

# **CODA Digest**

All-Causes Delays to Air Transport in Europe Annual 2022









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# **DOCUMENT APPROVAL**

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### 1 Executive Summary

The average delay per flight in 2022 increased to a 5-year high of 17.3 minutes per flight, compared to 2021 where the average delay per flight was 9.2 minutes per flight. The number of flights increased, this by 48% when compared to 2021.

Arrival punctuality for the year sharply deteriorated, with only **64.5% of flights arriving within 15 minutes** or earlier than their scheduled arrival time (STA).

The poor delay performance in 2022 was strongly influenced by the aviation industry in general struggling to accommodate the high numbers of passengers and flights following the declines of the COVID-19 pandemic, consequently **delays within airline and airport operations increased**.

Further analysis into the causes of delay shows **reactionary (knock-on) delay contributed the most** to the average delay per flight with a 48% share of delay minutes, translating to **8.0 minutes** per flight.

**Airline causes,** such as ground handling, staff shortage related delay ranked second with **4.9 minutes per flight**.

En-route ATFM delay sharply increased to 1.8 minutes per flight. There were significantly more ATFM capacity issues in the network in 2022.

The **Ukrainian crisis generated ATFM delays** from 22 February 2022 as traffic flows shifted following the closure of the Ukrainian FIR. Karlsruhe UAC saw delays from a combination of ATC capacity, weather and increased complexity due to military traffic. **Industrial action returned** to the network, with French ATC and Italian ATC both striking during the year. There were also **ATM system implementations** in Reims, Praha and Lisbon ACCs.

**Airport delays also increased**, as many of the major European hub airports struggled with labour shortages and adjusting their operations to accommodate the increasing numbers of passengers during the start and peak summer season months.

**Governmental delays**, those mostly associated to COVID-19 documentation checks **fell**, with only the start of the year seeing some higher delay for this cause, as the Omicron variant spread in Europe.

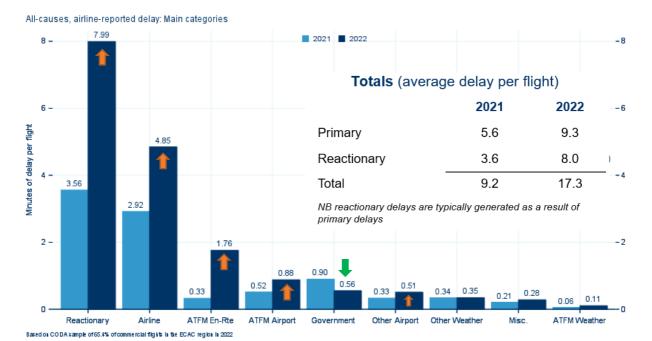


Figure 1. Breakdown of the Average Delay per Flight 2021 vs. 2022

## 2 Punctuality

The distribution of flights within the punctuality time bands returned to a more traditional picture in 2022, translating to 68.6% of flights departing within 15 minutes or earlier than their scheduled departure time, compared to 82.6% in 2021.

Figure 2: Departure Punctuality: 2022 vs 2021

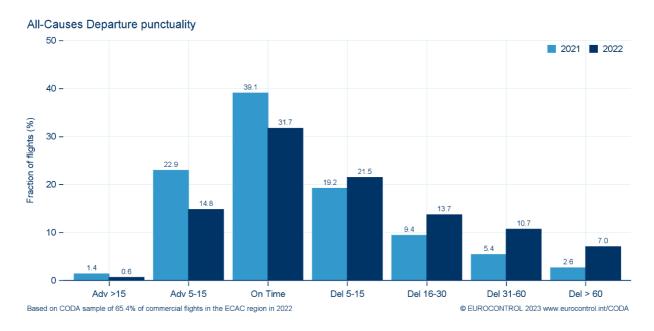
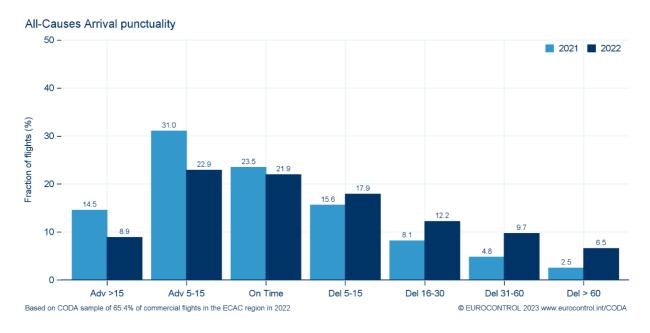


