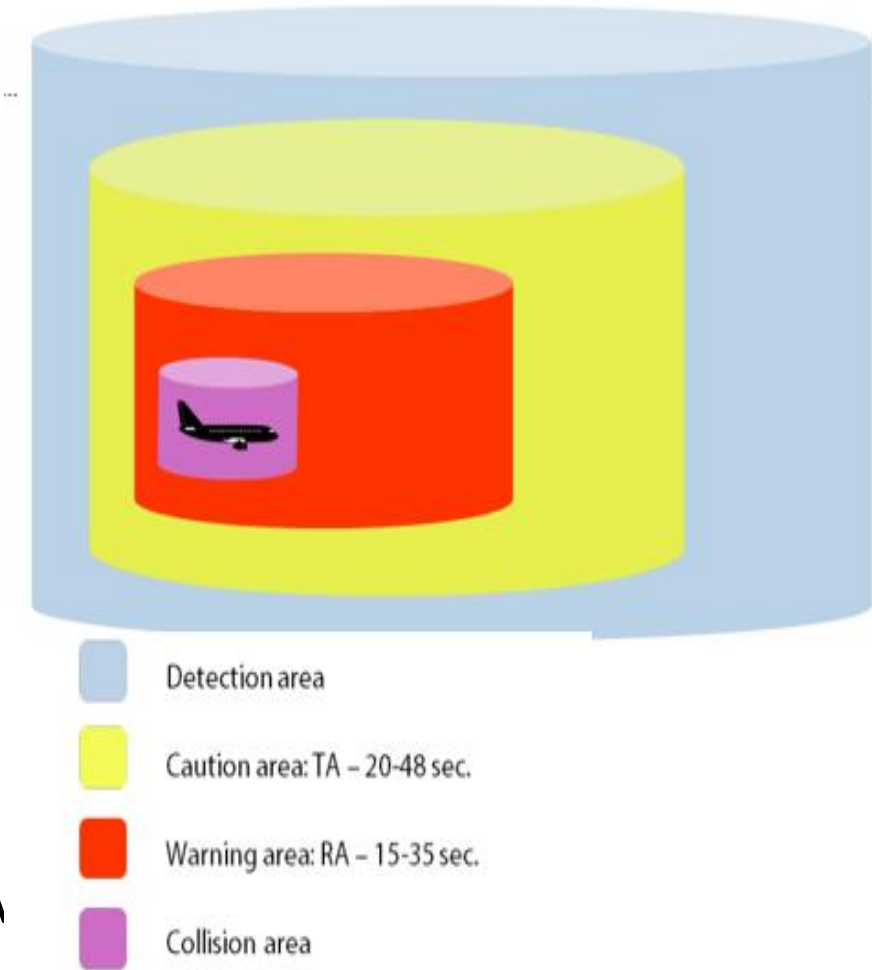
Example: TCAS RAs Detailed Analysis

CURRENT STATUS

- ICAO Annex 10 require the mandatory carriage of **ACAS II Ver.7.1** for all civil fixed-wing turbine-engine aircraft with maximum T/O mass exceeding 5700 kg or a maximum approved passenger seating configuration of more than 19 by **1 January 2014 for new aircraft** and **1 January 2017 for all existing aircraft** .
- Detailed analysis performed taking data from FDx for the period Q2 2022 to Q1 2024.
- 4 FIRs identified with high number of TCAS RAs.

PROPOSED NEXT STEPS :

Coordinate with concerned states to resolve and mitigate TCA incidents



Definitions and Notes

- **Analysis Scope:** This analysis uses data from the FDX data regarding TCAS RA activation at global and Region level for the period **2022 April - 2024 March**
- **FDX Flights:** Flights processed in the FDX Program for the studied region, and globally .
 - The Regional FDX Flights represent the flights processed in the FDX program that took off in the MID region.
 - The Global FDX Flights represent the total flights processed in the FDX program. These also include flights for the MID region .
- **FDX Events Definitions:**
 - TCAS RA above FL 100
 - TCAS RA Descending below FL 100
 - TCAS RA Climbing below FL 100
- **FDX Rate:** The rates are normalized per 1,000 FDX Flights as: $\text{events_count} / \text{number_of_flights} * 1000$.

Introduction

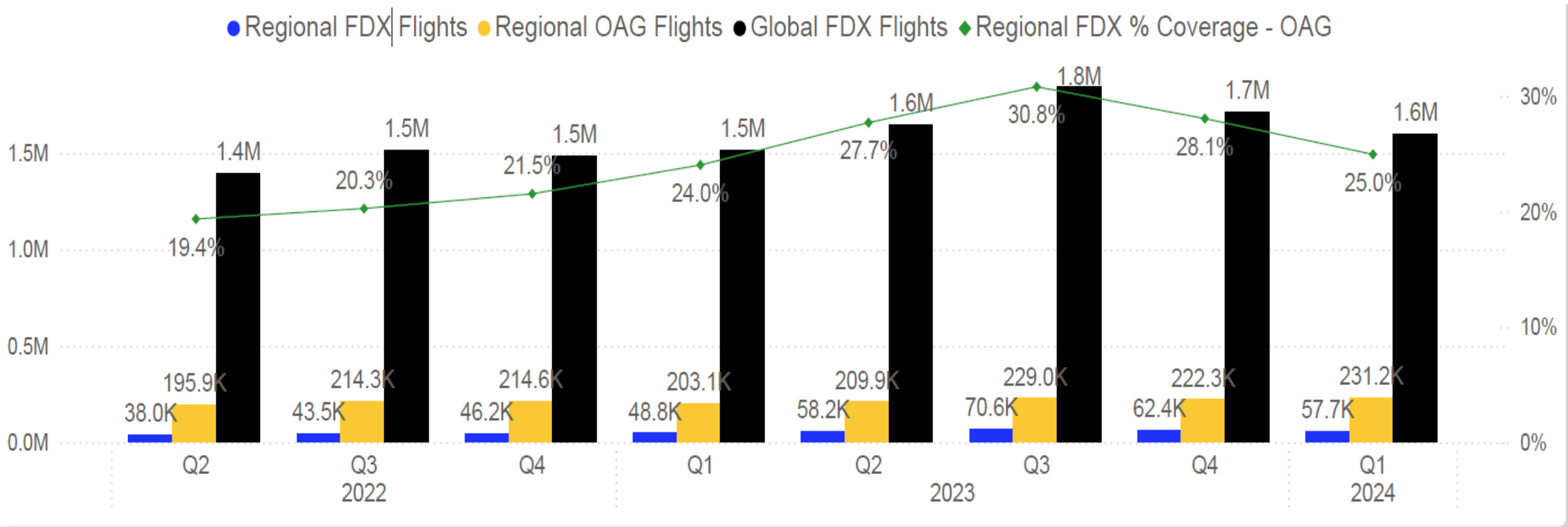
Two types of TCAS systems in operational use today,

- TCAS I system warns of potential conflicts by providing TA, but it does not provide any **resolution advice**
- TCAS II provides in addition to TA a second level of alert called a **RA**. This alert directs the flight crew to make a vertical maneuvers to avoid the intruding aircraft.

