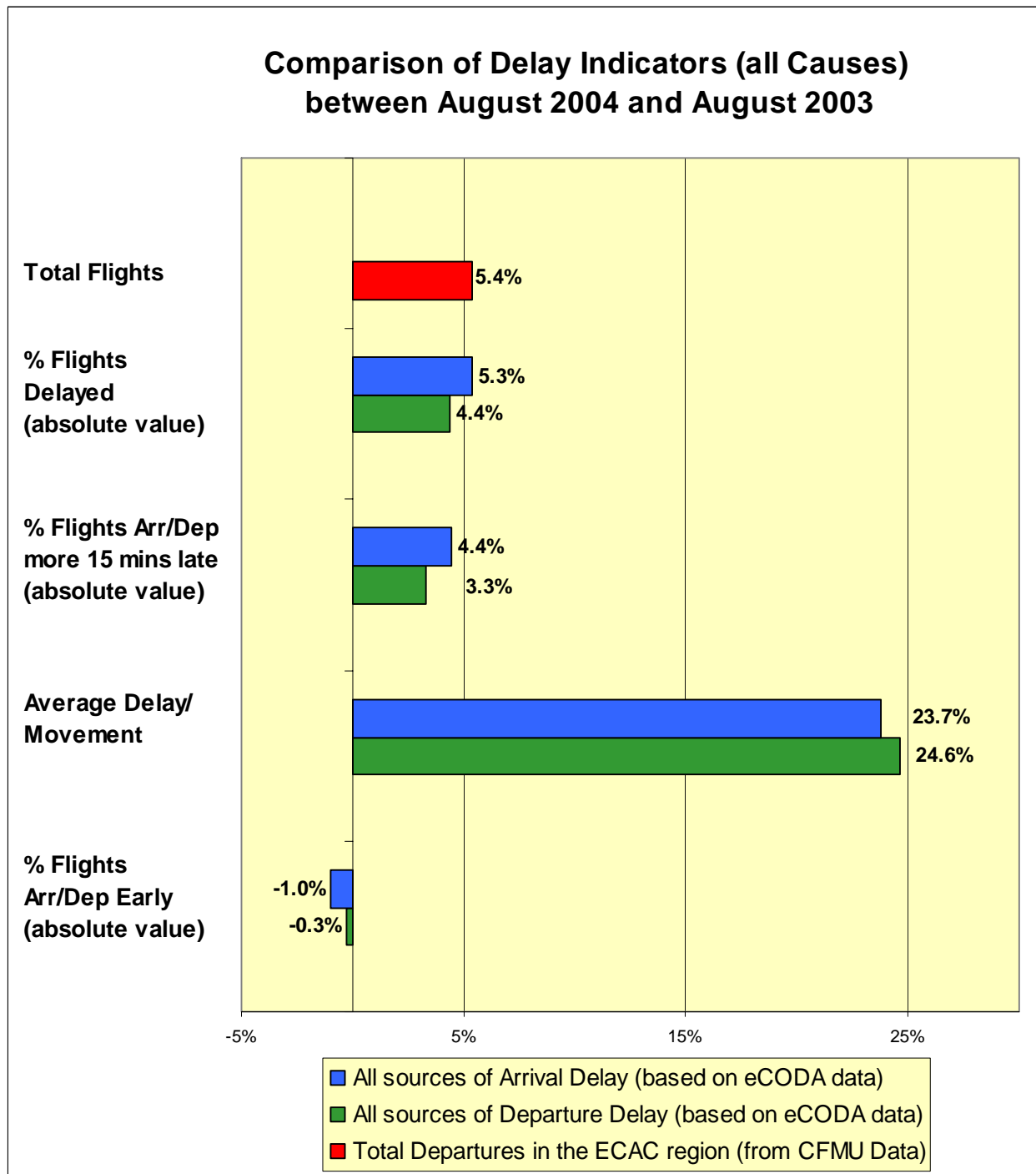


Delays to Air Transport in Europe August 2004



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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.

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1. SUMMARY OVERVIEW

Air traffic in August, in the ECAC region, increased by 5% on that of August 2003 and was slightly above the record level seen in July. The Average Delay per Movement, due to all causes of delay, for both departure and arrival traffic, had a significant increase, to almost 12 minutes. ATFM delay increased by 34%, with the Average Delay per Movement rising by 27% to just over 2 minutes.

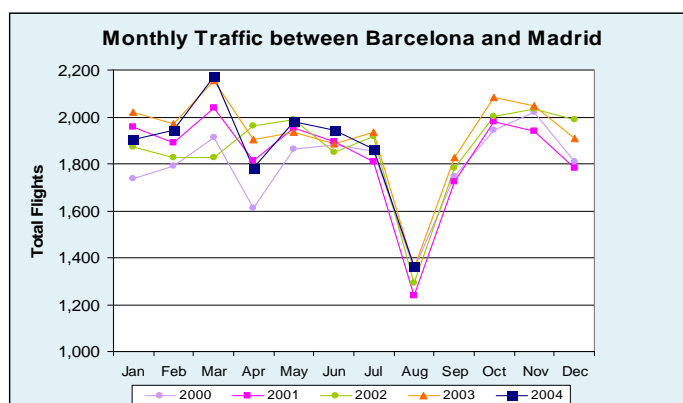
For the first eight months of the year, traffic increased by 4%, with delayed flights due to all causes increasing by 10% for departures and by 9% for arrivals. The number of flights delayed by more than 15 minutes was up 14% for departures and 13% for arrivals. Turning to the delays, the Average Delay per Movement was almost 10 minutes for both departures and arrivals. Total ATFM delay increased by 1%, with the Average Delay per Movement falling by 3% to 1.7 minutes

TRAFFIC SITUATION FOR AUGUST 2004¹

Departures in the ECAC region increased strongly and with almost eight hundred and twenty four thousand flights, it was the highest ever August figure since CFMU started operations (up thirty two percent on August 1996 and up eight percent on August 2002). Domestic traffic increased by three percent whereas International traffic was up by seven percent on August last year. Ninety seven percent of the busier countries (those with at least one thousand two hundred and fifty flights per month) had an increase in international traffic, with the largest real increases in Germany, the United Kingdom, Spain, France and Italy. At the other end of the scale, Serbia & Montenegro was the only country to have a fall in its international flights. Looking at the domestic traffic, there was a large increase in the United Kingdom, followed by Turkey and Spain and large decreases in France and Italy.

More than three quarters of the busier departure airports (those with at least two thousand five hundred flights per month) had rises in traffic levels. The largest real increases were at Athens, Munich, Prague, Vienna and Budapest. On the other hand, Nice, Birmingham, Catania, Iraklion and Berlin had the largest real decreases.

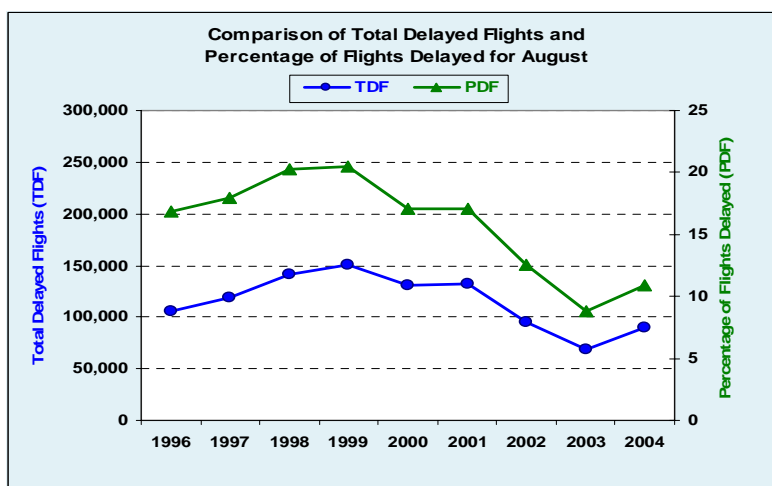
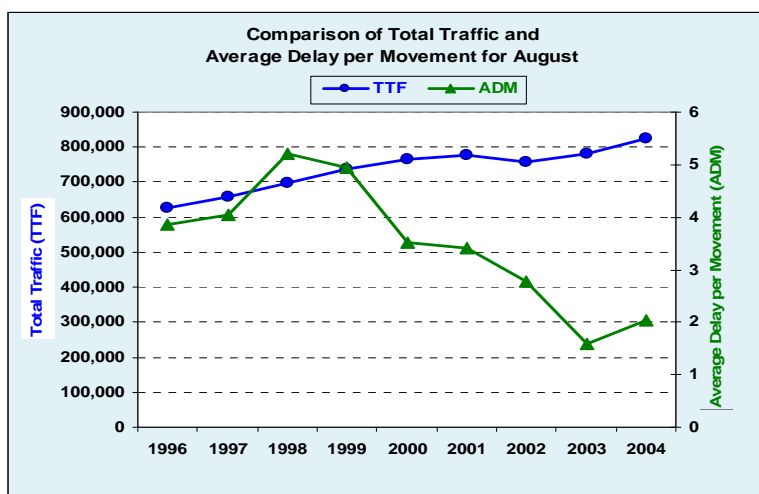
Barcelona-Madrid was the busiest city pair (seven flights during the busiest hour), though down by twenty seven percent of flights on July, and was followed by Barcelona-Palma de Mallorca (more than one thousand flights in each direction; five flights during the busiest hour). Sixty four percent of the busier pairs (those with at least two hundred and fifty flights per month) had an increase in the number of flights, with thirty three percent of them rising by ten percent or more. As in June and July, and due to a new airline operating on this route, Guernsey-Jersey had the largest real increase (up 432 flights) and was followed by Tenerife Norte-Las Palmas. Cologne/Bonn-Berlin had the largest real decrease.



