



MIDANPIRG/21 & RASG-MID/11 Meetings

GNSS Radio Interference Incidents

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Presentation Overview

01 GADM

02 Global GPS Signal Loss

03 GNSS RFI MENA

04 Recommendations

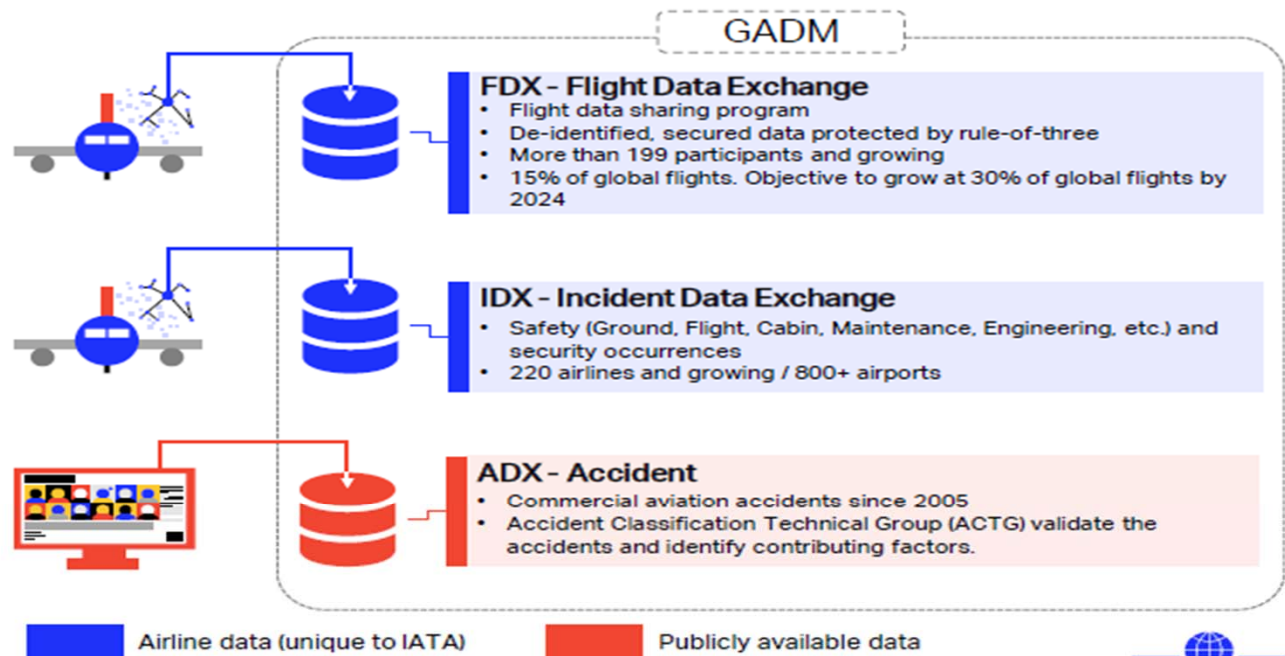
Aviation Safety Data

- Safety data and safety information exchange are fundamental components for understanding the underlying safety conditions and allows to **identify safety improvements** through improved safety intelligence to **mitigate safety risks** and improve **flight efficiency**
- IATA, through the IATA **Global Aviation Data Management (GADM)** program, collects and collates multiple forms of data, including safety, operational, flight and aircraft maintenance cost data, for the purposes of **conducting statistical analyses and benchmarking**, and making available to the industry aggregated anonymized outputs in the form of **reports, dashboards** and **business intelligence tools**;