Note: TCAS II does not provide RAs in the lateral direction.

- A recently developed ACAS X system, expected to become operational in the foreseeable future, is intended to bring enhancements to both surveillance and the advisory logic.

FDX Coverage MENA

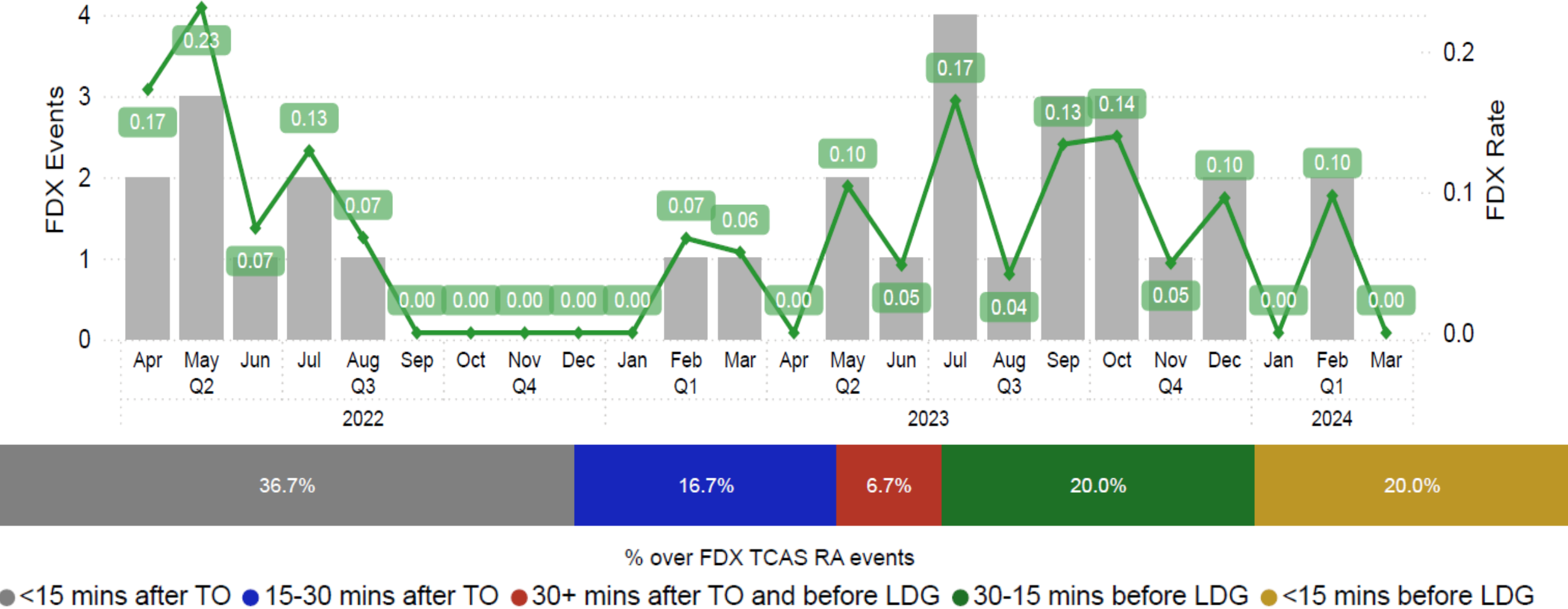


Airport Coverage

Airport IATA	Airport ICAO	Airport City	Airport Country	Rule of 3 - Distinct Operator Count	FDX Flights	OAG Scheduled Flights
CAI	HECA	Cairo	Egypt	30	49.9K	130.4K
DOH	OTHH	Doha	Qatar	29	45.3K	65.2K
DXB	OMDB	Dubai	United Arab Emirates	28	39.2K	115.0K
JED	OEJN	Jeddah	Saudi Arabia	35	35.4K	174.5K
RUH	OERK	Riyadh	Saudi Arabia	30	31.9K	177.3K
AMM	OJAI	Amman	Jordan	23	23.2K	47.6K
MCT	OOMS	Muscat	Oman	28	21.6K	44.3K
BAH	OBBI	Bahrain	Bahrain	22	20.7K	43.9K
DMM	OEDF	Dammam	Saudi Arabia	27	20.2K	67.7K
KWI	OKKK	Kuwait	Kuwait	23	16.4K	38.2K

