

PERFORMANCE REPORT 2015 - 2019

CAPACITY August 2018





















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Description & Analysis

Europe

Traffic in August 2018 increased by 3.5% compared to August 2017 and was in line with the high forecast. There were 36.966 flights on 31 August, which was a record for the network. Ten states added more than 50 flights per day to the European local traffic growth. Germany was the top contributor with 273 extra flights per day owing to a strong internal flow (+42 flights/day) but also to its Southern Europe flow (mainly to and from Turkey, Spain and Greece) which added 123 daily flights. Greece ranked second with 205 flights per day owing to its internal flow (+41 flights/day) and to its flow to and from Northern Europe (mainly Germany, Poland and UK adding together 67 daily flights). Poland was the third contributor with 164 extra daily flights, a 17.5% increase of its international arrival and departure flow thanks to strong growth of the flows to and from Turkey (+22 flights/day), Greece (+18 flights/day), Germany (+14 flights/day) and Ukraine (+12 flights/day). Italy added 130 flights per day due primarily to its flows to and from the Russian Federation (+21 flights/day), Austria (+15 flights/day), Spain (+14 flights/day) and France (+13 flights/day). At the other end of the scale, only two states recorded fewer daily flights: Sweden (-38 flights/day) and UK (-35 flights/day) due to their weak internal flow.

The charter segment continued to record the fastest growth (10.6%). The traditional scheduled segment was up 5.1%, stable since June. The low-cost segment recorded an increase of 1.7%. The business aviation segment saw an increase of 0.1%. The all-cargo segment slowed down and declined by 8.3%.

The top five external partners in average daily flights on flows in both directions were the Russian Federation (1,228 flights, up 7.7%), the United States (1,144 flights, down 2.2%), the United Arab Emirates (371 flights, up 9.4%), Egypt (286 flights, up 33%) and Canada (246 flights, up 0.2%). In addition, to be noted was the continued recovery of flows to and from Tunisia which were up by 25.6%, 230 daily flights. The airlines which added the most flights to the European network on a daily basis were easyJet UK (+196 flights), Lufthansa (+107 flights), Wizz Air (+92 flights), Ryanair (+78 flights), Jet2 (+64 flights) and LOT (+60 flights).

The average en-route ATFM delay per flight in the NM area in August was 2.87 min/flt, which is well above the corresponding monthly guideline value of 0.84 min/flt. The average YTD en-route ATFM delay per flight in 2018 in the NM area is 2.04 min/flt, which is more than three times the corresponding guideline value of 0.57 min/flt. (Source: NM).

FABEC

In the FABEC area, traffic increased by 3.0% in August 2018 compared to the same month in 2017. This traffic growth remains significantly above the STATFOR baseline scenario published in March 2015. The landings in the FABEC area (only the airports included in the performance plan) recorded an increase by 2.3%. The 2018 YTD arrival traffic evolution is now 1.0% higher than in 2017. DFS continued to record a sustained increase of landings (+4.2%), like DSNA (+1.7%), skyguide (+1.5%) and Belgocontrol (+1.0%); only LVNL recorded a decrease this month (-2.2%). The units with the highest ATFM en-route delay in August 2018 are Marseille (488 208 min.), Karlsruhe (485 889 min.), Reims (163 505 min.), Maastricht (162 110 min.) and Brest (122 234 min.). In Marseille, delays were due to 'Staffing' (57%), 'Weather' (33%) and 'ATC-Capacity' (10%). In Karlsruhe, delays were due to 'ATC-Capacity' (46%), 'Weather' (30%), 'Staffing' (13%), 'Airspace Management' (9%) and 'Technical' (1%); in Reims, 'ATC-Capacity' (45%), 'Staffing' (29%), 'Weather' (25%) and 'Airspace Management' (1%); in Maastricht, 'Staffing' (39%), 'Weather' (35%), 'ATC-Capacity' (23%), 'Airspace Management' (3%) and 'Other' (1%); in Brest, 'ATC-Capacity' (44%), 'Staffing' (37%), 'Weather' (18%) and 'Other' (1%).

Langen also induced significant delays in August 2018, but at a lower level; Langen (60 604 min.; 42% due to 'ATC-Capacity', 38% 'Weather', 20% 'Staffing').

The en-route ATFM delay per flight all causes reached 3.13 min/flt in August 2018 compared to 1.81 min/flt in 2017. The YTD en-route ATFM delay per flight shows a deterioration compared to last year (2.55 min/flt vs. 1.23 min/flt in 2017). This result is far above the YTD guideline value (0.48 min/flt). The YTD en-route ATFM delay CRSTMP causes reaches 1.53 min/flt. This corresponds to a performance drop compared to last year (0.77 min/flt); this value is, as well, far above the guideline value estimated at the end of August (0.36 min/flt). The Arrival ATFM delay per arrival movement all causes decreased in August from 0.82 min/flt in 2017 to 0.62 min/flt in 2018 (a performance improvement by 24%). The arrival ATFM delay per arrival flight CRSTMP causes slightly increased from 0.09 min/flt in 2017 to 0.12 min/flt at the end of August 2018, which represents a significant performance deterioration of 33%.