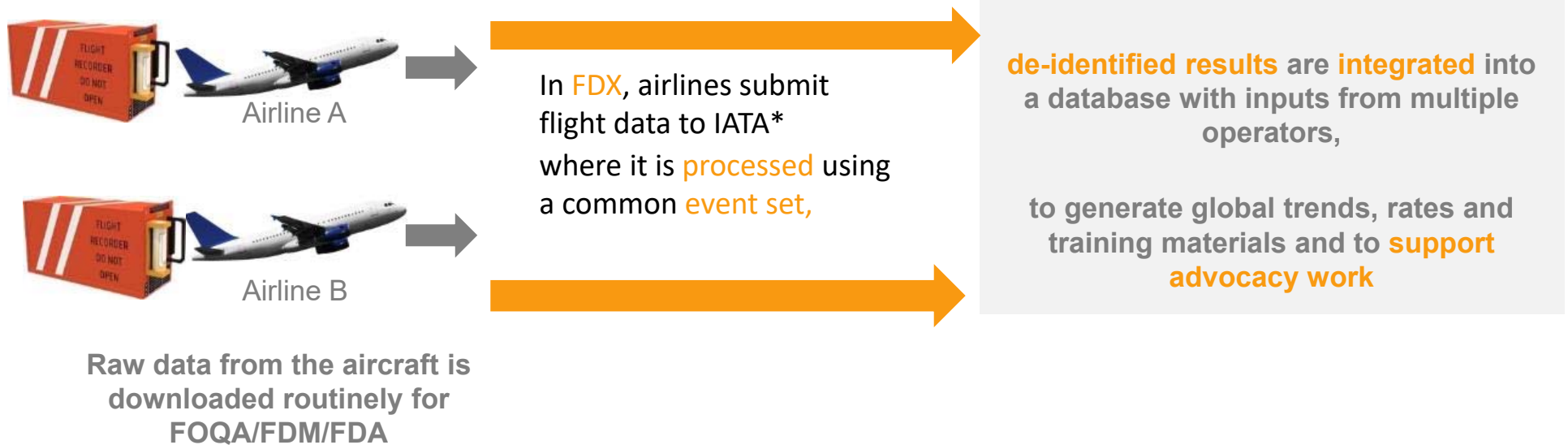
Global Aviation Data Management

The Global Aviation Data Management (GADM) program is a data management platform which integrates all sources of operational data received from various channels. These include IATA-unique programs, which all feed into a common, interlinked database structure.

Our Value Proposition | We champion data with our premier global aviation safety and operational data exchange program



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.

FDX Statistics



More than
209
Airlines and
growing

More than
15 000 000
flights globally

More than
7500
aircraft



IDX Statistics



271
Airlines
Participants
and growing

GNSS RFI Regions Affected

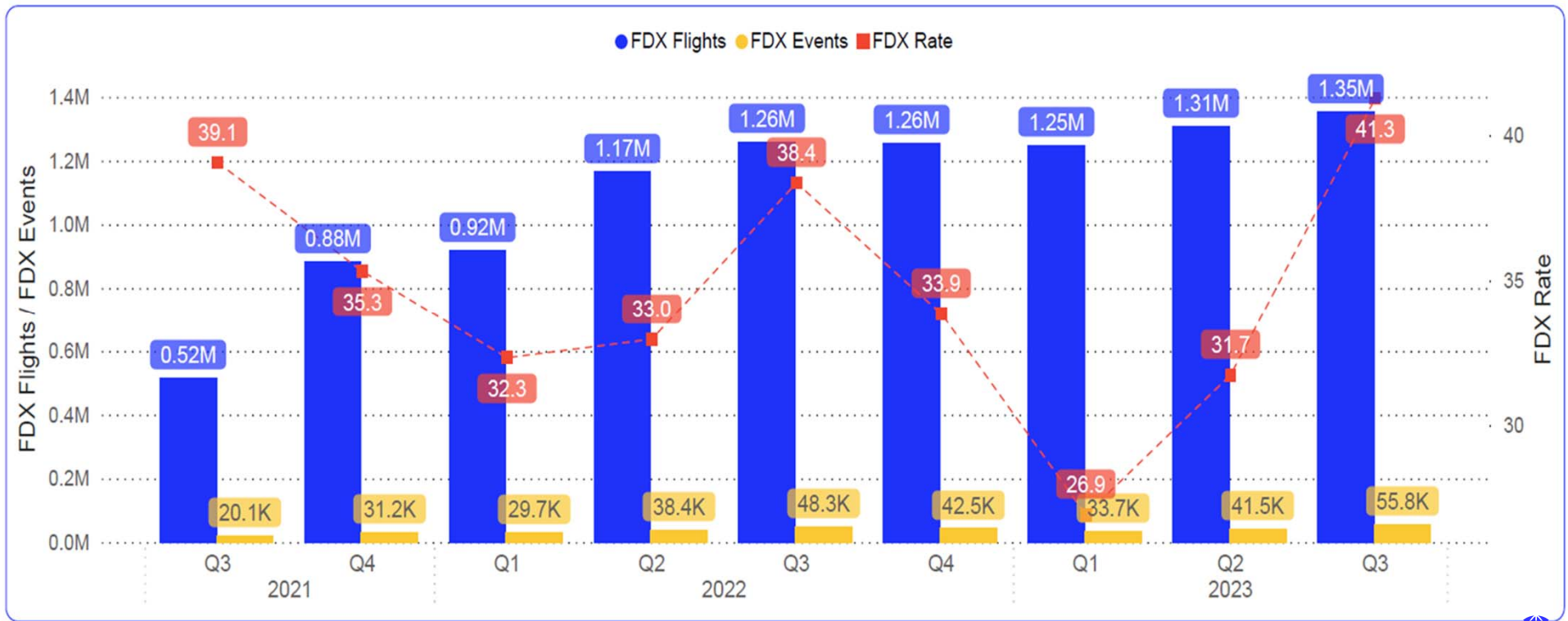
Regions

- Middle East
- Black Sea
- Caucasus Region
- East Mediterranean
- North Atlantic (impacted by GPS interference in Europe / MID)

