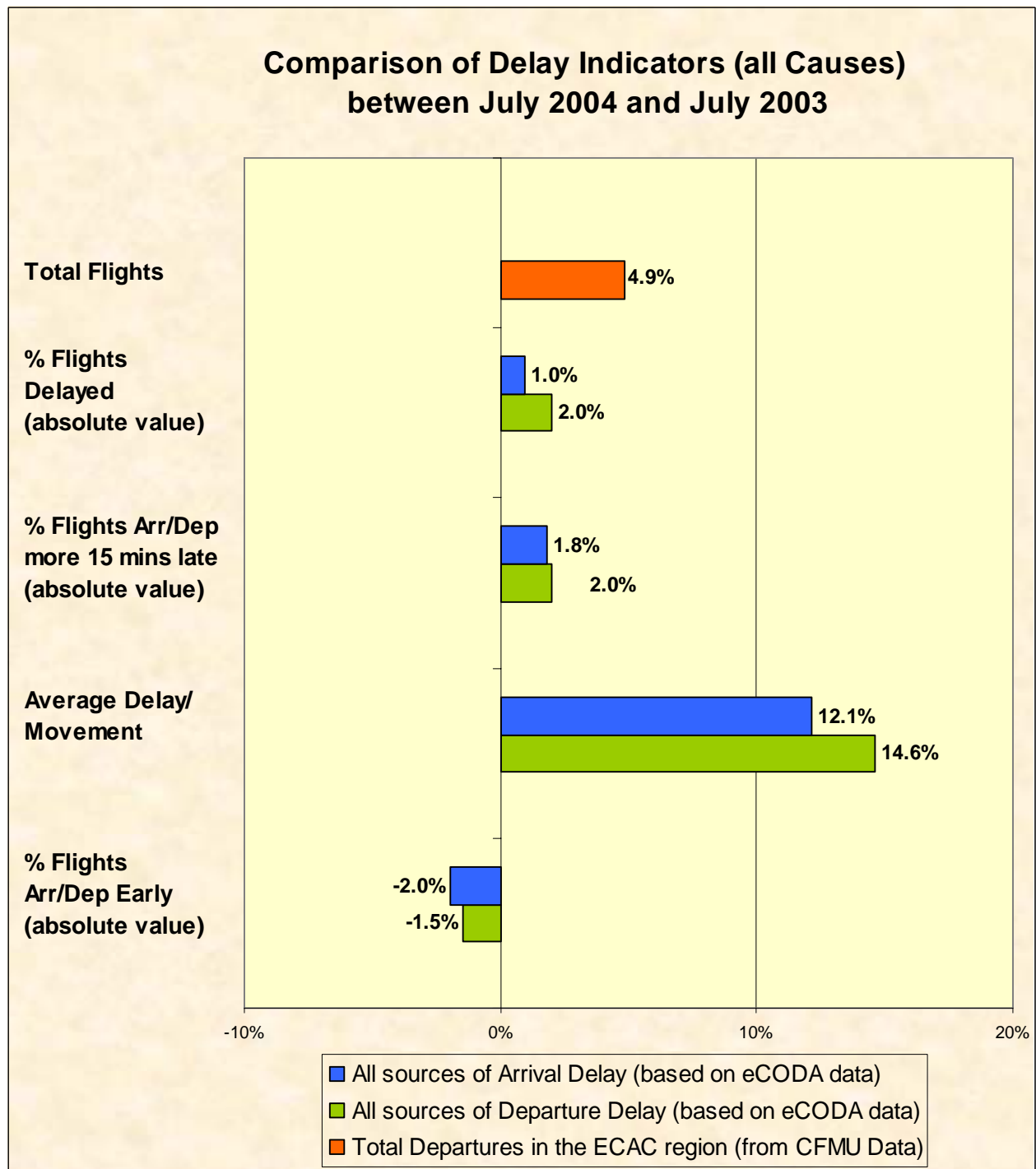


Delays to Air Transport in Europe July 2004



This page has been deliberately left blank.

FOREWORD

This report represents an overview of the delay situation in the European Civil Aviation Conference Area. It is based on delay data supplied by the CFMU and airline data from eCODA, and has been prepared by the Central Office for Delay Analysis (CODA), a service of the European Air Traffic Management Programme (EATMP).

The report consists of an overview of the reporting period, a summary of the main delay effects, and a series of charts and graphics, which illustrate the main characteristics of the reporting period. A glossary of terms and abbreviations used throughout the report is given in Annex 2.

In this report the definition of the CFMU ATFM departure delay is based on the difference between the scheduled off-block time and the calculated off-block time, taking into account slot time and estimated taxi time. Airline data from eCODA is based on real recorded delays.

© European Organisation for the Safety of Air Navigation (EUROCONTROL) 1997. All rights reserved.

The information contained herein is the property of EUROCONTROL and no part may be reproduced or used except as authorised by written permission of EUROCONTROL. The copyright, the foregoing restriction and use, extend to all media in which the information is embodied.

IMPORTANT NOTICE: Information contained in this document does not necessarily engage the responsibility or reflect the official position of EUROCONTROL. While EUROCONTROL aims to keep this information accurate, complete accuracy cannot be guaranteed. Errors brought to EUROCONTROL's attention shall be corrected. This report shall be considered only as an informative document on delays to air transport in Europe

**Central Office for
Delay Analysis**

EUROCONTROL

**96 Rue de la Fusée
B - 1130 Brussels**

Tel. : + 32-2-729 35 74
Fax : + 32-2-729 90 03
E-Mail : coda@eurocontrol.int
Web Site : <http://www.eurocontrol.int/eCoda/>
SITA : BRUAT7X

This page has been deliberately left blank.

Table of Contents

1. SUMMARY OVERVIEW	7
2. Year on Year Trends in Main Indicators.....	12
3. Most Affected Traffic Flows by CODA Regions	14
4. Most Affected and Most Dense Traffic Flows.....	15
5. Most Affected City Pairs.....	16
6. Most Affected and Most Dense City Pairs	17
7. ATFM Delay Share by Country.....	18
8. Reasons for ATFM Delay.....	19
9. Consolidated Evolution of Industry Delay Causes by Category	20
10. Primary Departure Delay Causes.....	21
Definition of CODA Flow Regions (Annex 1)	22
Glossary of Terms and Abbreviations (Annex 2)	23
Standard IATA Delay Codes (Annex 3)	24
Correlation between IATA Delay Codes and the CFMU Reasons for Regulation (Annex 4) ..	26

This page has been deliberately left blank.

1. SUMMARY OVERVIEW

Departures in the ECAC region continued to increase strongly in July, with a significant rise of 5% on 2003. The Average Delay per Movement, due to all causes of delay, increased significantly and was up 15% for departures, rising to almost 11 minutes and up 12% for arrivals, rising to 10 minutes. ATFM delay increased by 27% with the Average Delay per Movement increasing by 21% to 2.3 minutes.

For the first seven months of the year, traffic increased by 4%, with delayed flights due to all causes of delay increasing by 12% for departures and 11% for arrivals. The number of flights delayed by more than fifteen minutes was up 16% for departures and 13% for arrivals. Turning to the delays, the Average Delay per Movement was almost 10 minutes for both departures and arrivals. Total ATFM delay fell by 3%, with the Average Delay per Movement falling by 7% to 1.7 minutes.

TRAFFIC SITUATION FOR JULY 2004¹

When compared with July 2003, traffic throughout the ECAC region increased significantly and with almost eight hundred and twenty thousand flights, it was the highest ever July figure since CFMU started operations (up thirty one percent on July 1996 and up eight percent on July 2002). Domestic traffic decreased slightly (down less than half a percent) whereas International traffic was up eight percent. Eighty nine percent of the busier countries had an increase in International traffic, with the largest real increase in Germany, followed by the United Kingdom, Spain, Italy, France and Turkey. At the other end of the scale, Serbia & Montenegro, Belgium and the Former Yugoslav Republic of Macedonia had the largest real decreases. Turning to the domestic traffic, the United Kingdom, Turkey, Greece and Spain had the largest rises whereas France, Italy and Norway had the largest falls.

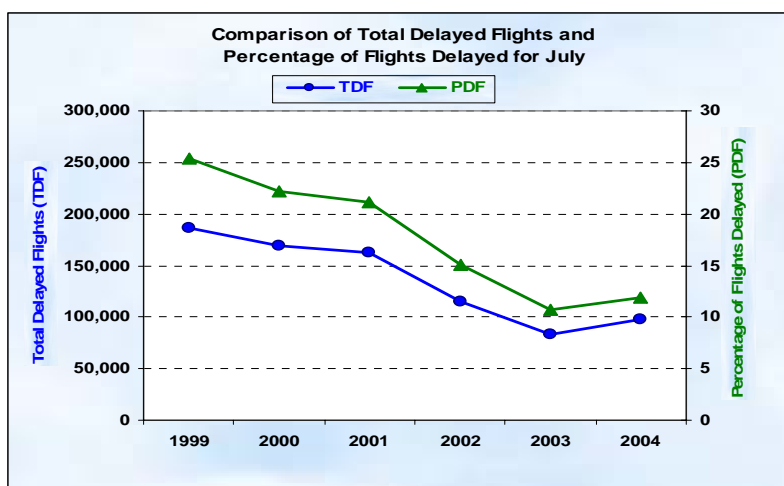
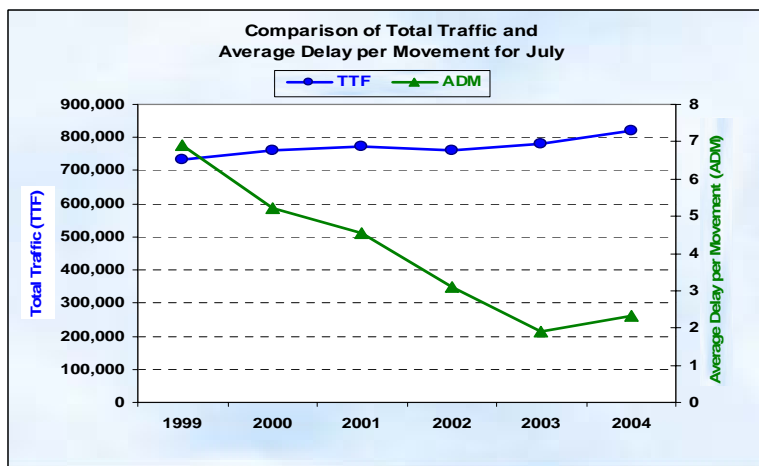
There were increases in traffic levels at many airports; with more than eighty percent of the busier airports (those with at least two thousand five hundred flights per month) showing a real increase. The largest real increases were at Munich, Vienna, Prague, Antalya and Athens. At the other end of the scale, Nice, Birmingham, Berlin, Bologna and Naples had the largest real decreases.