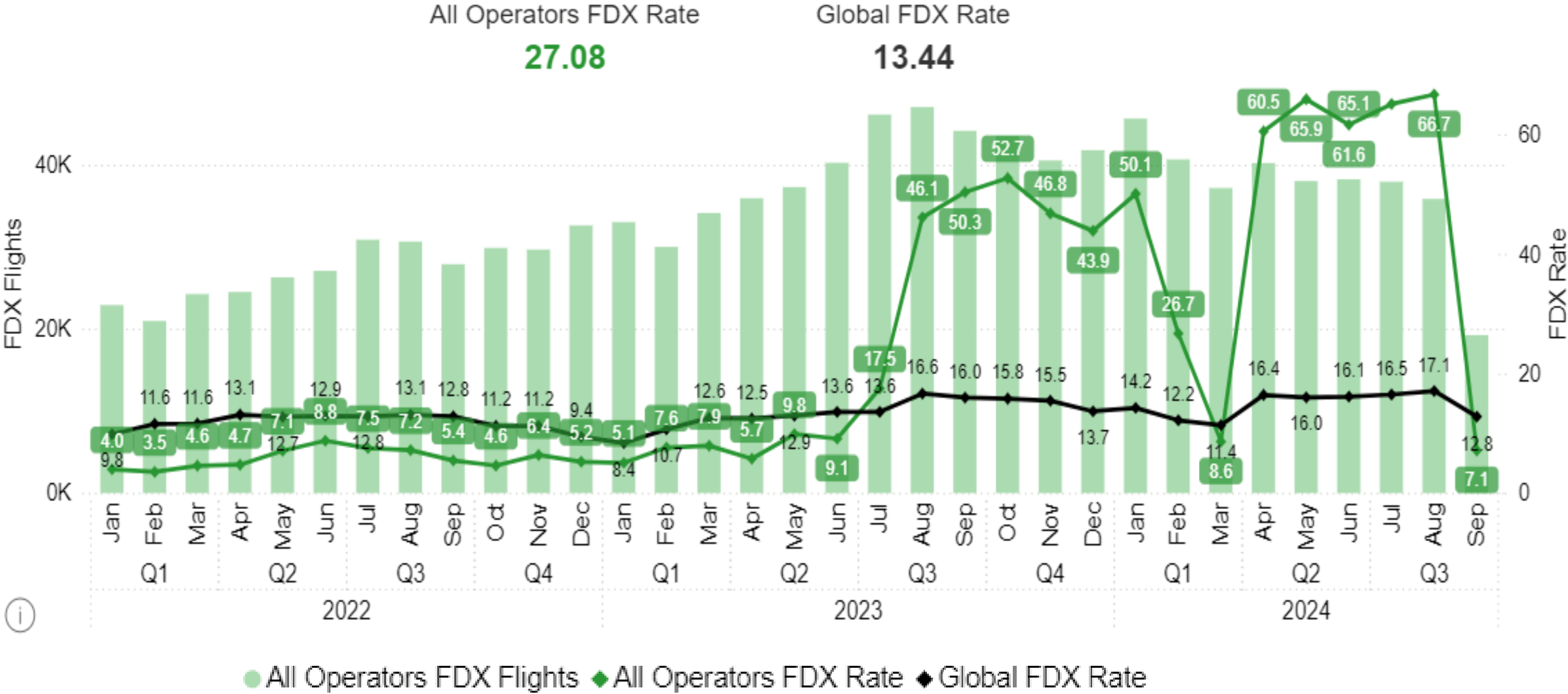
Regional Events in flights TO or LND in the Region Trend

FDX Rate – Events in MENA 0.07



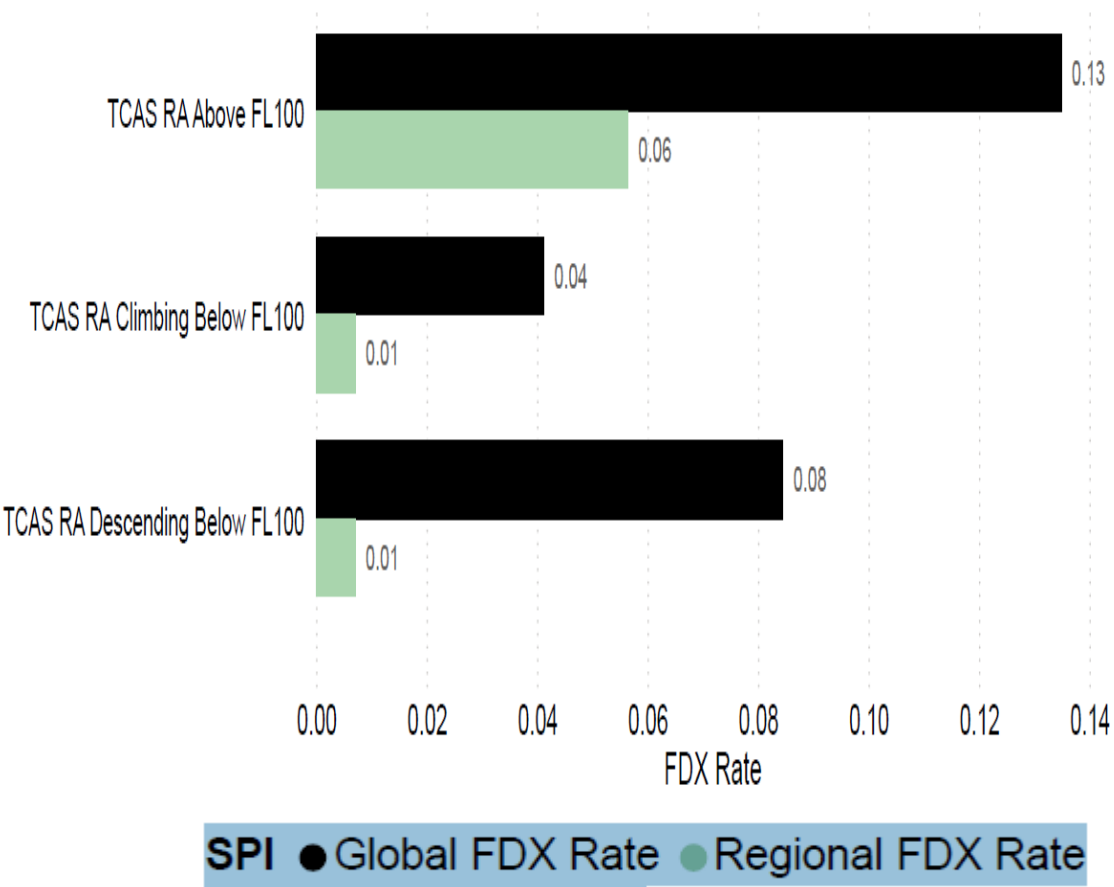
* Green line represents the rate of operators in MENA region.