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

ATFM DELAY SITUATION FOR AUGUST 2004

Delays due to ATFM measures increased by thirty four percent on August 2003. Since 1996 traffic in the month of August has increased by thirty two percent whereas delay during the same period has fallen by thirty one percent. Compared with August 2003, the Average Delay per Movement rose by twenty seven percent to just two minutes. Just over half of all the ATFM delay was due to lack of ATC capacity, followed by weather (twenty percent) and airport capacity (fourteen percent).



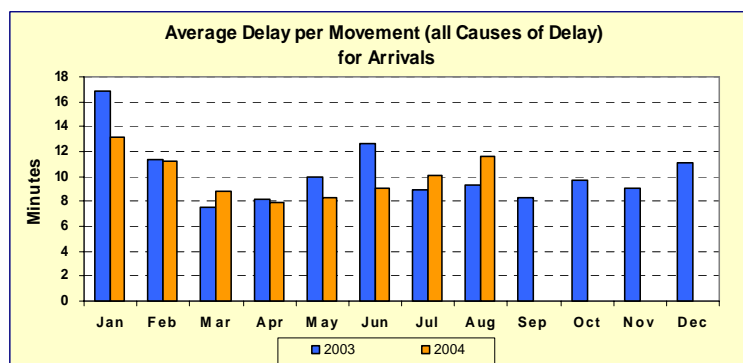
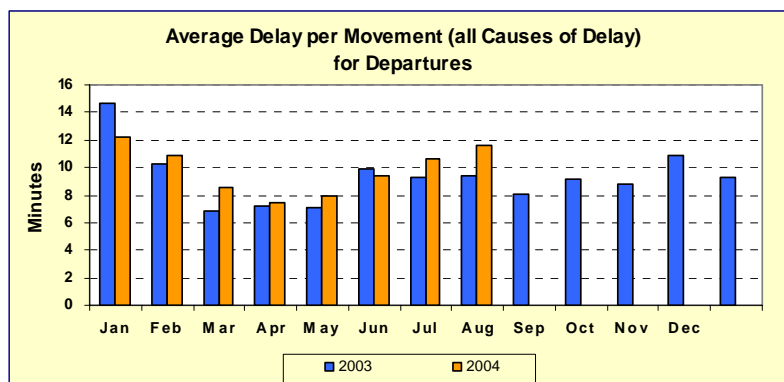
Delayed flights increased by thirty one percent, with the percentage of flights delayed rising by two percentage points to eleven percent. Since 1996, delayed flights in the month of August have decreased by fifteen percent and the percentage of flights delayed has fallen by six percentage points. Compared with August 2003, flights delayed by more than fifteen minutes increased by thirty six percent and flights delayed by more than sixty minutes rose by thirty five percent.

Thirty four percent of all ATFM delay in the ECAC region was caused by regulations put in place to protect airports. While the share of the delay due to these restrictions was the same as last year, the actual amount of the delay increased by thirty two percent. Lack of Airport Capacity accounted for forty three percent of the airport delay, with Weather (thirty two percent) and ATC capacity (seventeen percent) being the other major causes. Compared with August 2003 and due to the Olympic Games in Athens, there was an important rise in Special Event, with ATC capacity increasing by ninety six percent and Weather rising by eighty four percent. To offset these increases, there was a reduction in delay due to ATC staffing (down fifty three percent). The airports of London, Zurich, Brussels, Frankfurt and Paris were the most affected by airport-related regulations.

Based on the locations of the most penalising regulations, traffic (including overflights) using the airspace of the United Kingdom, France and Italy had the largest share of the delay. Between them, they accounted for forty percent of the total ATFM delay in the ECAC region. Compared with August 2003, Spain, Austria and Hungary had the largest increases (all three up by three percentage points) whereas Italy, France, Germany and Greece had the largest decreases.

eCODA DATA FOR AUGUST 2004²

The Average Delay per Movement, for departures and for all causes of delay, was almost twelve minutes; an increase of twenty five percent on August 2003. Forty four percent of flights were delayed on departure, with twenty percent delayed by more than fifteen minutes. On the other hand, eleven percent of flights departed before their scheduled time.



The Average Delay per Movement, for arrivals, again for all causes of delay, was also almost twelve minutes and represented an increase of twenty four percent on August 2003. Forty one percent of flights were delayed on arrival, with twenty percent delayed by more than fifteen minutes. However, thirty two percent of flights landed before their scheduled time.

More than half of the busier departure airports (those with at least nine hundred flights per month) had an Average Delay per Movement of more than ten minutes. The airports of New York and London/Heathrow were the most affected, with average delays of twenty six and twenty four minutes respectively and were followed by Rome/Fiumicino, Larnaca, Manchester and Edinburgh. Compared with August 2003, forty seven percent of the airports had an increase in average delay of more than one minute, with the largest rise at London/Heathrow (up thirteen minutes), followed by Manchester (up nine minutes), Edinburgh and London/Gatwick (both up eight minutes). These increases were offset by decreases at Prague (down eight minutes) and Makedonia (down seven minutes). All the airports had a proportion of their traffic departing before their scheduled time; with Makedonia, Hanover and Bilbao having the largest and Copenhagen the lowest.

Turning to the busier destination airports shows that traffic arriving at East Midlands had the largest Average Delay per Movement, with twenty seven minutes and was followed by London/Heathrow (twenty three minutes), London/Gatwick (twenty two minutes), Manchester (twenty minutes) and Edinburgh (nineteen minutes). Compared with August 2003, forty six percent of the busier destination airports had an increase in average delay of more than one minute, with the largest rise at London/Heathrow (up thirteen minutes), followed by London/Gatwick, Manchester and Edinburgh. At the other end of the scale, there was a significant decrease at Makedonia (down nineteen minutes), Prague (down eighteen minutes) and Larnaca (down twelve minutes). All the airports had a proportion of their flights arriving before their scheduled time, with Helsinki, Basle, Birmingham and Athens having the largest and Amsterdam the lowest.






² The analysis was based on airline data from eCODA, which for August 2004 contains details on **26%** of IFR GAT flights in Europe.

The most affected city pair, due to all causes of delay, was London/Heathrow-Nice with an Average Delay per Movement of thirty seven minutes and was followed by Nice-London/Heathrow, New York-London/Heathrow and London/Heathrow-Prague (all three pairs with thirty two minutes of delay). Compared with August last year, sixty three percent of the city pairs had an increase in Average Delay per Movement, with thirty two percent of them having a rise of three minutes or more. The largest increase was between London/Heathrow-Nice (up twenty three minutes), followed by London/Heathrow-Prague, London/Heathrow-Manchester, London/Heathrow-Stockholm and London/Heathrow-Helsinki. At the other end of the scale, twenty six percent of the pairs had a decrease of one minute or more, with the largest falls between Catania-Rome/Fiumicino, Palermo-Rome/Fiumicino and Rome/Fiumicino-Milan/Linate.