The airports with the highest ATFM delay in August 2018 – more than 10% of the total FABEC arrival delay – were Amsterdam/EHAM (47 796 min.), Zurich/LSZH (31 505 min.) and Frankfurt/EDDF (15 688 min.). In Amsterdam, delays were due to 'Aerodrome capacity' (45%), 'Technical' (33%); 'Weather' (22%) and 'ATC-Capacity' (1%); in Zurich, delays were due to 'Weather' (54%), 'Aerodrome capacity' (22%), 'Environment' (12%), 'ATC-Capacity' (9%), 'Airspace Management' (1%), 'Staffing' (1%); in Frankfurt, 'Weather' (100%).

On the one hand, after the first 8 months in 2018, apart from LVNL, no other FABEC members are achieving their respective CRSTMP en-route ATFM delay per flight target. On the other hand, all FABEC members are currently achieving their respective CRSTMP arrival ATFM delay per arrival flight target.

P.S.: In the context of the "post-ops performance adjustment process", delays figures for all ANSPs are not consolidated yet.















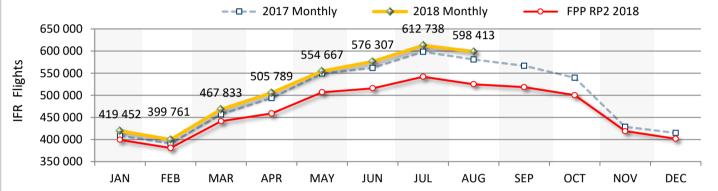




FABEC TRAFFIC DEVELOPMENT (en-route)

| FABEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| 2017 Monthly | 408 380 | 390 913 | 456 579 | 493 697 | 549 331 | 561 854 | 598 206 | 580 758 | 566 817 | 539 790 | 428 731 | 414 723 | 4 039 718 |
| 2018 Monthly | 419 452 | 399 761 | 467 833 | 505 789 | 554 667 | 576 307 | 612 738 | 598 413 | | | | | 4 134 960 |
| Growth (%) | 2.7 % | 2.3 % | 2.5 % | 2.4 % | 1.0 % | 2.6 % | 2.4 % | 3.0 % | | | | | 2.4 % |
| FPP RP2 2018 | 399 183 | 380 820 | 441 248 | 458 778 | 506 547 | 515 400 | 541 767 | 524 918 | 518 262 | 500 254 | 419 096 | 401 552 | 3 768 661 |
| 2018 / RP2 (%) - Monthly | 5.1 % | 5.0 % | 6.0 % | 10.2 % | 9.5 % | 11.8 % | 13.1 % | 14.0 % | | | | | |
| 2018 / RP2 (%) - Cumulated | | 5.0 % | 5.4 % | 6.7 % | 7.4 % | 8.2 % | 9.0 % | 9.7 % | | | | | |

2017 Monthly and 2018 Monthly values represent actual movements (*source: PRU*). RP2 2017 represents the traffic forecast (STATFOR low-growth 02/2015) underpinning the FABEC Performance Plan, split into monthly values on the basis of a FABEC consolidated methodology.



