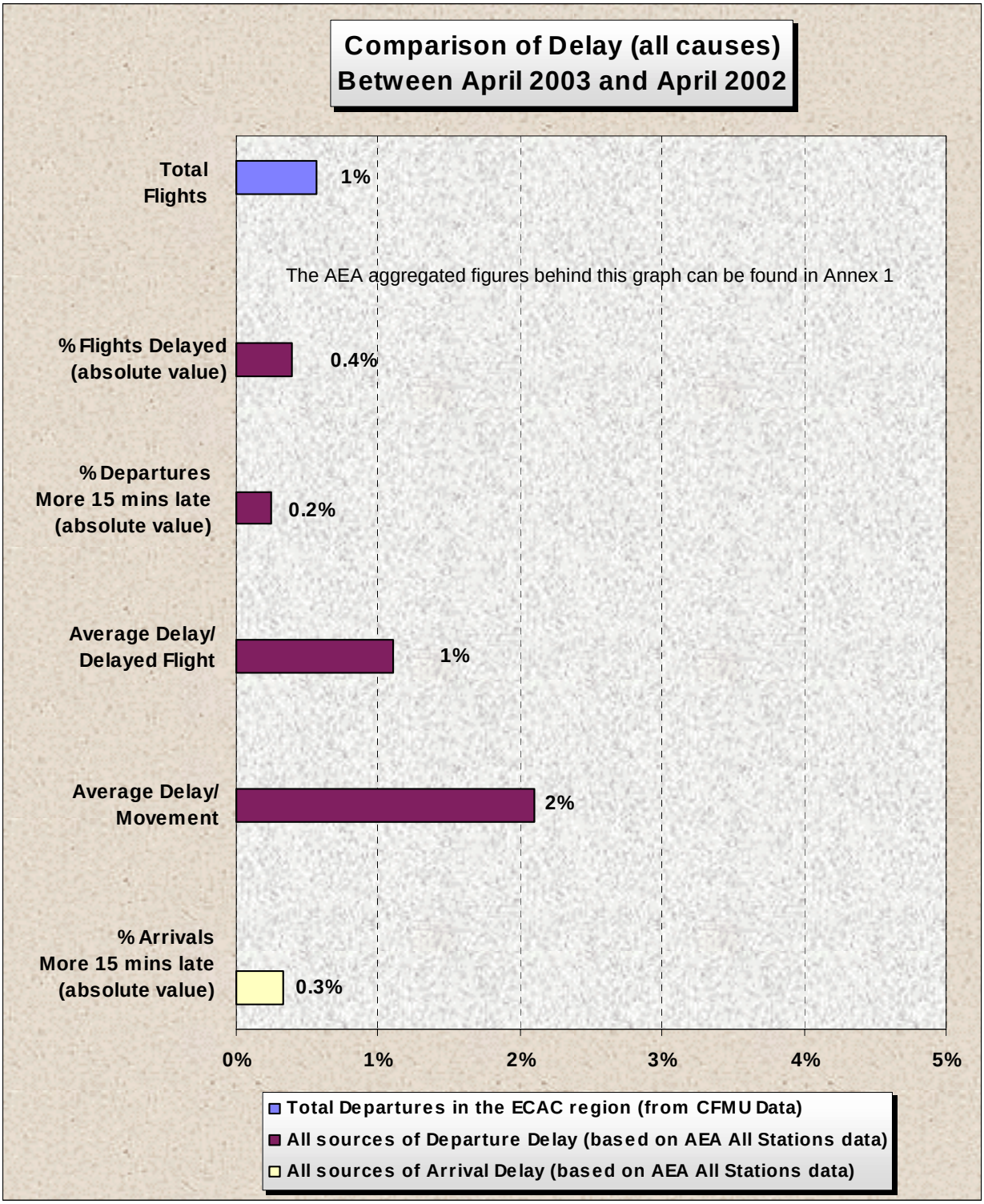
CODA

Delays to Air Transport in Europe
April 2003

April 2003



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 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. However, as a result of the current form of the database, *the graphics and charts refer only to departure delays.* A glossary of terms and abbreviations used throughout the report is given in Annex 3.

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.

Central Office for
Delay Analysis

EUROCONTROL

Rue de la Fusée, 96
B - 1130 Brussels

Tel. : + 32-2-729 35 74
Fax : + 32-2-729 90 03
E-Mail coda@eurocontrol.int
SITA : BRUAT7X

This page has been deliberately left blank.

Table of Contents

This page has been deliberately left blank.

1. SUMMARY OVERVIEW

Traffic in the ECAC region increased by less that one percent when compared with April 2002. This was by far the lowest increase for the year so far and this was due in part to the Easter holiday and flight cancellations because of industrial actions in France, Greece and Italy. Delays due to all causes, on the other hand, decreased, with the Average Delay per Movement going down by four and a half percent. ATFM delay, however, increased by around fourteen percent mainly due to a lack of ATC capacity, lack of airport capacity, weather and ATC staffing.

For the first four months of 2003, traffic increased by four percent, with delayed flights (due to all causes) increasing slightly to thirty nine percent, and flights delayed by more than fifteen minutes rising to almost seventeen percent. Total delay rose by eleven percent, with the Average Delay per Movement increasing by ten percent. The main reasons for the delay were Reactionary, Technical and Aircraft Equipment and Weather categories.

ATFM DELAY SITUATION FOR APRIL 2003

Departures throughout the ECAC region in April did not continue the solid growth seen in the previous three months, and at less than one percent, it was the smallest increase since September last year. Part of the reason for this small growth was that Easter fell in the middle of April this year and there were some cancellations due to industrial action in France and Greece at the beginning of the month and Italy in the middle of the month. Domestic traffic decreased by two and a half percent, but International traffic rose by over two and a half percent. Over two thirds of the busier countries had an increase in International traffic, with the largest real increases in Italy, Spain and Germany. The Ukraine had the largest increase in domestic traffic. At the other end of the scale, France, Turkey and the Netherlands had the largest real decreases in International traffic, with France also having the largest decrease in domestic traffic.

Delay due to all causes decreased, with departure delay going down by thirteen percent and arrival delay falling by eleven percent.

Delayed flights decreased by one and a half percentage points to thirty five percent. Flights delayed by more than fifteen minutes went down by one percentage point to thirteen percent, with flights delayed by more than one hour also falling slightly.

Delay due solely to ATFM measures, however, increased by fourteen percent, with the Average Delay per Movement increasing by thirteen percent. Delayed flights increased by seven percent and the number of flights delayed by more than fifteen minutes rising by seventeen percent.

Not all ATFM delay was caused by ATC, more than forty percent of the total ATFM delay in the ECAC region was due to regulations put in place to protect airports because of lack of capacity, parking problems, low visibility, etc.

Almost half of the busier airports (those with two thousand five hundred flights or more per month) saw an increase in departures, with fifteen percent having a double

figure increase. The largest real increases were at Cologne/Bonn, Palma and Munich, with Venice having the largest percentage increase. At the other end of the scale, Stockholm, Basle/Mulhouse and Paris/Orly had the largest real decreases, with Basle/Mulhouse having the largest percentage decrease.

Turning to delays, Paris/Charles de Gaulle and Milan/Malpensa had the largest amount of delay imposed on departing traffic[1]. Compared with April 2002, over sixty percent of airports saw a real increase in delay ranging from fourteen thousand minutes at Milan/Malpensa to just seven minutes at Tenerife. At the other end of the scale, Paris/Charles de Gaulle had the largest decrease, followed by London/Heathrow and Amsterdam. When traffic levels were taken into account, Milan/Linate was the most penalised airport with an Average Delay per Movement of four and a half minutes, followed by Dusseldorf, Milan/Malpensa, Venice, Bologna and Geneva; each with an average delay of over three minutes. When compared with last year, Milan/Linate had the largest increase, followed by Dusseldorf and Milan/Malpensa. In all over fifty five percent of airports had an increase in average delay, with five of them having a rise of more than one minute. Against these rises, there were decreases at Las Palmas and Paris/Charles de Gaulle, but no airport had a decrease of more than one minute.

Looking at airports as destinations shows that traffic arriving at Frankfurt and London/Heathrow accumulated the most ATFM delay. Almost sixty percent of the airports had an increase in delay, with the largest at Rome, Frankfurt, London/Heathrow and Milan/Malpensa. To offset these increases, there were significant real decreases at Paris/Charles de Gaulle, Amsterdam, Paris/Orly and Barcelona. In percentage terms, the largest falls were at Paris/Orly and Bergen/Flesland.

Taking traffic levels into account, Milan/Malpensa had the largest Average Delay per Movement, with six minutes, followed by Frankfurt with five minutes and Rome and London/Heathrow with almost five minutes (see table at the bottom of page 20). Over sixty percent of the busier airports had an increase in average delay, but only fifteen percent had an increase of more than one minute. The largest rises were at Rome and the Milan airports. At the other end of the scale, only Paris/Orly, Barcelona and Amsterdam had a decrease of more than one minute.

The busiest city pair in April was Barcelona-Madrid, with around nineteen hundred flights in each direction. This was twice that of any other city pair. A list of the twenty busiest pairs is given on page 19. Almost half of the busier pairs (those with more than two hundred and fifty flights per month) had a real increase in flights, with a little under twenty percent having an increase of ten percent or more.

The most affected pairs (due solely to ATFM) were Milan/Linate-London/Heathrow, with an Average Delay per Movement of ten minutes, followed by Venice-Rome and Milan/Linate–Rome, both with an average delay of more than nine minutes. For a schematic representation of the top ten most affected pairs, see the diagram on page 18 and for a more detailed list of these pairs, see the table at the top of page 19.

[1] It must be remembered that these are total ATFM delays to flights departing from/arriving at these airports and does not necessarily imply that these delays are due to action at these airports.

Compared with April last year, over forty percent of the pairs had an increase in Average Delay per Movement, with over twenty percent of them having an increase of more than one minute. The largest increase was between Diagoras-Athens, Venice-Rome and Milan/Linate-Rome; all having a rise of more than eight minutes. At the other end of the scale, there was a decrease of six minutes between Mahon-Barcelona, followed by Dublin-Paris/Charles de Gaulle, Manchester-Paris/Charles de Gaulle and Manchester-Amsterdam, which all had a fall of more than three minutes.

The countries (those with more than one thousand two hundred and fifty flights per month) with the largest Average Delay per Movement for departure traffic, were Italy, Switzerland and Luxembourg. Compared with April last year, more than half the countries had an increase in average delay, but only Italy had an increase of more than one minute. At the other end of the scale, no country had a decrease of more than one minute.

Looking at countries as destinations shows that arrivals in Italy, Switzerland and Germany had the largest Average Delay per Movement. Compared with the same month of last year, nearly fifty percent of the countries had an increase in average delay, but only Italy and Greece, of the ECAC countries, had an increase of more than one minute. At the other end of the scale, only traffic from within ECAC to North America had a decrease of more than one minute.

The most affected flows between countries were Italy-United Kingdom, Germany-Canary Islands, Switzerland-Italy and Spain-Italy; all with an Average Delay per Movement of more than four and a half minutes (see table at the bottom of page 21). Compared with April last year, fifty percent of the flows had an increase in Average Delay per Movement, with eighteen percent having an increase of more than one minute. The largest rises were between Spain-Italy and Switzerland-Italy. On the other hand, only seven flows had a decrease of more than one minute, with the largest decreases (over two minutes) between the United Kingdom-Netherlands, Germany-United States and Switzerland-France.

Based on the most penalising regulations, traffic (including overflights) using the airspace of France, Italy, the United Kingdom and Germany had the largest share of ATFM delay. Between them they accounted for almost three quarters of the total ATFM delay in the ECAC area. Compared with April 2002, Italy and Switzerland had the largest increases, with the United Kingdom and France having the largest decreases.

Looking at the amount of delay imposed shows that France, Italy[2], the United Kingdom and Germany imposed the most delay on flights using its airspace. Compared with April last year, half the countries had an increase in delay, with Italy, Switzerland and Germany having the largest real increases. At the other end of the scale, there were large decreases in the United Kingdom, Spain and France.

Taking traffic handled (again including overflights) by the countries/regions into account shows that Italy and Switzerland were the only countries to have an Average Delay per Movement of more than one minute. Compared with April last year, Italy

[2] There was industrial action by ATC personnel in both France and Italy and Milan ACC moved to a new Ops room.

was the only country to have an increase of more than one minute. At the other end of the scale, no country had a decrease of more than one minute.

The most penalising UACs/ACCs were Milan[3], Zurich and London and compared with last year, the largest increases were in Milan and Zurich. At the other end of the scale, there was a large decrease at London, followed by a smaller, yet nonetheless significant, fall in Madrid.