Figure 3. Arrival Punctuality: 2022 vs 2021

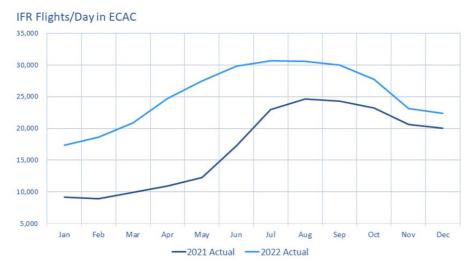


Arrival punctuality in 2022 followed the trend of departure punctuality with the higher volumes of early arrivals reducing in comparison to 2021, consequently 71.6% of flights arrived within 15 minutes or earlier of their scheduled arrival time (STA), compared to 84.6% in 2021.

Flights arriving more than 15 minutes ahead of schedule decreased, these at 8.9% in 2022, whilst being good for the passenger experience, this high share may affect operations. Effects being stand availability and air traffic flow management operations (implementation of ATFM regulations because of demand shifts) in the event of aircraft frequently arriving excessively ahead of their schedule.

#### 3 Traffic

Figure 4. Total Flights per Day in ECAC



European flights (ECAC) in average daily terms (Figure 4) increased by 48% when compared to 2021 as the recovery from the COVID-19 pandemic continued. However, there were 17% fewer flights than record highs of 2019.

Further information regarding traffic and forecasts is available at the <u>Forecasting</u> website, also via the <u>STATFOR Interactive Dashboard (SID)</u>.

### 4 2022 Monthly Summary

Section 4 provides a month-by-month view for 2022, highlighting the main causes of network delay, locations, or disruptions in further detail. Alongside ATFM related delays, airport delays also increased, as airports struggled to accommodate increasing passenger demand. Many airports experienced large security screening delays and aircraft handling delays throughout the year with summer seeing the highest levels.

**January 2022.** The average delay per flight on departure was 9.5 minutes, which was identical when compared to January 2021.

Weather was mainly responsible for delays during the month, strong winds and low visibility were recorded at Amsterdam Schiphol. IGA Istanbul was also impacted by severe weather (snow) between 24 and 27 January. Industrial action occurred in France from 26 to 27 January.

**February 2022.** The average delay per flight on departure was 9.5 minutes, remaining stable to February 2021 where the average delay per flight was 9.6 minutes.

In a similar pattern to January, weather remained a cause of delay with Amsterdam Schiphol impacted by storms and high winds. ATC capacity and staffing delays were recorded in Reims and Paris ACCs. On the 24 February at 0230utc the Ukrainian crisis commenced, a zero rate for the Ukrainian FIR was applied.

**March 2022.** The average delay per flight on departure was 8.7 minutes, an increase of 2.8 minutes compared to March 2021 where the average delay per flight was 5.9 minutes.

Industrial action in France occurred from 28 to 30 March. As the Ukrainian crisis evolved ATFM delays increased at several ACCs such as Bremen, Maastricht, Karlsruhe, Langen and Warsaw.

**April 2022.** The average delay per flight on departure was 14.5 minutes, an increase of 9.5 minutes compared to April 2021, where the average delay was 5.0 minutes per flight.

En-route ATFM delays increased sharply in April 2022, with delays observed in Warsaw ACC and Karlsruhe UAC from a combination of ATC staffing, ATC capacity and increased complexity due to military traffic. There were also new ATM system deployments in Reims and Praha ACCs.

Weather impacted Amsterdam Schiphol on the 07 April, there was also ATC industrial action in Italy on 11 April.