With over one thousand eight hundred flights in each direction, Barcelona-Madrid was again the busiest city pair (nine flights during the busiest hour). Milan/Linate-Rome was the only other pair with more than one thousand flights in each direction (eight flights during the busiest hour). Fifty seven percent of the busier pairs (those with at least two hundred and fifty flights per month) had an increase in the number of flights, with a quarter of them having a rise of more than ten percent. As in the previous month and due to a new airline operating on this route, Guernsey-Jersey had the largest real increase (up 417 flights) and was followed by Tenerife/Norte-Las Palmas. Cologne/Bonn-Berlin and Rome/Fiumicino-Milan/Malpensa, on the other hand, had the largest real decreases.

¹ The analysis was based on the CFMU database which contains details on all IFR flights in the ECAC region.

ATFM DELAY SITUATION FOR JULY 2004

Delays due solely to ATFM measures increased by twenty seven percent when compared with July 2003. The Average Delay per Movement rose by twenty one percent to almost two and a half minutes. ATC Capacity accounted for half of all the ATFM delay and was followed by Weather (fourteen percent), ATC Equipment and Airport Capacity (both with thirteen percent).



Delayed flights increased by seventeen percent and the percentage of flights delayed was up one percentage point on July 2003 to almost twelve percent. Flights delayed by more than fifteen minutes rose by twenty two percent.

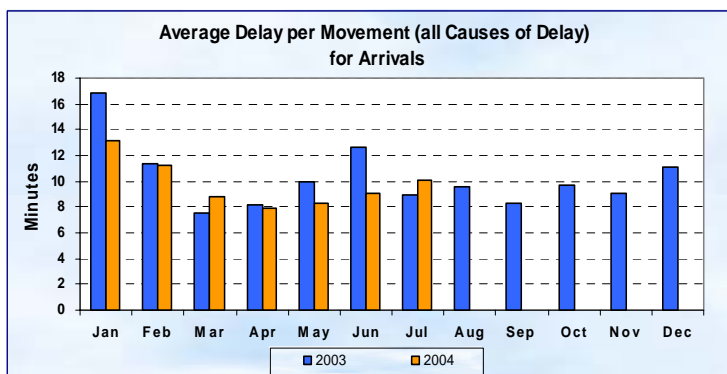
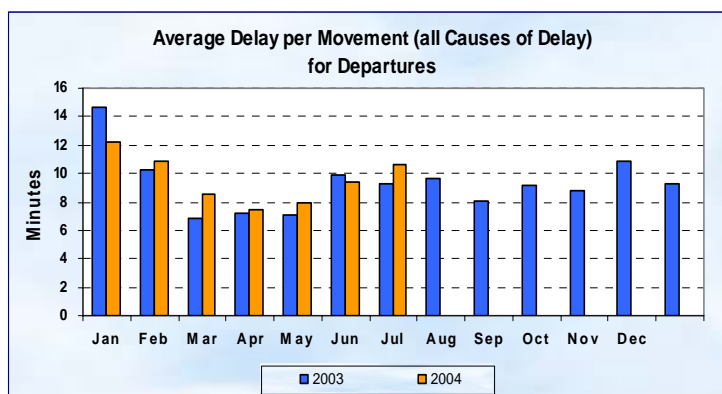
Not all ATFM delay was due to ATC; thirty two percent of the total ATFM delay in the ECAC region was caused by regulations put in place to protect airports. The share of the delay due to these restrictions was exactly the same as last year and the actual amount of the delay increased by twenty six percent. Lack of airport capacity accounted for forty two percent of the airport delay, with Weather and ATC at the airport being the other major causes. Compared with last year, there was an increase in delay due to ATC Equipment, ATC Capacity and Weather. To balance these increases, there was a reduction in delay due to ATC Staffing. The airports of Zurich, Alicante, Paris and London were the most affected by airport-related regulations.

Based on the locations of the most penalising regulations, traffic (including overflights) using the airspace of France, the United Kingdom, Italy had the largest share of the ATFM delay. Between them, they accounted for thirty eight percent of the total ATFM delay in the ECAC region. Compared with the same month last year, the Canary Islands had the largest increase², up by seven percentage points and were followed by Spain and Austria. On the other hand, the United Kingdom (down by ten percentage points) and France (down by six percentage points) had the largest decreases.

² The largest increase in delay in the Canary Islands was the result of serious radar problems throughout the month.

eCODA DATA FOR JULY 2004³

The Average Delay per Movement, for departure traffic and for all causes of delay, was quite higher than the past four months, at almost eleven minutes; an increase of fifteen percent on July last year. Forty three percent of flights were delayed on departure, with nineteen percent delayed by more than fifteen minutes. On the positive side, eleven percent of flights departed before their scheduled time.



The Average Delay per Movement, for arrival traffic and for all causes of delay, was also higher than the past four months, at ten minutes; a rise of twelve percent on July 2003. Thirty nine percent of flights were delayed on arrival, with eighteen percent delayed by more than fifteen minutes. On the plus side, thirty two percent of flights landed before their scheduled time.

More than half of the busier departure airports (those with at least nine hundred and fifty flights per month) had an Average Delay per Movement of more than ten minutes. With an average delay of twenty three minutes, Alicante⁴ was the most affected airport and was followed by Belfast, East Midlands and Rome/Fiumicino. Compared with July 2003, sixty percent of the airports had an increase in average delay of more than one minute. The largest rise was at Alicante (up twelve minutes), followed by East Midlands (up eight minutes) and Belfast (up six minutes). These increases were balanced by decreases at Prague (down seven minutes), followed by Thessaloniki (down five minutes). All the airports had a proportion of their flights departing before their scheduled time, with Bucharest having the largest (thirty two percent) and London/Heathrow the lowest (three and a half percent).

Looking at the busier destination airports, traffic arriving at East Midlands and Alicante had the largest Average Delay per Movement, with twenty four and twenty minutes respectively and were followed by New York (eighteen minutes), Ibiza, Milan/Linate and London/Heathrow (all three with an average delay of fifteen minutes). Compared with July 2003, forty five percent of the busier airports had an increase in average delay of more than one minute, with the largest at East Midlands (up nine minutes), followed by Alicante (up eight minutes), Ibiza, Milan/Linate and Vienna. On the other hand, there was a large decrease at Prague (down six minutes), New York, Birmingham (both down five minutes) and Amsterdam (down four minutes).

³ The analysis was based on airline data from eCODA which, for July 2004, contains details on 34.9% of IFR GAT flights in Europe.

⁴ Most of the delay was caused by industrial actions at the airport throughout the month.







Again, all the airports had a proportion of their flights landing before their scheduled time, with Nuremberg having the largest (forty six percent) and Amsterdam the lowest (ten percent).

The most affected city pair, due to all causes of delay, was London/Heathrow-Nice with an average delay of twenty seven minutes and was followed by Nice-London/Heathrow (twenty six minutes) and Rome/Fiumicino-Palermo (twenty five minutes). Compared with July 2003, sixty four percent of the city pairs had an increase in Average Delay per Movement, with thirty percent having a rise of three minutes or more. The largest increase was between Barcelona-London/Gatwick (up almost thirteen minutes), followed by London/Heathrow-Nice and Nice-London/Heathrow. At the other end of the scale, twenty five percent of the pairs had a decrease of more than one minute, with the largest fall between London/Heathrow-New York (down sixteen minutes), followed by Glasgow-Birmingham and Birmingham-Paris/Charles de Gaulle.