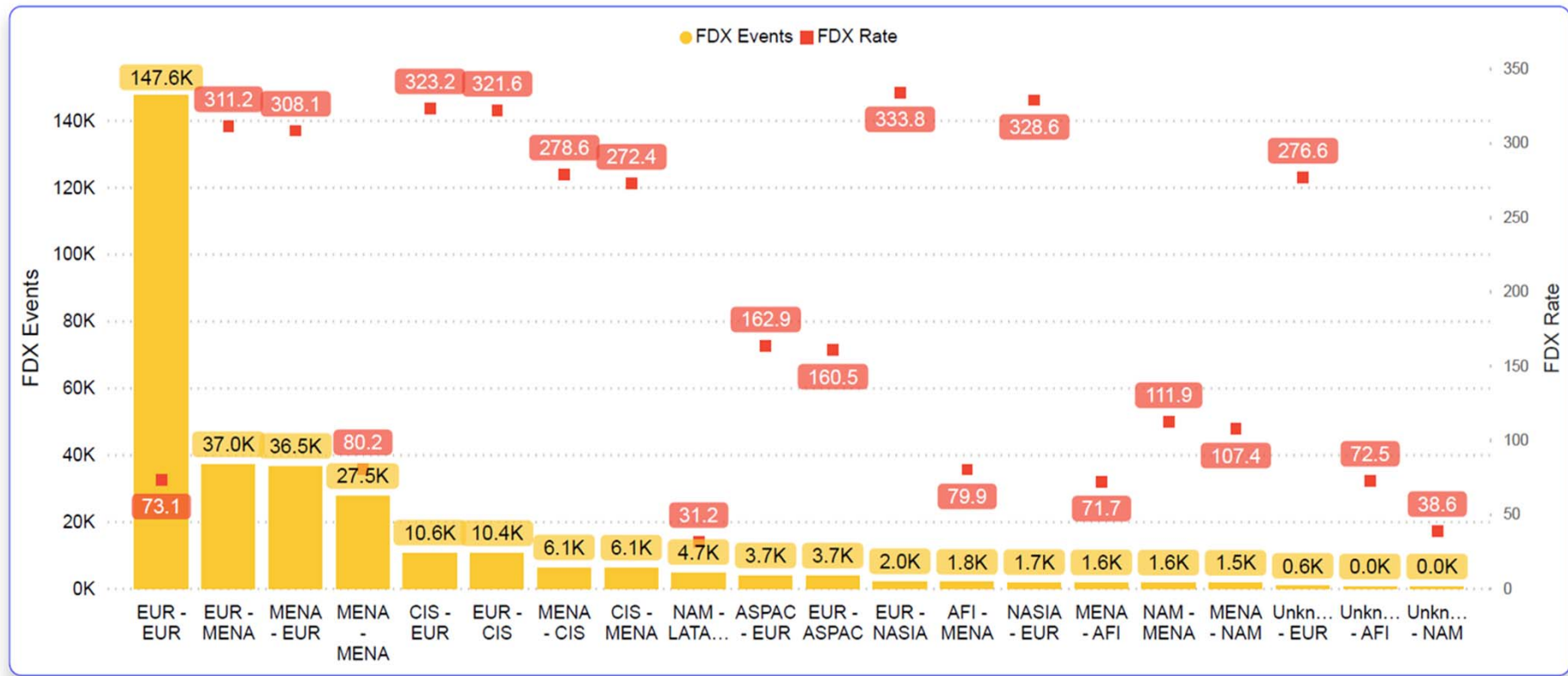
Regional GPS Interference (NOTAMS)