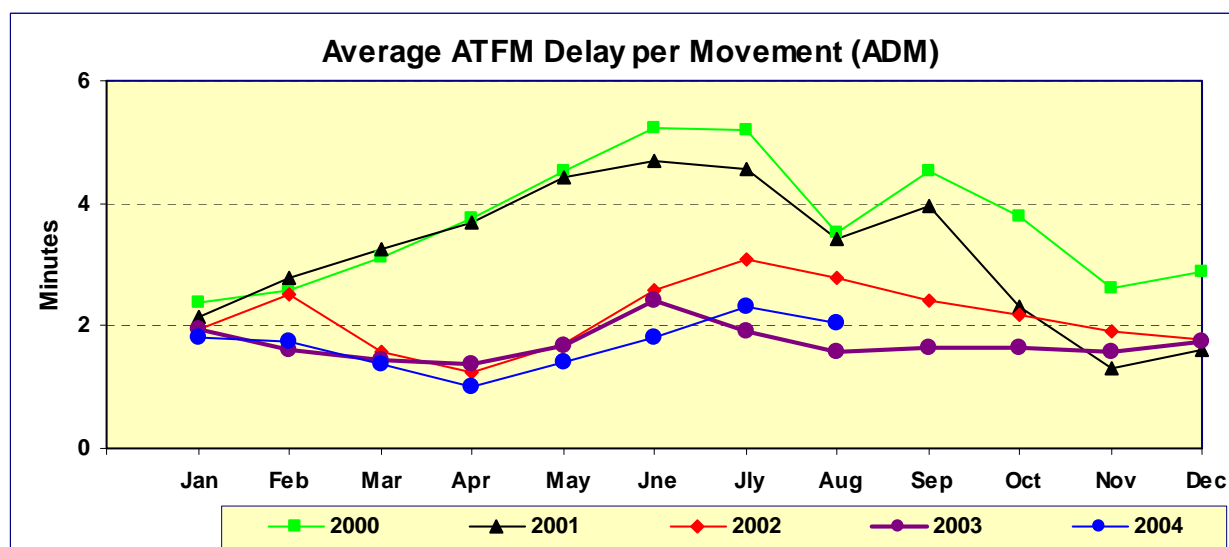
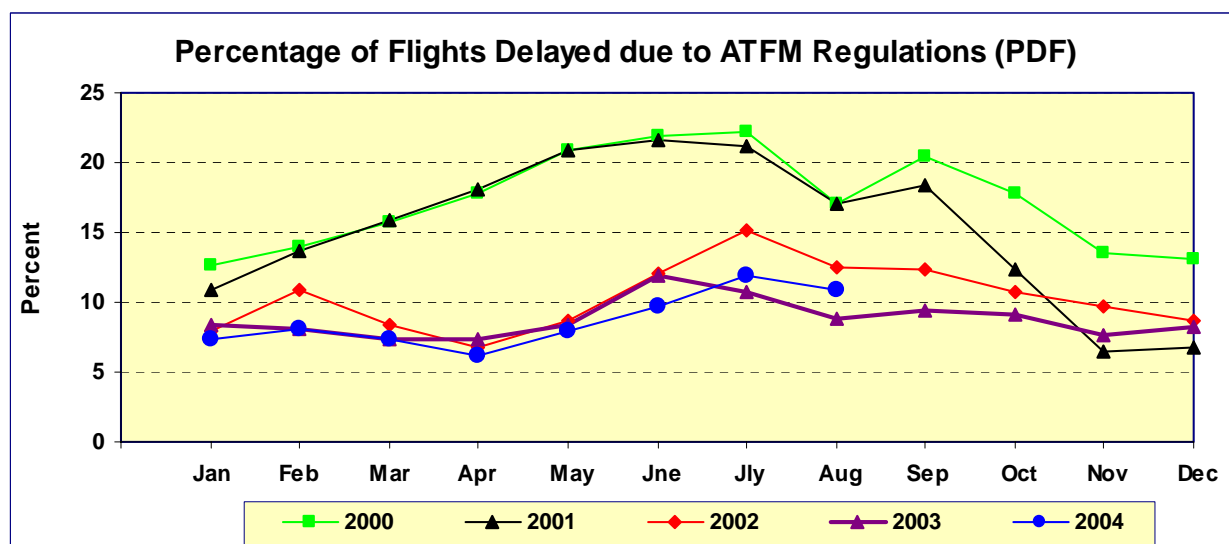
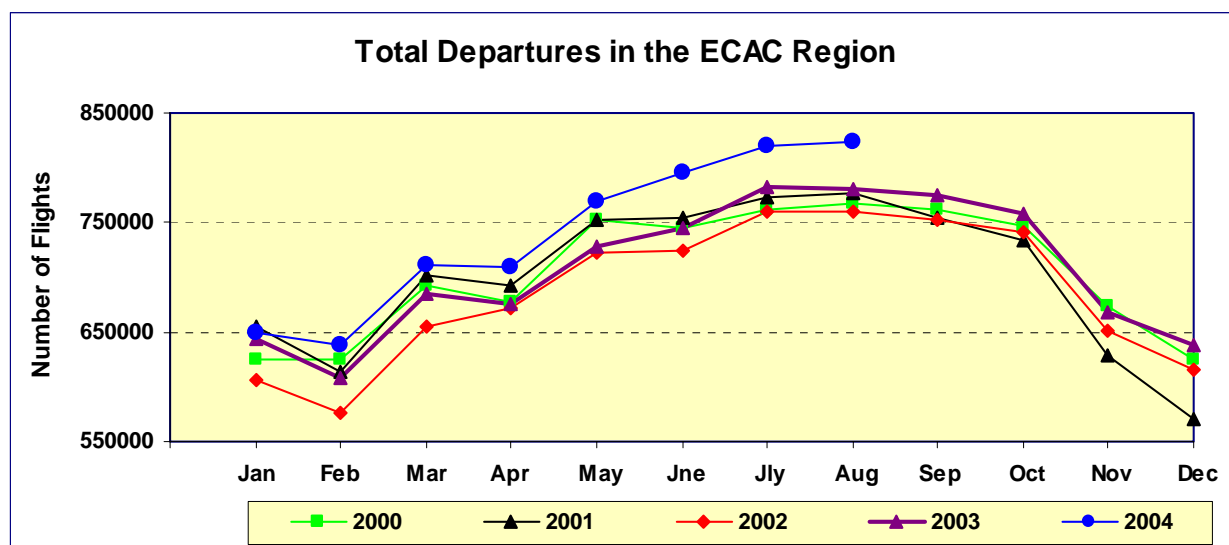
An analysis of the delay causes and categories, grouped by IATA codes, shows that forty two percent of them had an increase in delay share, with the largest rises in the Others, ATFM Weather at Destination and Weather categories. To offset these increases, there were decreases in the Damage to Aircraft and EDP/Automated Equipment Failure, Airport Facility and Mandatory Security (only those categories with more than one percent of the delay were taken into account).