AEA AIRLINE DATA

Delays on air traffic in the ECAC region, due to all causes, increased by ten percent when compared with April last year, due mainly to rises in the Reactionary, ATFM Restrictions at Destination Airport and ATFM En-Route Demand/Capacity. The Average Delay per Movement rose by two percent to nine minutes. Traffic departing from Lisbon airport was the most penalised[4], with an average delay of nearly fifteen minutes, whereas at Istanbul, it was less than four minutes. Compared with April last year, forty percent of the airports had an increase in average delay, with the largest increases (more than five minutes) at Rome and Zurich. Zurich and Rome also had the largest percentage increase. At the other end of the scale, the largest real decreases were at Paris/Charles de Gaulle and London/Gatwick, whereas the largest percentage decrease was at Istanbul.

Delays due solely to ATFM measures increased by seventeen percent, with the Average Delay per Movement increasing by eight and a half percent to two minutes. While the increase in total ATFM delay was similar, the average delay from AEA was significantly higher than that calculated from CFMU data.

The number of flights delayed increased by nine percent, but the percentage of flights delayed increased by less than half of one percentage point to forty two percent. Flights delayed by more than fifteen minutes also increased, with the departures rising to sixteen percent and the arrivals rising to eighteen and a half percent.

The graph of the comparison of the main indicators shows that while there were some differences between the two sources, they followed the same trend (with the exception of the Average Delay per Delayed Flight). These differences were due in part to the way the data was recorded, the mix of traffic and the way the delays were calculated (see note in the Foreword). These differences, however, do not affect the long term correlation of the ATFM delay of the two sources, as the graph on page 27 illustrates. This is also true when the eCODA all causes airline data is added to the graph.

An analysis of the delay causes and categories, grouped by IATA codes, shows that over fifty five percent of them had an increase in delay share, with ATFM Restrictions at Destination Airport, Weather and Aircraft Damage, etc. having the largest increases. To offset these increases, there were falls in the ATFM Weather at Destination, Immigration & Customs & Health and Mandatory Security categories.

[3] Milan ACC moved to a new Ops room.
[4] This does not necessarily mean that Lisbon airport was responsible for the delay as it could also have been caused by airline or ATFM measures.

Technical & Aircraft Equipment was again the most penalising direct delay category, with twelve and a half percent, followed by ATFM En-Route Demand/Capacity with eight percent and Restrictions at Departure Airport with seven percent. Reactionary had the largest real increase, with ATFM Restrictions at Destination Airport and ATFM En-Route Demand/Capacity also having significant increases. At the other end of the scale, there were decreases in the ATFM Weather at Destination and Mandatory Security categories.

eCODA DATA

The Average Delay per Movement for departures was seven and a half minutes; a decrease of five and a half percent on April last year. This was slightly lower than that calculated from AEA data, and reflects the greater data capture and the different mix of traffic in the eCODA data. While thirty five percent of the flights were delayed (thirteen percent by more than fifteen minutes), twelve percent departed before their scheduled time.

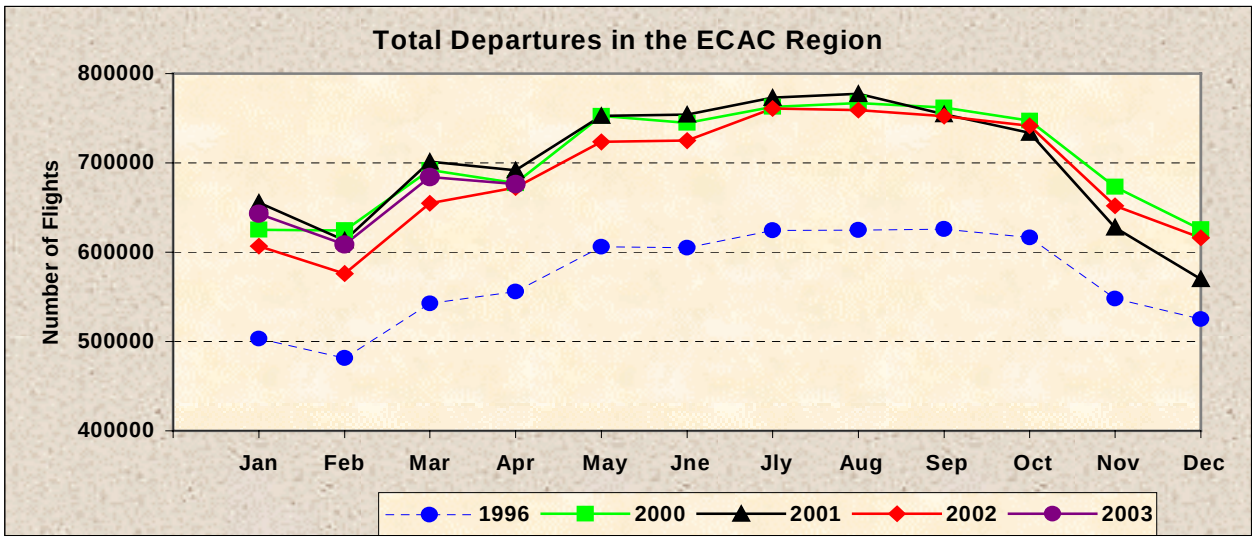
Turning to arrivals, the Average Delay per Movement was slightly higher at eight and a half minutes, which was a decrease of two and a half percent on April last year. Thirty six percent of the flights were delayed, with fourteen and a half percent by more than fifteen minutes. On the other hand, thirty three percent of flights arrived ahead of schedule.

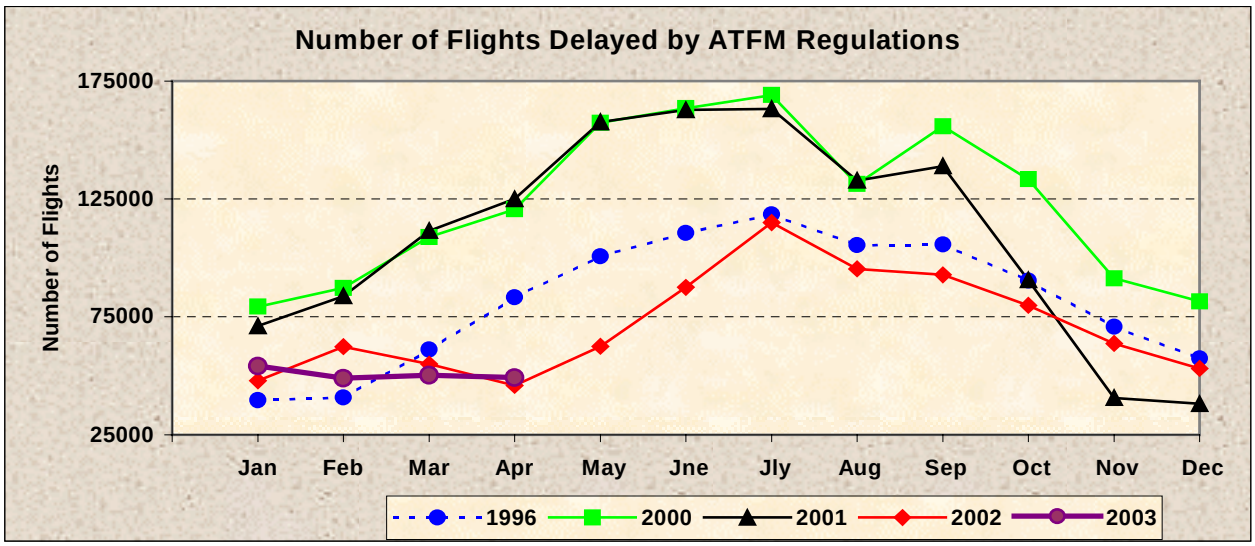
SUMMARY OF SIGNIFICANT ATFM EVENTS

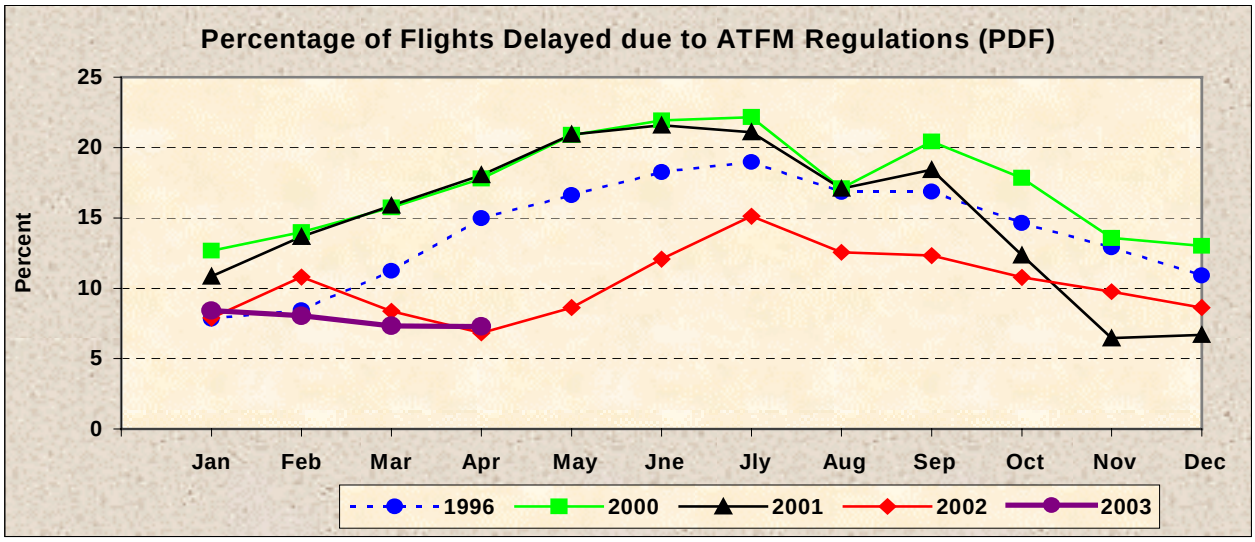
- Weather conditions including fog, low visibility and strong winds.
- Technical problems including radar failure in London and Warsaw ACCs; radar maintenance at Catania and Milan/Malpensa; frequency problems at Padua and Brindisi ACCs; computer problems at Paris ACC; Ancona closed due to an electrical failure.
- Staff issues at Paris ACC/UAC; Manchester ACC; Marseille approach; Dusseldorf ACC; Brest ACC; Dortmund, Paris/Charles de Gaulle, Paris/Le Bourget and Pontoise airports.
- Work in Progress at Catania; runway closure at Rome from 19 to 30 April.
- Zero rate at Zurich and Cardiff due to aircraft accidents; long delays at Milan/Malpensa due to runway configuration.
- Industrial action by ATC personnel in France and Italy; by Greek civil servants, including ATC personnel, and a general strike in Spain.
- Security: Bremen airport closed due to airfield fence violation; Dusseldorf closed (+/- 30 min) due to lack of fire cover; Tirana airport closed to civilian traffic; Genoa closed due to earth tremors.
- Military activity in Milan, Brindisi and Rome ACCs, Reims ACC; danger areas EG138, EG138A and EID1 activated.
- Other items included the final training for the transfer of Milan ACC to a new Ops room at the end of April; stand renumbering at London/Heathrow; reduced capacity due to airshows at Frederickshaven and Napoli; noise reduction procedures on traffic overflying Germany and landing at Zurich.

This page has been deliberately left blank

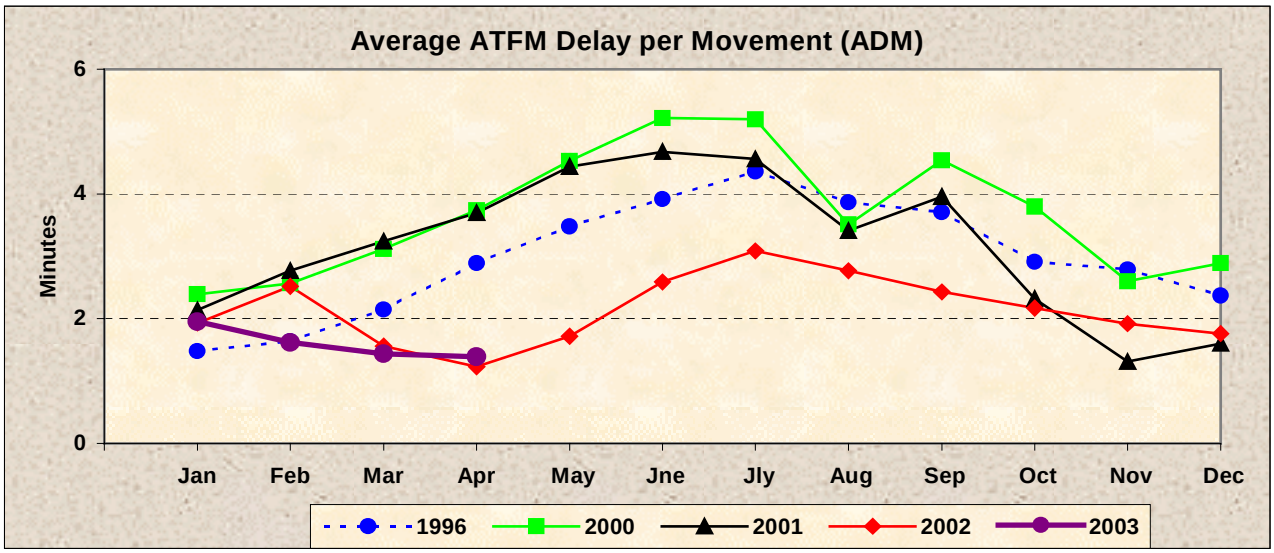
2. Year on Year Trends in Main Indicators