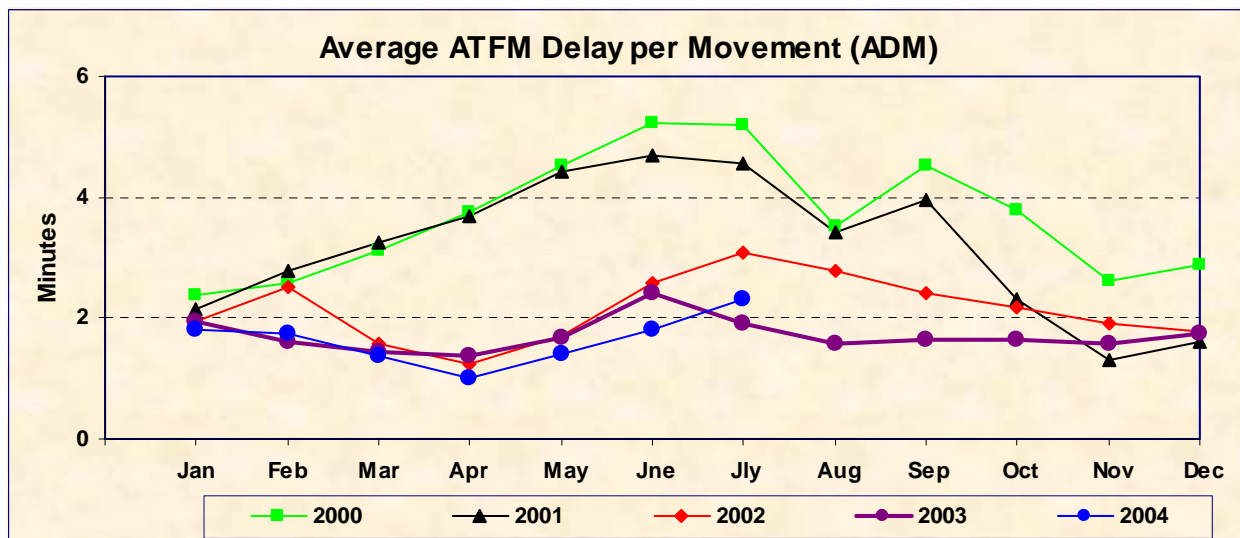
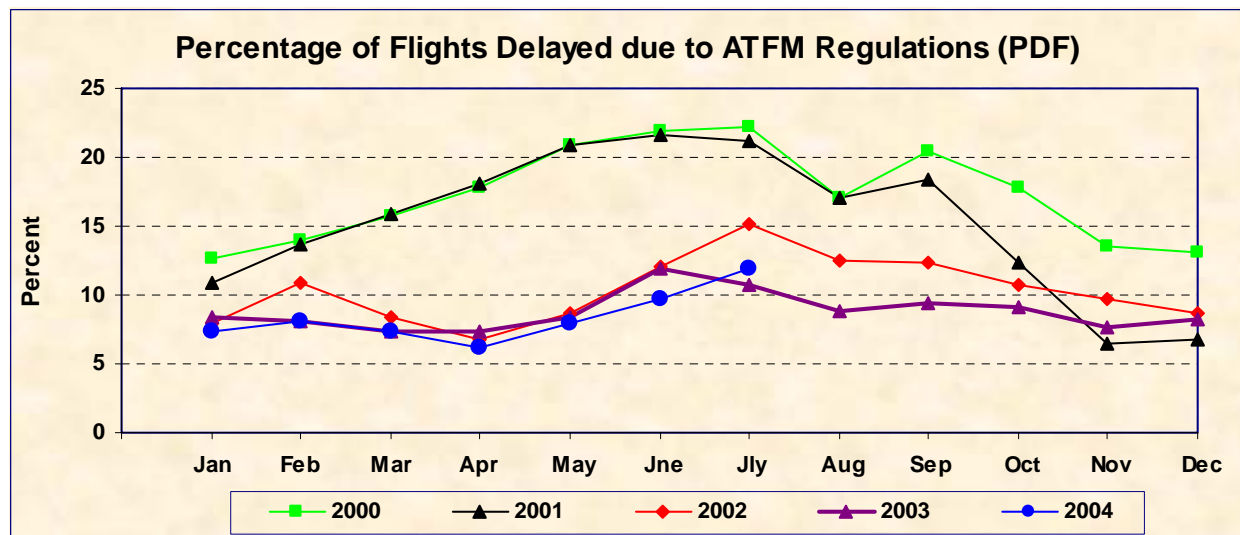
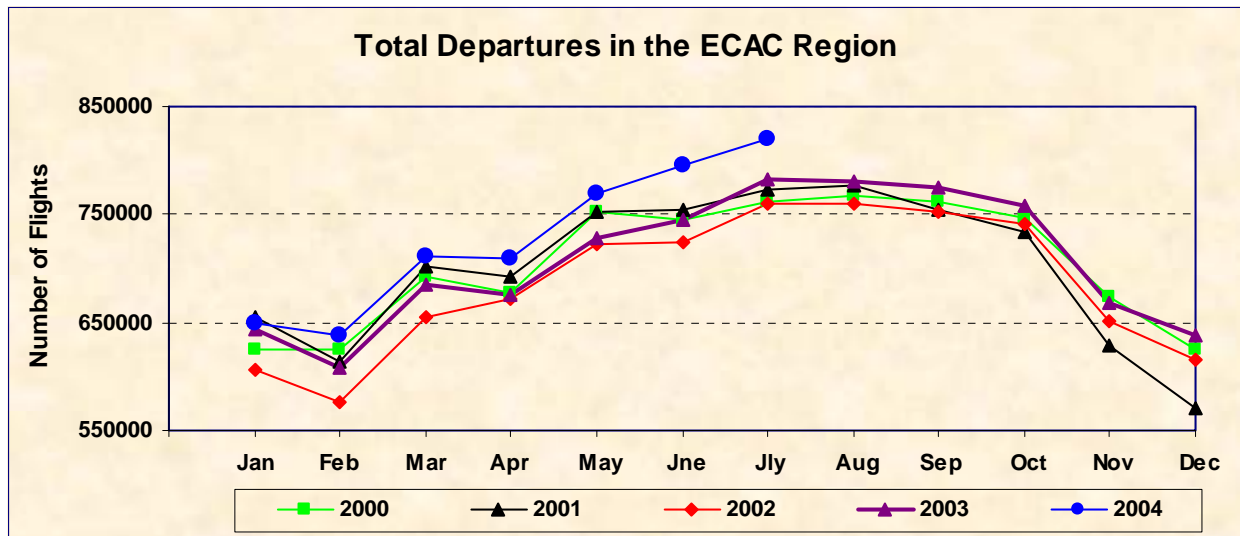
An analysis of the delay causes and categories, grouped by IATA codes, shows that forty seven percent of them had an increase in delay share, with the largest rises in the Others, Reactionary and Miscellaneous categories. To offset these increases, there were decreases in the Passenger & Baggage, Restriction at Departure Airport, Technical & Aircraft Equipment and ATFM Restriction at Destination Airport categories (only those categories of more than one percent of the delay were taken into account).

With nine percent share of the delay, Technical & Aircraft Equipment was the most penalising direct delay category and was immediately followed by ATFM En-Route Demand Capacity (eight and a half percent), Aircraft & Ramp Handling and Passenger & Baggage (both with seven percent).

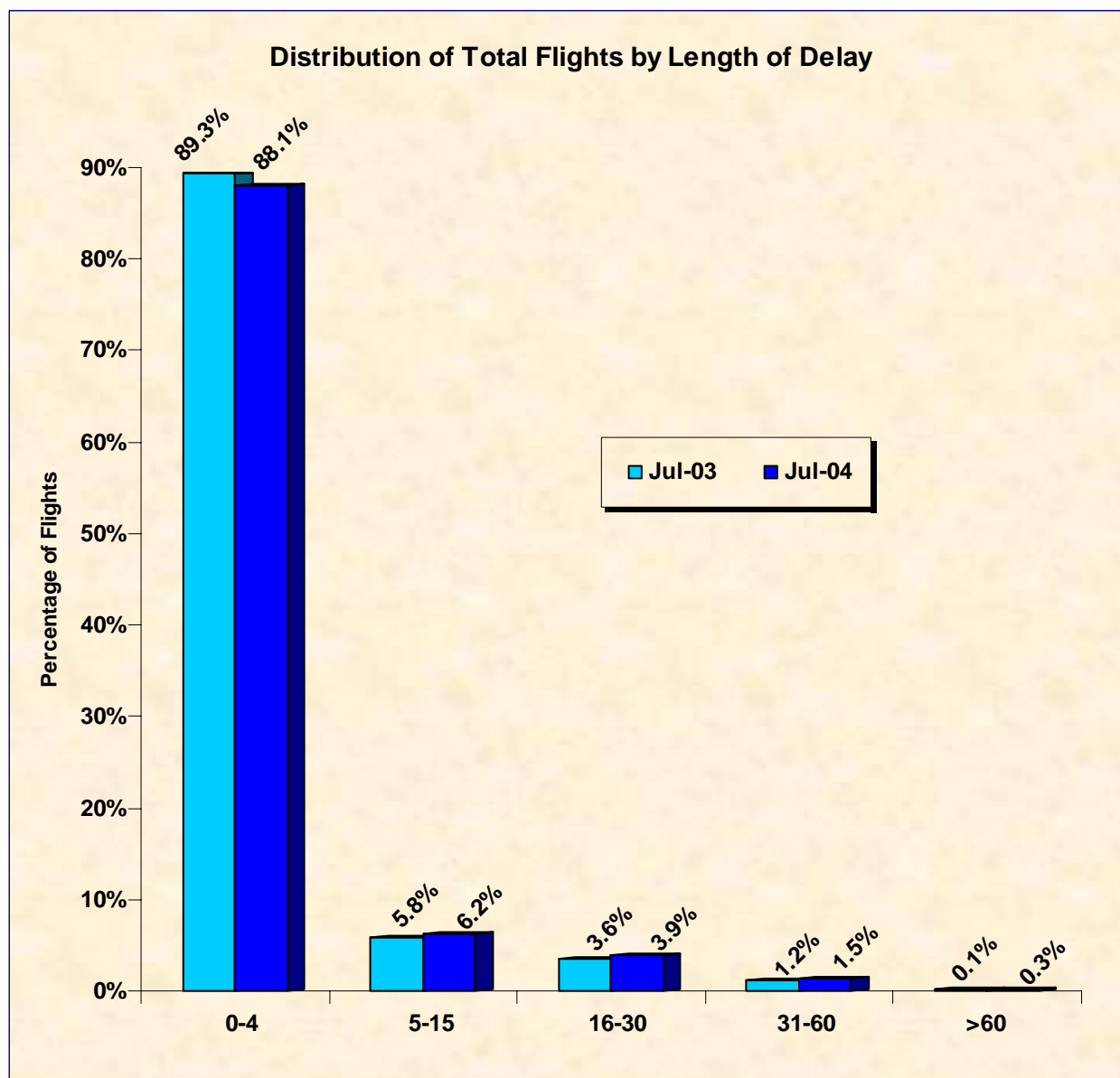
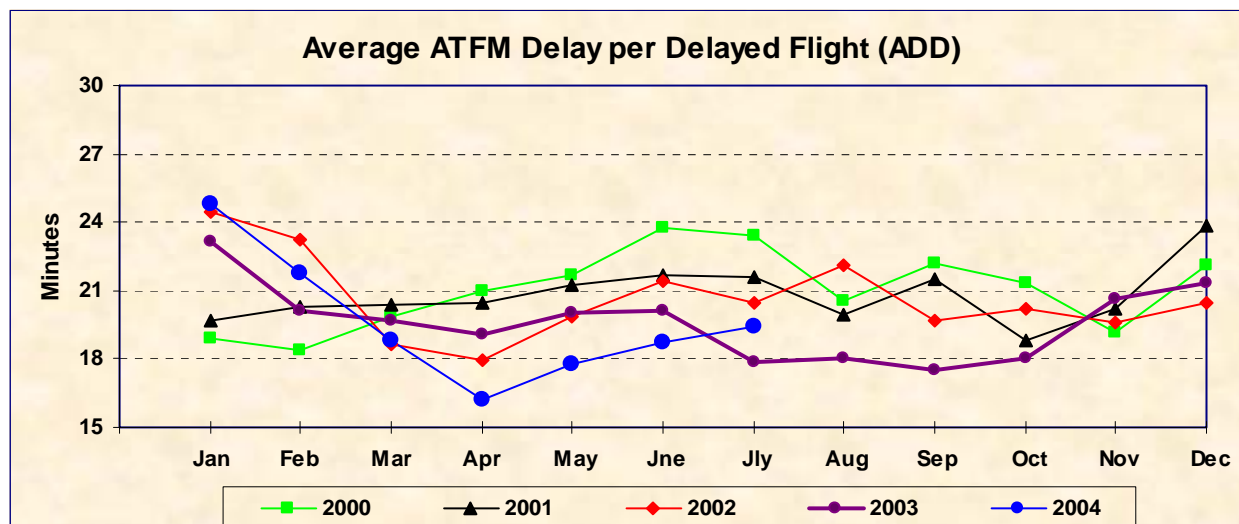
SUMMARY OF SIGNIFICANT EVENTS