Regional Events

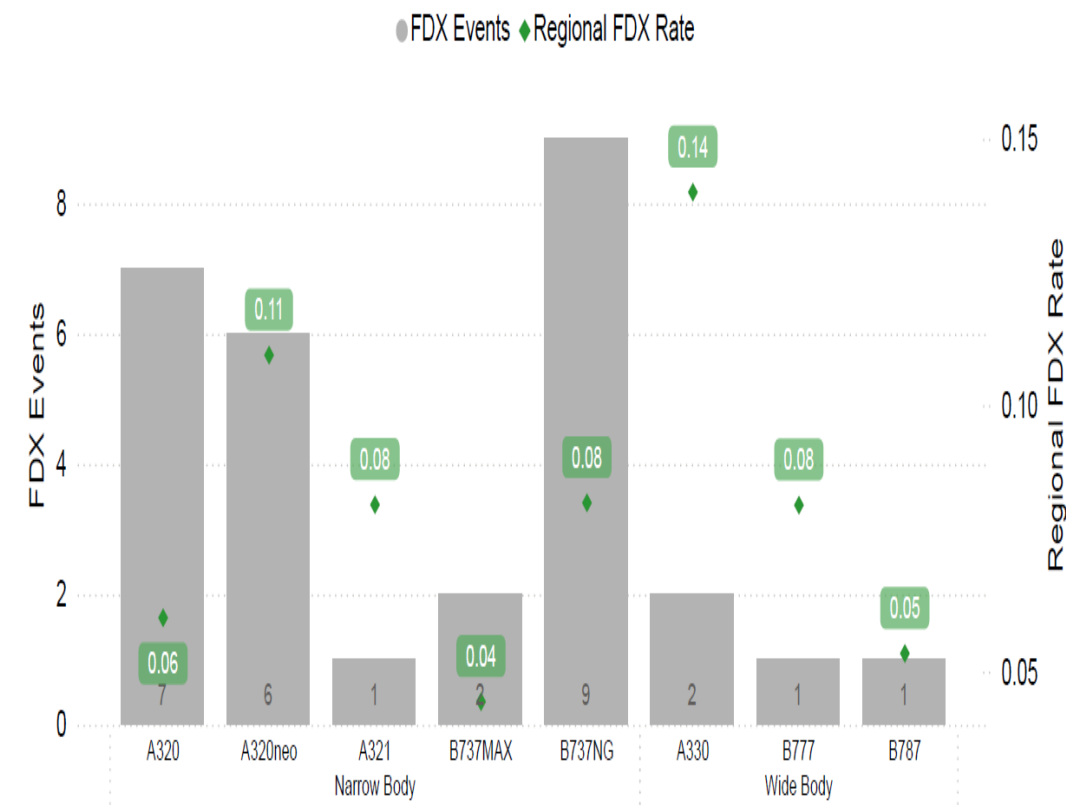


TCAS RA Category

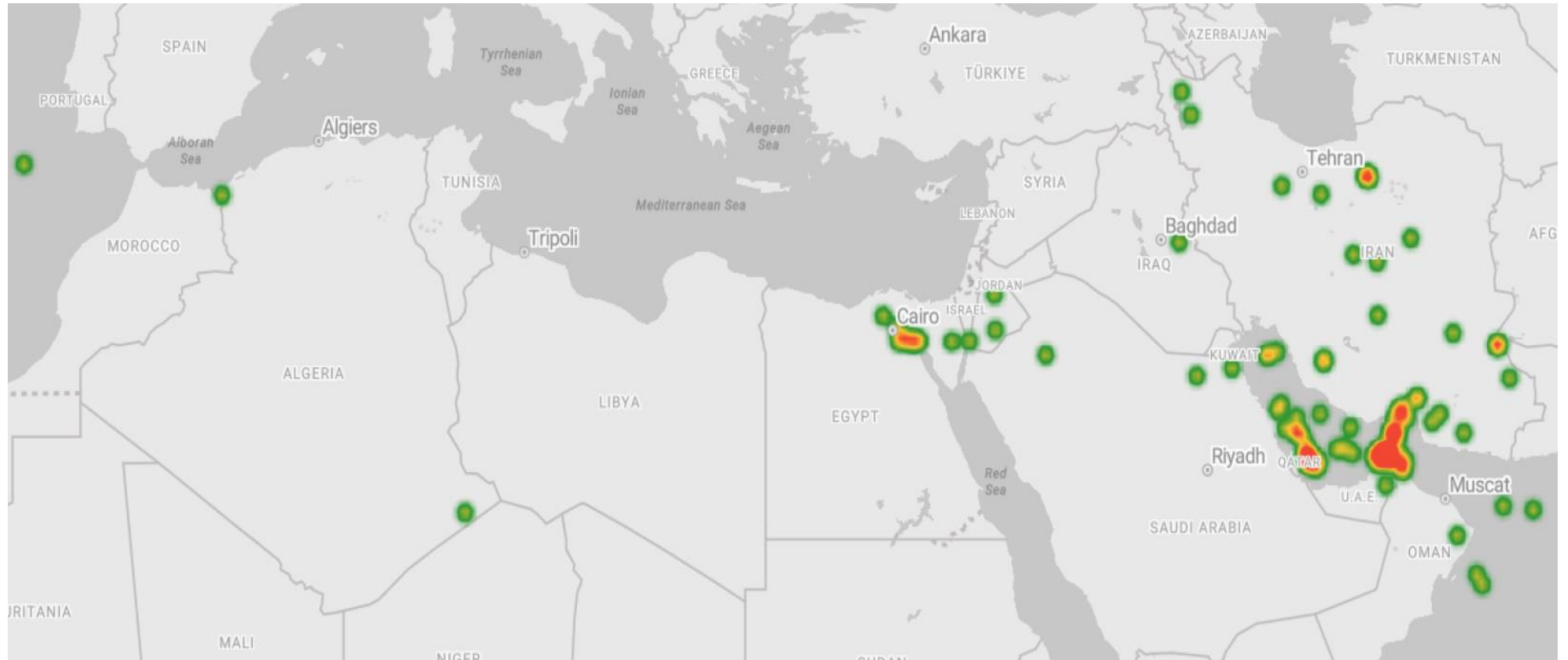
TCAS RA Category Rate - Region / Global



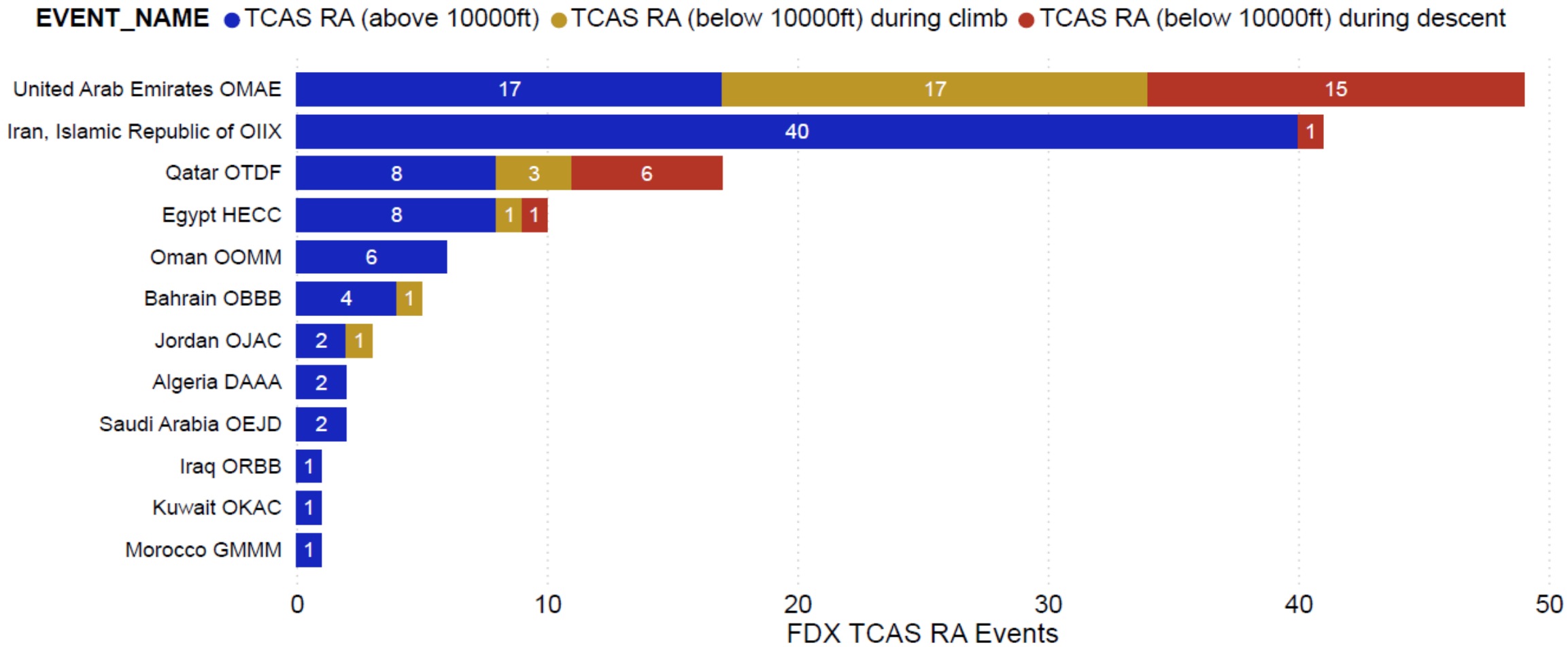
Aircraft Category / Aircraft Type