| Ī | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | ОСТ | NOV | DEC | YTD |
|-------------------|---------|----------------|---------|----------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| | UAIT | , 20 | WIN | AL IX | | Belgod | | | JLI | 301 | 1404 | DEG | 110 |
| 2017 Monthly | 43 381 | 40 904 | 49 093 | 51 528 | 57 327 | 58 122 | 60 679 | 58 562 | 58 651 | 57 821 | 47 761 | 44 876 | 419 596 |
| 2018 Monthly | 44 799 | 42 925 | 50 291 | 54 227 | 58 665 | 60 373 | 63 079 | 61 076 | 30 001 | 37 021 | 47 701 | 44 070 | 435 435 |
| Growth (%) | 3.3 % | 4.9 % | 2.4 % | 5.2 % | 2.3 % | 3.9 % | 4.0 % | 4.3 % | | | | | 3.8 % |
| Growiii (76) | 3.5 /6 | 4.3 /6 | 2.4 /0 | J.Z /8 | 2.5 /6 | DF | | 4.5 /6 | | | | | 3.0 /6 |
| 2017 Monthly | 207 690 | 197 449 | 232 389 | 243 825 | 273 488 | 277 744 | 291 083 | 283 588 | 283 914 | 274 704 | 220 629 | 207 969 | 2 007 256 |
| 2018 Monthly | 212 646 | 203 601 | 238 141 | 252 738 | 281 336 | 287 853 | 301 595 | 295 747 | 200 0 | 2 | 220 020 | 20. 000 | 2 073 657 |
| Growth (%) | 2.4 % | 3.1 % | 2.5 % | 3.7 % | 2.9 % | 3.6 % | 3.6 % | 4.3 % | | | | | 3.3 % |
| G. G. II. I. (70) | 2 , | 5 11 70 | 2.0 70 | 5 11 /0 | 2.0 /0 | DS | | /0 | | | | | 0.0 70 |
| 2017 Monthly | 206 853 | 198 320 | 230 645 | 264 980 | 293 336 | 305 789 | 332 010 | 319 032 | 305 158 | 284 474 | 216 125 | 216 341 | 2 150 965 |
| 2018 Monthly | 213 336 | 202 724 | 240 485 | 267 871 | 294 486 | 312 448 | 337 798 | 325 708 | 000 .00 | 201111 | 2.0.20 | 2.00 | 2 194 856 |
| Growth (%) | 3.1 % | 2.2 % | 4.3 % | 1.1 % | 0.4 % | 2.2 % | 1.7 % | 2.1 % | | | | | 2.0 % |
| Growar (70) | 011 70 | 2.2 /0 | 4.0 70 | 111 70 | 0.4 70 | LV | | 211 70 | | | | | 2.0 /0 |
| 2017 Monthly | 44 846 | 42 754 | 51 005 | 52 668 | 57 993 | 56 076 | 58 322 | 58 134 | 56 108 | 56 514 | 48 109 | 44 817 | 421 798 |
| 2018 Monthly | 46 296 | 44 327 | 50 909 | 53 087 | 58 004 | 57 003 | 59 115 | 58 614 | 30 100 | 30 314 | 40 103 | 44 017 | 427 355 |
| Growth (%) | 3.2 % | 3.7 % | -0.2 % | 0.8 % | 0.0 % | 1.7 % | 1.4 % | 0.8 % | | | | | 1.3 % |
| Growur (76) | 3.2 /0 | 3.1 /8 | -0.2 /6 | 0.0 /8 | 0.0 /8 | MU | | 0.0 /8 | | | | | 1.5 /6 |
| 2017 Monthly | 133 477 | 125 041 | 145 379 | 152 421 | 168 532 | 168 567 | 176 304 | 172 076 | 169 510 | 166 100 | 137 467 | 133 707 | 1 241 797 |
| 2018 Monthly | 135 713 | 126 950 | 147 139 | 154 380 | 171 373 | 171 559 | 179 214 | 175 989 | 109 310 | 100 100 | 137 407 | 133 707 | 1 262 317 |
| Growth (%) | 1.7 % | 1.5 % | 1.2 % | 1.3 % | 1.7 % | 1.8 % | 1.7 % | 2.3 % | | | | | 1.7 % |
| Growin (%) | 1.7 70 | 1.5 % | 1.2 70 | 1.3 % | 1.7 70 | | | 2.3 % | | | | | 1.7 70 |
| 2017 Monthly | 02.424 | 00.005 | 04.044 | 102.124 | 442.440 | skyg | | 120 501 | 110.050 | 442.720 | 05.540 | 05.005 | 020 425 |
| 2017 Monthly | 83 431 | 80 925 | 94 941 | 102 124 | 113 118 | 117 991 | 125 394 | 120 501 | 119 052 | 113 726 | 85 542 | 85 865 | 838 425 |
| 2018 Monthly | 86 394 | 82 941 | 97 689 | 107 085 | 118 537 | 125 433 | 132 695 | 129 467 | | | | | 880 241 |
| Growth (%) | 3.6 % | 2.5 % | 2.9 % | 4.9 % | 4.8 % | 6.3 % | 5.8 % | 7.4 % | | | | | 5.0 % |



















FABEC TRAFFIC DEVELOPMENT (arrival)

| FABEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| 2017 Monthly | 186 527 | 179 218 | 208 258 | 215 117 | 236 161 | 235 319 | 244 758 | 235 151 | 237 682 | 231 904 | 194 055 | 185 340 | 1 740 509 |
| 2018 Monthly | 189 660 | 180 419 | 209 287 | 217 664 | 233 911 | 237 622 | 248 909 | 240 578 | | | | | 1 758 050 |
| Growth (%) | 1.7 % | 0.7 % | 0.5 % | 1.2 % | -1.0 % | 1.0 % | 1.7 % | 2.3 % | | | | | 1.0 % |

2017 Monthly and 2018 Monthly values represent actual arrivals (source: PRU).



| | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | YTD |
|--------------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| | | | | | | ANA | LUX | | | | | | |
| 2017 Monthly | 2 472 | 2 370 | 2 814 | 2 999 | 3 253 | 3 235 | 3 193 | 2 979 | 3 165 | 3 218 | 2 919 | 2 751 | 23 315 |
| 2018 Monthly | 2 788 | 2 607 | 3 008 | 3 249 | 3 389 | 3 414 | 3 313 | 3 129 | | | | | 24 897 |
| Growth (%) | 12.8 % | 10.0 % | 6.9 % | 8.3 % | 4.2 % | 5.5 % | 3.8 % | 5.0 % | | | | | 6.8 % |