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

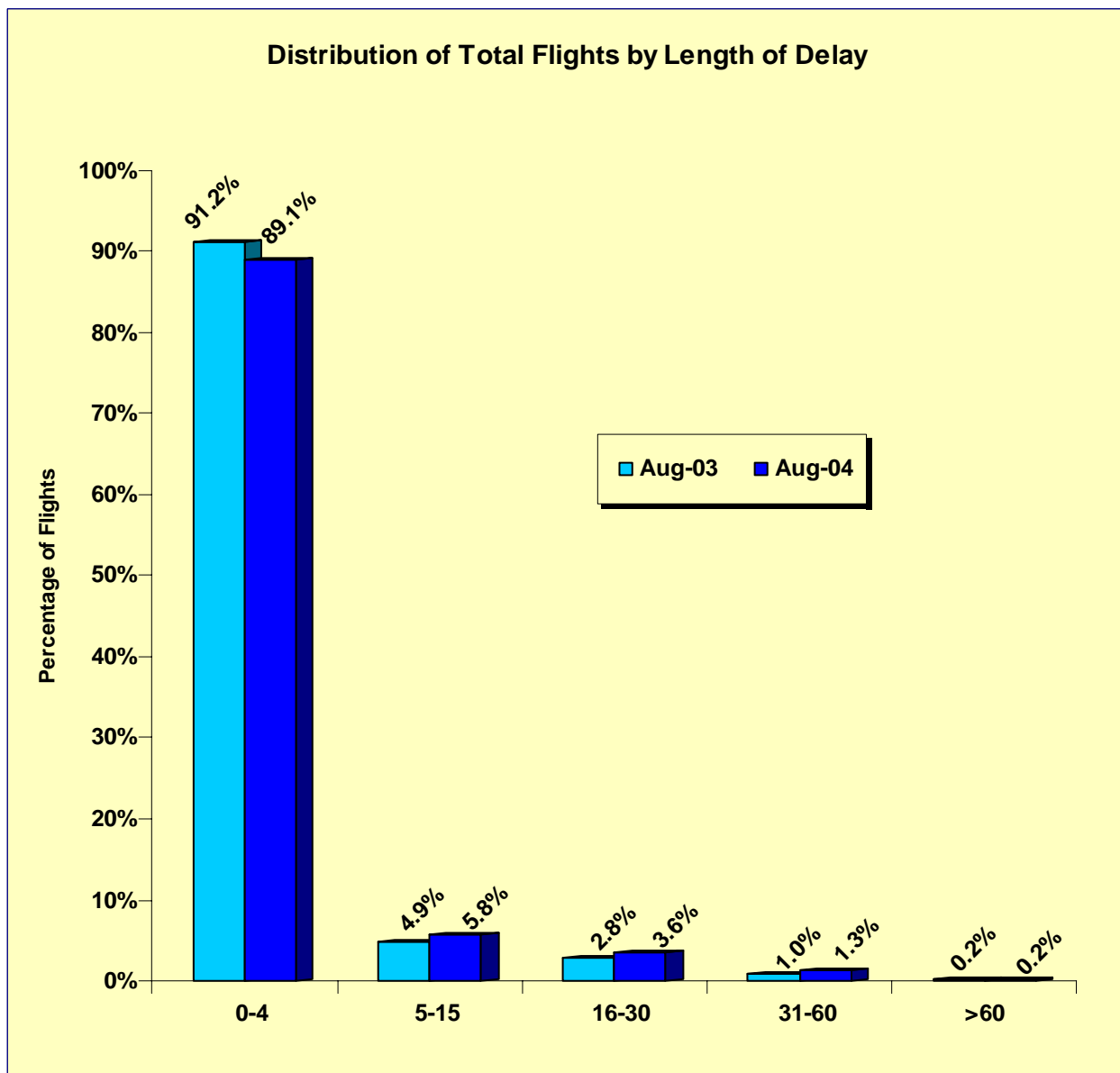
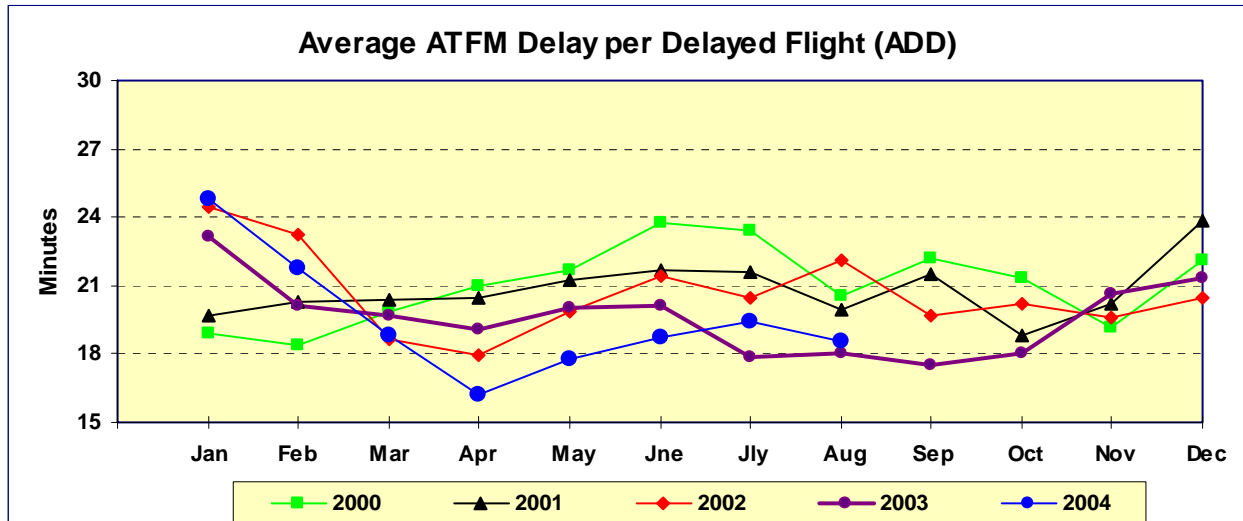
SUMMARY OF SIGNIFICANT EVENTS

-  Weather including strong winds, heavy showers, thunderstorms, fog reducing departure or arrival rates for short periods.
-  Technical problems including OLDI failure at Roma and Malmö ACCs; radar maintenance at Catania and Ljubljana ACCs; ILS calibration at Barcelona ACC; electrical power failure at Amsterdam ACC; frequency problems at Brindisi, Makedonia, Ankara and Marseille ACCs; radar problems at Canary Islands, Scottish and Manchester ACCs; VOR DME unserviceable at Paris/Charles de Gaulle; computer problems at London ACC; new NATCOM system implementation at Stavanger ACC; firing exercise at Madrid ACC.
-  Aircraft accident/incident at Paris/Orly; disabled aircraft on runway at Sigonella; work in progress at Brussels.
-  Staff issues including ATC staffing at Alicante; staff shortages at London/Gatwick.
-  Military activity at Trondheim, Reims, Paris, Zurich, Sion, Villafranca and Nice.
-  Other items included Athens Olympic Games for the last two weeks of the month; air show at Geneva; bomb alarm closing Frankfurt airport; Dublin's move to new operations room.

2. Year on Year Trends in Main Indicators

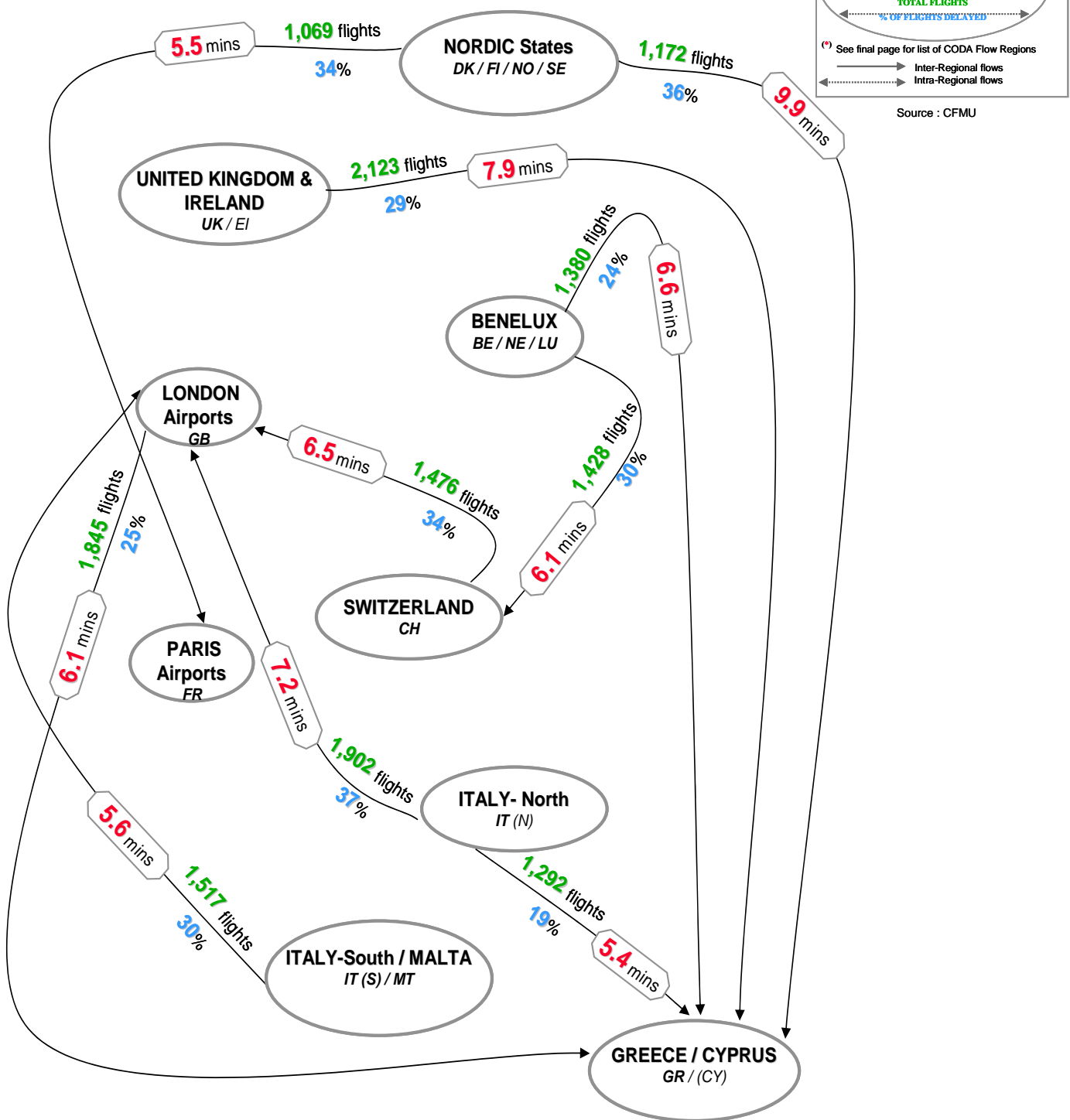


Source : CFMU ATFM Data



Source : CFMU ATFM Data

3. Most Affected Traffic Flows by CODA Regions



Selected flights: 15,204 (2% of Total flights)
 Delayed flights: 4,528 (30% of Selected flights)
 Accumulated delay: 102,283 mins (6% of Total Delay)
 Avg. Delay per Mvmt: 7 mins