- Several CAAs in the region, including Turkey, Iraq, and Israel, issued NOTAMS

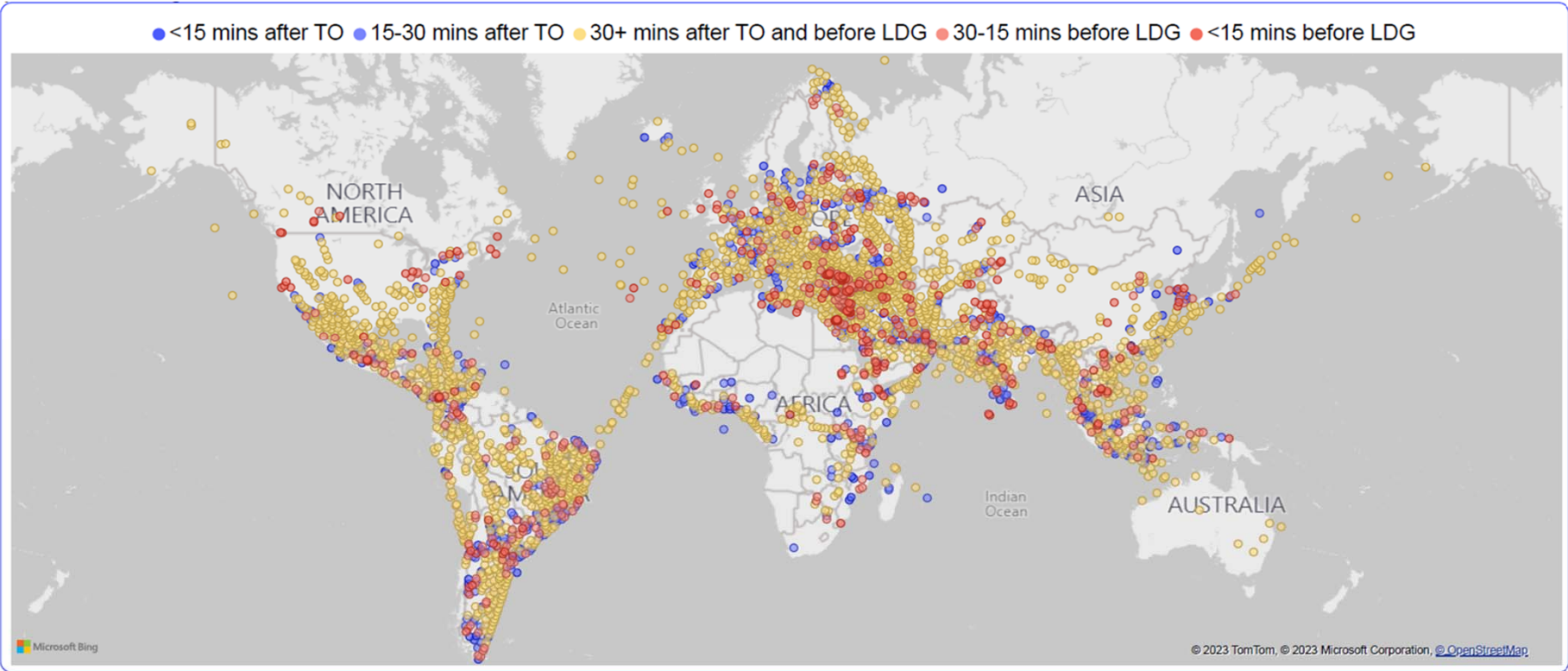
Global GPS Signal Loss Occurrence Rate



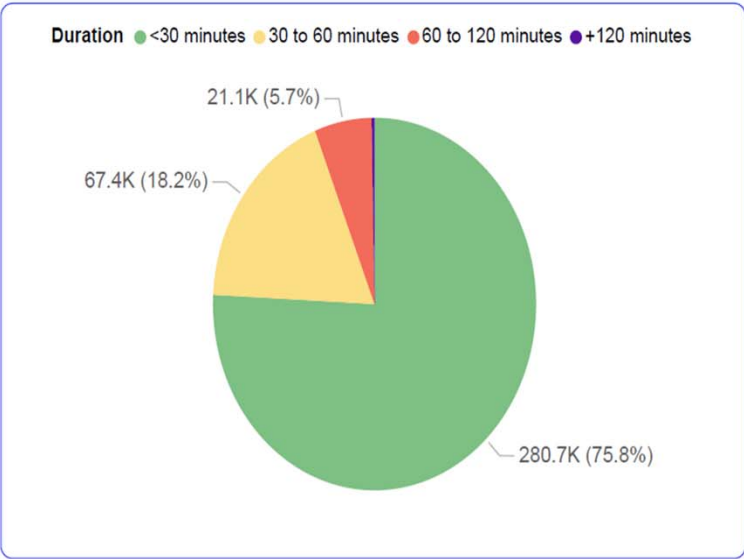
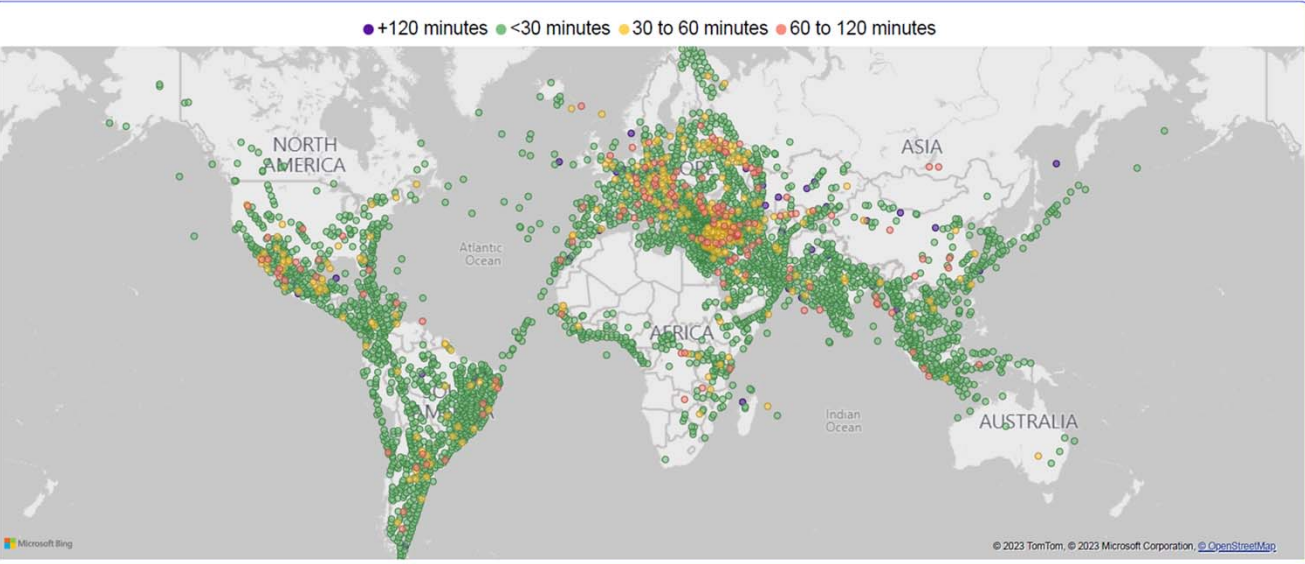
Global GPS Signal Loss Event



