

GNSS interference - Operator's perspective

EASA Annual Safety Conference 2024

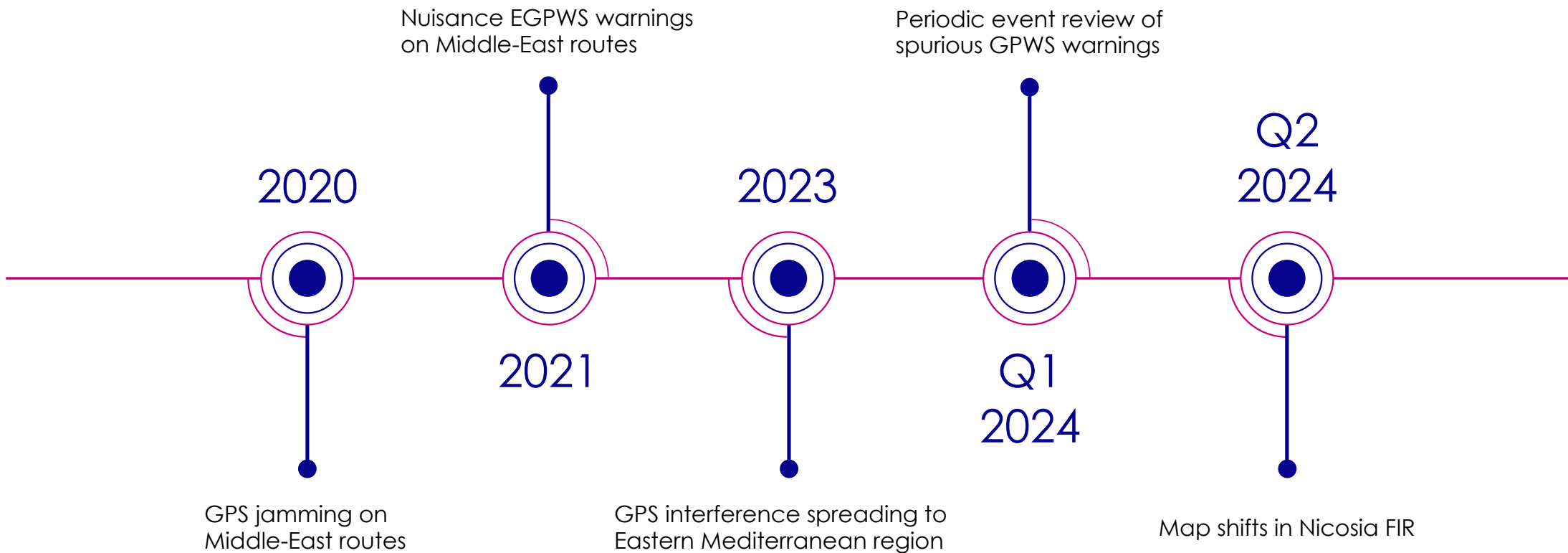