ATFM Delay Situation on 10 Regional CODA Traffic Flows (>1,000 flights) in August 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	1,172	782	424	36.18	11,647	27.47	9.94
2	United Kingdom & Ireland	Greece/Cyprus	2,123	940	613	28.87	16,850	27.49	7.94
3	Italy-North	London Airports	1,902	1,171	699	36.75	13,739	19.66	7.22
4	BENELUX	Greece/Cyprus	1,380	581	335	24.28	9,059	27.04	6.56
5	Switzerland	London Airports	1,476	848	497	33.67	9,601	19.32	6.50
6	BENELUX	Switzerland	1,428	669	427	29.90	8,766	20.53	6.14
7	London Airports	Greece/Cyprus	1,845	681	462	25.04	11,249	24.35	6.10
8	Italy-South/Malta	London Airports	1,517	736	460	30.32	8,532	18.55	5.62
9	Nordic States	Paris Airports	1,069	644	361	33.77	5,857	16.22	5.48
10	Italy-North	Greece/Cyprus	1,292	360	250	19.35	6,983	27.93	5.40
11	Austria/Slovenia	Switzerland	1,192	652	347	29.11	6,348	18.29	5.33
12	Germany-West	Greece/Cyprus	2,214	786	441	19.92	10,961	24.85	4.95
13	Italy-North	BENELUX	1,613	819	471	29.20	7,567	16.07	4.69
14	Switzerland	Austria/Slovenia	1,178	497	293	24.87	5,501	18.77	4.67
15	United Kingdom & Ireland	Iberian Peninsula/Canaria	3,915	1,220	755	19.28	18,004	23.85	4.60
16	Germany-West	Switzerland	3,274	1,207	666	20.34	14,728	22.11	4.50
17	Nordic States	BENELUX	2,820	1,162	663	23.51	12,639	19.06	4.48
18	Switzerland	BENELUX	1,414	687	362	25.60	6,297	17.40	4.45
19	Balearics/Spain East	United Kingdom & Ireland	4,766	1,553	956	20.06	20,956	21.92	4.40
20	Greece/Cyprus	London Airports	1,839	879	457	24.85	7,969	17.44	4.33
Totals			39,429	16,874	9,939	25.21	213,253	21.46	5.41

MOST DENSE TRAFFIC FLOWS (CFMU)

Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM	ADM-Rank
1	Nordic States	Nordic States	60,700	1,485	592	0.98	8,976	15.16	0.15	34
2	United Kingdom & Ireland	United Kingdom & Ireland	30,750	4,876	2,373	7.72	44,545	18.77	1.45	15
3	Iberian Peninsula/Canaria	Iberian Peninsula/Canaria	29,107	2,987	1,418	4.87	27,375	19.31	0.94	22
4	Germany-West	Germany-West	20,561	3,127	1,470	7.15	27,392	18.63	1.33	16
5	Greece/Cyprus	Greece/Cyprus	14,693	902	499	3.40	14,947	29.95	1.02	20
6	Other	Other	14,096	233	149	1.06	3,850	25.84	0.27	33
7	Italy-North	Italy-South/Malta	10,401	1,996	1,137	10.93	21,391	18.81	2.06	10
8	Italy-South/Malta	Italy-North	10,359	1,874	1,036	10.00	19,716	19.03	1.90	11
9	Italy-South/Malta	Italy-South/Malta	10,159	873	404	3.98	7,798	19.30	0.77	26
10	Turkey	Turkey	9,695	486	294	3.03	9,523	32.39	0.98	21
11	United Kingdom & Ireland	London Airports	9,643	2,706	1,438	14.91	29,221	20.32	3.03	2
12	London Airports	United Kingdom & Ireland	9,616	2,130	1,245	12.95	26,104	20.97	2.71	5
13	Germany-West	Other	9,436	2,590	1,243	13.17	21,575	17.36	2.29	9
14	Other	Germany-West	9,398	608	268	2.85	4,297	16.03	0.46	32
15	Other	London Airports	8,991	396	217	2.41	4,460	20.55	0.50	31
16	Balearics/Spain East	Balearics/Spain East	8,951	506	246	2.75	6,979	28.37	0.78	24
17	London Airports	Other	8,942	2,143	1,267	14.17	22,932	18.10	2.56	7
18	Paris Airports	Other	8,415	2,452	1,393	16.55	23,763	17.06	2.82	3
19	Other	Paris Airports	8,359	851	381	4.56	6,508	17.08	0.78	25
20	Balearics/Spain East	Iberian Peninsula/Canaria	8,114	1,561	647	7.97	12,306	19.02	1.52	14
21	Iberian Peninsula/Canaria	Balearics/Spain East	8,082	1,028	464	5.74	9,032	19.47	1.12	18
22	Central Europe	Central Europe	7,146	759	446	6.24	7,399	16.59	1.04	19
23	Germany-East/Czech Rep	Germany-West	6,655	1,195	458	6.88	8,218	17.94	1.23	17
24	Germany-West	Germany-East/Czech Rep	6,471	848	229	3.54	3,763	16.43	0.58	30
25	BENELUX	Other	5,712	1,632	885	15.49	15,939	18.01	2.79	4