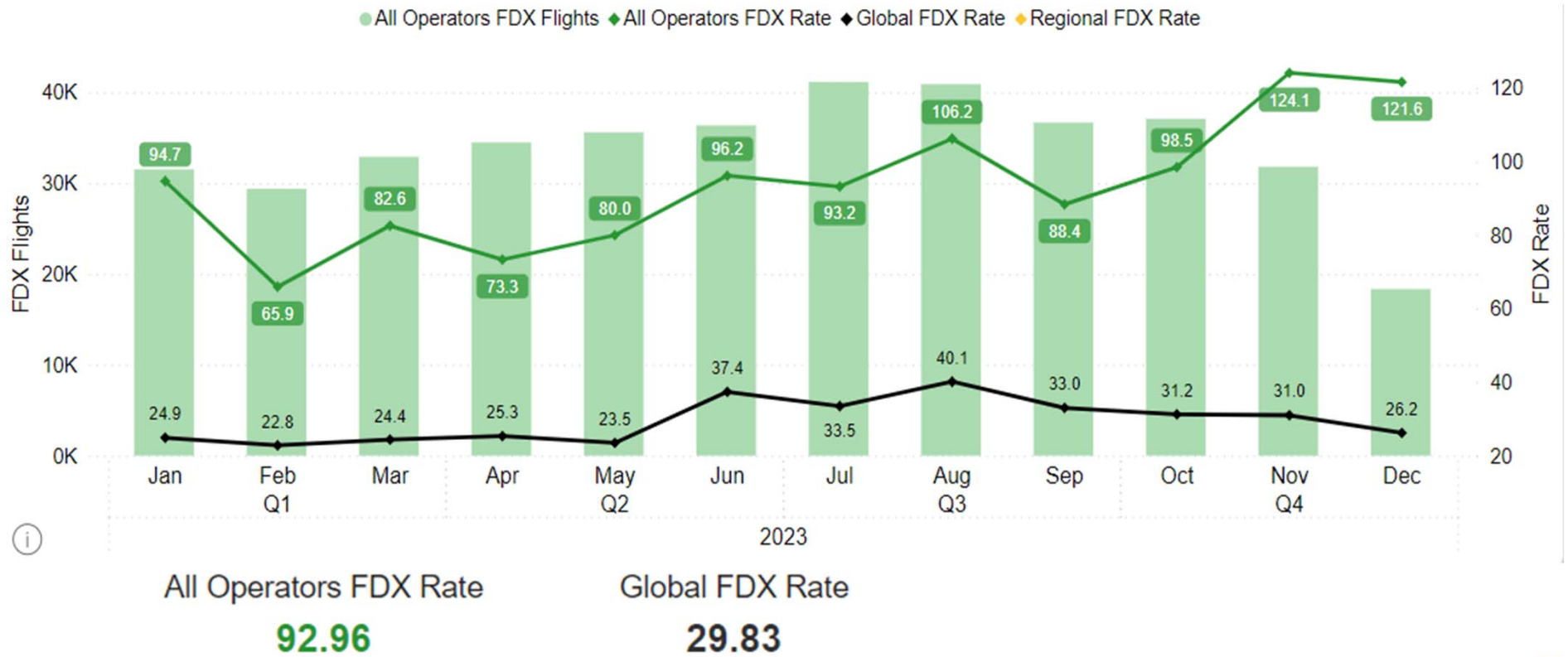
Signal Loss Occurrence Phase of Flight



GPS Signal Loss Occurrence Duration

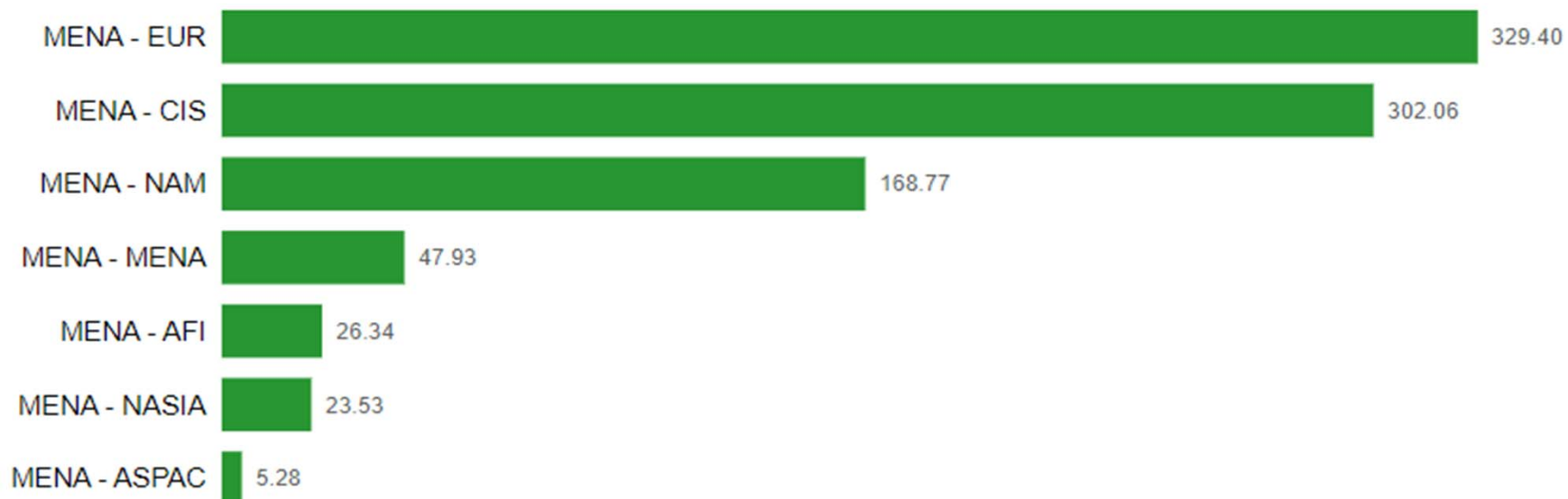


GNSS RFI MENA



Location Trend MID

Regional Route Pairs



FDX Rate

GNSS RFI EUR & MID