Location In MENA - FIR Map

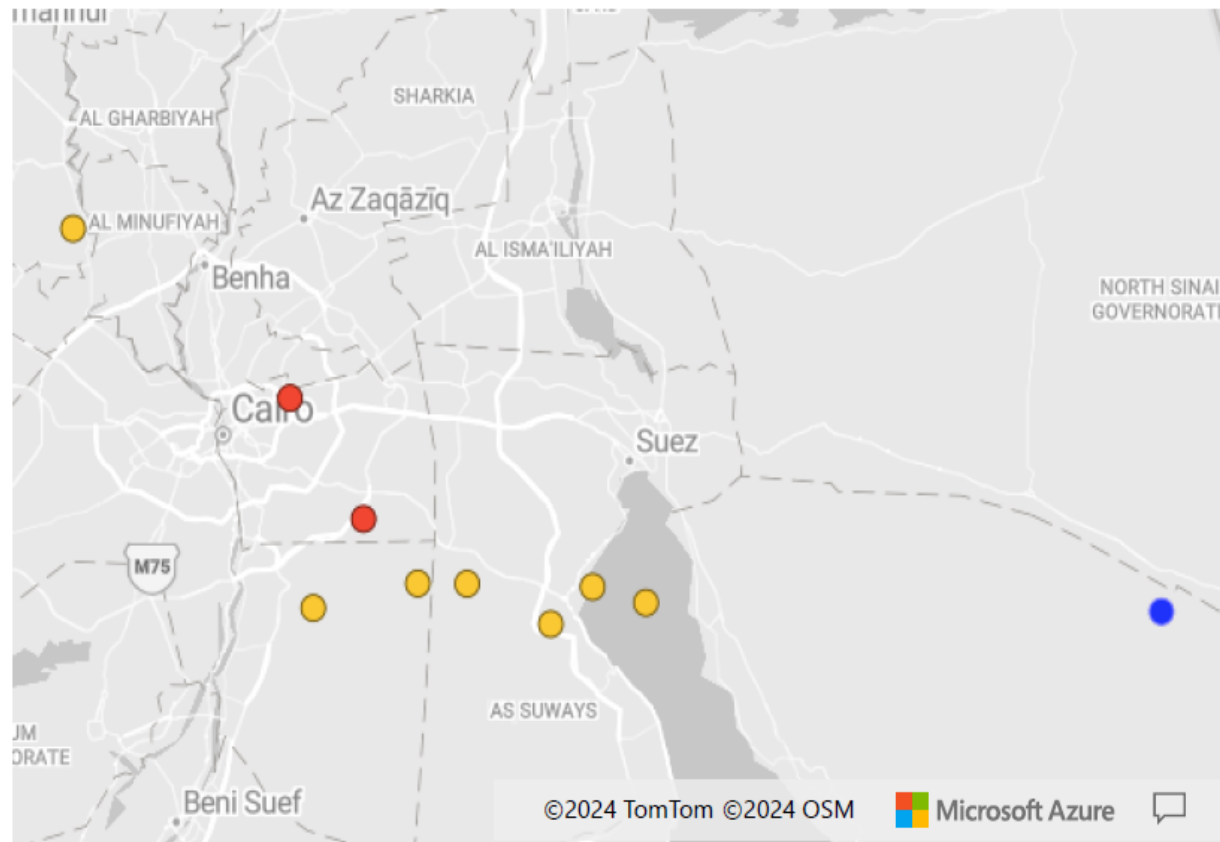


Breakdown of the Countries & FIRs



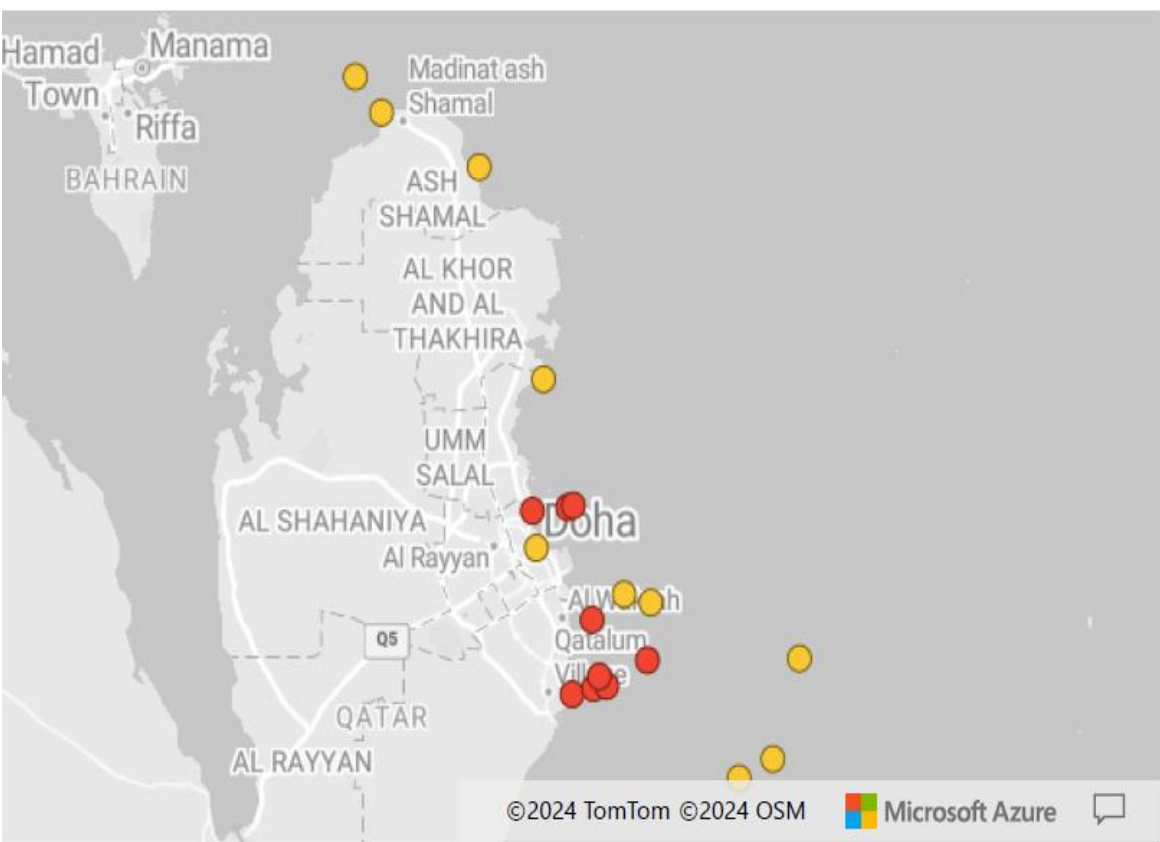
Identified Hotspots

Egypt



Altitude STD category ● Between 10000 ft and FL290 ● Below 10000 ft ● Above FL290