**May 2022.** The average delay per flight on departure was 15.8 minutes, an increase of 10.0 minutes per flight, compared to May 2021 where the average delay per flight was 5.8 minutes.

Delays increased in May 2022, in a similar pattern to April ATFM delays were observed in Warsaw ACC and Karlsruhe UAC from a combination of ATC staffing, ATC capacity and increased complexity due to military traffic. The new ATM system deployments in Reims and Praha ACCs continued and generated delays. Weather also caused delays, with Karlsruhe UAC seeing delay throughout the month due to thunderstorm related activity.

**June 2022.** The average delay per flight on departure was 25.1 minutes, a 5-year high and a significant increase of 17.9 minutes compared to June 2021 where the average delay per flight was 7.2 minutes.

There were system failures (communication) in Geneva ATC from 15 to 23 June. There were also ATC system failures in Zurich ACC on 15, 18, 21 & 22 June. ATC capacity and convective weather delays affected Karlsruhe UAC. French ATC industrial action occurred from 25 to 27 June 2022.

**July 2022.** The average delay per flight on departure was 26.4 minutes, an increase of 15.2 minutes compared to July 2021, where the average delay was 11.2 minutes per flight.

En-route ATFM delays increased sharply in July 2022, with a combination of en-route and weather ATFM delays observed in Karlsruhe UAC. Praha ACC due to TopSky implementation as well as Reims ACC due to 4Flight implementation. Industrial action occurred in Italy on 17 July, there were strikes by firefighters at Paris CDG on 01 and 02 July. Greek island airports experienced delays due to capacity, runway damage at London Luton on 18 July and works in progress at Manchester also caused delays.

**August 2022.** The average delay per flight on departure was 21.1 minutes, an increase of 10.0 minutes per flight, compared to August 2021 where the average delay per flight was 11.1 minutes.

A combination of weather and ATC capacity ATFM delays were observed in Karlsruhe UAC, as well as Budapest, Beograd, Zagreb and Marseille ACCs. The new ATM system deployments in Reims (4Flight) and Praha (TopSky) ACCs continued and generated delays. Tenerife South suffered delays on the 27 August due to a disabled aircraft blocking the runway, causing 12 aircraft to divert. London Gatwick suffered from ATC staffing delays throughout the month.

**September 2022.** The average delay per flight on departure was 21.5 minutes, increasing by 12.9 minutes compared to September 2021 where the average delay per flight was 8.6 minutes.

ATC industrial actions in Tunisia on 09 September, France 16 to 17 and 28 to 30 September caused enroute delays. London Gatwick suffered from ATC staffing delays. Karlsruhe UAC, Beograd, London and Milano ACCs suffered from delays due to weather (thunderstorm activity) throughout the month.

**October 2022.** The average delay per flight on departure was 16.7 minutes, increasing by 7.2 minutes compared to October 2021 where the average delay per flight was 9.5 minutes.

TopSky implementation started in Lisbon ACC, causing en-route delays as well as airport delays at Lisbon. ATC industrial actions in France (11 to 13, 17 to 19 and 26 to 28 October) and Italy (20 to 21 October) caused en-route delays.

**November 2022.** The average delay per flight on departure was 11.1 minutes, increasing by 2.5 minutes compared to November 2021 where the average delay per flight was 8.6 minutes.

TopSky implementation continued throughout the month in Lisbon ACC, causing en-route ATFM delays as well as airport ATFM delays at Lisbon. Canarias, Sevilla and Madrid ACCs were also impacted by the implementation. ATC industrial actions in France (Reims ACC from 8 to 11 November) caused en-route ATFM delays.

**December 2022.** The average delay per flight on departure was 20.1 minutes, increasing by 8.5 minutes compared to December 2021 where the average delay per flight was 11.6 minutes.

Winter weather (snow and low visibility) conditions strongly impacted the network causing delays at London airports, Amsterdam Schiphol and Lisbon.

## 5 Average Delay per Flight (Departure)

The average delay per flight on departure in 2022 increased to 17.3 minutes per flight from 9.2 minutes in 2021. Only January and February saw delays at or just below their 2021 equivalents. The remaining 10 months of the year saw increases in delay with 5-years highs being observed from April, as en-route ATFM delays returned to the network alongside airport related delays.