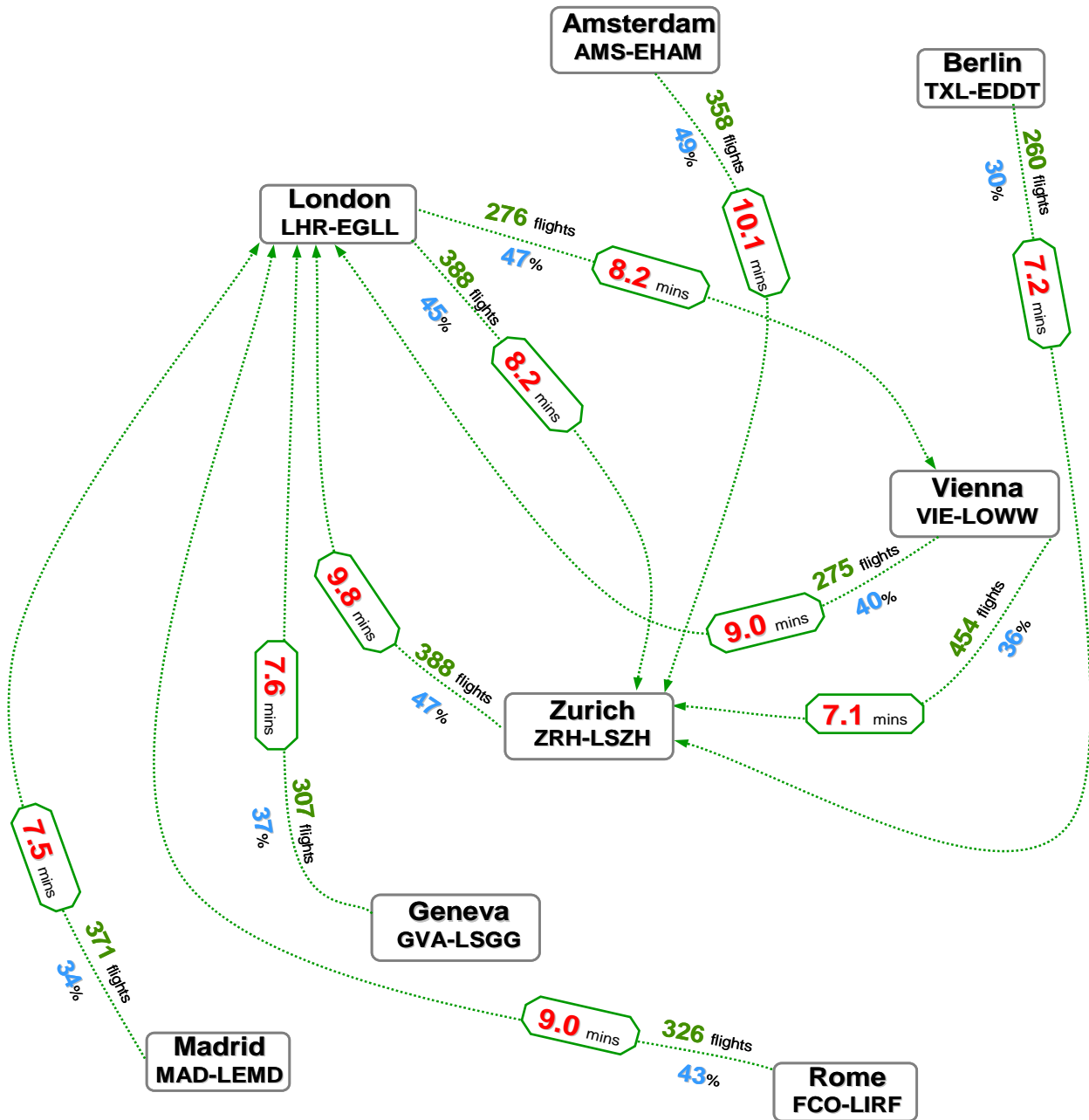
Source: CFMU ATFM Data

5. Most Affected City Pairs

AVERAGE DELAY PER MOVEMENT

Source : CFMU

Total Number of Flights & % of Flights Delayed



Selected flights: **3,403** (0.4% of Total flights)
 Delayed flights: **1,398** (41% of Selected flights)
 Accumulated delay: **28,478** mins (1.7% of Total Delay)
 Avg. Delay per Mvmt.: **8** mins

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

6. Most Affected and Most Dense City Pairs

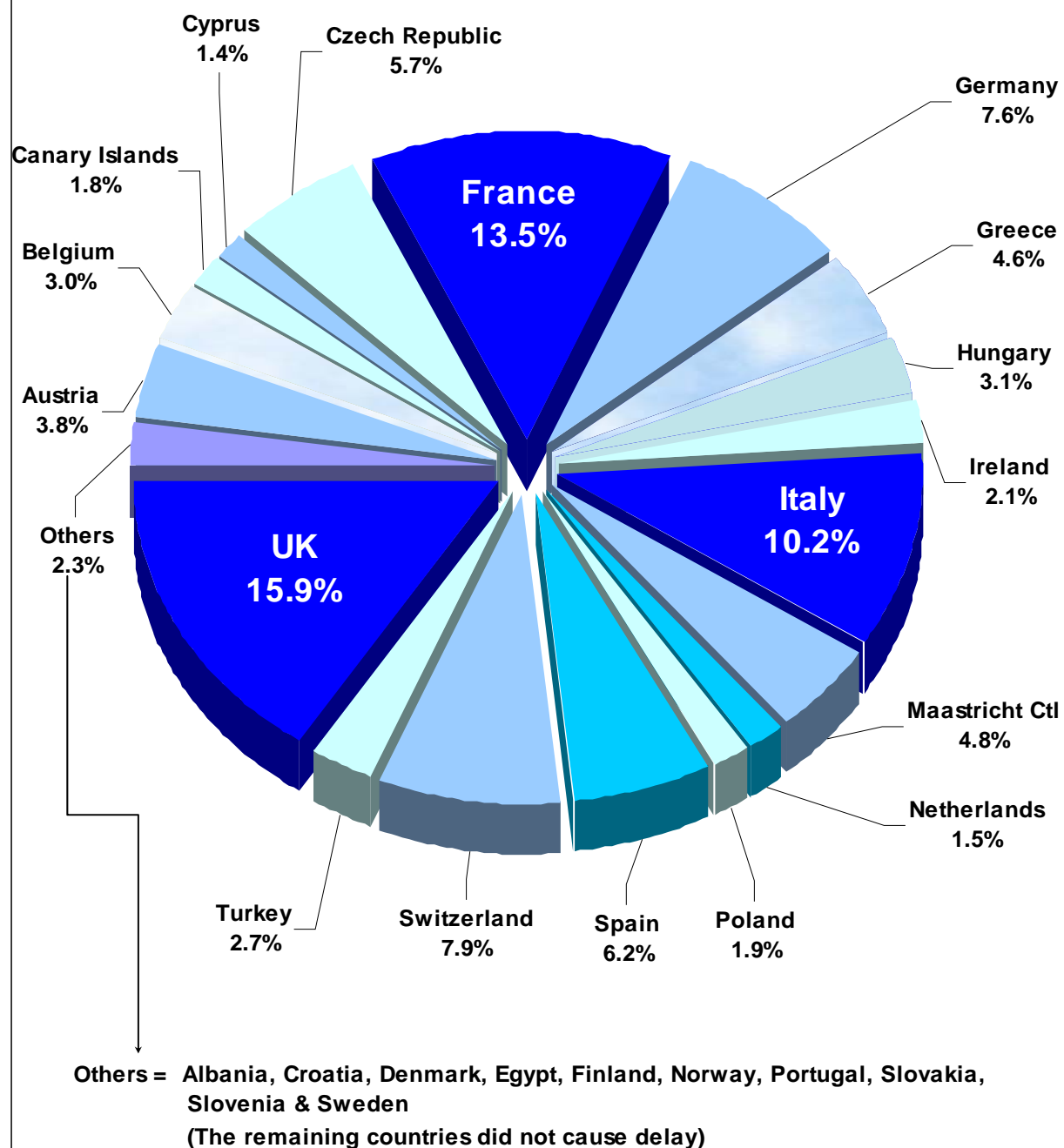
MOST AFFECTED CITY PAIRS (CFMU)									
Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM
1	Amsterdam	Zurich	358	242	174	48.60	3,619	20.80	10.11
2	Zurich	London/Heathrow	388	300	183	47.16	3,794	20.73	9.78
3	Rome/Fiumicino	London/Heathrow	326	203	140	42.94	2,946	21.04	9.04
4	Vienna	London/Heathrow	275	180	110	40.00	2,466	22.42	8.97
5	London/Heathrow	Zurich	388	267	176	45.36	3,184	18.09	8.21
6	London/Heathrow	Vienna	276	220	131	47.46	2,259	17.24	8.18
7	Geneva	London/Heathrow	307	190	114	37.13	2,342	20.54	7.63
8	Madrid/Barajas	London/Heathrow	371	200	127	34.23	2,774	21.84	7.48
9	Berlin-Tegel	Zurich	260	146	78	30.00	1,881	24.12	7.23
10	Vienna	Zurich	454	289	165	36.34	3,213	19.47	7.08
11	Dublin	London/Heathrow	631	326	183	29.00	4,351	23.78	6.90
12	Athens	Iraklion/Nikos/Kazantzak	517	170	106	20.50	3,479	32.82	6.73
13	London/City	Edinburgh	252	119	76	30.16	1,692	22.26	6.71
14	Barcelona	London/Heathrow	258	126	80	31.01	1,729	21.61	6.70
15	Frankfurt	London/Heathrow	520	260	168	32.31	3,454	20.56	6.64
16	Alicante	London/Gatwick	304	93	60	19.74	1,998	33.30	6.57
17	Munich	Zurich	334	161	92	27.54	2,175	23.64	6.51
18	Berlin-Tegel	Paris/Charles-De-Gaulle	261	172	112	42.91	1,696	15.14	6.50
19	Dusseldorf	Zurich	317	191	106	33.44	2,045	19.29	6.45
20	Aberdeen	London/Heathrow	319	136	88	27.59	2,055	23.35	6.44
Totals			7,116	3,991	2,469	34.70	53,152	21.53	7.47