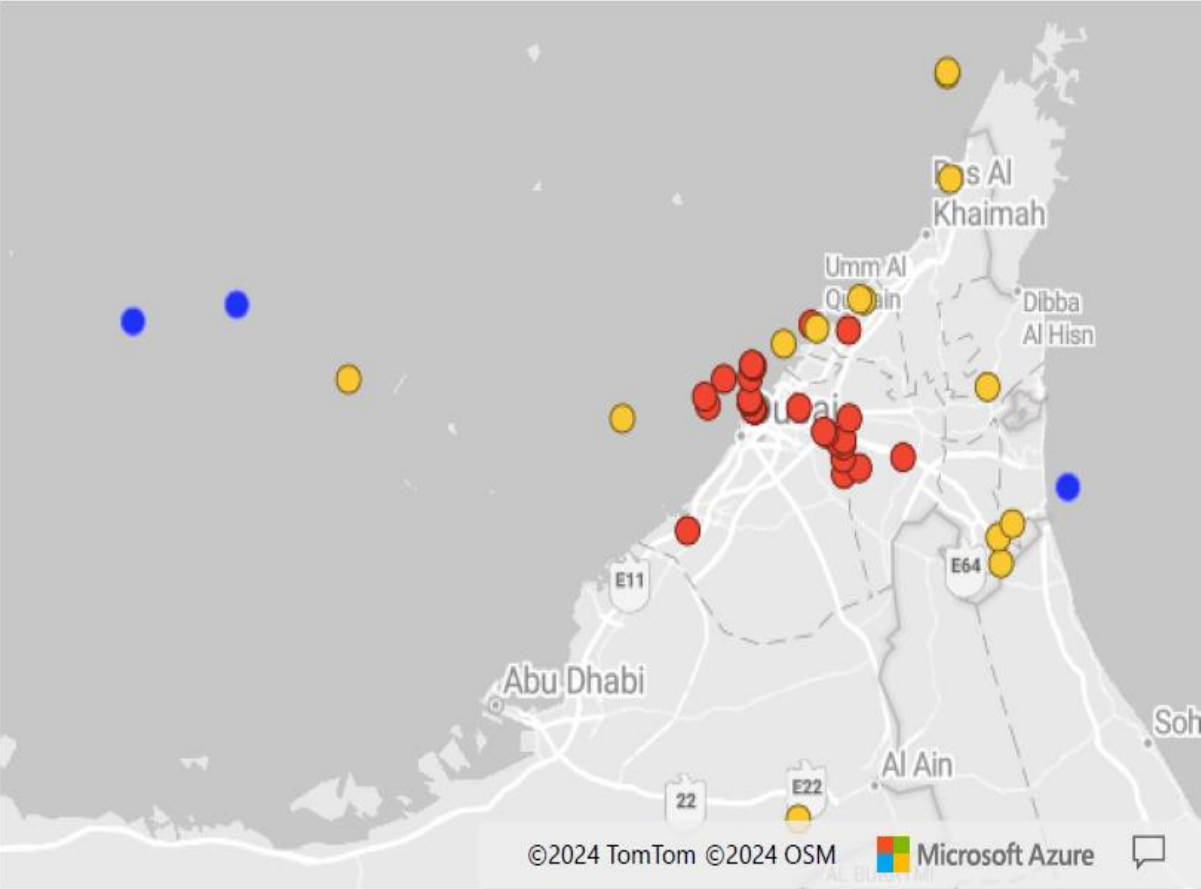
Qatar



Altitude STD category ● Between 10000 ft and FL290 ● Below 10000 ft

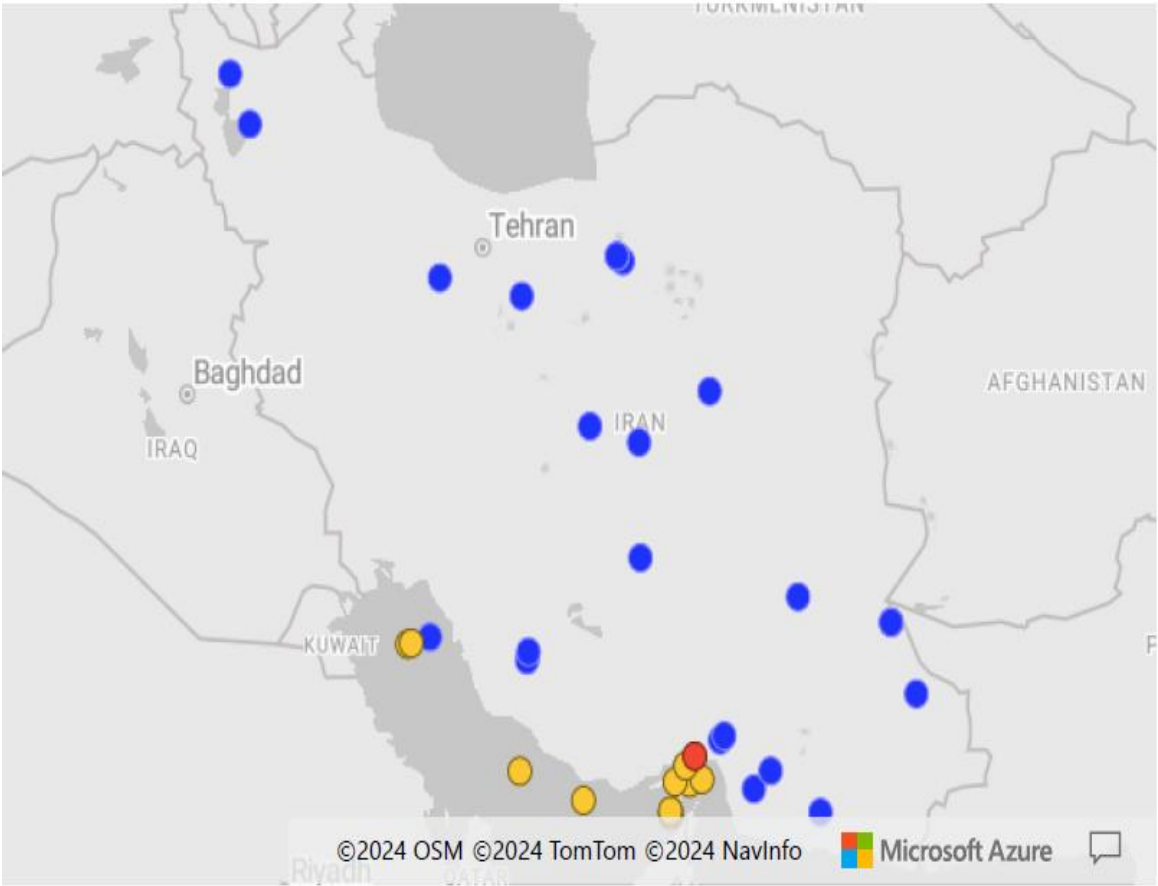