| | | | | | L | Belgoc | ontrol | | | | | | <u> </u> |
|--------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|----------|
| 2017 Monthly | 9 664 | 9 257 | 10 879 | 10 825 | 12 073 | 11 919 | 12 327 | 11 932 | 11 997 | 11 704 | 10 442 | 9 580 | 88 876 |
| 2018 Monthly | 9 676 | 9 263 | 10 646 | 11 094 | 11 701 | 11 711 | 12 477 | 12 046 | | | | | 88 614 |
| Growth (%) | 0.1 % | 0.1 % | -2.1 % | 2.5 % | -3.1 % | -1.7 % | 1.2 % | 1.0 % | | | | | -0.3 % |

| | | | | | | DF | S | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 2017 Monthly | 73 702 | 71 414 | 82 929 | 83 838 | 93 496 | 92 780 | 95 300 | 93 225 | 95 491 | 94 191 | 78 002 | 71 138 | 686 684 |
| 2018 Monthly | 73 971 | 72 422 | 83 650 | 86 752 | 94 000 | 94 769 | 98 092 | 97 183 | | | | | 700 839 |
| Growth (%) | 0.4 % | 1.4 % | 0.9 % | 3.5 % | 0.5 % | 2.1 % | 2.9 % | 4.2 % | | | | | 2.1 % |

| | | | | | | DSI | VA | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 2017 Monthly | 64 571 | 62 544 | 72 516 | 77 402 | 84 466 | 85 445 | 90 066 | 83 514 | 84 712 | 80 418 | 66 728 | 65 988 | 620 524 |
| 2018 Monthly | 66 247 | 61 688 | 72 535 | 76 311 | 82 339 | 85 816 | 91 320 | 84 966 | | | | | 621 222 |
| Growth (%) | 2.6 % | -1.4 % | 0.0 % | -1.4 % | -2.5 % | 0.4 % | 1.4 % | 1.7 % | | | | | 0.1 % |

| | | | | | | LVI | VL | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 2017 Monthly | 18 164 | 17 140 | 20 193 | 21 439 | 23 272 | 22 573 | 23 770 | 23 847 | 22 658 | 22 915 | 19 494 | 18 675 | 170 398 |
| 2018 Monthly | 18 970 | 17 932 | 20 586 | 21 404 | 22 907 | 22 339 | 23 347 | 23 315 | | | | | 170 800 |
| Growth (%) | 4.4 % | 4.6 % | 1.9 % | -0.2 % | -1.6 % | -1.0 % | -1.8 % | -2.2 % | | | | | 0.2 % |

| | | | | | | skyg | uide | | | | | | |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 2017 Monthly | 17 954 | 16 493 | 18 927 | 18 614 | 19 601 | 19 367 | 20 102 | 19 654 | 19 659 | 19 458 | 16 470 | 17 208 | 150 712 |
| 2018 Monthly | 18 008 | 16 507 | 18 862 | 18 854 | 19 575 | 19 573 | 20 360 | 19 939 | | | | | 151 678 |
| Growth (%) | 0.3 % | 0.1 % | -0.3 % | 1.3 % | -0.1 % | 1.1 % | 1.3 % | 1.5 % | | | | | 0.6 % |

















KPI #1: En-route ATFM delay per controlled flight (FABEC) YTD YTD YTD YTD 2018 2017 2018 2017 En-route Delay CRSTMP causes En-route Delay All causes 1.23 0.77 2.55 1.53 FABEC Target (yearly value) FABEC Target (yearly value) 0.42 0.33 Guideline 0.48 Guideline 0.36 Minute ('000) ALL causes 10 540 4 955 Minute ('000) CRSTMP causes 3 129 6 3 3 4 Diff. 2018 - 2017 Diff. 2018 - 2017 + 112.7 % + 102 % Traffic ('000) 4 135 4 040 Potential savings (*) due to underbid the delay Target Diff. 2018 - 2017 0.0 + 2.4 % (all Causes) in Mio EURO (YTD) * Cost of ATFM-delay per min = 87 € All Delay Causes ATFM Delay ATFM Delay FABEC ATFM Delay ATFM Delay FABEC Yearly Value YTD yearly Target Yearly Value YTD yearly Target 3.00 2.00 2.55 2.55 2.50 **1.53** 1.53 1.50 2.00 min./fl. min./fl. 1.50 1.07^{1.31} 1.15 1.23 1.00 0.48 0.44 0.67 0.37 44 0.67 **0.76**0.7 1.00 0.560.70 0.70 4870 .33 0.34 0.43 0.50 0.310.35 0.50 0.00 0.00 2014 2015 2016 2017 2018 2019 2014 2015 2016 2017 2018 2019 2017 (All Causes) Guideline (All Causes) 2017 (CRSTMP) Guideline (CRSTMP) 2018 (All Causes) Target (All Causes) 2018 (CRSTMP) Target (CRSTMP) 2.60 2.40 2.20 2.00 1.80 1.60 1.40 1.20 0.80 0.60 0.40 0.20 1.60 Cumulated (YTD) Cumulated (YTD) 1.40 1.20 min./fl. min./fl. 1.00 0.80 0,33 0.60 0.40 0.20 0.00 MAY SEP DEC 2017 monthly ADM 2018 monthly ADM 2017 monthly CRSTMP -2018 monthly CRSTMP 5.00 3.22 4.45 3.50 4.28 Monthly Monthly 3.75 3.00 4.00 2.49 2.50 3.00 2 57 2.00 min./fl. 1.60 1.25 1.41 1.81 1.78 1.69 1.50 2.00 0.58 1.00 1.29 0.690.84 1.89 0.98 1.00 1.00 8:43 0.49 0.15 0.26 0.24 0.29 0.50 0.17 0.00 0.00 MAR AUG MAR APR MAY N SEP A FEB APR MAY N SEP JAN Ы DEC ₫ Š 00









causes and 0.33 min per flight for the delay causes CRSTMP).