MOST DENSE CITY PAIRS (CFMU)										
Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM	ADM-rank
1	Barcelona	Madrid/Barajas	1,365	508	181	13.26	3,178	17.56	2.33	7
2	Madrid/Barajas	Barcelona	1,295	219	99	7.64	1,785	18.03	1.38	18
3	Barcelona	Palma De Mallorca	1,015	25	13	1.28	275	21.15	0.27	30
4	Palma De Mallorca	Barcelona	980	113	40	4.08	747	18.68	0.76	25
5	London/Heathrow	Paris/Charles-De-Gaulle	835	258	115	13.77	1,921	16.70	2.30	8
6	Paris/Charles-De-Gaulle	London/Heathrow	831	325	219	26.35	4,965	22.67	5.97	2
7	Madrid/Barajas	Palma De Mallorca	819	34	21	2.56	448	21.33	0.55	28
8	Palma De Mallorca	Madrid/Barajas	810	246	105	12.96	1,800	17.14	2.22	10
9	Nice	Paris/Orly	785	81	35	4.46	801	22.89	1.02	21
10	Paris/Orly	Nice	781	173	93	11.91	1,528	16.43	1.96	11
11	Athens	Makedonia	779	56	28	3.59	440	15.71	0.56	27
12	Makedonia	Athens	778	3	3	0.39	32	10.67	0.04	33
13	Amsterdam	London/Heathrow	731	274	143	19.56	3,186	22.28	4.36	3
14	London/Heathrow	Amsterdam	731	84	52	7.11	1,137	21.87	1.56	15
15	Rome/Fiumicino	Milan/Linate	698	31	14	2.01	232	16.57	0.33	29
16	Den Helder/De Kooy	Unknown	698	0	0	0.00	0	0.00	0.00	34
17	Milan/Linate	Rome/Fiumicino	697	126	83	11.91	1,640	19.76	2.35	6
18	Unknown	Den Helder/De Kooy	695	0	0	0.00	0	0.00	0.00	35
19	Ibiza	Barcelona	689	102	43	6.24	590	13.72	0.86	23
20	Hamburg	Munich	682	183	69	10.12	1,281	18.57	1.88	12
21	Barcelona	Ibiza	676	4	4	0.59	115	28.75	0.17	32
22	Berlin-Tegel	Munich	672	213	47	6.99	909	19.34	1.35	19
23	Dusseldorf	Munich	671	159	71	10.58	1,493	21.03	2.23	9
24	Fuerteventura	Las Palmas	662	68	42	6.34	955	22.74	1.44	17
25	Las Palmas	Fuerteventura	654	60	40	6.12	975	24.38	1.49	16

Source: CFMU ATFM Data

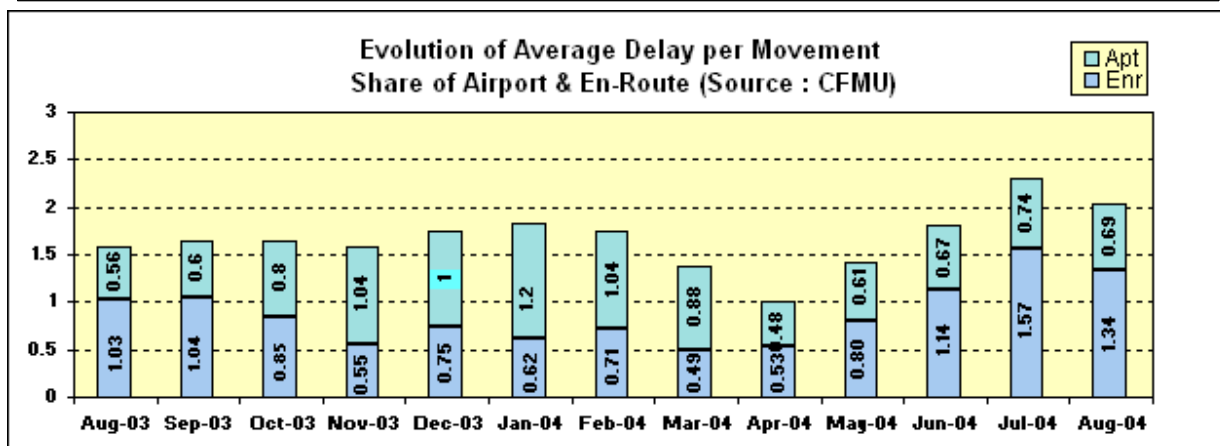
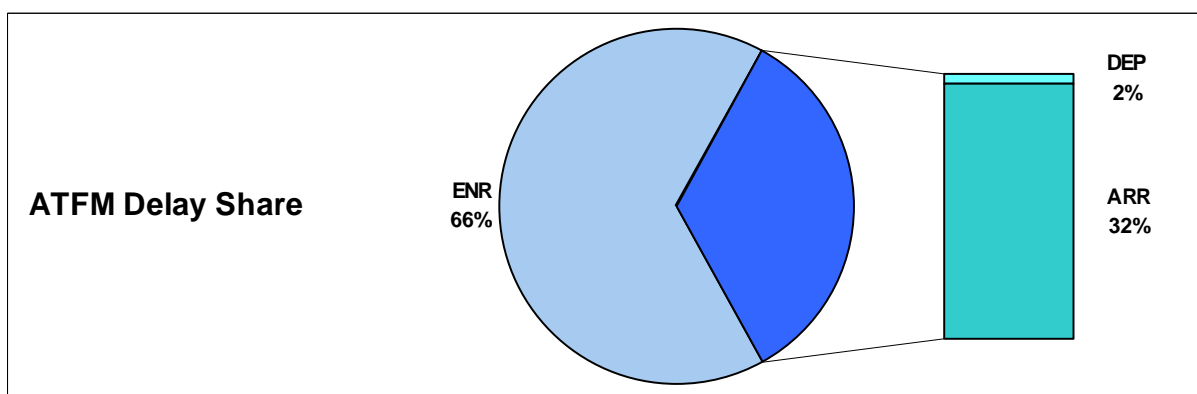
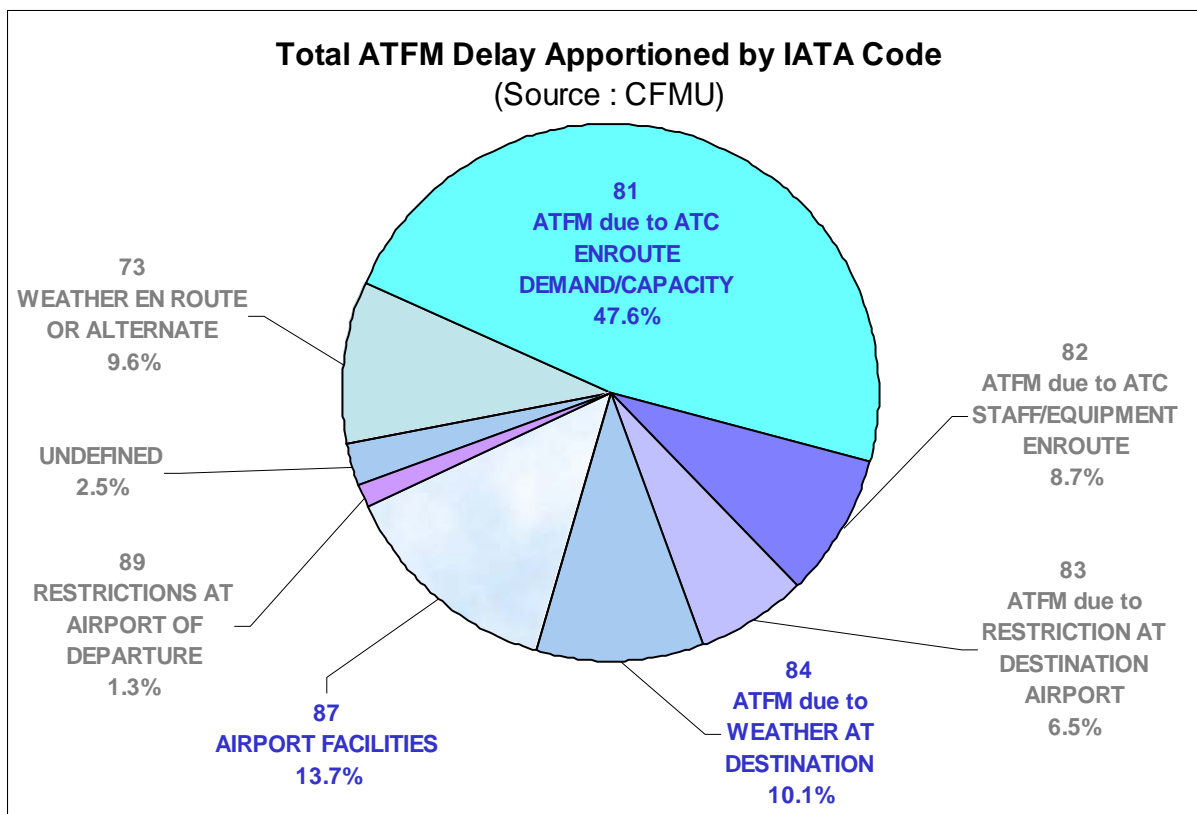
7. ATFM Delay Share by Country