-  Weather conditions including fog, low clouds, thunderstorms and low visibility closing some airports for short periods.
-  Technical problems including radar failure at Munich, Frankfurt, Ljubljana, Dublin, Bergen/Flesland, Canarias, Lanzarote, Tenerife/Norte, London, Shanwick, Scottish, Antalya, Prague, Venice and Malmö ACCs; radar maintenance at Cagliari ACC; frequency problems at Bordeaux, Roma, Paris, London, Milan, Catania, Brindisi, Makedonia and Athens ACCs; ILS calibration at Barcelona and London/Heathrow ACCs; Tampere and Stavanger ACCs moved to new ATC system; computer failure at Amsterdam ACC; OLDI failure at Padova ACC; new radar installation at Canarias ACC. Marseille ACC closed due to fire in vicinity of the airport; Clermont-Ferrand closed due to fire in ATC.
-  Staff issues including industrial actions at Alicante; staff shortage at London ATC; strike at Brindisi.
-  Aircraft accident/incident at Paris/Charles de Gaulle and Bologna, disabled aircraft on runway at Rome/Fiumicino; Catania closed due to WIP.
-  Military activity at Brest, Reims, London, Maastricht; NATO exercise at Casablanca.
-  Other items included F1 Grand Prix in France; EURO 2004 in Portugal; air show at Cannes/Mandelieu and Farnborough; Paris Bastille Day celebrations; new ACC phase 5 in Dublin.

2. Year on Year Trends in Main Indicators

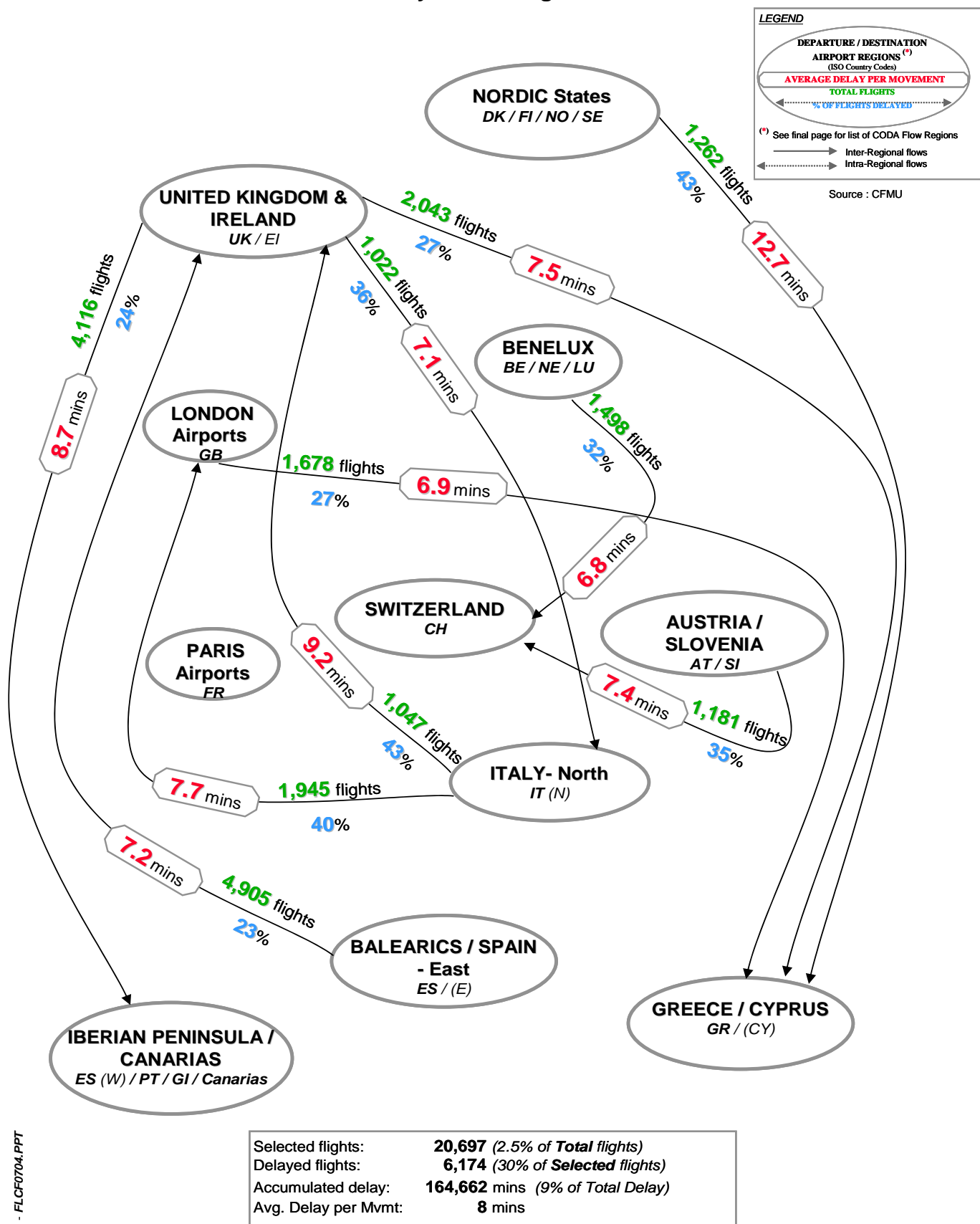


Source : CFMU ATFM Data



Source : CFMU ATFM Data

3. Most Affected Traffic Flows by CODA Regions



ATFM Delay Situation on 10 Regional CODA Traffic Flows (>1,000 flights)
in July 2004

4. Most Affected and Most Dense Traffic Flows

MOST AFFECTED TRAFFIC FLOWS (CFMU)

Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM
1	Nordic States	Greece/Cyprus	1,262	790	543	43.03	16,037	29.53	12.71
2	Italy-North	United Kingdom & Ireland	1,047	698	453	43.27	9,645	21.29	9.21
3	United Kingdom & Ireland	Iberian Peninsula/Canaria	4,116	1,480	986	23.96	35,720	36.23	8.68
4	Italy-North	London Airports	1,945	1,246	780	40.10	15,063	19.31	7.74
5	United Kingdom & Ireland	Greece/Cyprus	2,043	862	552	27.02	15,242	27.61	7.46
6	Austria/Slovenia	Switzerland	1,181	715	408	34.55	8,727	21.39	7.39
7	Balearics/Spain East	United Kingdom & Ireland	4,905	1,683	1,145	23.34	35,246	30.78	7.19
8	United Kingdom & Ireland	Italy-North	1,022	591	372	36.40	7,257	19.51	7.10
9	London Airports	Greece/Cyprus	1,678	675	450	26.82	11,529	25.62	6.87
10	BENELUX	Switzerland	1,498	804	485	32.38	10,196	21.02	6.81
11	Nordic States	Paris Airports	1,075	667	397	36.93	7,089	17.86	6.59
12	Switzerland	London Airports	1,509	954	538	35.65	9,694	18.02	6.42
13	Iberian Peninsula/Canaria	United Kingdom & Ireland	4,160	1,349	911	21.90	25,776	28.29	6.20
14	Germany-West	Greece/Cyprus	1,990	741	463	23.27	11,593	25.04	5.83
15	Iberian Peninsula/Canaria	Germany-West	3,278	1,664	939	28.65	18,814	20.04	5.74
16	Italy-North	Paris Airports	1,973	1,044	516	26.15	11,294	21.89	5.72
17	BENELUX	Greece/Cyprus	1,264	544	312	24.68	7,217	23.13	5.71
18	United Kingdom & Ireland	Paris Airports	2,073	933	548	26.44	11,817	21.56	5.70
19	Germany-West	Switzerland	3,357	1,423	818	24.37	18,799	22.98	5.60
20	Switzerland	Austria/Slovenia	1,168	575	351	30.05	6,422	18.30	5.50
Totals			42,544	19,438	11,967	28.13	293,177	24.50	6.89

MOST DENSE TRAFFIC FLOWS (CFMU)

Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM	ADM-Rank
1	Nordic States	Nordic States	48,270	1,192	465	0.96	7,803	16.78	0.16	32
2	United Kingdom & Ireland	United Kingdom & Ireland	31,671	3,962	1,875	5.92	31,076	16.57	0.98	23
3	Iberian Peninsula/Canaria	Iberian Peninsula/Canaria	29,254	5,299	2,865	9.79	77,845	27.17	2.66	9
4	Germany-West	Germany-West	22,589	2,852	1,523	6.74	33,741	22.15	1.49	18
5	Greece/Cyprus	Greece/Cyprus	14,026	1,204	738	5.26	22,933	31.07	1.64	15
6	Other	Other	13,281	109	68	0.51	1,354	19.91	0.10	33
7	Italy-North	Italy-South/Malta	11,721	2,821	1,750	14.93	31,077	17.76	2.65	10
8	Italy-South/Malta	Italy-North	11,685	2,181	1,209	10.35	23,425	19.38	2.00	14
9	Italy-South/Malta	Italy-South/Malta	9,955	1,407	693	6.96	11,584	16.72	1.16	22
10	London Airports	United Kingdom & Ireland	9,945	2,003	1,158	11.64	20,334	17.56	2.04	12
11	United Kingdom & Ireland	London Airports	9,891	2,422	1,350	13.65	23,574	17.46	2.38	11
12	Germany-West	Other	9,409	2,677	1,513	16.08	26,078	17.24	2.77	7
13	Turkey	Turkey	9,275	2	1	0.01	40	40.00	0.00	35
14	Other	Germany-West	9,254	559	282	3.05	5,117	18.15	0.55	27
15	Other	London Airports	9,090	364	211	2.32	4,236	20.08	0.47	29
16	London Airports	Other	9,050	2,169	1,358	15.01	24,926	18.35	2.75	8
17	Balearics/Spain East	Iberian Peninsula/Canaria	8,662	1,952	704	8.13	13,147	18.67	1.52	17
18	Iberian Peninsula/Canaria	Balearics/Spain East	8,641	1,778	707	8.18	13,246	18.74	1.53	16
19	Paris Airports	Other	8,072	2,387	1,521	18.84	27,767	18.26	3.44	5
20	Balearics/Spain East	Balearics/Spain East	8,069	697	328	4.06	9,584	29.22	1.19	21
21	Other	Paris Airports	7,987	609	275	3.44	5,141	18.69	0.64	26
22	Central Europe	Central Europe	7,275	493	237	3.26	3,561	15.03	0.49	28
23	Germany-East/Czech Rep	Germany-West	6,806	1,160	453	6.66	9,714	21.44	1.43	20
24	Germany-West	Germany-East/Czech Rep	6,662	985	337	5.06	5,599	16.61	0.84	24
25	BENELUX	Other	5,767	1,733	1,029	17.84	18,729	18.20	3.25	6

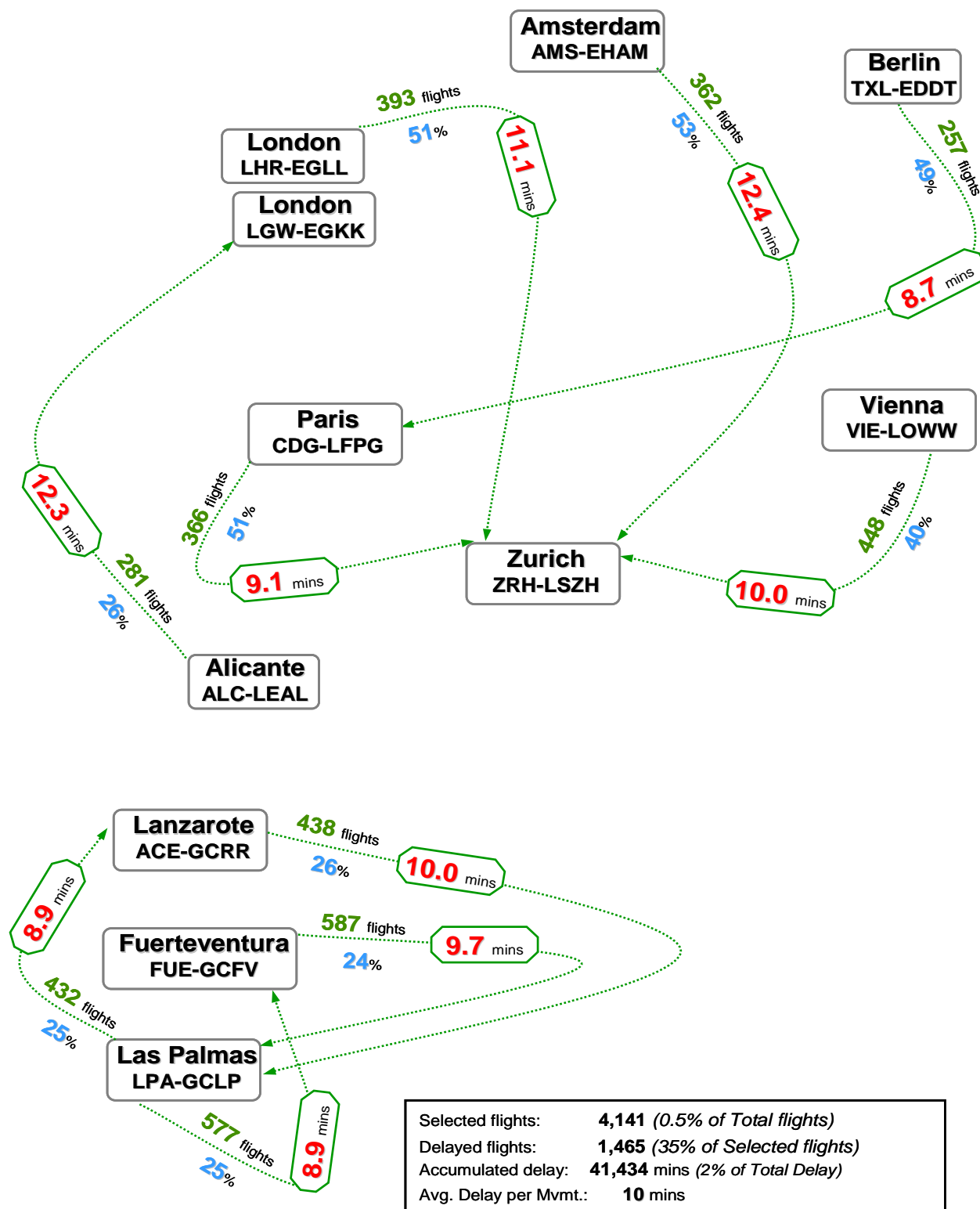
Source: CFMU ATFM Data

5. Most Affected City Pairs

AVERAGE DELAY PER MOVEMENT

Source : CFMU

Total Number of Flights & % of Flights Delayed



ATFM Delay Situation on 10 City Pairs (>250 flights) in July 2004

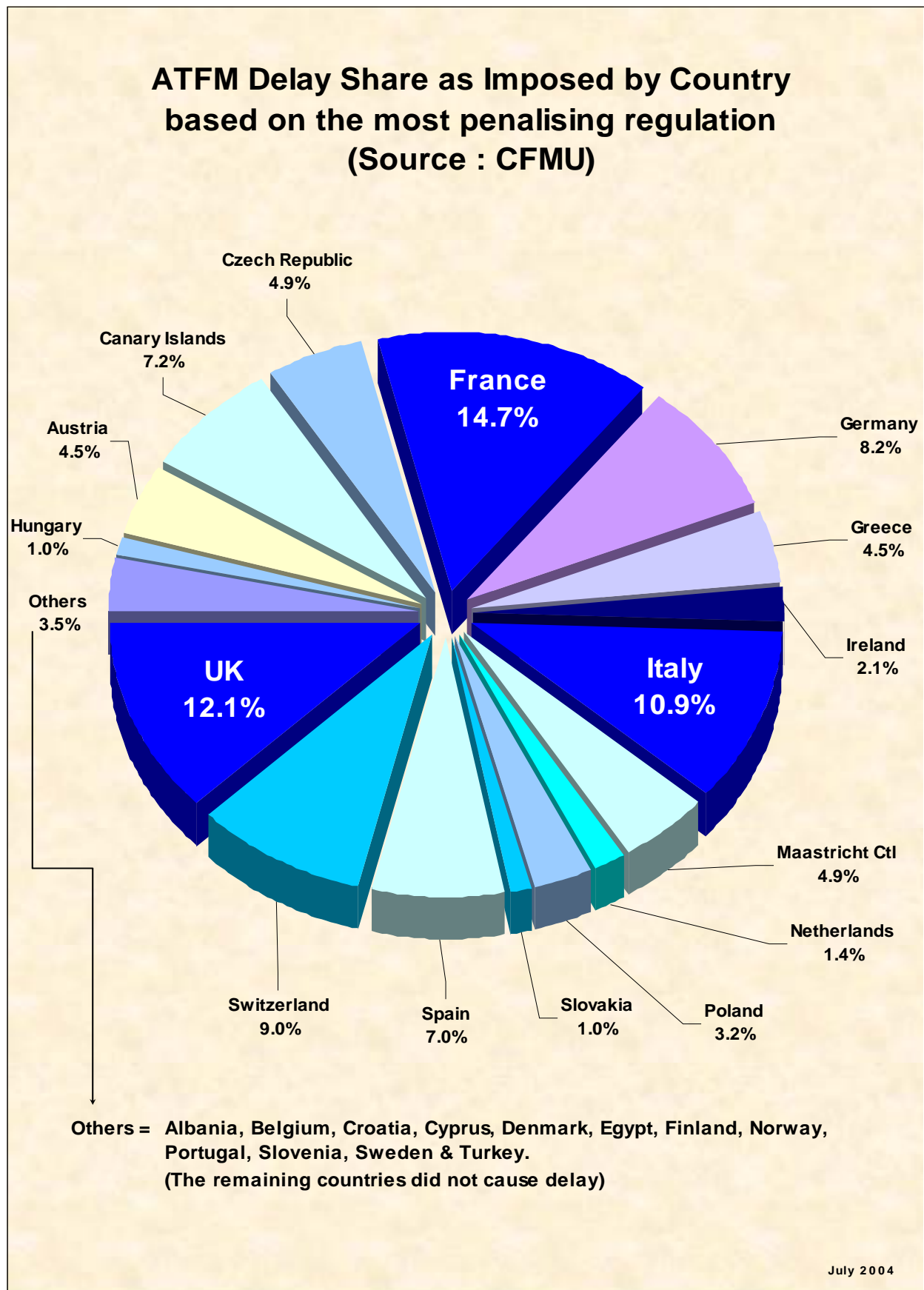
6. Most Affected and Most Dense City Pairs