Figure 5. Average Delay per Flight (All-Causes) for Departures

# 6 Average Delay per Flight (Arrival)

The average delay per flight on arrival (Figure 6) showed a similar trend to that of the departure delay, here again 5-year highs were observed throughout the summer, with the average delay increasing to 16.0 minutes per flight, compared to 8.2 minutes in 2021.

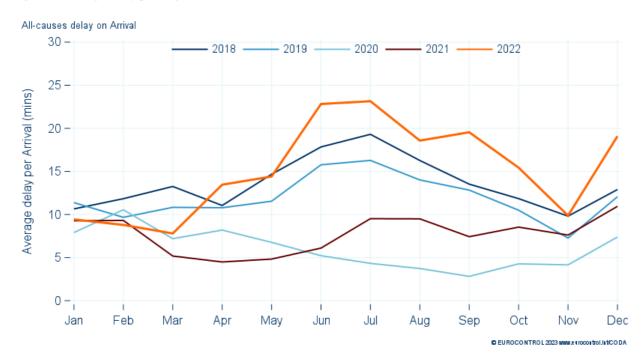


Figure 6. Average Delay per Flight (All-Causes) for Arrivals

### 7 Scheduling Indicators

Scheduling correctly is a difficult art: if too long a time is blocked for a flight, the airline will not be able to make best use of resources - staff, airframes, infrastructure. Too short a time can arguably be worse as late flights generate rotational (knock-on) delay with late incoming aircraft and passengers from previous flights having to be accommodated. When flights leave on time but arrive after the scheduled time of arrival, they cause reactionary delays. Schedule padding is essential for air carriers to find schedules, which work with the typical patterns of delay, so that they can deliver passengers on time, and get maximum use out of their aircraft. Consequently, when delays decrease it takes one or two (IATA) seasons for the airline to adapt its schedule accordingly.

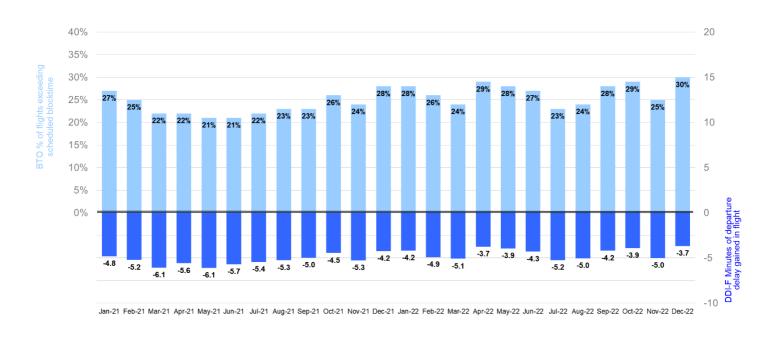
Two CODA scheduling indicators help airline schedulers determine the optimal schedule based on historical flight data:

The Delay Difference Indicator - Flight (DDI-F) or departure delay recovery is the difference between departure and arrival punctuality expressed in minutes. This can be indicated as a positive or negative figure, for example, a flight departing with 20 minutes delay and arriving with 30 minutes arrival delay will have a DDI-F of +10 minutes.

The **European DDI-F in 2022 was -4.4 minutes**, this was a decrease in comparison to 2021 where the DDI-F was -5.3 minutes.

The **Block Time Overshoot (BTO)** is the percentage of flights with an actual block time that exceeds the scheduled block time. The **European BTO in 2022 increased to 27%** compared to 24% in 2021.