Identified Hotspots

United Arab Emirates



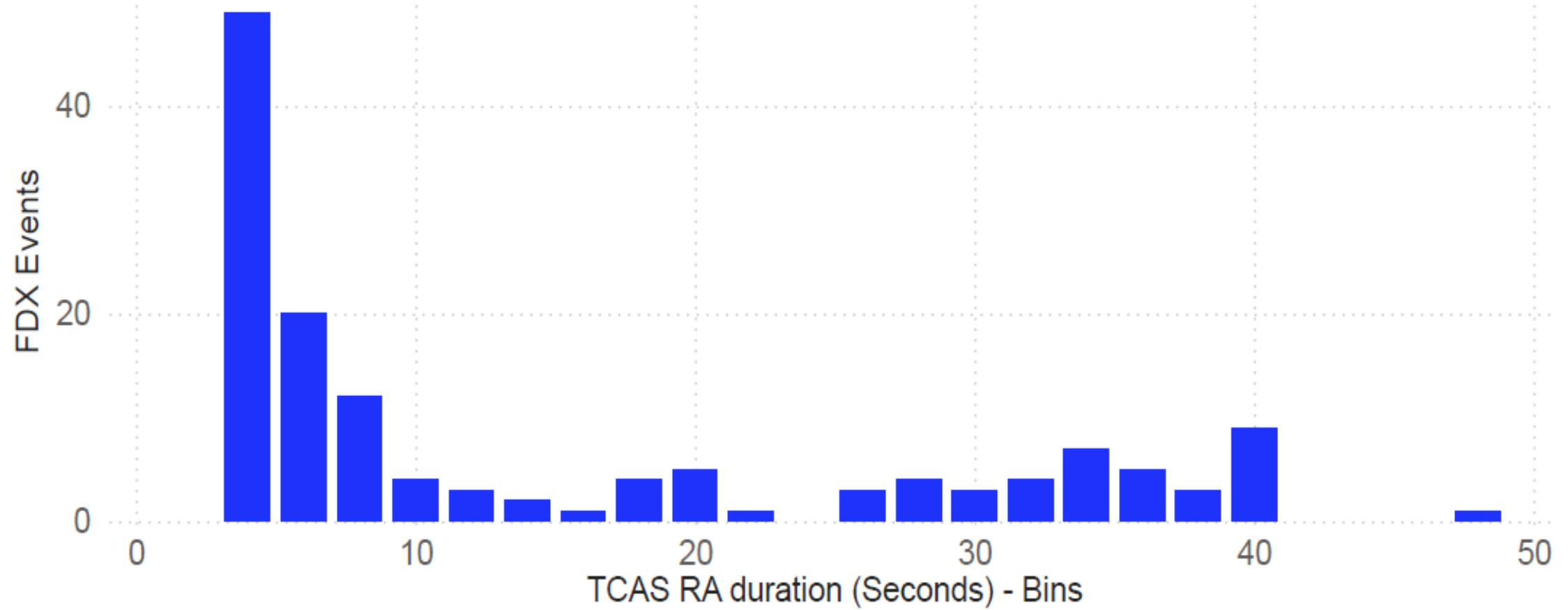
Altitude STD category ● Below 10000 ft ● Between 10000 ft and FL290 ● Above FL290