The guideline for the en-route ATFM delay per movement is a basic cumulative extrapolation of the previous three years monthly allocation and is designed to give an impression, how the YTD figures should be, in order to reach the yearly 2018 published targets (0.42 min per flight for all delay





KPI #2: Arrival ATFM delay per controlled flight (FABEC)

| 2018 2017 Arrival Delay All causes 0.74 0.79 Arrival Delay CRSTMP causes 0.0 Diff. 2018 - 2017 Minute ('000) ALL causes 1298 1 372 Diff. 2018 - 2017 | | | | | |
|---|--------------------------|---------|-------|-----------------------------|--------|
| Arrival Delay All causes 0.74 0.79 Arrival Delay CRSTMP causes 0.0 Diff. 2018 - 2017 -6% Diff. 2018 - 2017 -39 Minute ('000) ALL causes 1298 1 372 Minute ('000) CRSTMP causes 11 Diff. 2018 - 2017 -5% Diff. 2018 - 2017 -39 | | YTD | YTD | | YTD |
| Diff. 2018 - 2017 - 6 % Diff. 2018 - 2017 - 39 Minute ('000) ALL causes 1298 1 372 Minute ('000) CRSTMP causes 11 Diff. 2018 - 2017 - 5 % Diff. 2018 - 2017 - 39 | | 2018 | 2017 | | 2018 |
| Minute ('000) ALL causes 1298 1 372 Minute ('000) CRSTMP causes 11 Diff. 2018 - 2017 - 5% Diff. 2018 - 2017 - 39 | Arrival Delay All causes | 0.74 | 0.79 | Arrival Delay CRSTMP causes | 0.07 |
| Diff. 2018 - 2017 - 5% Diff. 2018 - 2017 - 39 | Diff. 2018 - 2017 | - 6 % | | Diff. 2018 - 2017 | - 39 % |
| Diff. 2018 - 2017 - 5% Diff. 2018 - 2017 - 39 | Minute ('000) ALL causes | 1298 | 1 372 | Minute ('000) CRSTMP causes | 116 |
| Traffic ('000) 1 758 1 741 | ` , | | | , , | - 39 % |
| 1 raffic (1000) 1 758 1 741 | T ((: (1000) | | | | |
| | I raπic (1000) | 1 758 | 1 /41 | | |
| Diff. 2018 - 2017 + 1.0 % | Diff. 2018 - 2017 | + 1.0 % | | | |

All Delay Causes CRSTMP Delay Causes ATFM Delay ■ ATFM Delay ATFM Delay ■ ATFM Delay Yearly Value Yearly Value 1.20 0.20 1.00 0.82 _{0.78} 0.80 0.80 0.85 0.15 0.79 0.74 0.74 0.11 0.11 0.80 min./fl. 0.11 0.65 0.090.09 0.60 0.10 0.060.07 0.070.07 0.40 0.05 0.20 0.00 0.00 2014 2015 2016 2017 2018 2019 2014 2015 2016 2017 2018 2019 2017 (All Causes) 2018 (All Causes) 2017 (CRSTMP) 2018 (CRSTMP) Cumulated (YTD) Cumulated (YTD) 1.40 1.20 1.00 0.73 0.79 0.76 0.74 min./fl. min./fl. 0.04 0.04 0.04 0.04 0.05 0.06 0.07 0.40 0.02 0.20 0.00 0.00 2017 monthly ADM 2018 monthly ADM 2017 monthly CRSTMP --- 2018 monthly CRSTMP Monthly Monthly 1.40 1.29 0.30 1.25 1.17 1.20 0.99 1.04 0.21 0.90 1.00 0.86 0.86 0.78 0.82 0.19 0.18 min./fl. 0.20 0.83 0.80 0.70 0.14 0.12 0.53 0.10 0.10 0.60 0.09 0.07 0.08 0.09 0.10 0.06 0.06 0 0.40 0.20 0.00 0.00 NOV DEC MAY MA Ш SEP OCT SEP





