Figure 7. Block Time Overshoot (BTO) and Delay Difference Indicator - Flight (DDI-F) January 2021 - December 2022

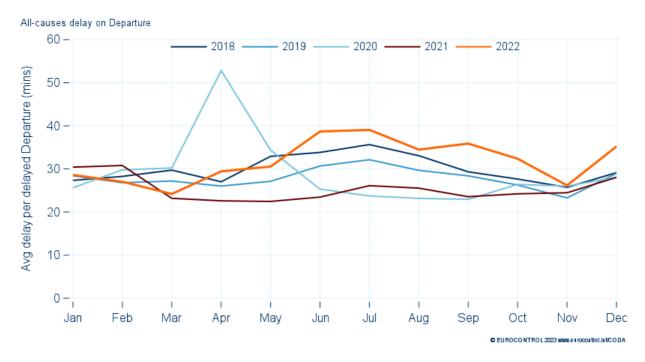


#### 8 Year-on-Year Trends in All-Causes Indicators

This section summarises the year-on-year trends in the main indicators of delay from all-causes. Here flights are considered delayed from 5 minutes.

The long-term performance trends in can be observed in Figures 8, 9 and 10. The average delay per delayed flight (ADD) in 2022 was 33.4 minutes per flight, compared to 25.3 minutes in 2021. The percentage of flights delayed  $\geq$  5 mins (PDF) increased to 52.9% compared to 2021 where the PDF was 46.3%.

Figure 8. Average all-causes delay per delayed flight ≥ 5 mins (departures top, arrivals bottom)



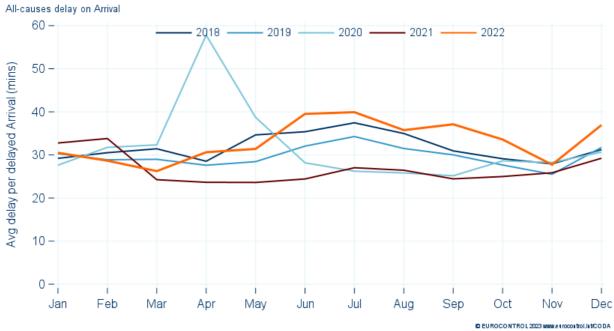


Figure 9. Percentage of flights delayed ≥ 5 mins for all-causes delay (departures top, arrivals bottom)

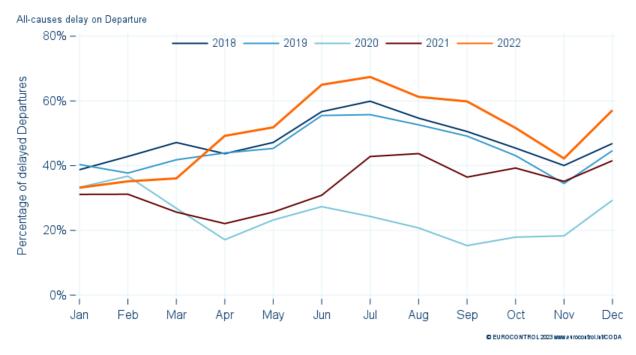




Figure 10. Percentage of flights delayed >15mins for all-causes (departures top, arrivals bottom)





# **Annex Standard IATA Delay Codes (AHM 730)**

#### Others

00-05	AIRLINE INTERNAL CODES
06 (OA)	NO GATE STAND AVAILABILITY DUE TO OWN AIRLINE ACTIVITY Including Early Arrivals
09 (SG)	SCHEDULED GROUND TIME LESS THAN DECLARED MINIMUM GROUND TIME

#### Passenger and Baggage

11 (PD)	LATE CHECK-IN, acceptance after deadline
12 (PL)	LATE CHECK-IN, congestions in check-in area
13 (PE)	CHECK-IN ERROR, passenger and baggage
14 (PO)	OVERSALES hooking errors

14 (PO) 15 (PH)

BOARDING, discrepancies and paging, missing checked-in passenger

16 (PS) 17 (PC) COMMERCIAL PUBLICITY PASSENGER CONVENIENCE, VIP, press, ground meals and missing personal items

CATERING ORDER, late or incorrect order given to supplier

18 (PB) 19 (PW) BAGGAGE PROCESSING, sorting etc.

REDUCED MOBILITY, boarding deboarding of passengers with reduced mobility.