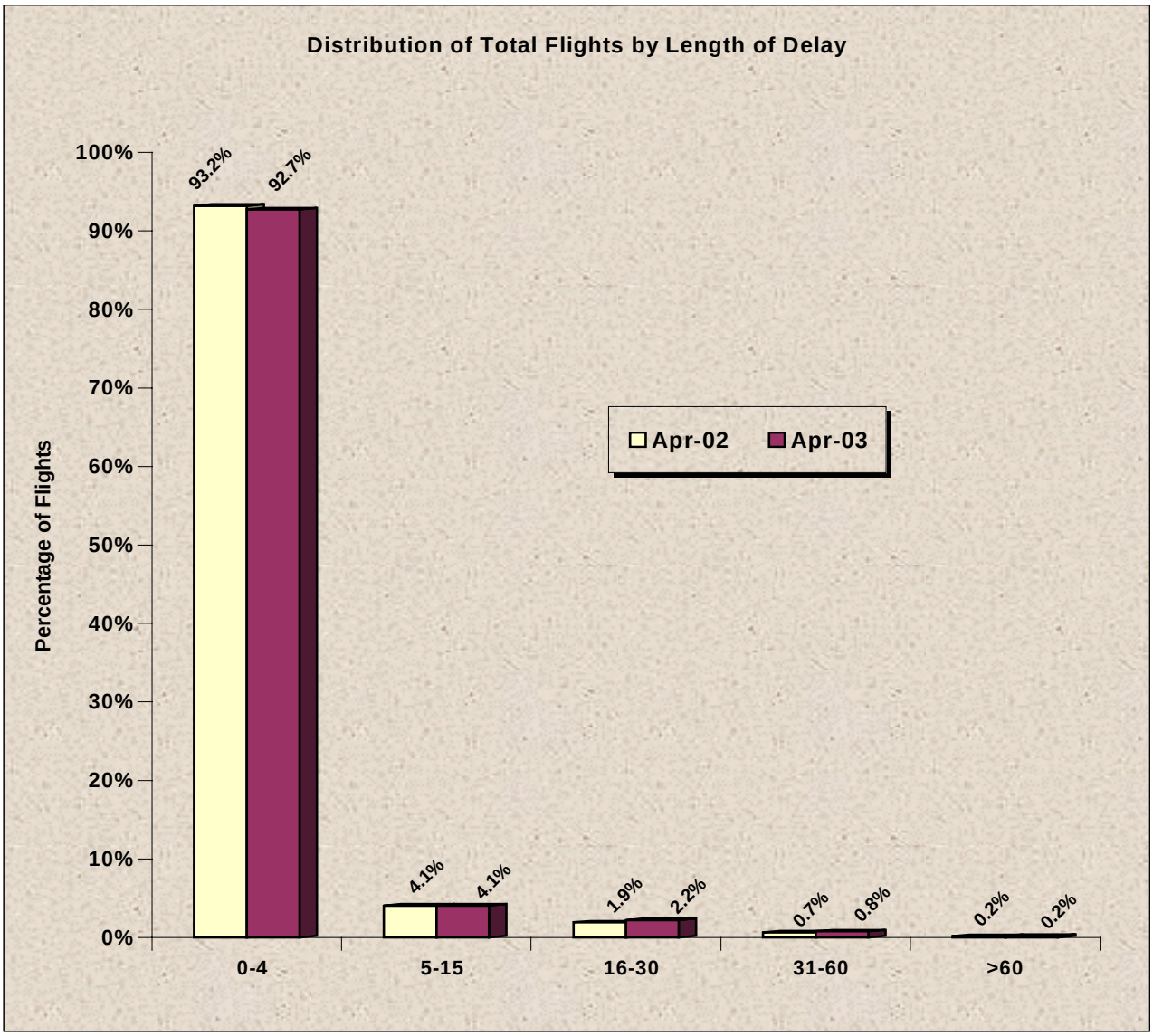






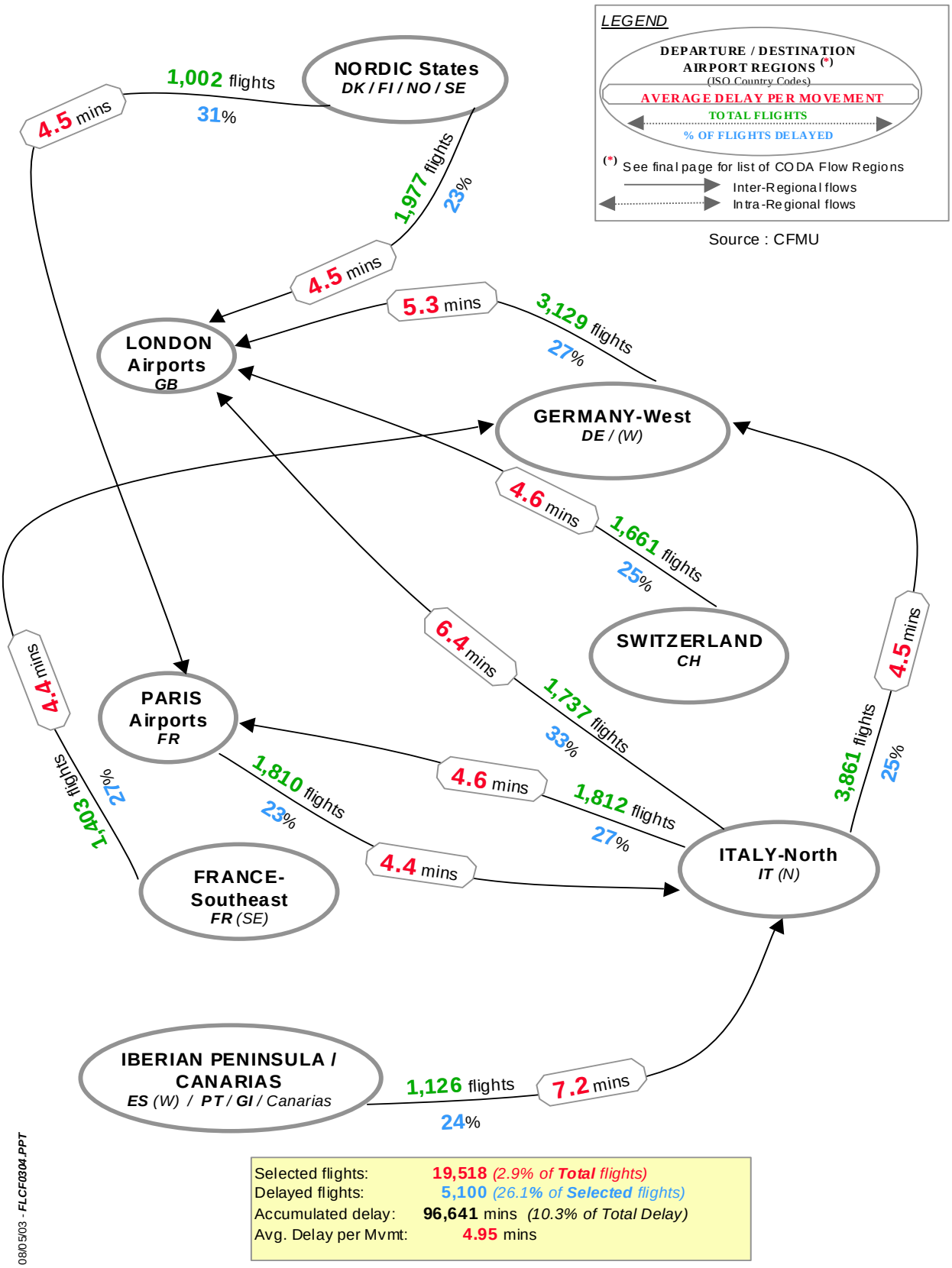
Source: CFMU ATFM Data





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 April 2003

4. Most Affected and Most Dense Traffic Flows

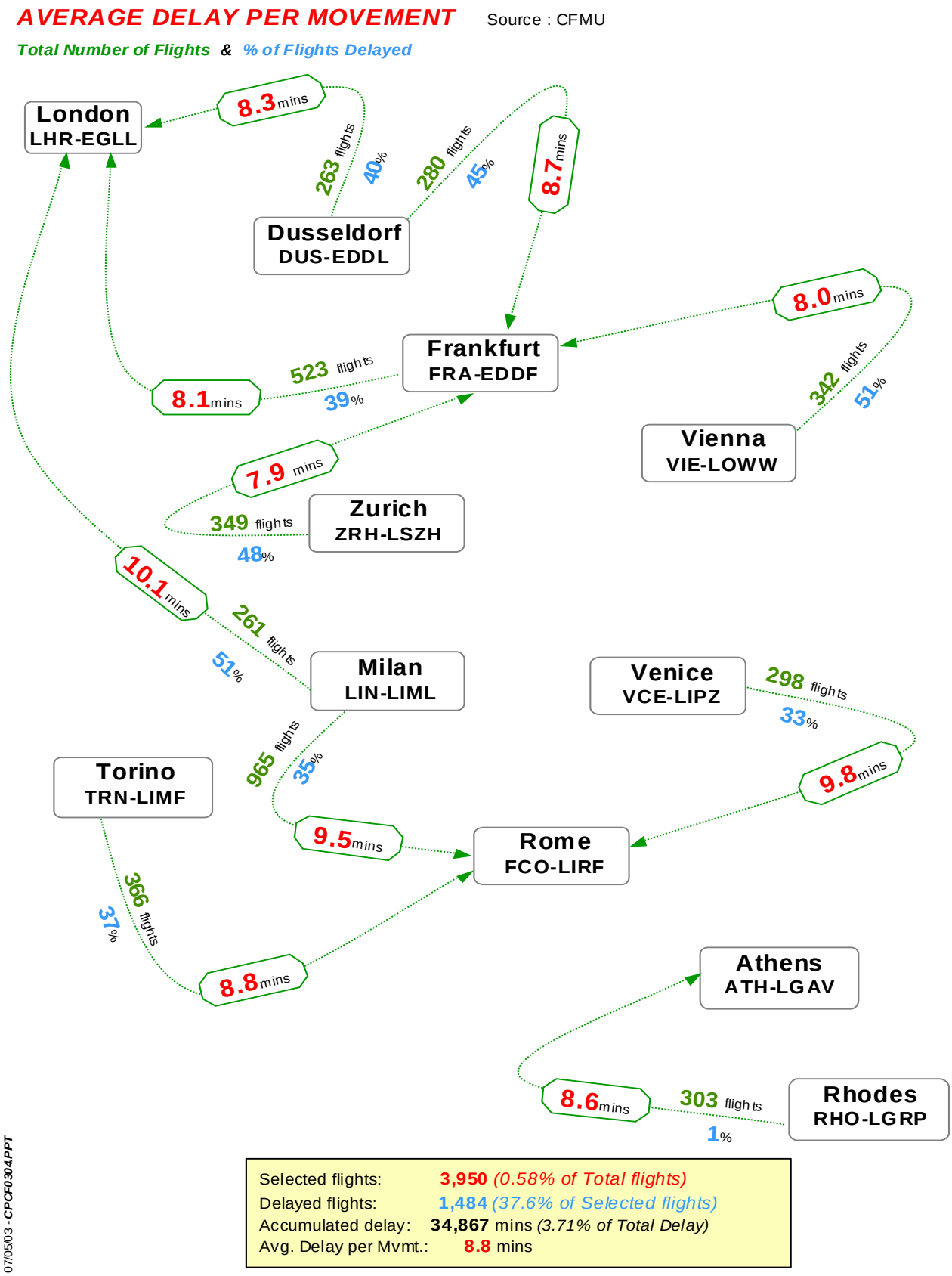
MOST AFFECTED TRAFFIC FLOWS (CFMU)

Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM
1	Iberian Peninsula/Canaria	Italy-North	1,126	418	269	23.89	8,127	30.21	7.22
2	Italy-North	London Airports	1,737	972	571	32.87	11,080	19.40	6.38
3	Germany-West	London Airports	3,129	1,437	842	26.91	16,556	19.66	5.29
4	Switzerland	London Airports	1,661	847	422	25.41	7,722	18.30	4.65
5	Italy-North	Paris Airports	1,812	1,039	491	27.10	8,273	16.85	4.57
6	Italy-North	Germany-West	3,861	1,547	947	24.53	17,411	18.39	4.51
7	Nordic States	Paris Airports	1,002	583	309	30.84	4,511	14.60	4.50
8	Nordic States	London Airports	1,977	822	449	22.71	8,884	19.79	4.49
9	France Southeast	Germany-West	1,403	641	384	27.37	6,187	16.11	4.41
10	Paris Airports	Italy-North	1,810	743	416	22.98	7,890	18.97	4.36
11	Germany-West	Italy-North	3,853	1,410	744	19.31	16,351	21.98	4.24
12	Italy-North	Italy-South/Malta	9,170	2,366	1,590	17.34	38,813	24.41	4.23
13	Iberian Peninsula/Canaria	Germany-West	3,876	1,545	907	23.40	16,095	17.75	4.15
14	Balearics/Spain East	London Airports	1,726	309	156	9.04	7,001	44.88	4.06
15	Germany-West	Iberian Peninsula/Canaria	3,852	1,685	875	22.72	15,485	17.70	4.02
16	Austria/Slovenia	Germany-West	3,091	944	628	20.32	12,204	19.43	3.95
17	United Kingdom & Ireland	Paris Airports	1,987	818	410	20.63	7,757	18.92	3.90
18	Paris Airports	London Airports	1,426	401	252	17.67	5,478	21.74	3.84
19	BENELUX	Italy-North	1,899	882	430	22.64	7,293	16.96	3.84
20	Italy-North	Italy-North	3,273	779	501	15.31	12,392	24.73	3.79
Totals			53,671	20,188	11,593	21.60	235,510	20.31	4.39

MOST DENSE TRAFFIC FLOWS (CFMU)

Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM	ADM-Rank
1	Nordic States	Nordic States	58,551	199	101	0.17	1,585	15.69	0.03	34
2	United Kingdom & Ireland	United Kingdom & Ireland	28,126	2,042	893	3.17	13,480	15.10	0.48	22
3	Iberian Peninsula/Canaria	Iberian Peninsula/Canaria	25,426	599	283	1.11	4,405	15.57	0.17	29
4	Germany-West	Germany-West	22,691	3,472	2,009	8.85	43,970	21.89	1.94	7
5	Greece/Cyprus	Greece/Cyprus	10,550	241	130	1.23	9,928	76.37	0.94	15
6	Italy-South/Malta	Italy-North	9,209	1,693	993	10.78	20,806	20.95	2.26	6
7	Italy-North	Italy-South/Malta	9,170	2,366	1,590	17.34	38,813	24.41	4.23	3
8	London Airports	United Kingdom & Ireland	8,951	900	452	5.05	6,951	15.38	0.78	18
9	United Kingdom & Ireland	London Airports	8,942	2,382	1,209	13.52	25,153	20.80	2.81	5
10	Other	Other	8,428	25	11	0.13	299	27.18	0.04	32
11	Italy-South/Malta	Italy-South/Malta	8,179	1,040	545	6.66	12,142	22.28	1.48	11
12	Germany-West	Other	7,325	920	503	6.87	8,179	16.26	1.12	12
13	Other	Germany-West	7,277	392	217	2.98	3,624	16.70	0.50	21
14	Balearics/Spain East	Balearics/Spain East	7,200	554	227	3.15	4,414	19.44	0.61	20
15	Balearics/Spain East	Iberian Peninsula/Canaria	7,045	447	179	2.54	2,535	14.16	0.36	27
16	Iberian Peninsula/Canaria	Balearics/Spain East	7,022	1,315	524	7.46	10,743	20.50	1.53	10
17	Other	London Airports	6,906	210	128	1.85	2,717	21.23	0.39	26
18	London Airports	Other	6,859	736	349	5.09	5,668	16.24	0.83	17
19	Germany-East/Czech Rep	Germany-West	6,673	976	611	9.16	10,836	17.73	1.62	8
20	Germany-West	Germany-East/Czech Rep	6,649	297	145	2.18	3,173	21.88	0.48	23
21	Other	Paris Airports	5,911	416	161	2.72	2,616	16.25	0.44	25
22	Paris Airports	Other	5,886	905	564	9.58	9,496	16.84	1.61	9
23	Central Europe	Central Europe	5,781	1	1	0.02	175	175.00	0.03	33
24	Turkey	Turkey	5,667	0	4	0.07	87	21.75	0.02	35
25	France Southeast	France Southeast	5,427	95	40	0.74	833	20.83	0.15	31

5. Most Affected City Pairs



ATFM Delay Situation on 10 City Pairs (>250 flights) in April 2003

6. Most Affected and Most Dense City Pairs

MOST AFFECTED CITY PAIRS (CFMU)

Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM
1	Milan/Linate	London/Heathrow	261	214	132	50.57	2,625	19.89	10.06
2	Venice/Tessera	Rome/Fiumicino	298	130	98	32.89	2,931	29.91	9.84
3	Milan/Linate	Rome/Fiumicino	965	537	339	35.13	9,127	26.92	9.46
4	Torino/Caselle	Rome/Fiumicino	366	193	136	37.16	3,209	23.60	8.77
5	Dusseldorf	Frankfurt	280	192	125	44.64	2,428	19.42	8.67
6	Diagoras	Athens	303	2	2	0.66	2,618	1309.00	8.64
7	Dusseldorf	London/Heathrow	263	193	104	39.54	2,187	21.03	8.32
8	Frankfurt	London/Heathrow	523	318	206	39.39	4,243	20.60	8.11
9	Vienna	Frankfurt	342	241	173	50.58	2,724	15.75	7.96
10	Zurich	Frankfurt	349	233	169	48.42	2,775	16.42	7.95
11	Geneva	London/Heathrow	308	199	114	37.01	2,341	20.54	7.60
12	Paris/Charles-De-Gaulle	Milan/Malpensa	326	159	109	33.44	2,409	22.10	7.39
13	Oslo/Gardermoen	London/Heathrow	259	138	83	32.05	1,895	22.83	7.32
14	Rome/Fiumicino	London/Heathrow	312	164	100	32.05	2,262	22.62	7.25
15	Rome/Fiumicino	Frankfurt	257	199	115	44.75	1,808	15.72	7.04
16	Brussels	Frankfurt	258	156	109	42.25	1,734	15.91	6.72
17	Hamburg	Frankfurt	376	251	156	41.49	2,504	16.05	6.66
18	Vienna	London/Heathrow	261	144	71	27.20	1,722	24.25	6.60
19	Munich	Frankfurt	506	280	193	38.14	3,311	17.16	6.54
20	Glasgow	London/Heathrow	542	279	153	28.23	3,502	22.89	6.46
Totals			7,355	4,222	2,687	36.53	58,355	21.72	7.93

MOST DENSE CITY PAIRS (CFMU)

Rank	Departure	Destination	TTF	TRF	TDF	PDF	TDM	ADD	ADM	ADM-rank
1	Barcelona	Madrid/Barajas	1,903	199	62	3.26	869	14.02	0.46	16
2	Madrid/Barajas	Barcelona	1,886	499	218	11.56	4,392	20.15	2.33	8
3	Milan/Linate	Rome/Fiumicino	965	537	339	35.13	9,127	26.92	9.46	1
4	Rome/Fiumicino	Milan/Linate	964	239	138	14.32	2,436	17.65	2.53	5
5	Barcelona	Palma De Mallorca	944	5	3	0.32	69	23.00	0.07	28
6	Palma De Mallorca	Barcelona	908	273	112	12.33	2,286	20.41	2.52	6
7	London/Heathrow	Paris/Charles-De-Gaulle	803	276	102	12.70	1,977	19.38	2.46	7
8	Paris/Charles-De-Gaulle	London/Heathrow	800	349	217	27.13	4,738	21.83	5.92	3
9	Akrotiri	Akrotiri	795	0	0	0.00	0	0.00	0.00	30
10	London/Heathrow	Amsterdam	713	83	23	3.23	467	20.30	0.65	12
11	Berlin-Tegel	Munich	713	34	17	2.38	268	15.76	0.38	17
12	Amsterdam	London/Heathrow	711	348	179	25.18	4,015	22.43	5.65	4
13	Dusseldorf	Munich	706	87	56	7.93	1,461	26.09	2.07	9
14	Cologne/Bonn	Berlin-Tegel	699	33	12	1.72	181	15.08	0.26	20
15	Munich	Dusseldorf	698	61	48	6.88	1,401	29.19	2.01	10
16	Munich	Berlin-Tegel	693	9	1	0.14	31	31.00	0.04	29
17	Madrid/Barajas	Palma De Mallorca	689	19	7	1.02	101	14.43	0.15	25
18	Berlin-Tegel	Cologne/Bonn	687	6	0	0.00	0	0.00	0.00	31
19	Las Palmas	Fuerteventura	682	14	10	1.47	235	23.50	0.34	19
20	Palma De Mallorca	Madrid/Barajas	676	57	27	3.99	311	11.52	0.46	15
21	Fuerteventura	Las Palmas	676	10	6	0.89	82	13.67	0.12	26
22	Paris/Orly	Toulouse/Blagnac	675	46	17	2.52	168	9.88	0.25	22
23	Toulouse/Blagnac	Paris/Orly	672	49	14	2.08	142	10.14	0.21	24
24	Munich	Hamburg	650	53	19	2.92	242	12.74	0.37	18
25	Munich	Cologne/Bonn	643	32	16	2.49	320	20.00	0.50	14

7. Most Penalised Airports (with more than 2,500 flights per month)

Ranked by Average Delay per Movement (ADM)

Departure Airports

Airport	Total Flights (TTF)	Delayed Flights (TDF)	% of Delayed Flights (PDF)	Total Delay (TDM)	Flights Delayed > 60 mins	Av.Delay/ Delayed Flt (ADD)	Av.Delay/ Movement (ADM)
Milan/Linate	4,618	942	20	21,022	26	22.3	4.6
Dusseldorf	7,309	1,310	18	28,615	46	21.8	3.9
Milan/Malpensa	8,598	1,518	18	31,370	20	20.7	3.7
Venice/Tessera	3,053	518	17	10,964	13	21.2	3.6
Bologna	2,503	418	17	7,590	9	18.2	3.0
Geneva	5,824	992	17	17,483	16	17.6	3.0
Zurich	10,328	1,531	15	24,750	19	16.2	2.4
Basle/Mulhouse	2,708	383	14	6,180	5	16.1	2.3
Malaga	4,453	462	10	10,110	28	21.9	2.3
Stuttgart	5,049	601	12	11,066	11	18.4	2.2
Hanover	3,276	369	11	6,569	9	17.8	2.0
Budapest/Ferihegy	3,274	340	10	6,559	6	19.3	2.0
Paris/Charles-De-Gaulle	20,734	2,483	12	41,068	25	16.5	2.0
Berlin-Tegel	5,492	605	11	10,315	4	17.1	1.9
Prague/Ruzyne	4,349	439	10	8,022	7	18.3	1.8
Manchester	7,682	774	10	14,158	21	18.3	1.8
Hamburg	5,389	611	11	9,911	5	16.2	1.8
Napoli Capodichino	2,849	240	8	5,210	9	21.7	1.8
Brussels	10,008	1,062	11	17,942	23	16.9	1.8
Edinburgh	4,578	463	10	8,129	9	17.6	1.8

Destination Airports

Airport	Total Flights (TTF)	Delayed Flights (TDF)	% of Delayed Flights (PDF)	Total Delay (TDM)	Flights Delayed > 60 mins	Av.Delay/ Delayed Flt (ADD)	Av.Delay/ Movement (ADM)
Milan/Malpensa	8,615	2,314	27	53,143	93	23.0	6.2
Frankfurt	19,581	6,304	32	102,305	24	16.2	5.2
Rome/Fiumicino	12,020	2,589	22	57,666	65	22.3	4.8
London/Heathrow	18,640	4,042	22	88,435	146	21.9	4.7
Zurich	10,310	1,931	19	32,666	22	16.9	3.2
Barcelona	11,504	1,698	15	34,226	95	20.2	3.0
Milan/Linate	4,629	688	15	12,680	8	18.4	2.7
Paris/Charles-De-Gaulle	20,684	3,238	16	52,389	32	16.2	2.5
Dusseldorf	7,341	812	11	18,160	14	22.4	2.5
Alicante	2,625	261	10	5,089	9	19.5	1.9
London/Stansted	6,515	668	10	12,331	15	18.5	1.9
Amsterdam	16,283	1,506	9	27,728	53	18.4	1.7
Bologna	2,500	171	7	4,149	5	24.3	1.7
Edinburgh	4,570	440	10	7,460	4	17.0	1.6
Tenerife Sur/Reina Sofia	2,778	241	9	4,305	6	17.9	1.6
Vienna	8,442	980	12	12,636	4	12.9	1.5
Birmingham	5,016	437	9	7,374	6	16.9	1.5
London/Luton	3,112	208	7	4,572	13	22.0	1.5
Venice/Tessera	3,052	197	6	4,348	5	22.1	1.4
London/Gatwick	9,428	610	6	12,742	34	20.9	1.4

Source : CFMU ATFM Data

8. Most Dense Traffic Flows (Country to Country with more than 1,250 flights per month)

Ranked by Total Number of Flights (TTF)

From	To	Total Flights (TTF)	Delayed Flights (TDF)	% of Delayed Flights (PDF)	Total Delay (TDM)	Av.Delay/ Delayed Flt (ADD)	Av. Delay/ Movement (ADM)
FRANCE	FRANCE	42,896	1,642	4%	24,670	15.0	0.6
UNITED KINGDOM	UNITED KINGDOM	39,256	2,119	5%	37,448	17.7	1.0
GERMANY	GERMANY	34,979	2,632	8%	55,518	21.1	1.6
SPAIN	SPAIN	30,146	980	3%	18,021	18.4	0.6
ITALY	ITALY	29,464	3,604	12%	83,701	23.2	2.8
NORWAY	NORWAY	21,695	31	0%	420	13.6	0.0
SWEDEN	SWEDEN	15,170	6	0%	122	20.3	0.0
GREECE	GREECE	8,673	116	1%	9,569	82.5	1.1
CANARY ISLANDS	CANARY ISLANDS	6,495	58	1%	940	16.2	0.1
FRANCE	UNITED KINGDOM	6,436	756	12%	14,410	19.1	2.2
UNITED KINGDOM	FRANCE	6,380	676	11%	13,015	19.3	2.0
SPAIN	UNITED KINGDOM	6,031	601	10%	19,313	32.1	3.2
UNITED KINGDOM	SPAIN	5,999	609	10%	15,833	26.0	2.6
UNITED KINGDOM	GERMANY	5,974	798	13%	12,533	15.7	2.1
FINLAND	FINLAND	5,947	0	0%	0	0.0	0.0
GERMANY	UNITED KINGDOM	5,836	1,079	18%	20,920	19.4	3.6
TURKEY	TURKEY	5,667	4	0%	87	21.8	0.0
GERMANY	ITALY	5,664	1,057	19%	23,475	22.2	4.1
ITALY	GERMANY	5,657	1,162	21%	21,339	18.4	3.8
GERMANY	FRANCE	5,504	884	16%	14,325	16.2	2.6

Source: CFMU ATFM Data

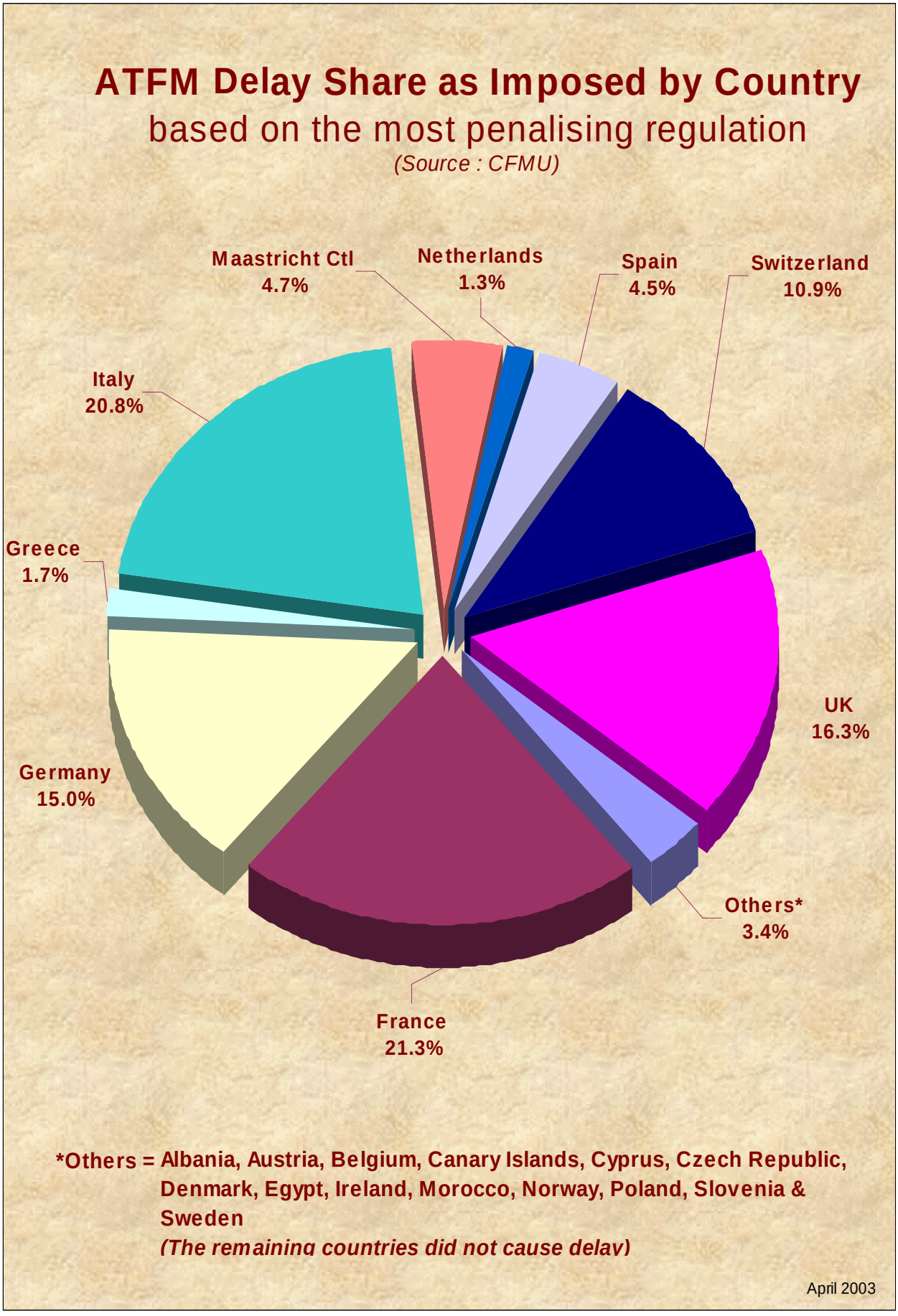
9. Most Penalised Traffic Flows (Country to Country with more than 1,250 flights per month)

Ranked by Average Delay per Movement (ADM)

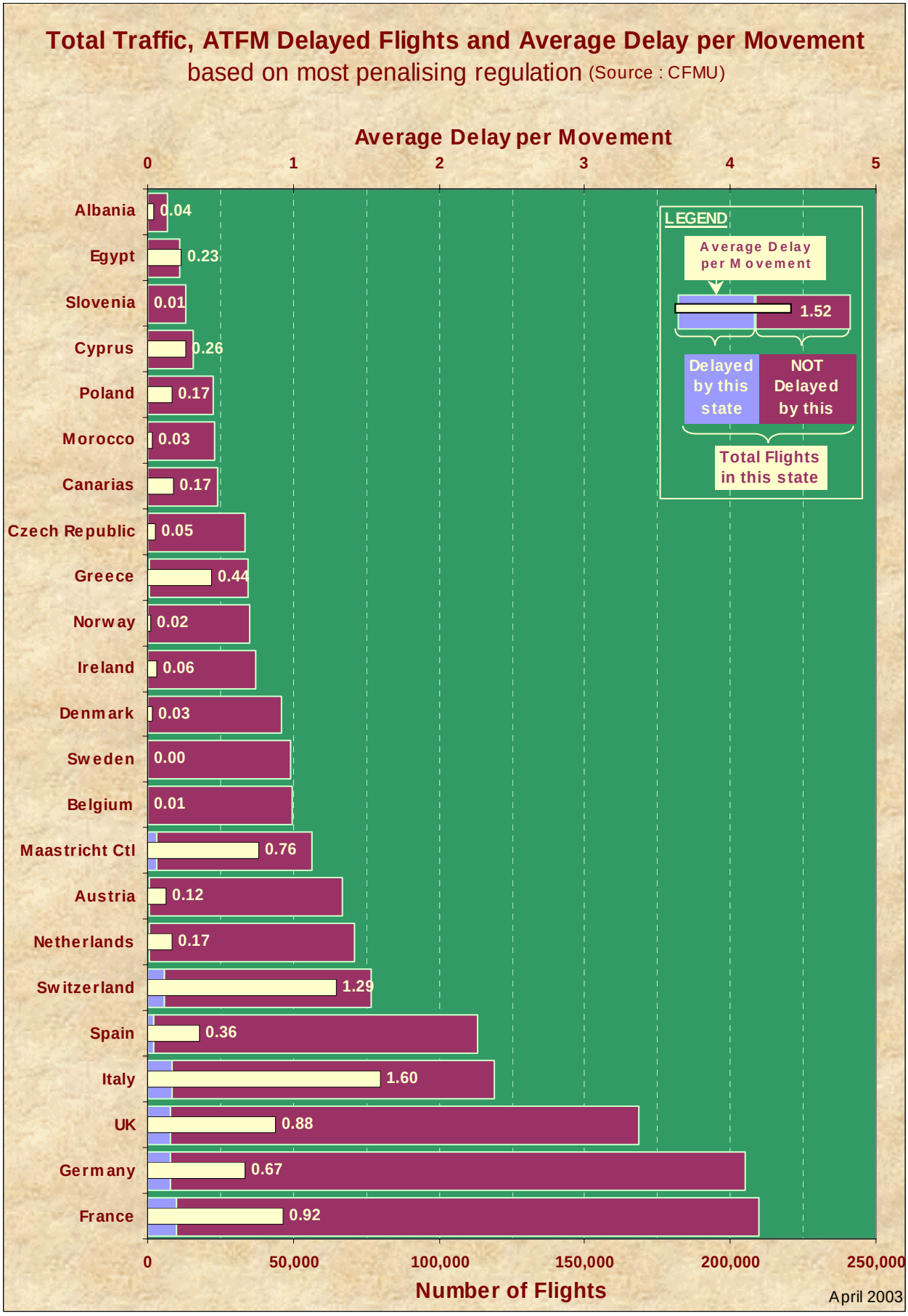
From	To	Total Flights (TTF)	Delayed Flights (TDF)	% of Delayed Flights (PDF)	Total Delay (TDM)	Av.Delay/ Delayed Flt (ADD)	Av. Delay/ Movement (ADM)
ITALY	UNITED KINGDOM	3,456	870	25%	16,631	19.1	4.8
GERMANY	CANARY ISLANDS	1,632	459	28%	7,663	16.7	4.7
SWITZERLAND	ITALY	1,277	254	20%	5,941	23.4	4.7
SPAIN	ITALY	2,468	438	18%	11,412	26.1	4.6
GERMANY	ITALY	5,664	1,057	19%	23,475	22.2	4.1
SWITZERLAND	UNITED KINGDOM	2,158	478	22%	8,643	18.1	4.0
ITALY	GERMANY	5,657	1,162	21%	21,339	18.4	3.8
CANARY ISLANDS	GERMANY	1,656	318	19%	6,127	19.3	3.7
AUSTRIA	GERMANY	3,184	602	19%	11,568	19.2	3.6
GERMANY	UNITED KINGDOM	5,836	1,079	18%	20,920	19.4	3.6
BELGIUM	ITALY	1,388	279	20%	4,934	17.7	3.6
FRANCE	ITALY	4,444	790	18%	15,258	19.3	3.4
SWITZERLAND	GERMANY	3,200	597	19%	10,587	17.7	3.3
ITALY	FRANCE	4,469	826	18%	14,618	17.7	3.3
ITALY	SWITZERLAND	1,279	247	19%	4,180	16.9	3.3
UNITED KINGDOM	ITALY	3,405	594	17%	11,107	18.7	3.3
SPAIN	UNITED KINGDOM	6,031	601	10%	19,313	32.1	3.2
FRANCE	NETHERLANDS	1,425	277	19%	4,521	16.3	3.2
FRANCE	GERMANY	5,491	1,072	20%	17,198	16.0	3.1
GERMANY	SPAIN	5,023	898	18%	15,373	17.1	3.1

Source: CFMU ATFM Data

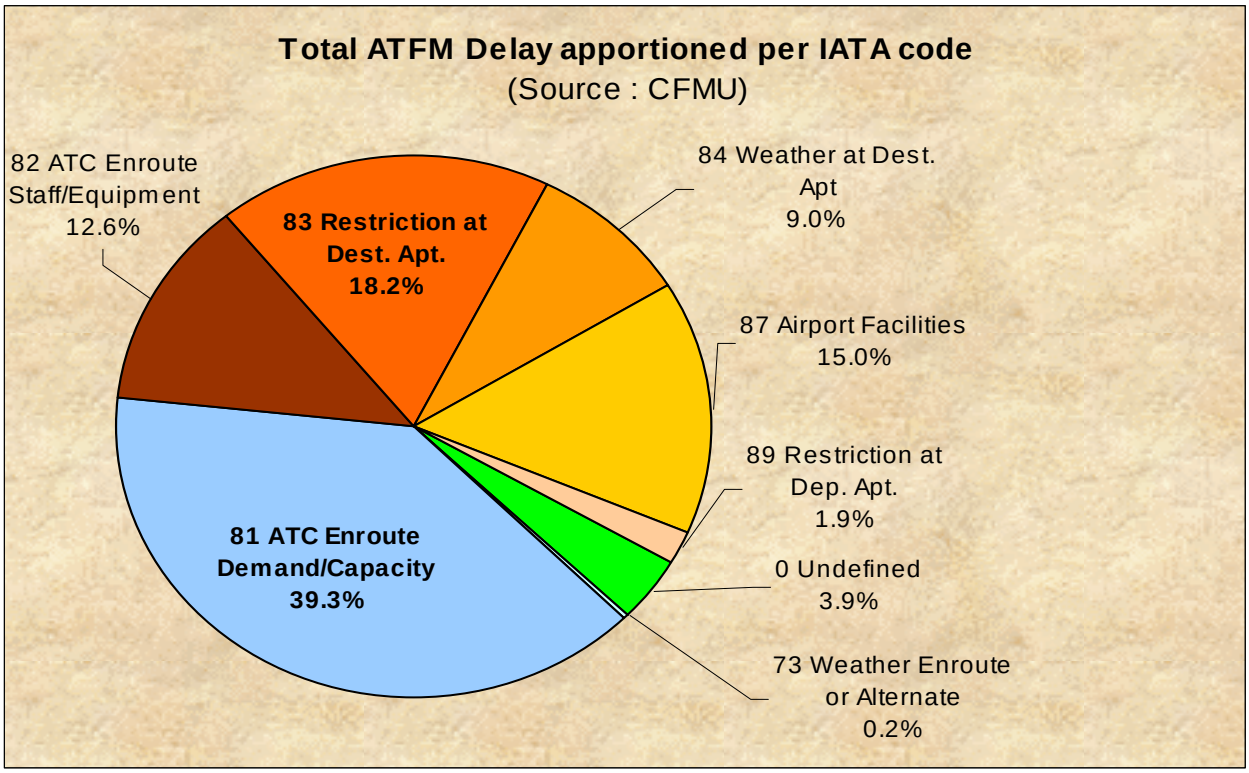
10. Delay Share by Country

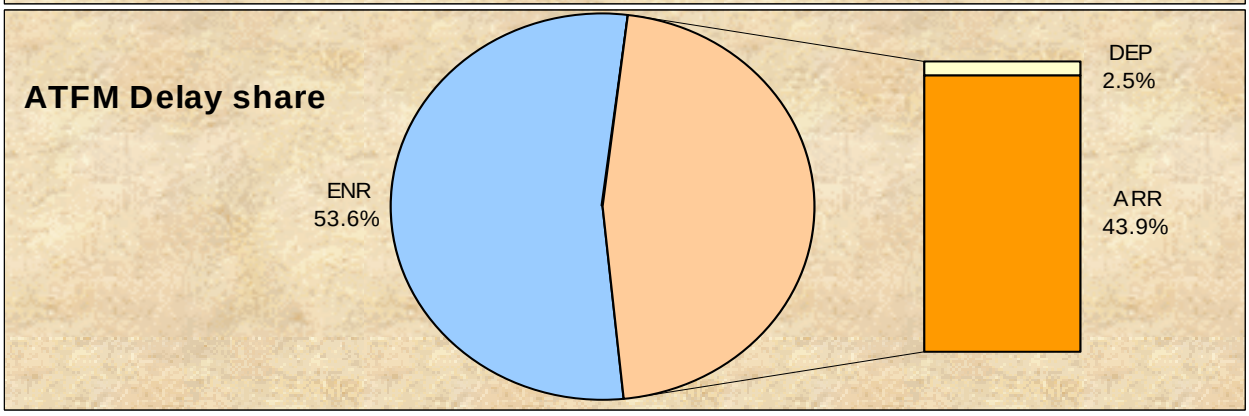


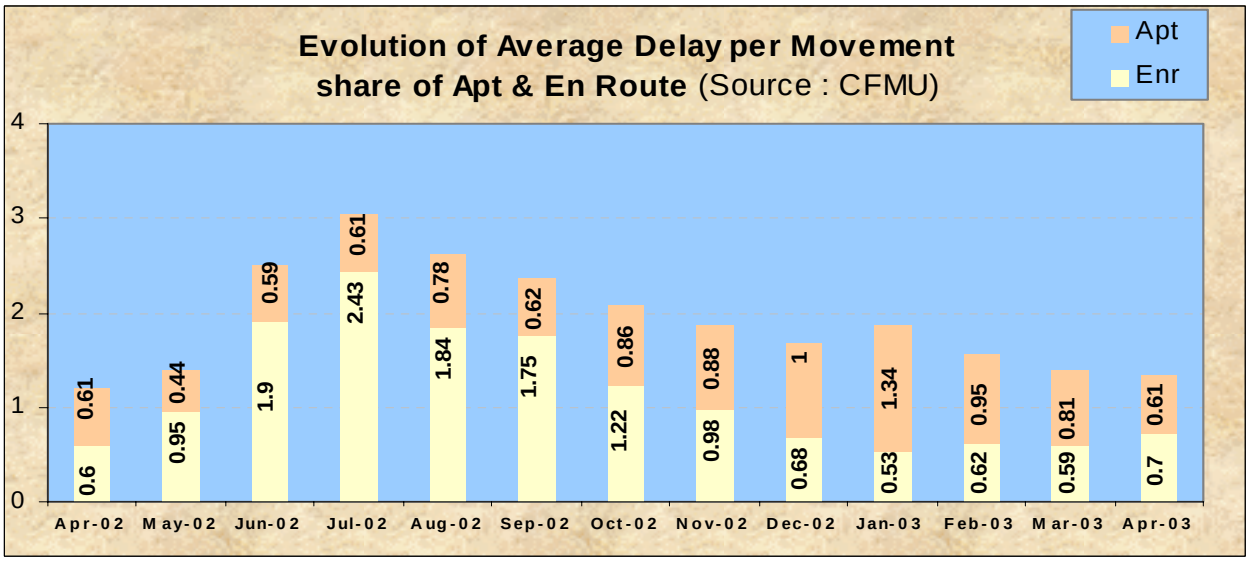
11. Delayed Flights by Country

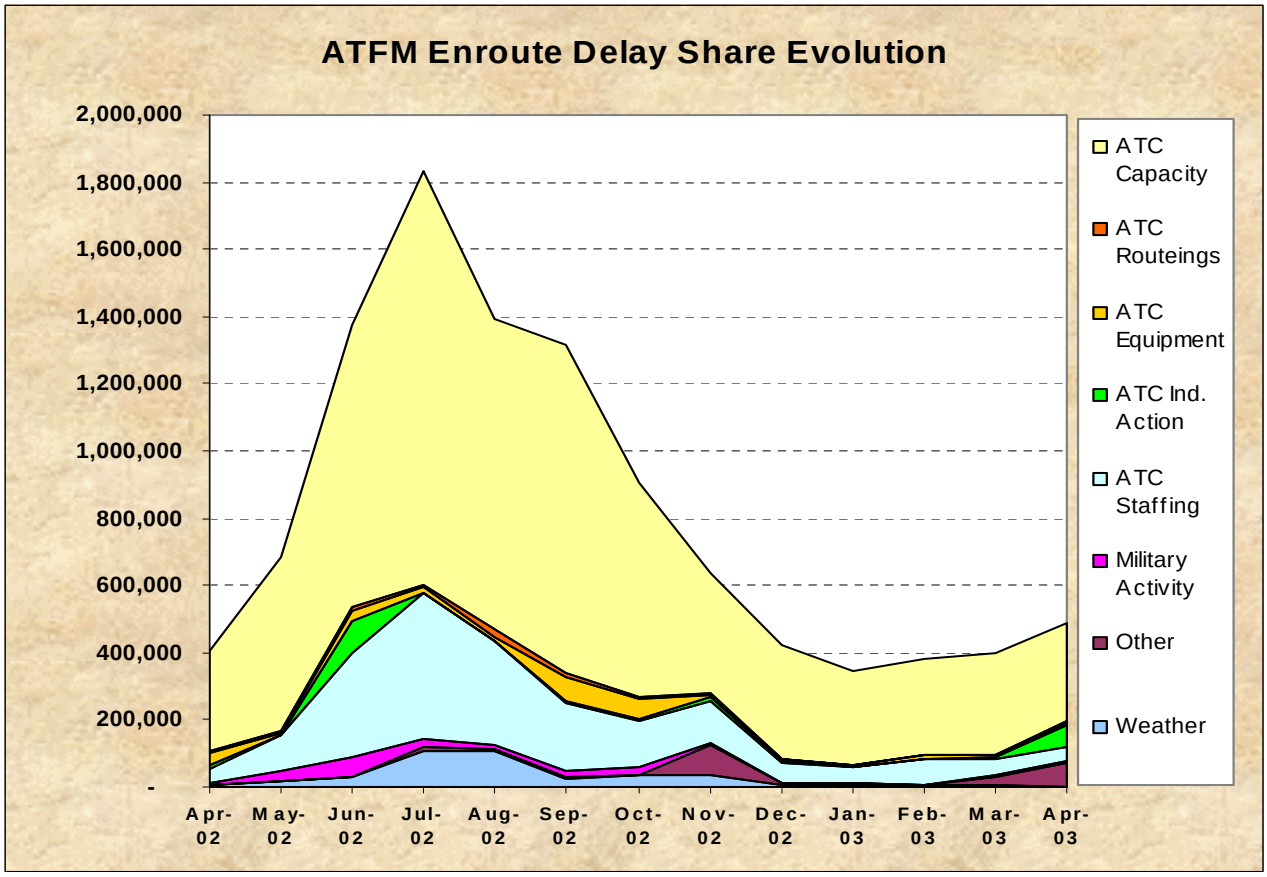


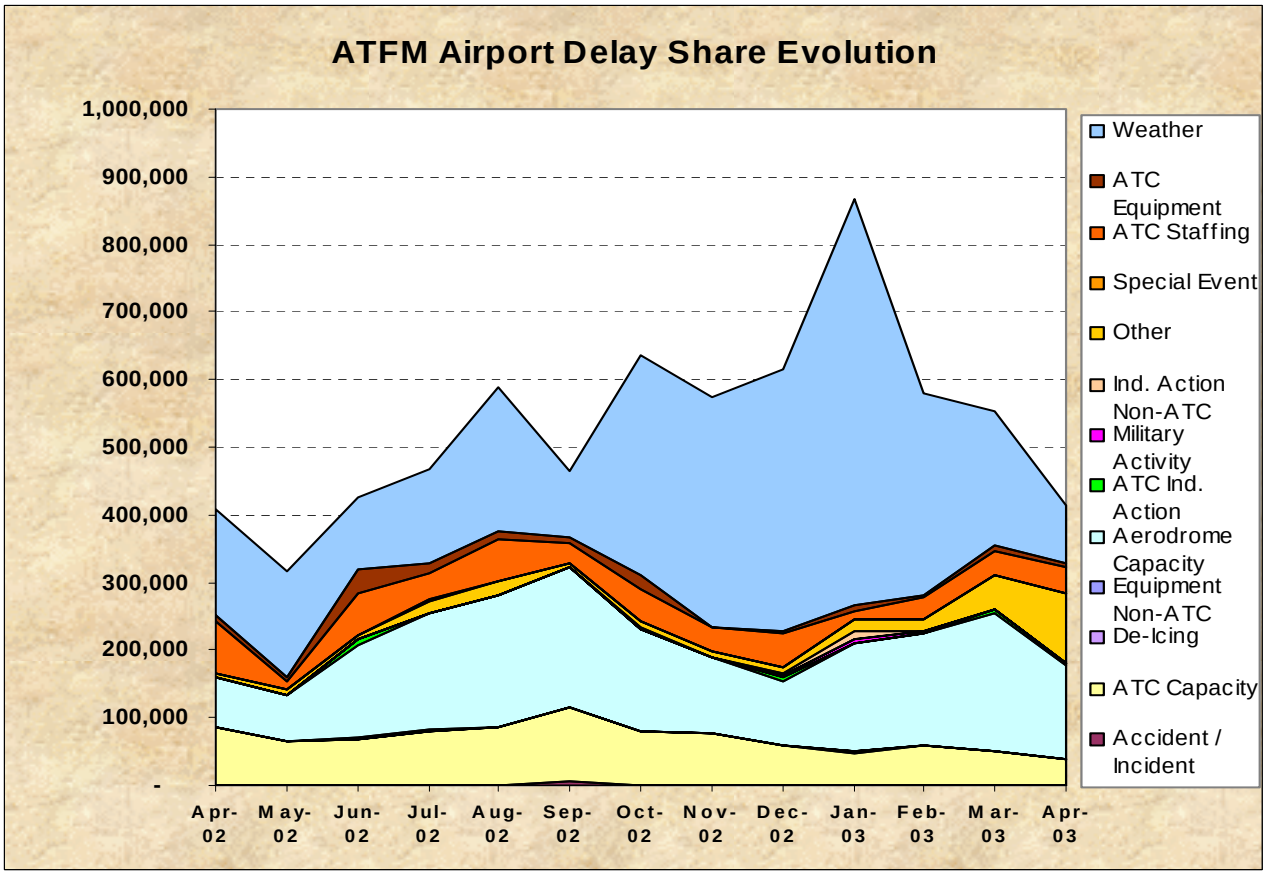
12. Reasons for ATFM Delay



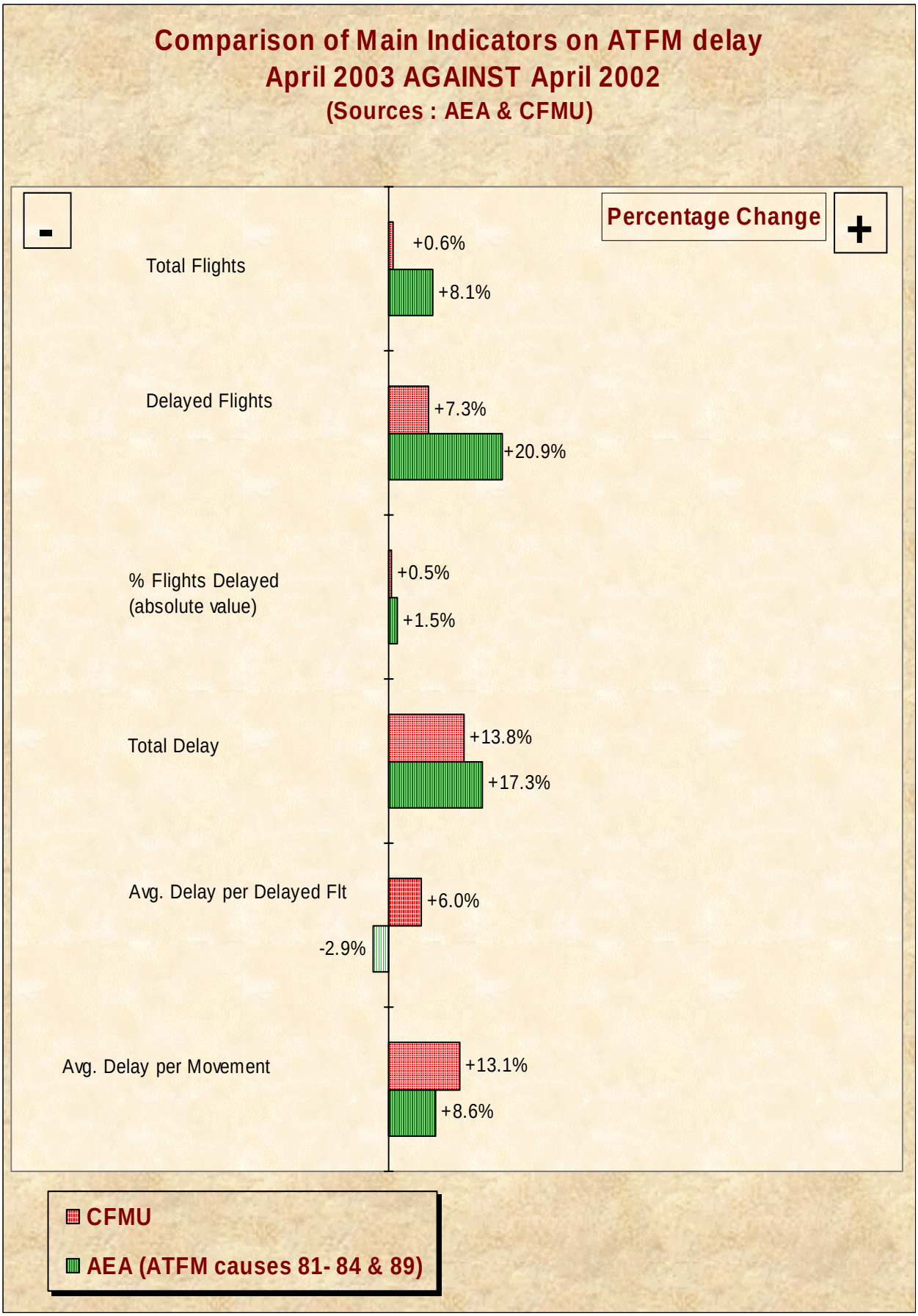


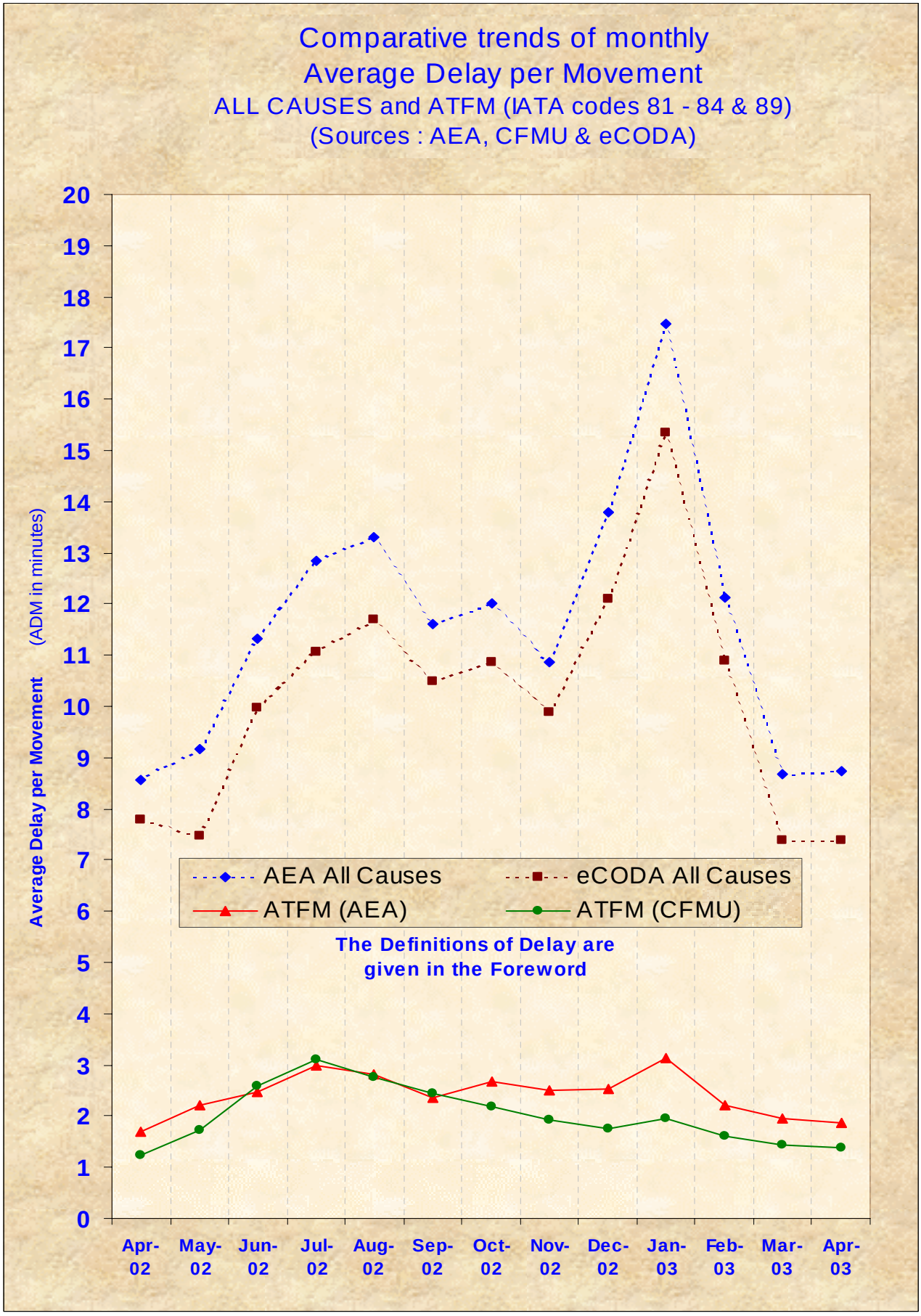



ATFM Enroute Delay Share Evolution
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
-
Apr-02
May-02
Jun-02
Jul-02
Aug-02
Sep-02
Oct-02
Nov-02
Dec-02
Jan-03
Feb-03
Mar-03
Apr-03
ATC Capacity
ATC Routeings
ATC Equipment
ATC Ind. Action
ATC Staffing
Military Activity
Other
Weather

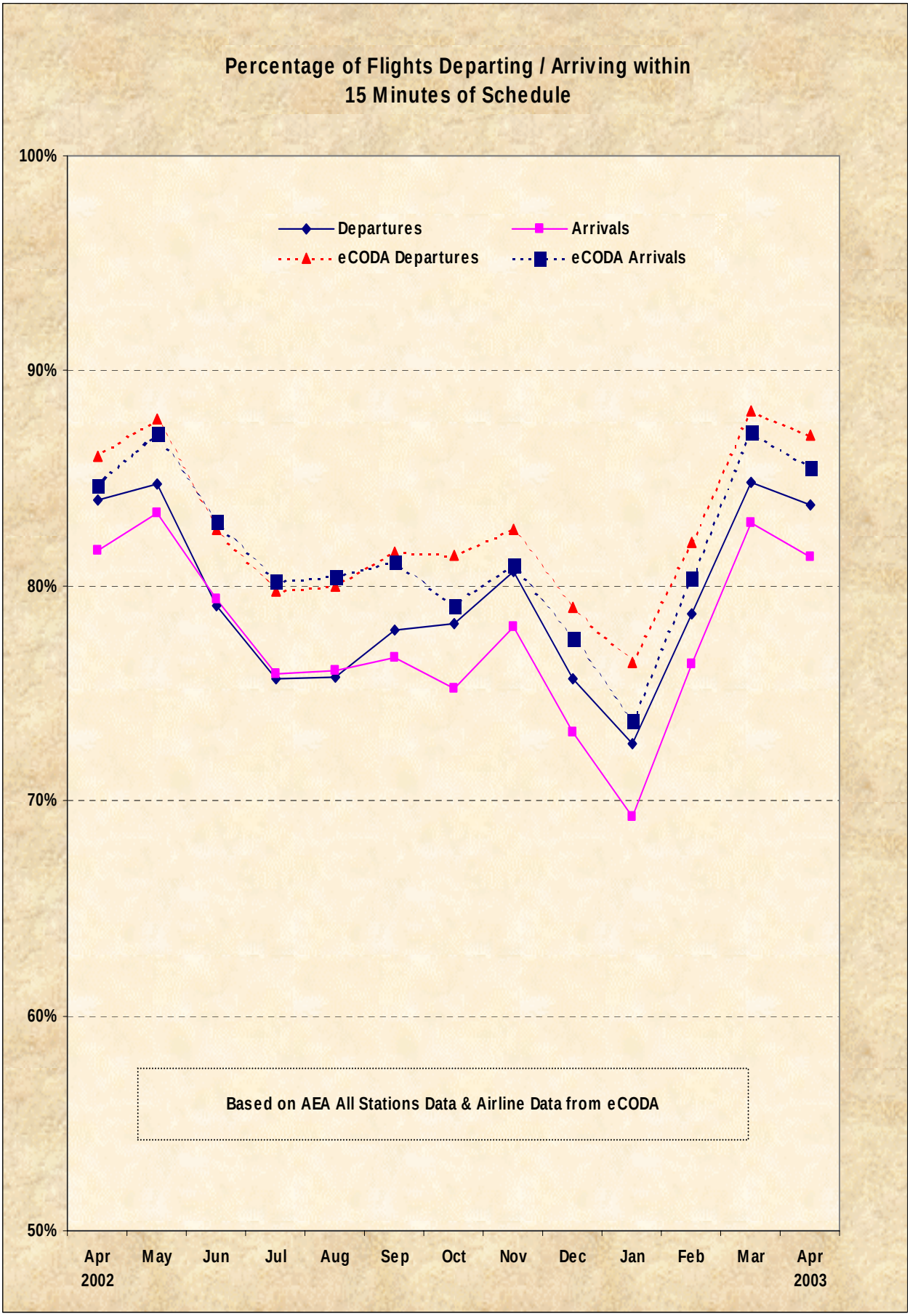

ATFM Airport Delay Share Evolution
1,000,000
900,000
800,000
700,000
600,000
500,000
400,000
300,000
200,000
100,000
-
Apr-02
May-02
Jun-02
Jul-02
Aug-02
Sep-02
Oct-02
Nov-02
Dec-02
Jan-03
Feb-03
Mar-03
Apr-03
Weather
ATC Equipment
ATC Staffing
Special Event
Other
Ind. Action Non-ATC
Military Activity
ATC Ind. Action
Aerodrome Capacity
Equipment Non-ATC
De-Icing
ATC Capacity
Accident / Incident

13. Correlation of the two Data Sources

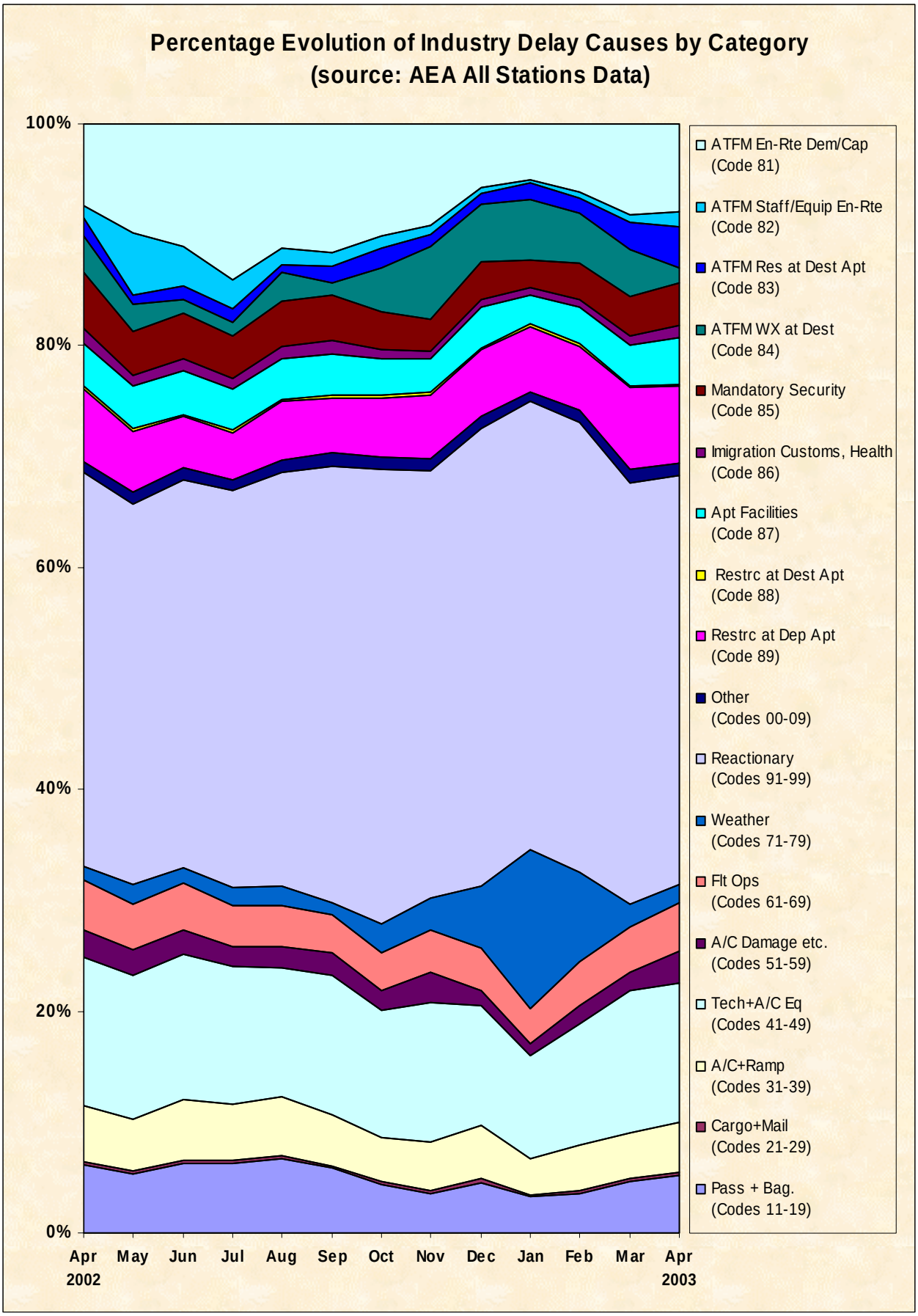



Comparative trends of monthly
Average Delay per Movement
ALL CAUSES and ATFM (IATA codes 81 - 84 & 89)
(Sources : AEA, CFMU & eCODA)
Average Delay per Movement (ADM in minutes)
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
AEA All Causes
eCODA All Causes
ATFM (AEA)
ATFM (CFMU)
The Definitions of Delay are
given in the Foreword
Apr-02
May-02
Jun-02
Jul-02
Aug-02
Sep-02
Oct-02
Nov-02
Dec-02
Jan-03
Feb-03
Mar-03
Apr-03

14. Flights within 15 Minutes of Schedule



15. Consolidated Evolution of Industry Delay Causes by Category



16. Prorated Percentage Evolution of Industry Delay Causes

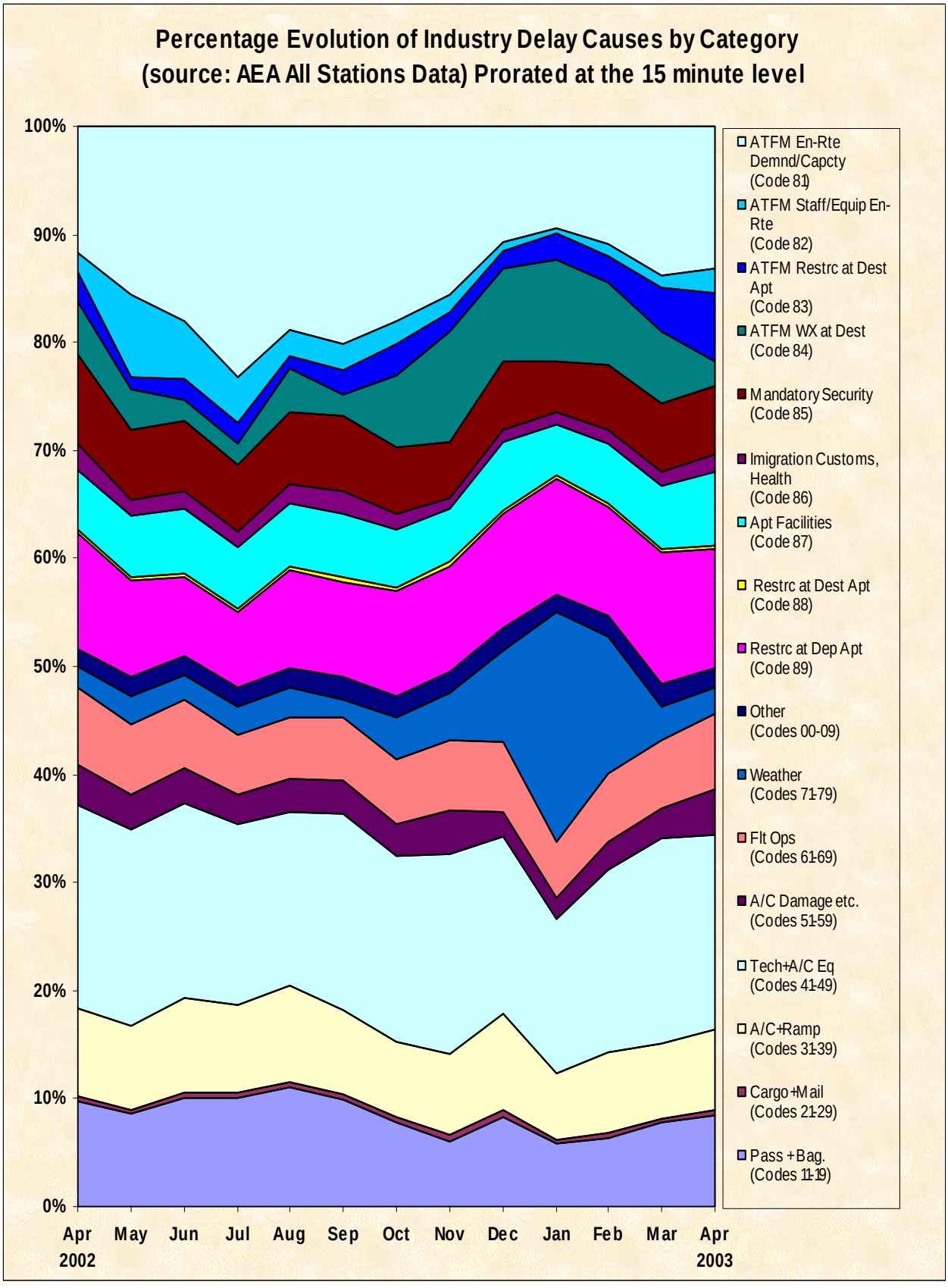


Table of Comparison of Delay (all causes) (Annex 1)

AEA Aggregated Data

	TTF*	TDF	PDF	TDM	ADM	ADD	% > d15 Departures	% > a15 Arrivals
Apr-01	691,844	103541	54.1%	2510807	13.12	24.25	25.0%	26.9%
May-01	752,537	107883	54.1%	2632652	13.20	24.40	25.4%	27.0%
Jun-01	754,315	112905	57.7%	2725860	13.92	24.14	27.2%	26.9%
Jul-01	773,056	116487	57.7%	2912275	14.43	25.00	27.4%	26.3%
Aug-01	777,176	107496	53.3%	2583995	12.81	24.04	23.8%	22.9%
Sep-01	754,408	114827	59.4%	3139759	16.25	27.34	29.8%	29.5%
Oct-01	733,676	87961	47.1%	2052824	10.99	23.34	19.8%	21.5%
Nov-01	627,860	70772	43.5%	1803138	11.08	25.48	19.0%	21.2%
Dec-01	569,860	79350	52.5%	2536812	16.78	31.97	27.5%	30.2%
Jan-02	606,782	71713	47.4%	2218551	14.68	30.94	23.5%	25.3%
Feb-02	576,224	68605	48.7%	1878854	13.35	27.39	23.7%	25.9%
Mar-02	654,994	69678	43.1%	1486155	9.19	21.33	17.1%	18.4%
Apr-02	672,384	67729	41.2%	1407502	8.57	20.78	16.0%	18.3%
May-02	723,329	67571	39.5%	1566614	9.17	23.18	15.3%	16.6%
Jun-02	725,090	80710	48.5%	1886408	11.33	23.37	20.9%	20.6%
Jul-02	760,905	93409	52.5%	2285630	12.85	24.47	24.3%	24.1%
Aug-02	759,141	92447	51.3%	2398151	13.32	25.94	24.3%	23.9%
Sep-02	752,213	86143	50.4%	1983620	11.60	23.03	22.0%	23.4%
Oct-02	741,388	85868	49.0%	2106196	12.01	24.53	21.8%	24.8%
Nov-02	651,894	73172	44.9%	1769417	10.86	24.18	19.3%	21.9%
Dec-02	616,158	78038	49.8%	2163102	13.80	27.72	24.3%	26.8%
Jan-03	642,851	93974	51.7%	3175593	17.48	33.79	27.3%	30.7%
Feb-03	608,815	79808	47.3%	2045190	12.13	25.63	21.3%	23.6%
Mar-03	684,161	73185	39.4%	1610122	8.67	22.00	15.2%	17.1%
Apr-03	676,167	73873	41.6%	1551913	8.75	21.01	16.3%	18.7%

Month on Month Percentage Evolution

	TTF	TDF	PDF**	TDM	ADM	ADD	% > d15** Departures	% > a15** Arrivals
Apr-02	-2.8%	-34.6%	-12.8%	-43.9%	-34.7%	-14.3%	-8.9%	-8.6%
May-02	-3.9%	-37.4%	-14.6%	-40.5%	-30.6%	-5.0%	-10.1%	-10.3%
Jun-02	-3.9%	-28.5%	-9.2%	-30.8%	-18.6%	-3.2%	-6.3%	-6.3%
Jul-02	-1.6%	-19.8%	-5.2%	-21.5%	-10.9%	-2.1%	-3.1%	-2.2%
Aug-02	-2.3%	-14.0%	-1.9%	-7.2%	4.0%	7.9%	0.4%	1.0%
Sep-02	-0.3%	-25.0%	-9.0%	-36.8%	-28.6%	-15.8%	-7.8%	-6.2%
Oct-02	1.1%	-2.4%	1.9%	2.6%	9.3%	5.1%	1.9%	3.3%
Nov-02	3.8%	3.4%	1.4%	-1.9%	-2.0%	-5.1%	0.3%	0.7%
Dec-02	8.1%	-1.7%	-2.7%	-14.7%	-17.8%	-13.3%	-3.2%	-3.4%
Jan-03	5.9%	31.0%	4.3%	43.1%	19.1%	9.2%	3.8%	5.4%
Feb-03	5.7%	16.3%	-1.4%	8.9%	-9.1%	-6.4%	-2.3%	-2.2%
Mar-03	4.5%	5.0%	-3.7%	8.3%	-5.6%	3.1%	-1.9%	-1.3%
Apr-03	0.6%	9.1%	0.4%	10.3%	2.0%	1.1%	0.2%	0.3%

* From CFMU Data

** These are REAL percentage differences (i.e. PDF Jan02 - PDF Jan01)

Definition of CODA Flow Regions (Annex 2)

Glossary of Terms and Abbreviations (Annex 3)

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
CDI	CODA Delay Indicator
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 4)

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 *(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

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 weather[5], 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 5)

CORRELATION BETWEEN IATA DELAY CODES AND THE CFMU REASONS FOR REGULATION

CFMU				IATA	
REASON FOR REGULATION	CODE	REGULATION LOCATION	EXAMPLE	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	D	RWY23 closed due accident	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
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
De-Icing	D	D	De-Icing	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
Equipment non-ATC	E	D	Runway or taxiway lighting failure	87	AIRPORT FACILITIES
		A		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
Military Activity	M	D	Brilliant Invader; ODAX	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		82	ATFM due to ATC STAFF/EQUIPMENT ENROUTE
		A		83	ATFM due to RESTRICTION AT DESTINATION AIRPORT
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
Weather	W	D	Thunderstorm; low visibility; X winds	89	RESTRICTIONS AT AIRPORT OF DEPARTURE
		E		73	WEATHER EN ROUTE OR ALTERNATE
		A		84	ATFM due to WEATHER AT DESTINATION
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