All Operators FDX Rate

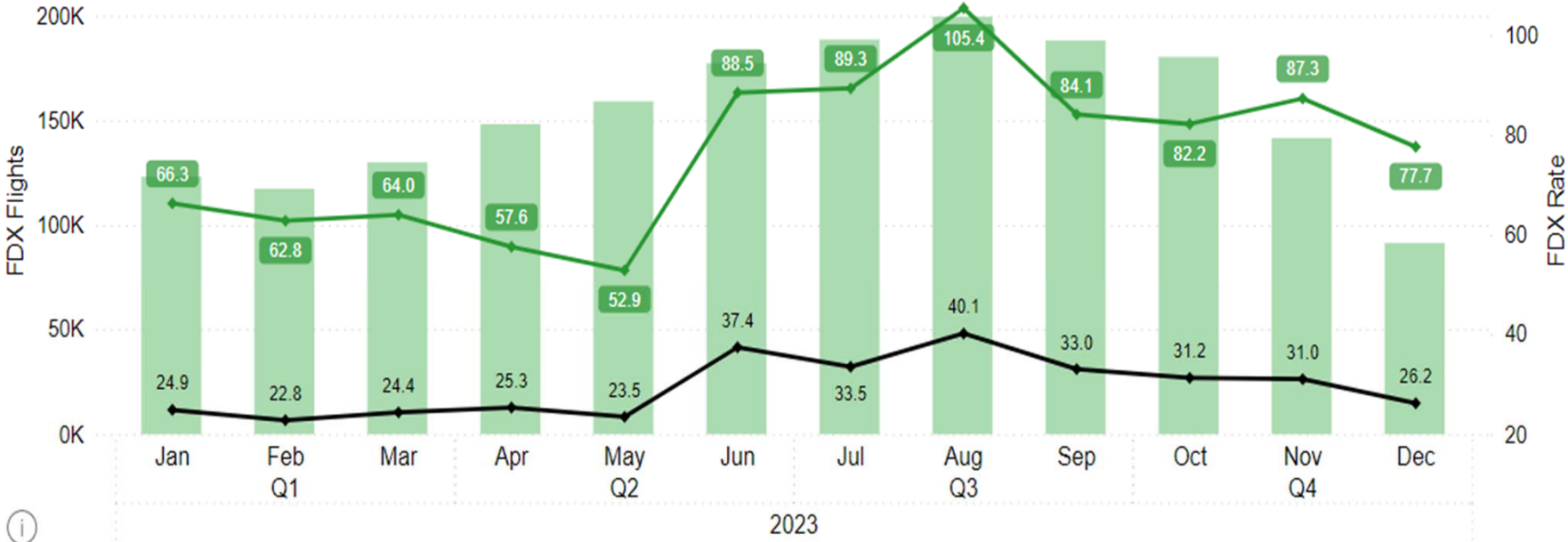
78.34

Global FDX Rate

29.83

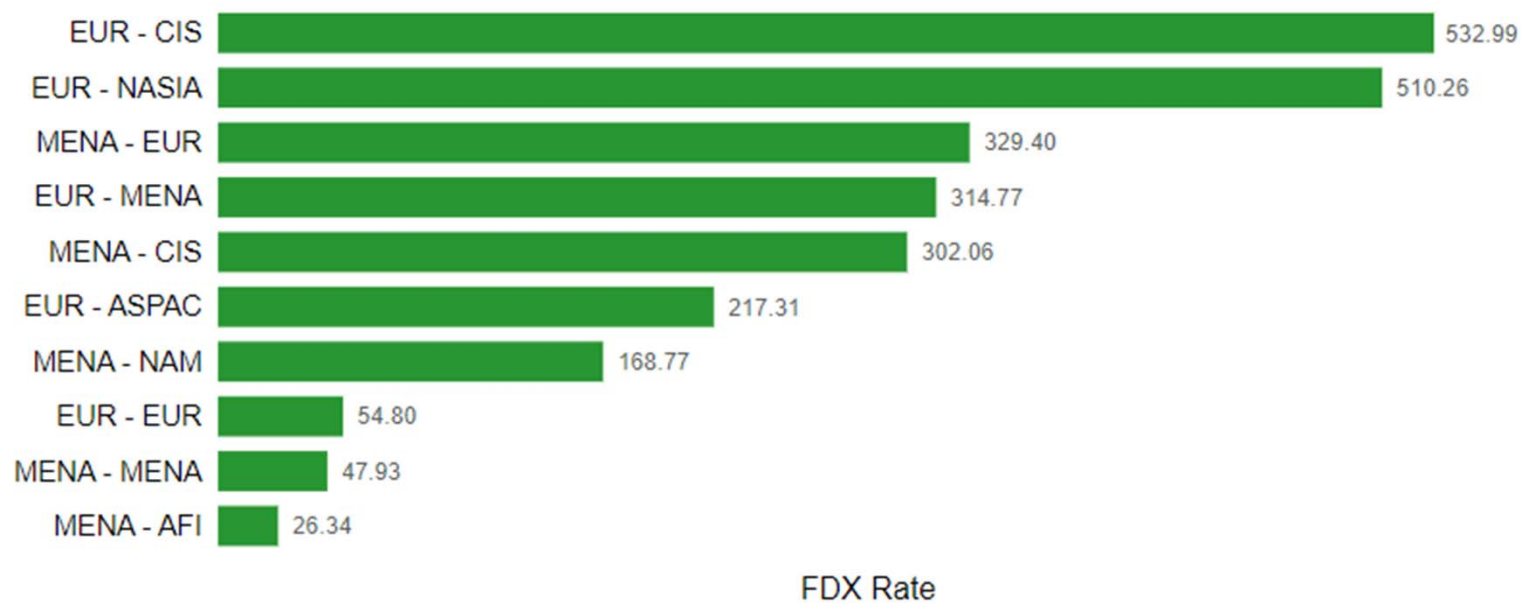
Yearly / Quarterly / Monthly Trend

● All Operators FDX Flights ● All Operators FDX Rate ◆ Global FDX Rate ◆ Regional FDX Rate