#### Cargo and Mail

21 (CD)	DOCUMENTATION, errors etc.
22 (CP)	LATE POSITIONING
23 (CC)	LATE ACCEPTANCE
24 (CI)	INADEQUATE PACKING
25 (CO)	OVERSALES, booking errors
26 (CU)	LATE PREPARATION IN WAREHOUSE
27 (CE)	DOCUMENTATION, PACKING etc (Mail Only)
28 (CL)	LATE POSITIONING (Mail Only)
29 (CA)	LATE ACCEPTANCE (Mail Only)

#### Aircraft and Ramp Handling

31	(GD)	AIRCRAFT DOCUMENTATION LATE INACCURATE, weight and balance, general declaration, pax manifest, etc.
32	(GL)	LOADING UNLOADING, bulky, special load, cabin load, lack of loading staff
33	(GE)	LOADING EQUIPMENT, lack of or breakdown, e.g. container pallet loader, lack of staff
34	(GS)	SERVICING EQUIPMENT, lack of or breakdown, lack of staff, e.g. steps
35	(GC)	AIRCRAFT CLEANING
36	(GF)	FUELLING DEFUELLING, fuel supplier
37	(GB)	CATERING, late delivery or loading
38	(GU)	ULD, lack of or serviceability
39	(GT)	TECHNICAL EQUIPMENT, lack of or breakdown, lack of staff, e.g. pushback

### Technical and Aircraft Equipment

42 (TM) SCHEDULED MAINTENANCE, late release.	
42 (TIVI) SOLIEDULED IVIAIIVI EIVAIVOE, IAIE TEIEASE.	
43 (TN) NON-SCHEDULED MAINTENANCE, special checks and or additional works beyond normal maintenance schedul	e.
44 (TS) SPARES AND MAINTENANCE EQUIPMENT, lack of or breakdown.	
45 (TA) AOG SPARES, to be carried to another station.	
46 (TC) AIRCRAFT CHANGE, for technical reasons.	
47 (TL) STAND-BY AIRCRAFT, lack of planned stand-by aircraft for technical reasons.	
48 (TV) SCHEDULED CABIN CONFIGURATION VERSION ADJUSTMENTS.	

#### Damage to Aircraft & EDP Automated Equipment Failure

51 (D	PF)	DAMAGE DURING FLIGHT OPERATIONS, bird or lightning strike, turbulence, heavy or overweight landing, collision during taxiing
52 (D	)G)	DAMAGE DURING GROUND OPERATIONS, collisions (other than during taxiing), loading off-loading damage, contamination, towing, extreme weather conditions
55 (E	D)	DEPARTURE CONTROL
56 (E	EC)	CARGO PREPARATION DOCUMENTATION
57 (E	F)	FLIGHT PLANS
58 (E	EO)	OTHER AUTOMATED SYSTEM

Fligh	t Operations and Crewing
61 (FP)	FLIGHT PLAN, late completion or change of, flight documentation
62 (FF)	OPERATIONAL REQUIREMENTS, fuel, load alteration
63 (FT)	LATE CREW BOARDING OR DEPARTURE PROCEDURES, other than connection and standby (flight deck or entire crew)
64 (FS)	FLIGHT DECK CREW SHORTAGE, sickness, awaiting standby, flight time limitations, crew meals, valid visa, health documents, etc.
65 (FR)	FLIGHT DECK CREW SPECIAL REQUEST, not within operational requirements
66 (FL)	LATE CABIN CREW BOARDING OR DEPARTURE PROCEDURES, other than connection and standby
67 (FC)	CABIN CREW SHORTAGE, sickness, awaiting standby, flight time limitations, crew meals, valid visa, health documents, etc.
68 (FA) 69 (FB)	CABIN CREW ERROR OR SPECIAL REQUEST, not within operational requirements CAPTAIN REQUEST FOR SECURITY CHECK, extraordinary

#### Weather

71	(WO)	DEPARTURE STATION
72	(WT)	DESTINATION STATION
73	(WR)	EN ROUTE OR ALTERNATE
75	(WI)	DE-ICING OF AIRCRAFT, removal of ice and or snow, frost prevention excluding unserviceability of equipment
76	(WS)	REMOVAL OF SNOW, ICE, WATER AND SAND FROM AIRPORT
77	(WG)	GROUND HANDLING IMPAIRED BY ADVERSE WEATHER CONDITIONS