MOST AFFECTED CITY PAIRS (CFMU)									
Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM
1	Amsterdam	Zurich	362	275	193	53.31	4,470	23.16	12.35
2	Alicante	London/Gatwick	281	103	74	26.33	3,459	46.74	12.31
3	London/Heathrow	Zurich	393	310	201	51.15	4,361	21.70	11.10
4	Arrecife Lanzarote	Las Palmas	438	150	112	25.57	4,360	38.93	9.95
5	Vienna	Zurich	448	302	178	39.73	4,458	25.04	9.95
6	Fuerteventura	Las Palmas	587	220	143	24.36	5,713	39.95	9.73
7	Paris/Charles-De-Gaulle	Zurich	366	311	185	50.55	3,337	18.04	9.12
8	Las Palmas	Fuerteventura	577	191	145	25.13	5,177	35.70	8.97
9	Las Palmas	Arrecife Lanzarote	432	144	107	24.77	3,857	36.05	8.93
10	Berlin-Tegel	Paris/Charles-De-Gaulle	257	177	127	49.42	2,242	17.65	8.72
11	London/Heathrow	Vienna	276	191	129	46.74	2,401	18.61	8.70
12	Dusseldorf	Zurich	349	232	141	40.40	2,959	20.99	8.48
13	London/Gatwick	Alicante	283	71	50	17.67	2,397	47.94	8.47
14	Munich	Zurich	352	184	120	34.09	2,961	24.68	8.41
15	Zurich	London/Heathrow	398	317	179	44.97	3,158	17.64	7.93
16	Dublin	Paris/Charles-De-Gaulle	281	180	113	40.21	2,219	19.64	7.90
17	Brussels	Vienna	256	178	118	46.09	2,015	17.08	7.87
18	Vienna	Frankfurt	363	216	143	39.39	2,833	19.81	7.80
19	Hamburg	Zurich	281	135	89	31.67	2,123	23.85	7.56
20	Vienna	London/Heathrow	275	183	110	40.00	2,054	18.67	7.47
Totals			7,255	4,070	2,657	36.62	66,554	25.05	9.17

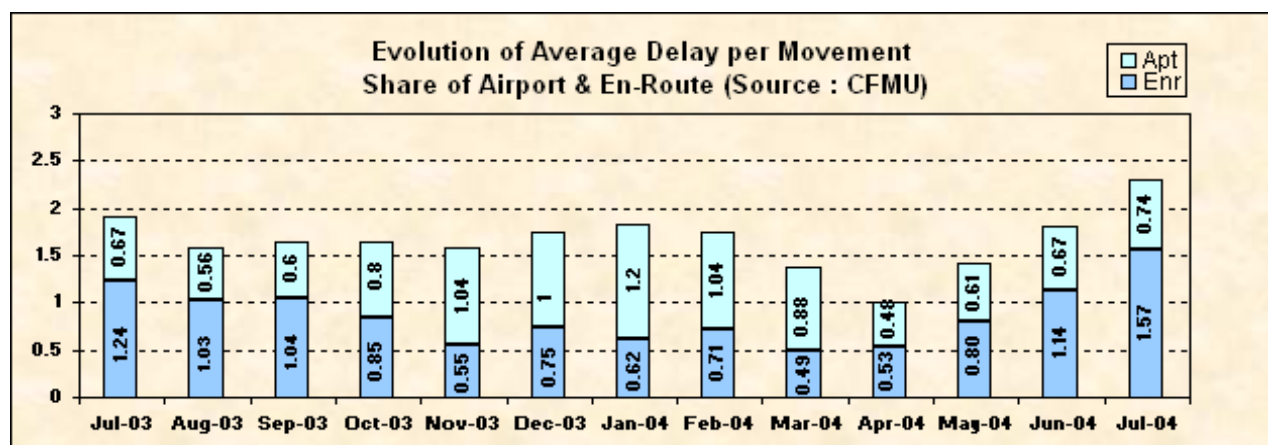
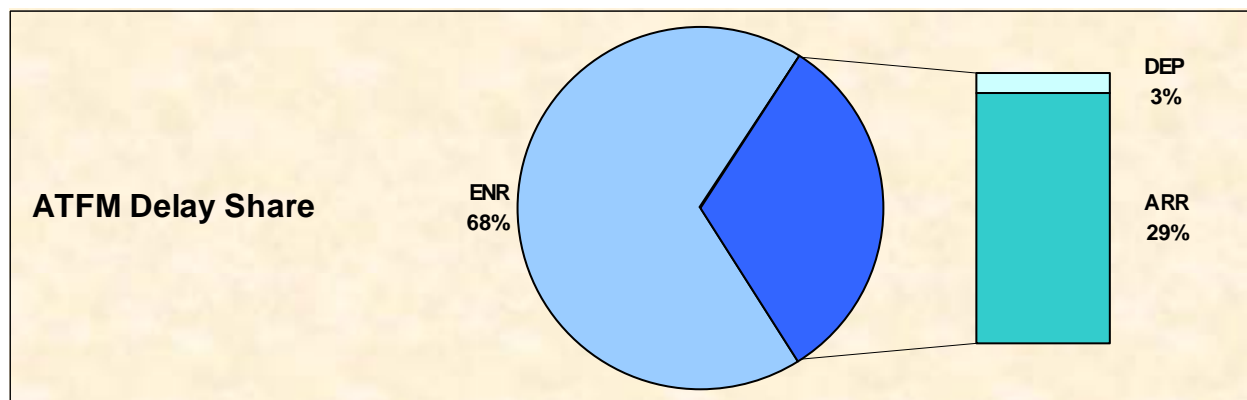
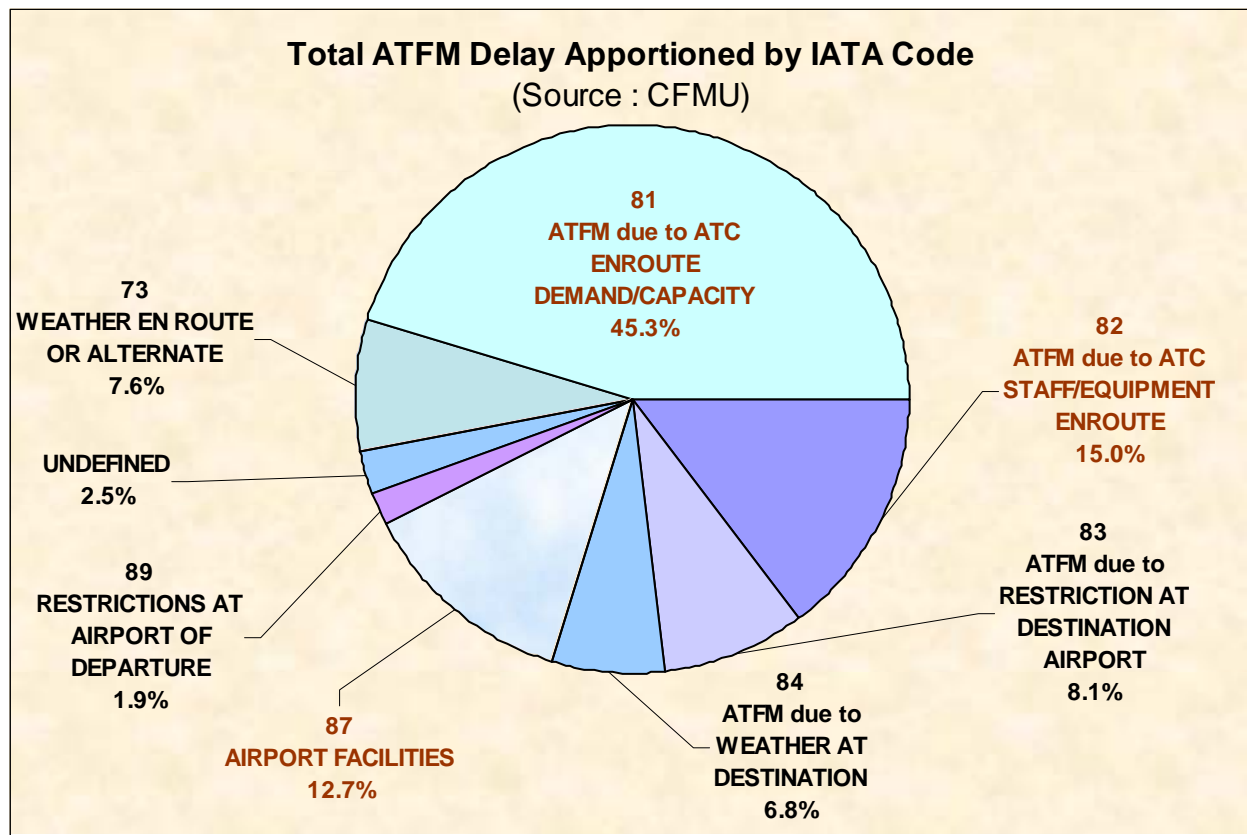
MOST DENSE CITY PAIRS (CFMU)										
Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM	ADM-rank
1	Barcelona	Madrid/Barajas	1,865	803	257	13.78	4,141	16.11	2.22	13
2	Madrid/Barajas	Barcelona	1,827	544	186	10.18	2,579	13.87	1.41	21
3	Milan/Linate	Rome/Fiumicino	1,259	432	230	18.27	3,371	14.66	2.68	9
4	Rome/Fiumicino	Milan/Linate	1,254	63	30	2.39	435	14.50	0.35	31
5	Barcelona	Palma De Mallorca	969	34	17	1.75	458	26.94	0.47	29
6	Palma De Mallorca	Barcelona	930	197	75	8.06	979	13.05	1.05	22
7	London/Heathrow	Paris/Charles-De-Gaulle	853	265	131	15.36	2,621	20.01	3.07	6
8	Paris/Charles-De-Gaulle	London/Heathrow	846	294	168	19.86	3,569	21.24	4.22	2
9	Madrid/Barajas	Palma De Mallorca	777	44	24	3.09	544	22.67	0.70	26
10	Makedonia	Athens	769	31	17	2.21	302	17.76	0.39	30
11	Paris/Orly	Nice	768	149	78	10.16	1,231	15.78	1.60	17
12	Nice	Paris/Orly	768	23	15	1.95	524	34.93	0.68	28
13	Cologne/Bonn	Munich	766	101	51	6.66	1,540	30.20	2.01	15
14	Athens	Makedonia	761	165	88	11.56	2,318	26.34	3.05	7
15	Palma De Mallorca	Madrid/Barajas	758	229	78	10.29	1,195	15.32	1.58	19
16	Amsterdam	London/Heathrow	741	222	105	14.17	1,880	17.90	2.54	11
17	London/Heathrow	Amsterdam	740	114	61	8.24	1,175	19.26	1.59	18
18	Munich	Cologne/Bonn	731	65	33	4.51	725	21.97	0.99	24
19	Toulouse/Blagnac	Paris/Orly	720	23	10	1.39	181	18.10	0.25	32
20	Munich	Dusseldorf	718	163	88	12.26	1,642	18.66	2.29	12
21	Paris/Orly	Toulouse/Blagnac	717	160	84	11.72	1,473	17.54	2.05	14
22	Dusseldorf	Munich	708	170	95	13.42	2,319	24.41	3.28	5
23	Unknown	Den Helder/De Kooy	695	0	0	0.00	0	0.00	0.00	33
24	Den Helder/De Kooy	Unknown	692	0	0	0.00	0	0.00	0.00	34
25	Hamburg	Munich	672	192	102	15.18	2,560	25.10	3.81	3