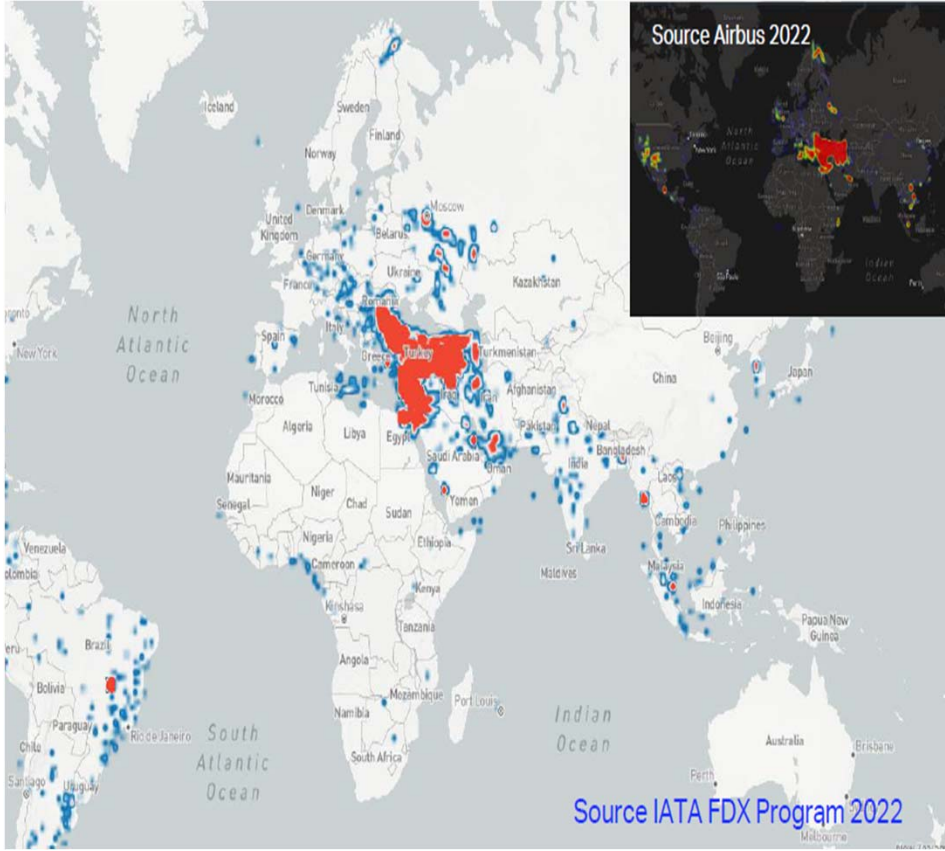
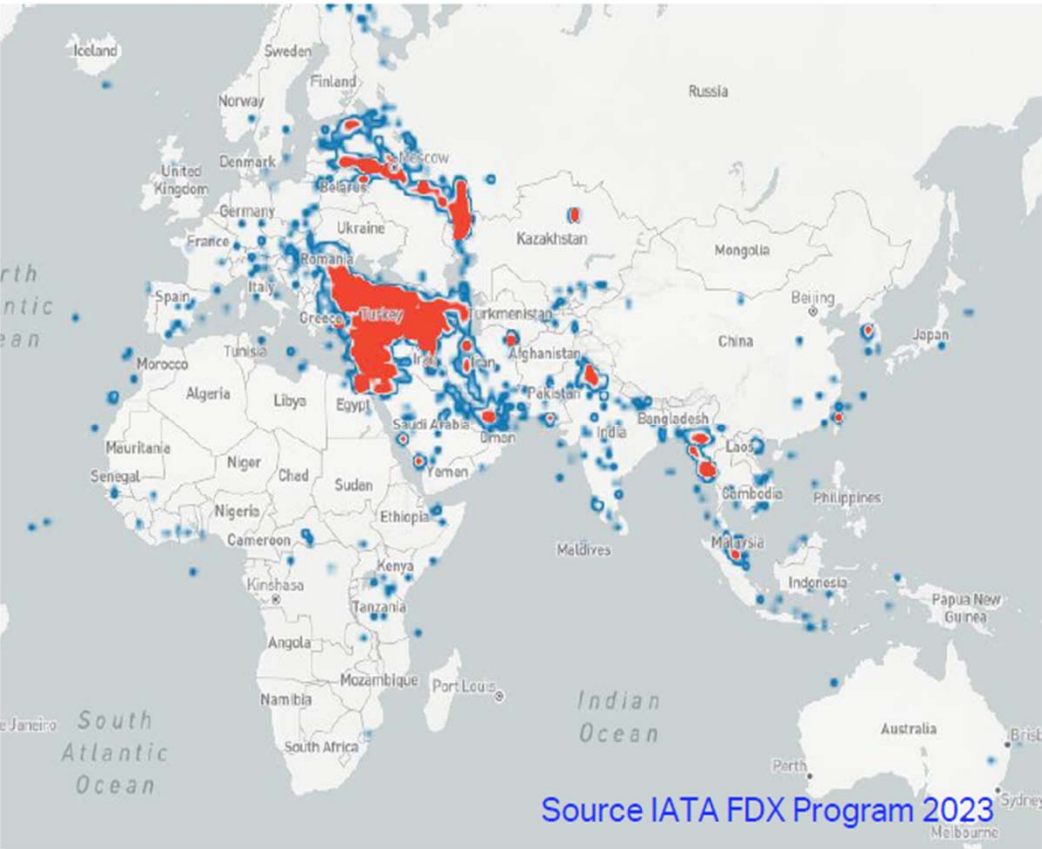


Location Trend Europe & MID

Regional Route Pairs



GNSS RFI Recorded events



IATA Recommendations

- Establish a regionally determined minimum operational network (MON) of conventional navigation aids .
- ICAO & IATA to continue efforts to encourage **pragmatic elimination** of government origin GNSS RFI.
- States to develop procedures (conventional routes) to be used in case of GNSS interference .



Thank You!