



## Air Defender 2023: Military mission effectiveness with minimal network impacts

Our latest EUROCONTROL European Aviation Trends strategic briefing looks at the impact of Air Defender 2023, the largest military deployment exercise since the foundation of NATO, on the network.

Lasting between Monday 12 and Thursday 22 June 2023, Air Defender has now been concluded – and concluded very successfully from a civil-military perspective.

We take a quick look at the outcome of this important demonstration of European readiness in a challenging security context, in a complex exercise for which preparations started last year involving all relevant players and requiring close coordination until the end of the exercise.

Overall, Air Defender delivered its goal of exercising large-scale air operations with allied air forces, while its impact on civil air traffic was successfully minimised by careful planning.

### #AirDefender in numbers

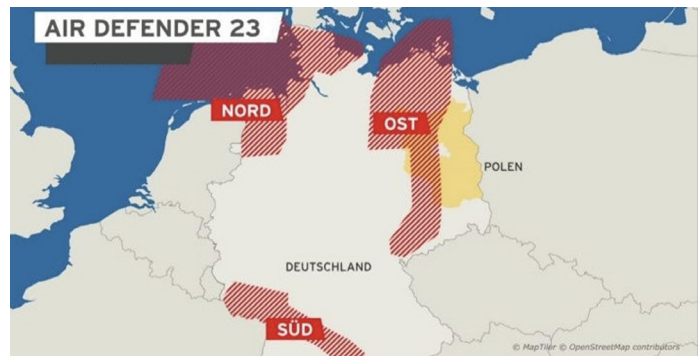
#### Military mission

- 250** military aircraft involved...
- 25** nations taking part...
- 10,000** personnel...
- 808** missions performed...
- 1,800** flights carried out...
- 90%** of all flights executed as planned.

#### Civil impacts

- 0** unplanned cancellations as a result of the exercise.
- Up to **800** re-routed flights per day....  
... with an average route extension of **10 NM** per re-routed flight.
- 12,474** flights delayed due to Air Defender for the whole period...  
... with an average delay per delayed flight of **17** minutes.
- Air Defender-related delays represented **18%** of all ATFM delays in that period.

Air Defender, the largest military deployment exercise since the foundation of NATO, took place in Germany over 9 exercise days from 12-22 June, with the participation of around 250 military aircraft from 25 nations in three distinct exercise areas.



Collaboration and preparations started in 2022 with EUROCONTROL working closely with the German Air Force, NATO, airlines, the German ANSP (DFS) and other air navigation service providers (ANSPs) to develop airspace impact assessments, with work intensifying in the run-up to the exercise. The EUROCONTROL Network Manager each day tactically supported air operators in finding optimal trajectories that avoided the areas when necessary, planned re-routings in advance of up to 800 flights per day, and provided hour-by-hour tactical support to operational aviation stakeholders. Colleagues from the Lufthansa Group and DFS joined EUROCONTROL staff physically in the Brussels Network Management Operations Centre for the duration of the exercise to support efficient tactical coordination. Overall, this was an excellent example for the future of Network collaboration.

# EUROCONTROL Aviation Trends

30 June 2023

As a result of this intense cooperation, this massive exercise was able to complete a set of complex military objectives with relatively low delays for civilian traffic and a limited overall impact on the busy summer European aviation Network.



The total delay attributable to Air Defender was kept to a very reasonable 23,590 minutes on average per day (18% of the total network delay), with no flights needing to be cancelled prior to the exercise, and in total 12,474 flights delayed due to Air Defender for the whole period with an average delay per delayed flight of 17 minutes, a very reasonable amount compared to the total of 293,928 flights which operated across the European aviation network over those nine days.



## In conclusion

Air Defender successfully delivered its goal of exercising ambitious air operations with allied air forces, while from the civil aviation perspective, rigorous preparation and intense cooperation throughout the exercise ensured impacts on civil air traffic were successfully minimised by careful planning.

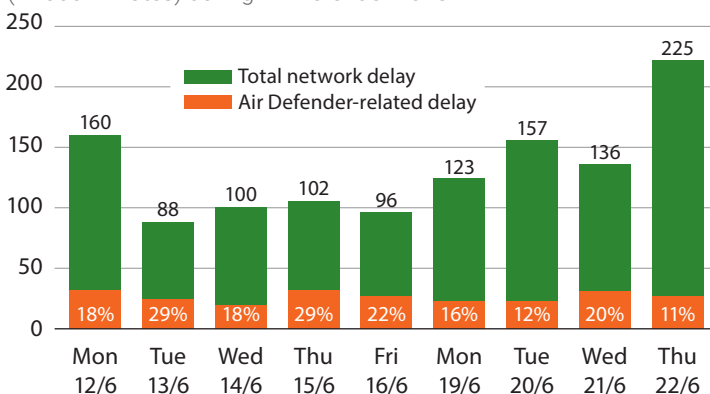
This demonstrates once again the importance of intensive civil-military cooperation and close collaboration with all operational stakeholders when accommodating military exercises, as underlined by our "Raising the Bar" programme, and in particular our "Preparing for Summer 2023" roadmap – particularly as traffic accelerates to close to pre-pandemic levels.

### Key indicators for each day of Air Defender 2023

	Mon 12/6	Tue 13/6	Wed 14/6	Thu 15/6	Fri 16/6	Mon 19/6	Tue 20/6	Wed 21/6	Thu 22/6
Number of flights delayed due to Air Defender 23	<b>1,513</b>	<b>1,670</b>	<b>1,294</b>	<b>1,701</b>	<b>1,364</b>	<b>1,286</b>	<b>1,074</b>	<b>1,430</b>	<b>1,132</b>
Average delay per delayed flight due to Air Defender 23	<b>19</b> minutes	<b>15</b> minutes	<b>14</b> minutes	<b>17</b> minutes	<b>15</b> minutes	<b>15</b> minutes	<b>18</b> minutes	<b>19</b> minutes	<b>22</b> minutes
Arrival punctuality	<b>64%</b>	<b>70%</b>	<b>71%</b>	<b>67%</b>	<b>66%</b>	<b>64%</b>	<b>61%</b>	<b>63%</b>	<b>59%</b>
	(-8% vs Mon 5/6)	(+5% vs Tue 6/6)	(same as Wed 7/6)	(-2% vs Thu 8/6)	(-4% vs Fri 9/6)	(-8% vs Mon 5/6)	(-3% vs Tue 6/6)	(-8% vs Wed 7/6)	(-10% vs Thu 8/6)

### Share of Air Defender-related ATFM delays in all ATFM delays

(in '000 minutes) during Air Defender 2023



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