Source: CFMU ATFM Data

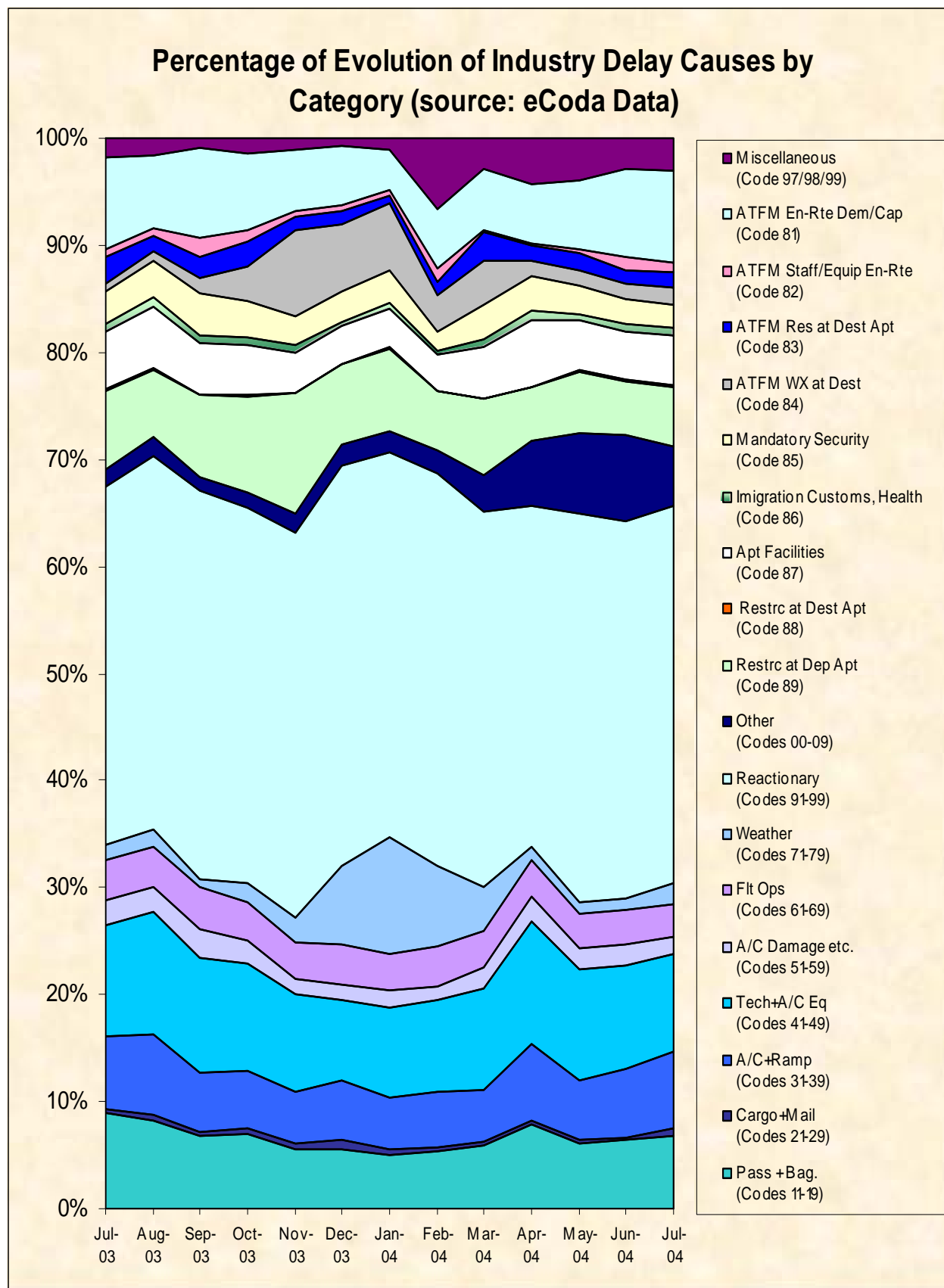
7. ATFM Delay Share by Country



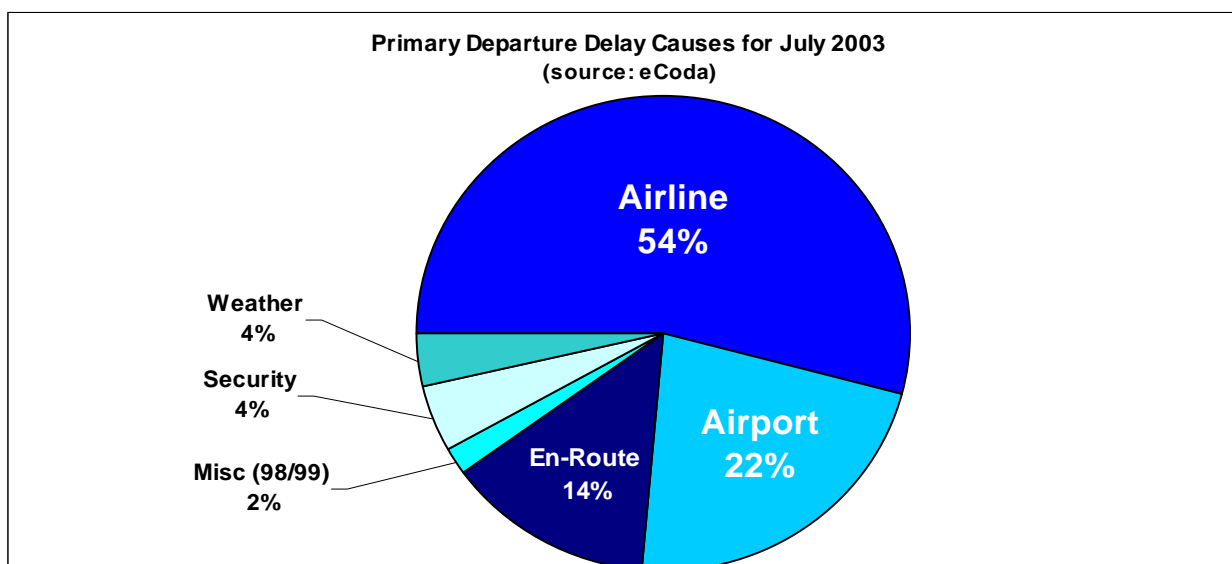
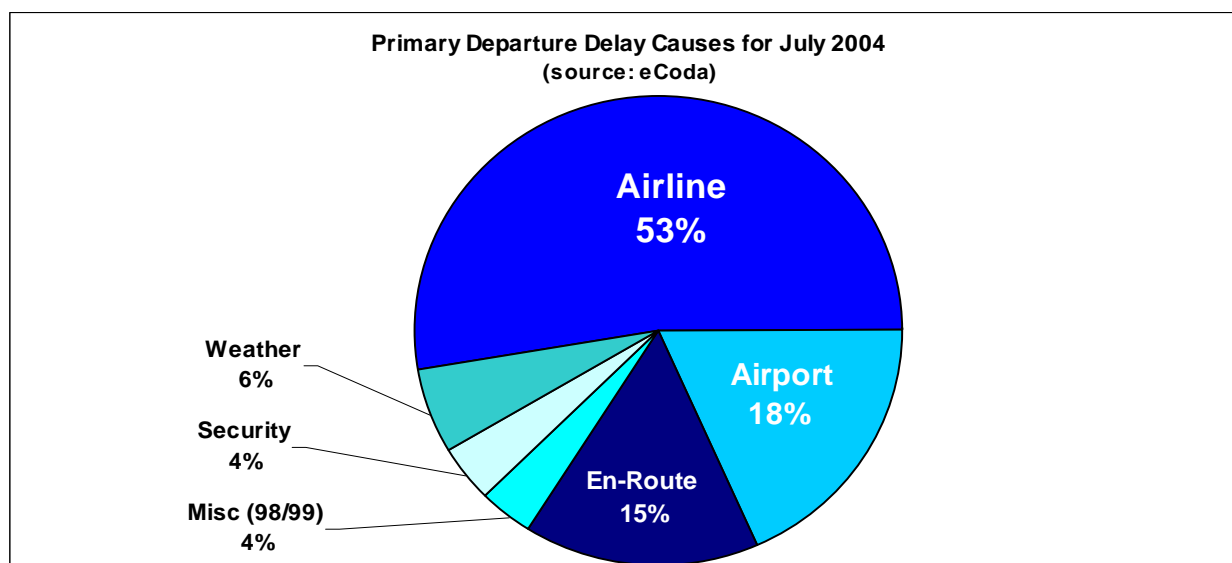
8. Reasons for ATFM Delay