**FLY THE
GREENEST**

Akos Steigervald
Budapest, 30 October 2024

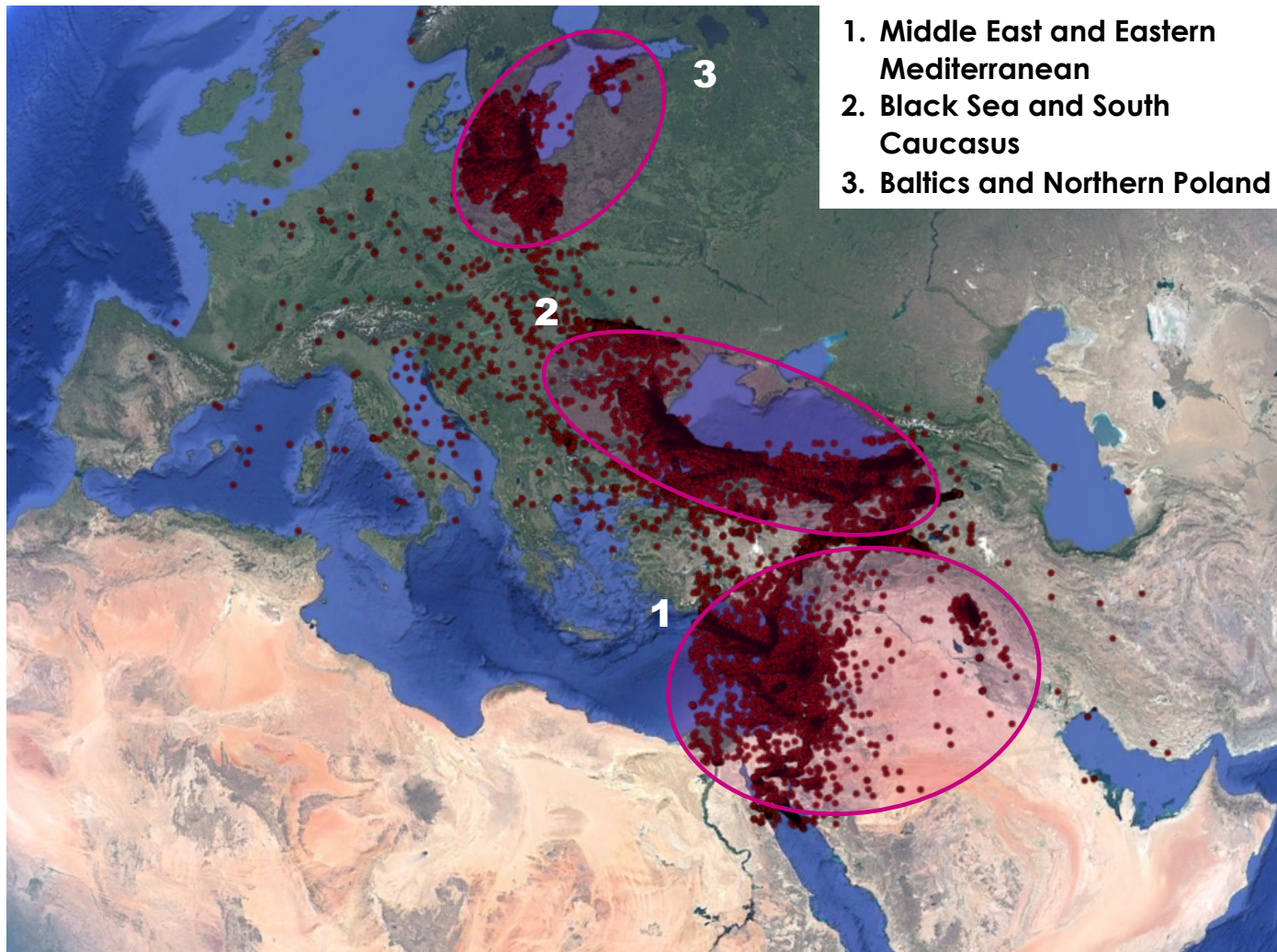
MILESTONES

How did it evolve?