KPI #1: En-route ATFM delay per reason code (FABEC) min. (YTD value) 2017 2018 Delay due to reason code: ■ Capacity "C" 2 096 587 3 400 785 Routeing "R" 14 009 3 435 ■ Staffing "S" 667 200 2 455 162 Equipment "T" 97 067 136 400 Airspace Mgmt. "M" 77 192 305 193 Special event "P" 177 050 32 688 ■ Weather "W" 1 484 807 2 874 870 ■ Industrial Action "I" 293 112 1 056 446 47 684 274 543 ■ All others (ex. CRSTMP & WI) 6 333 663 3 129 105 **CRSTMP: TOTAL:** 10 539 522 4 954 708 Delay due to reason code Absolute ATFM-Delay (min.) min. (*monthly value*) 3 000 000 MAII others (ex. CRSTMP & WI) 2 500 000 Industrial Action "I" ■ Weather "W" 2 000 000 Special event "P" 1 500 000 Airspace Mgmt. "M" Equipment "T" 1 000 000 ■ Staffing "S" Routeing "R" 500 000 ■ Capacity "C" 0 N 1 2018 AUG MAR APR SEP OCT NOV DEC MAY MAY No No DEC JAN Average ATFM-Delay per Flight (min./fl.) 5.0 ADM due to reason code min./fl. (monthly value) 88 All others (ex. CRSTMP & WI) Industrial Action "I" 4.0 ■ Weather "W" Special event "P" 3.0 Airspace Mgmt. "M" 2.0 Equipment "T" ■ Staffing "S" 1.0 Routeing "R" ■ Capacity "C" 0.0 _ NON_ MAY NOC П SEP DEC JAN MAR APR MAY NOC JUL AUG SEP OCT NOV DEC











2017





2018



KPI #1: En-route ATFM delay per controlled flight (ANSP) E Absolute ATFM-Delay (min.) 6 000 000 YTD value) 5 000 000 4 000 000 3 000 000 2 000 000 1 000 000 Belgocontrol DFS DSNA LVNL MUAC skyguide All others (ex. CRSTMP & WI) 41 659 213 291 2 3 1 9 17 274 ■ Industrial Action "I" 1 056 446 ■ Weather "W" 42 005 1 135 402 1 031 664 17 863 496 553 151 383 Special event "P" 3 9 181 553 19 538 3 413 Airspace Mgmt. "M" 1 144 229 198 42 958 31 640 253 Equipment "T" 10 860 4 448 118 236 868 1 358 630 ■ Staffing "S" 22 257 653 221 1 304 768 437 843 37 073 ■ Routeing "R" 1918 285 481 730 21 ■ Capacity "C" 1 776 517 139 588 5 488 1 218 812 19 012 241 368 **CRSTMP:** 40.034 2 663 868 2 695 873 20 433 731 749 181 706 **TOTAL:** 82 039 3 840 929 4 997 274 40 615 1 245 576 333 089 (National) Target All causes -(National) Target CRSTMP causes Average ATFM-Delay per Flight (min./fl.) 3.50 min./fl. (YTD value) 3.00 2.50 2.00 1.50 1.00 0.50 0.18 ^{0.07}Belgocontrol LVNL DFS DSNA MUAC skyguide M All others (ex. CRSTMP & WI) 0.02 0.10 0.01 0.01 ■ Industrial Action "I" 0.48 ■ Weather "W" 0.10 0.55 0.47 0.04 0.39 0.17 Special event "P" 0.00 0.00 0.00 0.02 0.00 Airspace Mgmt. "M" 0.00 0.11 0.02 0.03 0.00 0.02 0.00 0.05 0.00 0.00 0.00 Equipment "T" ■ Staffing "S" 0.05 0.32 0.59 0.00 0.35 0.04 ■ Routeing "R" 0.00 0.00 0.00 0.00 0.00 ■ Capacity "C" 0.01 0.86 0.56 0.04 0.19 0.16







CRSTMP:

TOTAL:





0.09

0.19





1.28

1.85

1.23

2.28

0.05

0.10

0.58

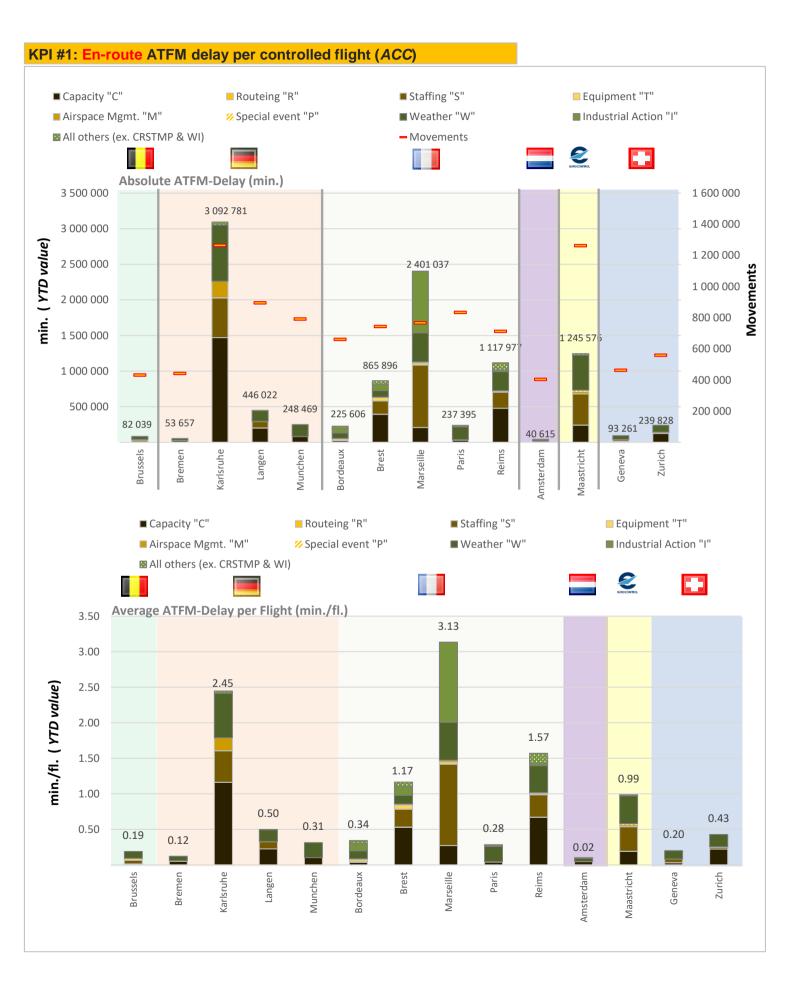
0.99

0.21

0.38

















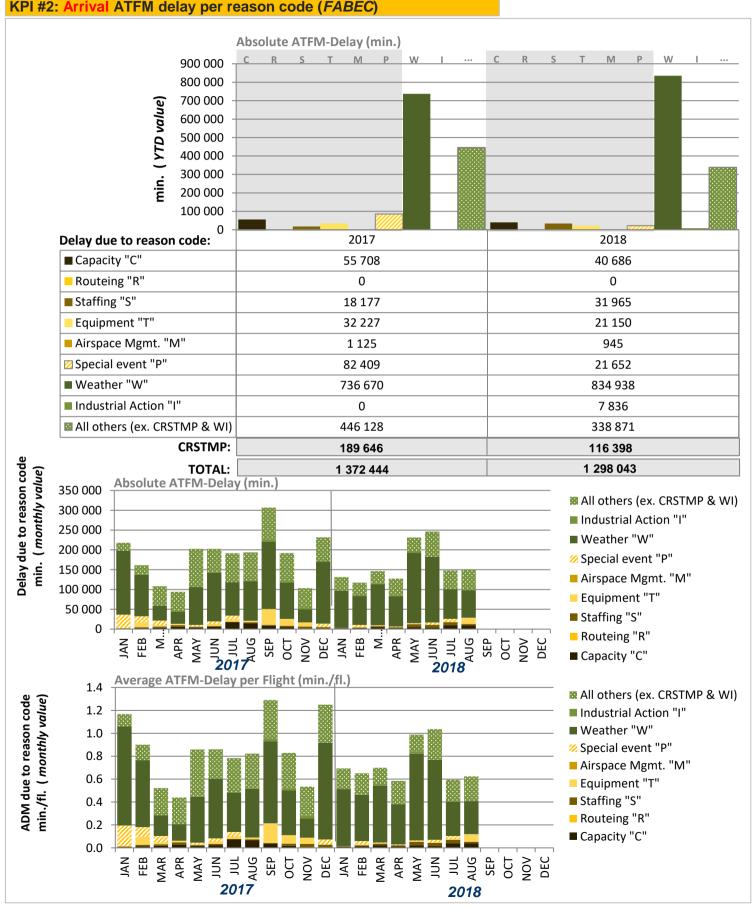








KPI #2: Arrival ATFM delay per reason code (FABEC)

















KPI #2: Arrival ATFM delay per controlled flight (ANSP) Absolute ATFM-Delay (min.) 450 000 400 000 min. (YTD value) 350 000 300 000 250 000 200 000 150 000 100 000 50 000 DFS ANA LUX LVNL Belgocontrol DSNA skyguide ■ All others (ex. CRSTMP & WI) 419 1 610 76 804 36 454 151 725 71 859 ■ Industrial Action "I" 7 836 ■ Weather "W" 57 512 163 439 341 291 053 91 025 231 568 Special event "P" 141 19 092 2 4 1 9 ■ Airspace Mgmt. "M" 686 259 Equipment "T" 13 120 86 504 6 982 458 ■ Staffing "S" 2 012 5 840 13 257 10 856 ■ Routeing "R" ■ Capacity "C" 6 363 652 3 037 29 074 1 560 **CRSTMP:** 2 891 9 381 69 091 14 680 20 355 **TOTAL:** 760 255 653 62 013 377 238 204 406 397 973 (National) Target All causes (National) Target CRSTMP causes In fact Target All causes Average ATFM-Delay per Flight (min./fl.) Target values are applies to all 4 airports dependent on traffic 5.00 evolution 4.50 4.00 3.50 3.00 2.50 2.20 2.00 1.50 1.00 0.50 0.47 0.43 0.50 0.15 ANA LUX Belgocontrol DFS DSNA LVNL skyguide All others (ex. CRSTMP & WI) 0.02 0.02 0.06 0.89 0.47 0.11 ■ Industrial Action "I" 0.01 ■ Weather "W" 0.01 0.65 0.42 0.15 1.36 1.08 Special event "P" 0.00 0.00 0.03 0.00 0.02 Airspace Mgmt. "M" 0.00 0.00 Equipment "T" 0.00 0.00 0.01 0.08 0.00 ■ Staffing "S" 0.07 0.02 0.01 0.02 ■ Routeing "R" ■ Capacity "C" 0.01 0.00 0.05 0.01 0.04 **CRSTMP:** 0.03 0.01 0.11 0.09 0.13 0.03 0.70 2.33 1.69 TOTAL: 0.54 0.33



