9. Consolidated Evolution of Industry Delay Causes by Category

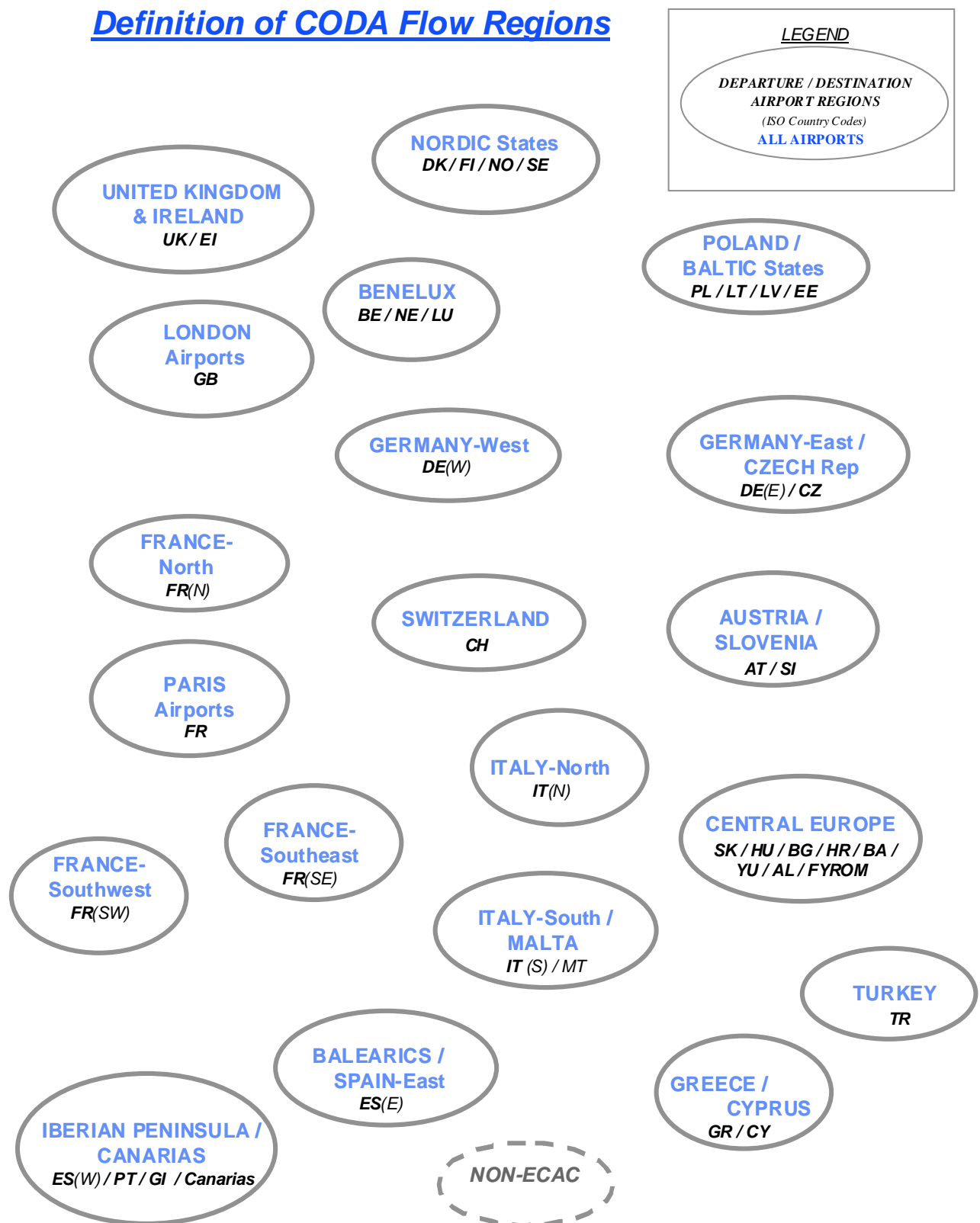


10. Primary Departure Delay Causes



eCODA Cause	Description	IATA Code
Airline	Passengers + Baggage	11-19
	Cargo + Mail	21-29
	Aircraft + Ramp Handling	31-39
	Technical + Aircraft Equipment	41-49
	Aircraft Damage and Ops Computer Failure	51-59
	Flight Operations	61-69
	Other Airline-Related Causes	Others
Airport	ATFM due to Restriction at Destination Airport	83
	Immigration, Customs, Health	86
	Airport Facilities	87
	Restriction at Destination Airport	88
	Restriction at Airport of Departure, with or without ATFM	89
En-Route	ATFM due to ATC En-Rte Demand Capacity	81
	ATFM due to ATC Staff/Equipment En-Route	82
Misc	Miscellaneous	98-99
Security	Mandatory Security	85
Weather	Weather	71-79
	ATFM due to Weather at Destination	84

Definition of CODA Flow Regions (Annex 1)

Definition of CODA Flow Regions

Glossary of Terms and Abbreviations (Annex 2)

Delay Parameter Abbreviations

TTF	Total Flights
TRF	Total Regulated Flights
TDF	Total Delayed Flights
PRF	Percentage of Regulated Flights
PDF	Percentage of Delayed Flights
TDM	Total Delay in Minutes
ADM	Average Delay per Movement
ADR	Average Delay per Regulated Flight
ADD	Average Delay per Delayed Flight

Glossary of Terms

AEA	Association of European Airlines
ATFM	Air Traffic Flow Management
ATS	Air Traffic Services
CFMU	Central Flow Management Unit
CODA	Central Office for Delay Analysis
EATMP	European Air Traffic Management Program
ECAC	European Civil Aviation Conference
EDAS	European Delay Analysis System
ERA	European Regions Airline Association
EURACA	European Air Carrier Assembly
IACA	International Air Carrier Association
IATA	International Air Transport Association

Standard IATA Delay Codes (Annex 3)

Others

00-05	AIRLINE INTERNAL CODES
06 (OA)	NO GATE/STAND AVAILABILITY DUE TO OWN AIRLINE ACTIVITY
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, booking errors
15 (PH)	BOARDING, discrepancies and paging, missing checked-in passenger
16 (PS)	COMMERCIAL PUBLICITY/PASSENGER CONVENIENCE, VIP, press, ground meals and missing personal items
17 (PC)	CATERING ORDER, late or incorrect order given to supplier
18 (PB)	BAGGAGE PROCESSING, sorting etc.

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 (<i>Mail Only</i>)
28 (CL)	LATE POSITIONING (<i>Mail Only</i>)
29 (CA)	LATE ACCEPTANCE (<i>Mail Only</i>)

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

41 (TD)	AIRCRAFT DEFECTS.
42 (TM)	SCHEDULED MAINTENANCE, late release.
43 (TN)	NON-SCHEDULED MAINTENANCE, special checks and/or additional works beyond normal maintenance schedule.
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 (DF)	DAMAGE DURING FLIGHT OPERATIONS, bird or lightning strike, turbulence, heavy or overweight landing, collision during taxiing
52 (DG)	DAMAGE DURING GROUND OPERATIONS, collisions (other than during taxiing), loading/off-loading damage, contamination, towing, extreme weather conditions
55 (ED)	DEPARTURE CONTROL
56 (EC)	CARGO PREPARATION/DOCUMENTATION
57 (EF)	FLIGHT PLANS

Flight 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) CABIN CREW ERROR OR SPECIAL REQUEST, not within operational requirements
- 69 (FB) 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

ATFM + AIRPORT + GOVERNMENTAL AUTHORITIES**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 GOVERNMENTAL AUTHORITIES

- 85 (AS) MANDATORY SECURITY
- 86 (AG) IMMIGRATION, CUSTOMS, HEALTH
- 87 (AF) AIRPORT FACILITIES, parking stands, ramp congestion, lighting, buildings, gate limitations, etc.
- 88 (AD) 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 weather⁵, industrial action, staff shortage, political unrest, noise abatement, night curfew, special flights

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

Miscellaneous

- 97 (MI) INDUSTRIAL ACTION WITH OWN AIRLINE
- 98 (MO) INDUSTRIAL ACTION OUTSIDE OWN AIRLINE, excluding ATS
- 99 (MX) OTHER REASON, not matching any code above

SOURCE: Provisional list composed by IATA

⁵ Restriction due to weather in case of ATFM regulation only, else refer to code 71 (WO)

Correlation between IATA Delay Codes and the CFMU Reasons for Regulation (Annex 4)

CORRELATION BETWEEN IATA DELAY CODES AND THE CFMU REASONS FOR REGULATION				IATA	
REASON FOR REGULATION	CODE	REGULATION LOCATION	EXAMPLE	CFMU	
				CODE	DELAY CAUSE
ATC Capacity	C	D	Demand exceeds the capacity	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		81	ATFM due to ATC ENROUTE DEMAND/CAPACITY
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
ATC Ind Action	I	D	Controllers' strike	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		82	ATFM due to ATC STAFF/EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
ATC Routeings	R	E	Phasing in of new procedures	81	ATFM due to ATC ENROUTE DEMAND/CAPACITY
ATC Staffing	S	D	Illness; traffic delays on the highway	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		82	ATFM due to ATC STAFF/EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
ATC Equipment	T	D	Radar failure; RTF failure	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		82	ATFM due to ATC STAFF/EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
Accident/Incident	A	A	RWY23 closed due accident	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
Aerodrome Capacity	G	D	Lack of parking; taxiway closure; areas closed for maintenance; demand exceeds the declared airport capacity	87	AIRPORT FACILITIES
		A		87	AIRPORT FACILITIES
		D		89	RESTRICTIONS AT AIRPORT OF DEPARTURE
De-icing	D	D	De-icing	87	AIRPORT FACILITIES
Equipment non-ATC	E	A	Runway or taxiway lighting failure	87	AIRPORT FACILITIES
Ind Action non-ATC	N	D	Firemen's strike	98	INDUSTRIAL ACTION OUTSIDE OWN AIRLINE
		A		98	INDUSTRIAL ACTION OUTSIDE OWN AIRLINE
		D		89	RESTRICTIONS AT AIRPORT OF DEPARTURE
Military Activity	M	D	Brilliant Invader; ODAX	82	ATFM due to ATC STAFF/EQUIPMENT ENROUTE
		E		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
		A		89	RESTRICTIONS AT AIRPORT OF DEPARTURE
Special Event	P	D	European football cup; Heads of Government meetings	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
		D		89	RESTRICTIONS AT AIRPORT OF DEPARTURE
Weather	W	D	Thunderstorm; low visibility; X winds	73	WEATHER EN ROUTE OR ALTERNATE
		E		84	ATFM due to WEATHER AT DESTINATION
		A		89	RESTRICTIONS AT AIRPORT OF DEPARTURE
Other	O	D	Security alert	81	ATFM due to ATC ENROUTE DEMAND/CAPACITY
		E		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
		A			