#### Air Traffic Flow Management Restrictions

81 (AT)	ATFM due to ATC EN-ROUTE DEMAND CAPACITY, standard demand capacity problems
82 (AX)	ATFM due to ATC STAFF EQUIPMENT EN-ROUTE, reduced capacity caused by industrial action or staff shortage,
	equipment failure, military exercise or extraordinary demand due to capacity reduction in neighbouring area
83 (AE)	ATFM due to RESTRICTION AT DESTINATION AIRPORT, airport and or runway closed due to obstruction, industrial
	action, staff shortage, political unrest, noise abatement, night curfew, special flights
84 (AW)	ATFM due to WEATHER AT DESTINATION

#### Airport and Government Authorities

85 (AS) 86 (AG) 87 (AF) 88 (AD)	MANDATORY SECURITY IMMIGRATION, CUSTOMS, HEALTH AIRPORT FACILITIES, parking stands, ramp congestion, lighting, buildings, gate limitations, etc. RESTRICTIONS AT AIRPORT OF DESTINATION, airport and or runway closed due to obstruction, industrial action, staff shortage, political unrest, noise abatement, night curfew, special flights
89 (AM)	RESTRICTIONS AT AIRPORT OF DEPARTURE WITH OR WITHOUT ATFM RESTRICTIONS, including Air Traffic Services, start-up and pushback, airport and or runway closed due to obstruction or weather. 1, industrial action, staff shortage, political unrest, noise abatement, night curfew, special flights
Poor	ntionary.

#### Reactionary

91 (RL)	LOAD CONNECTION, awaiting load from another flight
92 (RT)	THROUGH CHECK-IN ERROR, passenger and baggage
93 (RA)	AIRCRAFT ROTATION, late arrival of aircraft from another flight or previous sector
94 (RS)	CABIN CREW ROTATION, awaiting cabin crew from another flight
95 (RC)	CREW ROTATION, awaiting crew from another flight (flight deck or entire crew)
96 (RO)	OPERATIONS CONTROL, re-routing, diversion, consolidation, aircraft change for reasons other than technical

96 (RO)	OPERATIONS CONTROL, re-routing, diversion, consolidation, aircraft change for reasons other than techn
Miscellaneous	
97 (MI)	INDUSTRIAL ACTION WITH OWN AIRLINE

99 (MX) OTHER REASON, not matching any code above

SOURCE: IATA - Airport Handling Manual (730 & 731)

# Standard IATA Delay Code Sub-Codes (AHM 731)

INDUSTRIAL ACTION OUTSIDE OWN AIRLINE, excluding ATS

# 73 (WR)

**WEATHER: EN ROUTE OR ALTERNATE** OUTSIDE AIRCRAFT LIMITS OUTSIDE CREW LIMITS

**ETOPS** 

#### 81 (AT) ATFM DUE TO ATC EN-ROUTE DEMAND CAPACITY, standard demand capacity problems

ATC ROUTEING

HIGH DEMAND OR CAPACITY ENVIRONMENTAL

X W

WEATHER

OTHER

#### 82 (AX) ATFM DUE TO ATC STAFF EQUIPMENT EN-ROUTE, reduced capacity caused by industrial action or shortage or equipment failure, extraordinary demand due to capacity reduction in neighbouring area

INDUSTRIAL ACTION

**EQUIPMENT FAILURE** 

STAFF SHORTAGE

MILITARY ACTIVITY SPECIAL EVENT w

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98 (MO)

<sup>&</sup>lt;sup>1</sup> Restriction due to weather in case of ATFM regulation only, else refer to code 71 (WO)

#### ATFM DUE TO RESTRICTION AT DESTINATION AIRPORT, airport and or runway closed due to obstruction, 83 (AE) industrial action, staff shortage, political unrest, noise abatement, night curfew, special flights