**ATFM Delay Share as Imposed by Country
based on the most penalising regulation
(Source : CFMU)**

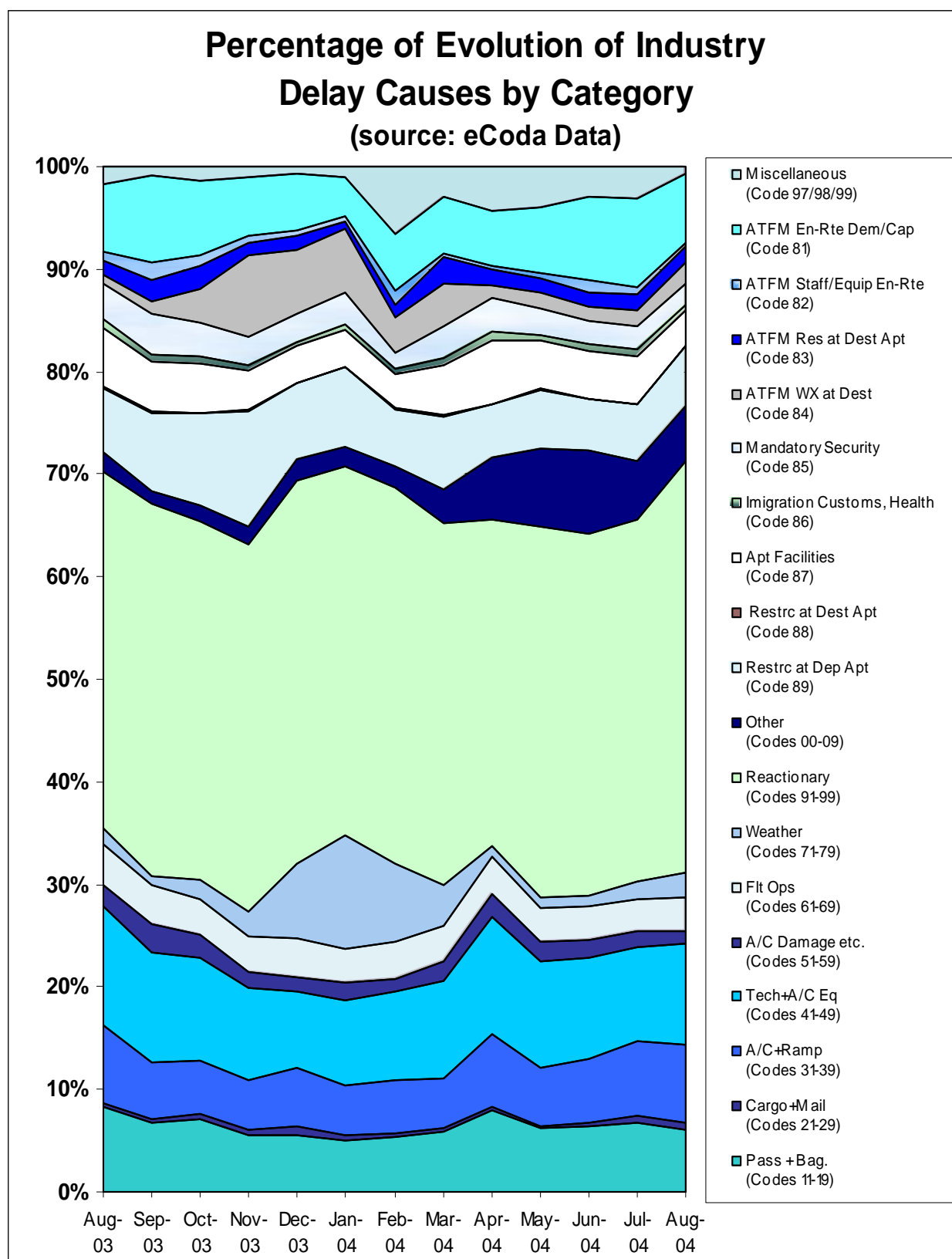


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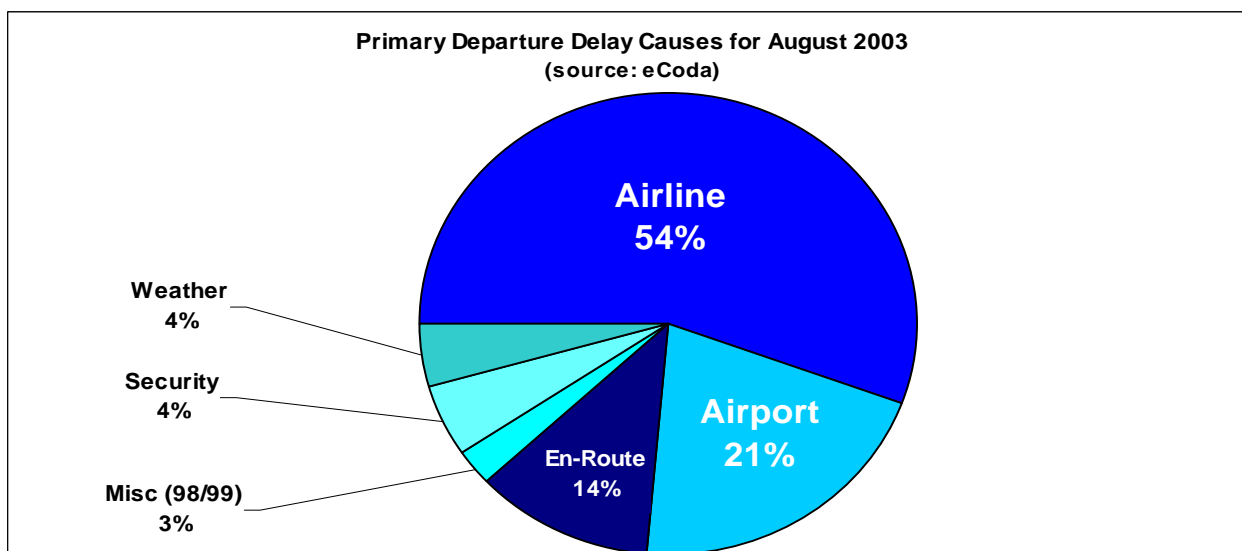
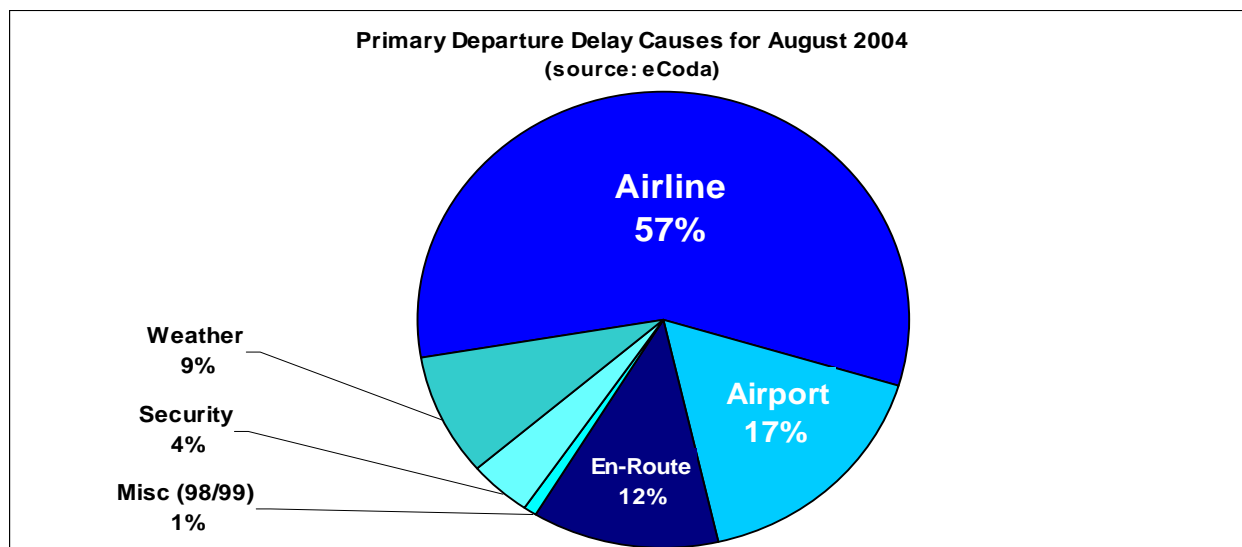
8. Reasons for ATFM Delay



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 weather³, 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

³ 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		73	WEATHER EN ROUTE OR ALTERNATE
		E		84	ATFM due to WEATHER AT DESTINATION
Weather	W	D	Thunderstorm; low visibility; X winds	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		81	ATFM due to ATC ENROUTE DEMAND/CAPACITY
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
Other	O	D	Security alert	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		81	ATFM due to ATC ENROUTE DEMAND/CAPACITY
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT