Annual ATFM delay report 2013

Air Traffic Flow Management Delay (ATFM)
ATFM measures in Europe
(Data Source: CFMU statistics)

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
<th>Trend 12/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Flights</td>
<td>9,568,399</td>
<td>9,672,217</td>
<td>-1,1%</td>
</tr>
<tr>
<td>Regulated Flights</td>
<td>721,704</td>
<td>904,635</td>
<td>-20,2%</td>
</tr>
<tr>
<td>Delayed Flights</td>
<td>428,574</td>
<td>539,235</td>
<td>-20,5%</td>
</tr>
</tbody>
</table>

**Total Flights**
Number of flight plans having been activated in the EUROCONTROL CFMU TACT-System.

**Regulated Flights**
Number of flights / percentage of flights with SLOT allocation (with & without delay).

**Delayed Flights**
Number of flights / percentage of flights subject to delays due to ATFM measures.

**Trend Column**
The percentages show the changes compared to the corresponding period last year.

ATFM-Delay per flight
(Data Source: CFMU statistics)

Average ATFM delay per flight in minutes attributable to national FMPs.

*caused by ATC
(source: DFS CC/FC, based on FMP reports)
ATFM Delay as a result of ATFM measures
(Data Source: CFMU statistics)

ATFM Delay in minutes as a result of ATFM measures of selected European FMPs.

ATFM Delay:
difference in time between estimated take-off time (ETOT) and calculated take-off time (CTOT) of the CFMU.

Percentage of German FMPs: 1,077,839 = 12.3% minutes of total delay of minutes 8,772,688

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Percentage of German "ATFM delay" attributable to different FMPs
(Data Source: DFS CC-FC, based on FMP reports)

- FMP München: 13.2%
- FMP Bremen: 9.1%
- FMP Langen: 51.3%
- FMP Karlsruhe: 26.4%
FMP
Langen

- Environmental Issues 2.7%
- Other 0.8%
- Special Event ATC 0.6%
- Weather 38.8%
- Equipment non ATC 0.3%
- Aerodrome Capacity 10.0%

ATC Capacity 17.6%
ATC Staffing 23.0%
ATC Equipment 6.2%

FMP
München

- Other 0.1%
- Special Event ATC 2.5%
- Weather 91.4%

ATC Capacity 4.5%
ATC Staffing 0.4%
Aerodrome Capacity 1.0%

FMP
Bremen

- Other 0.1%
- Weather 59.3%

ATC Capacity 9.0%
ATC Staffing 23.8%
ATC Equipment 1.8%
Aerodrome Capacity 4.0%
Ind. Action non ATC 0.4%
Special Event 0.6%
Airspace Management 0.3%
Accident / Incident 0.7%
FMP Karlsruhe

Development and share of "ATFM delays" attributable to German FMPs
(Data Source: CFMU statistics)

ATFM delay (in thousand minutes) and percentages of ATFM delays attributable to ATFM measures taken by German FMPs.

<table>
<thead>
<tr>
<th>Year</th>
<th>ATFM Delay (thousand minutes)</th>
<th>Percentage of ATFM Delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>14.928</td>
<td>11.5%</td>
</tr>
<tr>
<td>2005</td>
<td>17.552</td>
<td>9.0%</td>
</tr>
<tr>
<td>2006</td>
<td>18.352</td>
<td>9.5%</td>
</tr>
<tr>
<td>2007</td>
<td>21.544</td>
<td>10.2%</td>
</tr>
<tr>
<td>2008</td>
<td>23.049</td>
<td>15.7%</td>
</tr>
<tr>
<td>2009</td>
<td>15.218</td>
<td>21.2%</td>
</tr>
<tr>
<td>2010</td>
<td>27.673</td>
<td>20.6%</td>
</tr>
<tr>
<td>2011</td>
<td>17.835</td>
<td>23.4%</td>
</tr>
<tr>
<td>2012</td>
<td>10.772</td>
<td>20.5%</td>
</tr>
<tr>
<td>2013</td>
<td>8.773</td>
<td>12.3%</td>
</tr>
</tbody>
</table>
ATFM departure delay at international German airports
(Data Source: CFMU statistics)

Average ATFM delays in minutes for departures from international German airports following ATFM measures of European FMPs.

German airports:
11.5% = 1.012.103 minutes of total delay of 8.772.688 minutes

ATFM departure delays at international German airports
(Data Source: CFMU statistics)

Percentage of ATFM delays for flights departing from international German airports attributable to ATFM measures of German FMPs in categories. The delays are distributed in 3 categories.

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ATFM Arrival Delay
(Data Source: CFMU statistics, DFS LIZ)

ATFM Arrival Delay with reference to the relevant Airport, in minutes per IFR Arrival.

ATFM Arrival Delay:
sum of all arrival ATFM delay divided by the sum of all inbound flights for the particular traffic volume

<table>
<thead>
<tr>
<th>Airport</th>
<th>non ATC</th>
<th>ATC</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Airports*</td>
<td>0.3972</td>
<td>0.0162</td>
</tr>
<tr>
<td>EDDF</td>
<td>0.7772</td>
<td>0.0499</td>
</tr>
<tr>
<td>EDDM</td>
<td>0.4516</td>
<td>0.0025</td>
</tr>
<tr>
<td>EDDL</td>
<td>0.5318</td>
<td>0.0015</td>
</tr>
<tr>
<td>EDDT</td>
<td>0.5077</td>
<td>0.0015</td>
</tr>
<tr>
<td>EDDH</td>
<td>0.1826</td>
<td>0.0480</td>
</tr>
<tr>
<td>EDDK</td>
<td>0.0061</td>
<td>0.0000</td>
</tr>
<tr>
<td>EDDS</td>
<td>0.0110</td>
<td>0.0000</td>
</tr>
<tr>
<td>EDDP</td>
<td>0.0134</td>
<td>0.0000</td>
</tr>
<tr>
<td>EDDN</td>
<td>0.0013</td>
<td>0.0000</td>
</tr>
<tr>
<td>EDDW</td>
<td>0.0037</td>
<td>0.0000</td>
</tr>
<tr>
<td>EDDC</td>
<td>0.0160</td>
<td>0.0000</td>
</tr>
<tr>
<td>Münster-Osnabrück (EDDM)</td>
<td>0.0042</td>
<td></td>
</tr>
</tbody>
</table>

* All Airports means all international German Airports

Berlin Schönefeld (EDDB), Berlin Tegel (EDDT), Bremen (EDDB), Dresden (EDDL), Erfurt (EDDE), Frankfurt (EDDF), Hamburg (EDDH), Hannover (EDDV), Köln/Bonn (EDDK), Leipzig (EDDP), München (EDDM), Münster-Osnabrück (EDDG), Nürnberg (EDDN), Saarbrücken (EDDR), Stuttgart (EDDS)

Please note: The ATFM Delay data are provided by CFMU statistics. Due to internal distribution of the ATFM Delay, data are modified by CC/FC and TWR/M. The inbound flight information is based on LIZ statistics.