Iran

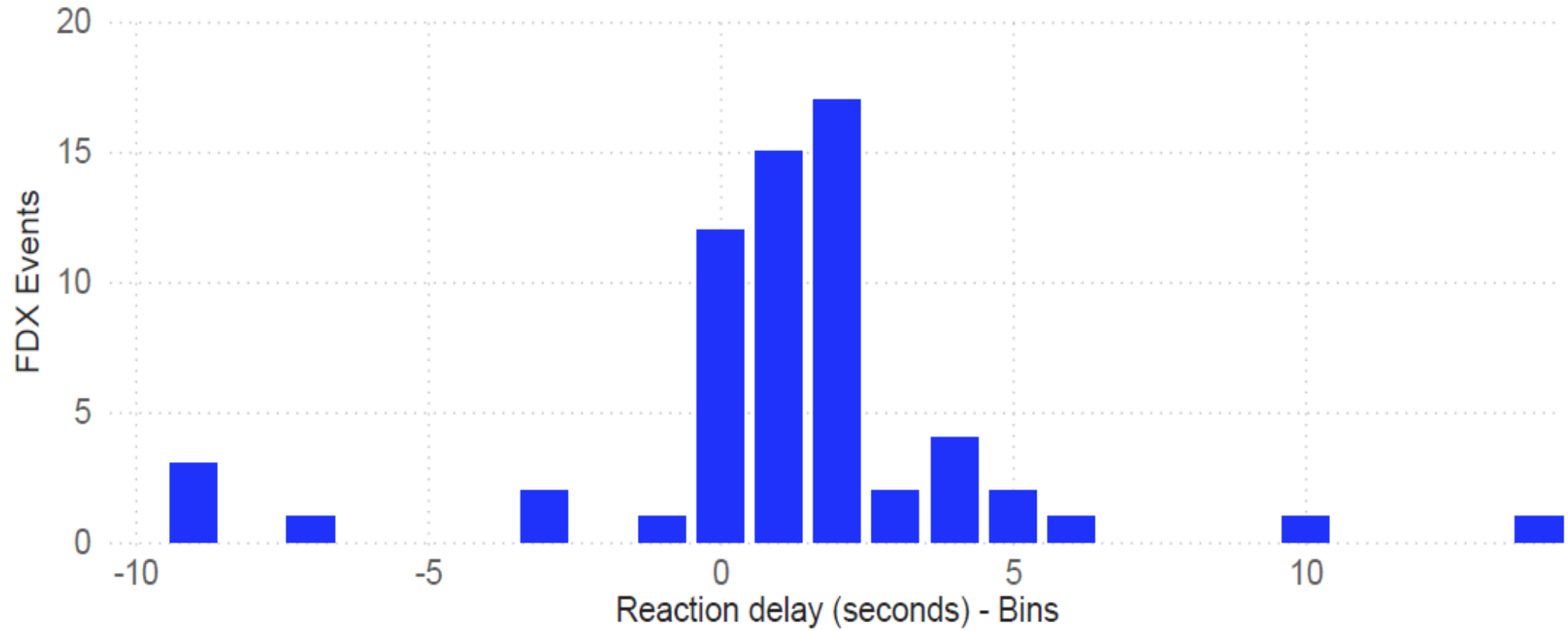


Altitude STD category ● Above FL290 ● Between 10000 ft and FL290 ● Below 10000 ft

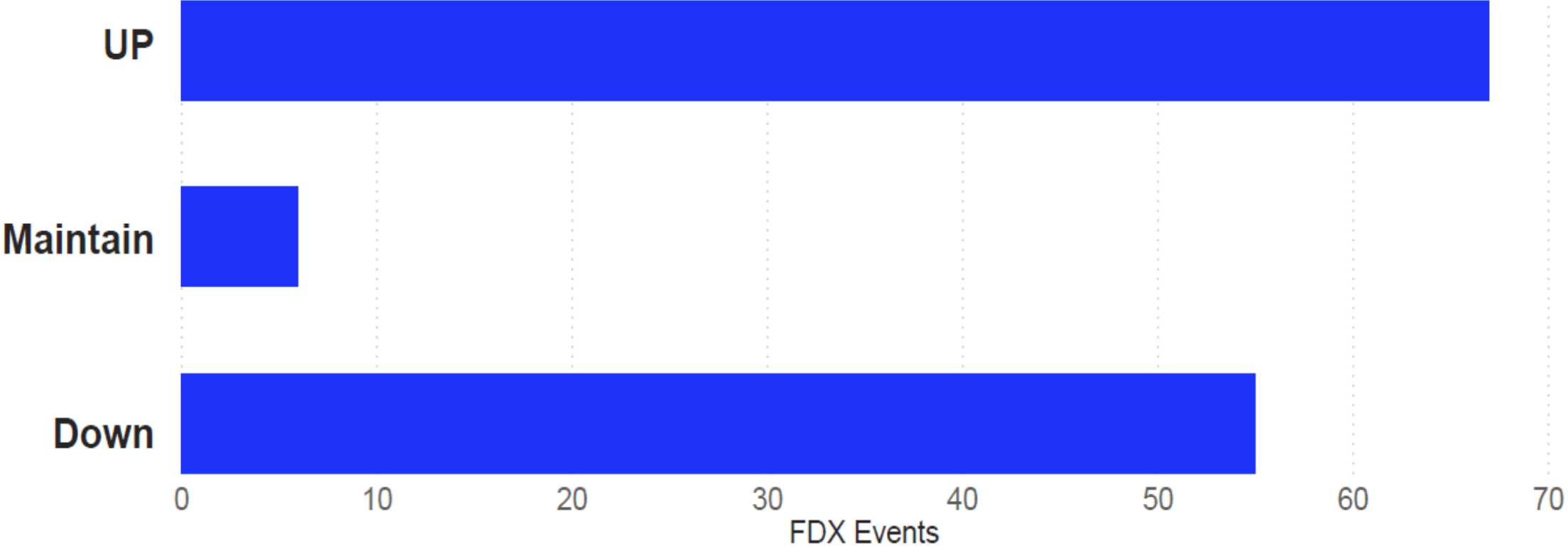
Duration of TCAS RA



Reaction Time



Resolution Advisory



TCAS Status in MENA Region –TCAS Ver.7.1

ACAS					
Element	Title	Applicability	Performance Indicators/	Performance Indicators/	Performance Indicators/
ACAS B1/1	ACAS Improvements Operational	All States	Indicator: % of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons Supporting metric: Number of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons	100%	Dec 2017

	Bahrain	Egypt	Iran	Iraq	Jordan	Kuwait	Lebanon	Libya	Oman	Qatar	Saudi Arabia	Sudan	Syria	UAE	Yemen
B1/1															

Average Regional Implementation is 86.7%

Thank you.