GNSS INTERFERENCE

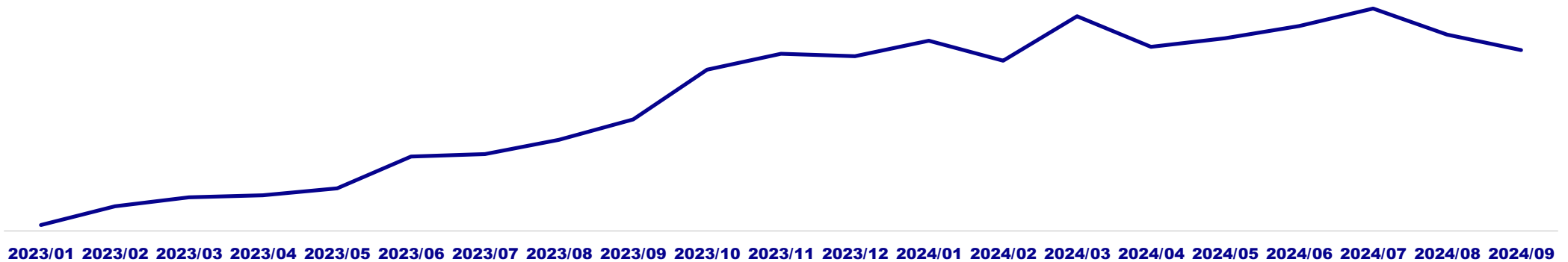
Most affected areas on Wizz Air network



AFFECTED AIRCRAFT SYSTEMS

Experienced by Wizz Air

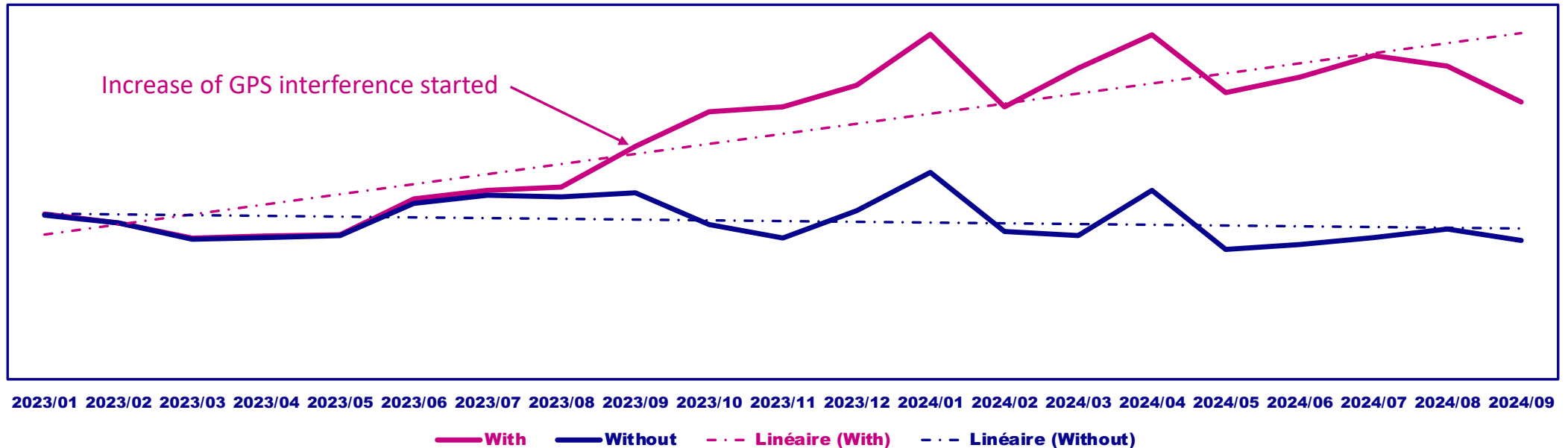
Rate of GPS interference



- **EGPWS:** nuisance “PULL UP” warnings → CFIT
- **Map shifts** → CFIT
- **Wind direction and speed indication:** Inconsistent information about wind speed and direction → CFIT
- **ROW/ROP:** nuisance “RWY too short (if wet)” alerts → RE

FDM STATISTICS

Event rate with and without GNSS interference



Trend with GPS interference: increasing

Trend without GPS interference: decreasing

TAKEAWAYS AND ACTIONS

Key of clarity

Rate of GPWS terrain warning

- Implementing OEM procedures and recommendations

- FCOM
- ISI



- Creating own procedures
 - EGPWS TERR OFF
 - Mandatory navigation accuracy checks
- Communication
 - Airbus
 - Pilot community
 - Consulting other sources

Key takeaways

- Constantly changing effects – reactive approach
- Potential loss of trust in 'PULL UP' warnings
- Information for flight crew community must be centralized and simplified

Further actions

- Monitor the situation to identify new areas or consequences
- Mitigate the risk of losing trust in the aircraft systems



THANK YOU FOR THE ATTENTION!