- HIGH DEMAND ATC CAPACITY INDUSTRIAL ACTION EQUIPMENT FAILURE

- w STAFF SHORTAGE
- ACCIDENT INCIDENT
- MILITARY ACTIVITY
- SPECIAL EVENT
- NOISE ABATEMENT NIGHT CURFEW
- HIGH DEMAND AIRPORT FACILTIES
- G OTHER

#### **MANDATORY SECURITY** 85 (AS)

- MANDATORY SECURITY CHECK SECURITY CONTROL CHECKPOINTS
- **BAGGAGE AVI SECURITY**
- BAGGAGE IDENTIFICATION UNLOADING INTENDED
- AIRPORT TERMINAL SECURITY
- AIRLINE AIRCRAFT SECURITY CHECK
- **EXTRAORDINARY SECURITY EVENTS**
- OTHER

#### 86 (AG) IMMIGRATION, CUSTOMS, HEALTH

- IMMIGRATION EMMIGRATION
- **CUSTOMS**
- HEALTH
- G OTHER

#### 87 (AF) AIRPORT FACILITIES, parking stands, ramp congestion, lighting, buildings, gate limitations, etc.

- PARKING STANDS LIMITATION NO PARKING STANDS AVAILABLE, EXCLUDING EARLY ARRIVALS
- RAMP CONGESTION, ABNORMAL STAND ACCESS LIMITATION (NON-ATC)
- BUILDINGS
- GATE LIMITATION NO GATE AVAILABLE EXCLUDING EARLY ARRIVALS BAGGAGE SORTING SYSTEM DOWN SLOW w
- NO PUSH BACK CLEARANCE DUE TO INFRASTRUCTURE (NON-ATC)
- JET BRIDGE INOPERATIVE
- LACK OF CHECK IN COUNTERS
- AIRFIELD ELECTRICAL SYSTEM FAILURE
- PASSENGER TRANSPORT SYSTEM FAILURE
- PUBLIC ADDRESS FLIGHT INFORMATION DISPLAY SYSTEM FAILURE
- М INSUFFICIENT FIRE COVER
- LATE POSITIONING OF AIRCRAFT (WHEN RESPONSIBILITY OF AIRPORT)
- SERVICE ROAD RESTRICTION
- LATE ARRIVAL OR LACK OF FOLLOW ME VEHICLE
- ANY OF THE ABOVE AT THE DESTINATION AIRPORT

#### 89 (AM) RESTRICTIONS AT AIRPORT OF DEPARTURE WITH OR WITHOUT ATFM RESTRICTIONS, including Air Traffic Services, start-up and pushback, airport and/or runway closed due to obstruction or weather.

- ATC DEMAND/CAPACI
- ATC INDUSTRIAL ACTION
- ATC STAFFING X
- w ATC EQUIPMENT
- ATC ACCIDENT/INCIDENT
- MILITARY ACTIVITY/SPECIALFLIGHTS/VIP
- ATC SPECIAL EVENT
- ATC WEATHER
- O ENVIRONMENTAL BENEFIT, DELAYED START-UP/PUSHBACK DUE TO USE OF REDUCED STANDARD TAXI TIMES
- ATC ENVIRONMENTAL Ν
- М AIRPORT CLOSURE
- RUNWAY/TAXIWAYCLOSURE
- MISCELLANEOUS START-UP DELAY (LOCAL ATC)
- LOST FLIGHT PLAN BY ATC
- LATE PUSHBACK GIVEN DUE TO OTHER REASONS THAN INFRASTRUCTURE
- CONTRUCTION WORK/MAINTENANCE
- G OTHER

#### 93 (RA) AIRCRAFT ROTATION, LATE ARRIVAL OF AIRCRAFT FROM ANOTHER FLIGHT

- LATE ARRIVAL DUE DEPARTURE DELAY AT PREVIOUS STATION
- LATE ARRIVAL DUE ENROUTE DELAY
- LATE ARRIVAL DUE DELAY AFTER LANDING
- LATE ARRIVAL DUETO HIGH DEMAND FOR DESTINATION STATION w
- LATE ARRIVAL DUE TO WEATHER AT DESTINATION
- LATE ARRIVAL DUE TO TECHNICAL REASONS



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