Glossary

KPI #1:

KPI #1 is set by IR (EU) 390/2013 and is expressed in minutes per flight. For this indicator, the EU-wide target set for each year of RP2 is 0.50 min./fl.

The targets set at FABEC level are as follows for the indicator 'En-route ATFM delay (all regulation causes) per controlled flight' for **2015**: 0,48 min./fl., **2016**: 0.42 min./fl., **2017**: 0.42 min./fl., **2018**: 0.42 min./fl., **2019**: 0.43 min./fl.

The targets set at FABEC level are as follows for the indicator 'En-route ATFM delay (CRSTMP regulation causes) per controlled flight' for **2015**: 0.37 min./fl., **2016**: 0.33 min./fl., **2017**: 0.33 min./fl., **2018**: 0.33 min./fl., **2019**: 0.34 min./fl.

KPI #2:

KPI #2 is set by IR (EU) 390/2013 and is expressed in minutes per flight. For this indicator, no targets have been defined at EU and FABEC level for RP2. The targets have been set at local level.

| Cause | CODE | Guidelines for Application |
|--|------|---|
| ATC Capacity | С | En Route: Demand exceeds or complexity reduces declared or expected ATC capacity Airport: Demand exceeds declared or expected ATC capacity. |
| ATC Industrial Action | I | Reduction in any capacity due to industrial action by ATC staff |
| ATC Routeings | R | Network solutions / scenarios used to balance demand and capacity |
| ATC Staffing | S | Unplanned staff shortage reducing expected capacity. |
| ATC Equipment | Т | Reduction of expected or declared capacity due to the non-availability or degradation of equipment used to provide an ATC service. |
| Accident / Incident | Α | Reduction of expected ATC capacity due to an aircraft accident / incident. |
| Aerodrome Capacity | G | Reduction in declared or expected capacity due to the degradation or non-availability of infrastructure at an airport. e.g. Work in Progress, shortage of aircraft stands etc. Or when demand exceeds expected aerodrome capacity. |
| Equipment NON ATC- to be Aerodrome Services | E | Reduced capacity due to the degradation or non-availability of support equipment at an airport e.g. Fire Service, De-icing / snow removal equipment or other ground handling equipment. |
| Industrial Action NON ATC | N | A reduction in expected / planned capacity due to industrial action by non ATC personnel. |
| Airspace Management | М | Reduction in declared or expected capacity following changes in airspace / route availability due to small scale military activity. |
| Special Event | Р | Reduction in planned, declared or expected capacity or when demand exceeds the above capacities as a result of a major sporting, governmental or social event. It may also be used for ATM system upgrades and transitions. Large multinational military exercises may also use this reason. This category should only be used with prior approval during the planning process. |
| Weather | w | Reduction in expected capacity due to any weather phenomena. This includes where weather impacts airport infrastructure capacity, but where aerodrome services are operating as planned / expected. |
| Environmental Issues | V | Reduction in any capacity or when demand exceeds any capacity due to agreed local noise, runway usage or similar procedures. This category should only be used with prior agreement in the planning process. |
| Other | 0 | This should only be used in exceptional circumstances when no other category is sufficient. An explanatory ANM remark MUST be given to allow post ops analysis. |

CRSTMP:

ATC Capacity (**C**), ATC Routeings (**R**), ATC Staffing (**S**), ATC Equipment (**T**), Airspace Management (**M**), Special Event (**P**); a set of regulation codes which are defined in the Common Charging Scheme Regulation (IR 391/2013) and subject to financial incentive.

Note: Arrival figures (traffic and delay) do only include EBBR and EBLG for Belgium and only EHAM for the Netherlands.

TABLE OF ABBREVIATIONS

ADM - Average en-route ATFM Delay per Movement

ANSP - Air Navigation Service Provider

ATFM - Air Traffic Flow Management

ANM - Aeronautical Notification Message

FABEC - Functional Airspace Block Europe Central

ATM - Air Traffic Management

PRU - Performance Review Unit

YTD - Year to Date value

FPP - FABEC Performace Plan



















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Notice

The FABEC PMG has made every effort to ensure that the information and analysis contained in this document are as accurate and complete as possible.

Only information from quoted sources has been used and information relating to named parties has been checked with the parties concerned.

Despite these precautions, should you find any errors or inconsistencies we would be grateful if you could please bring them to the FABEC PMGs attention.













