

# ANS performance briefing - Germany

*EUROCONTROL Performance Review Unit*

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## Preface

This performance briefing has been prepared by the EUROCONTROL Performance Review Unit (PRU) in the interest of the exchange of information.

If you have any questions related to this document or if we can help with any ANS performance related matter, then please do not hesitate to contact us: [pru-support@eurocontrol.int](mailto:pru-support@eurocontrol.int)

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# Key observations

## TRAFFIC

- Following the high traffic increase already in 2017 ..
- The strong growth ..
- As a result ..

## SAFETY

- No data available

## CAPACITY

### En-route ATFM delays

- No en-route ATFM delay..

### Airport arrival ATFM delays

- No airport arrival ATFM delay..

## ENVIRONMENT

### Horizontal en-route flight efficiency

- In 2008, Finland..

### Vertical en-route flight efficiency

### Vertical flight efficiency during climb and descent

## COST-EFFECTIVENESS

- ARMATS represents.. see [1]
- Since ARMATS did not..
- Compared to the..

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# 1 Institutional arrangements

## 2 Traffic characteristics

Sources: NM; STATFOR[2]; PRU ANS Performance Data Portal [3]; CRCO Service Unit Dashboard [4]

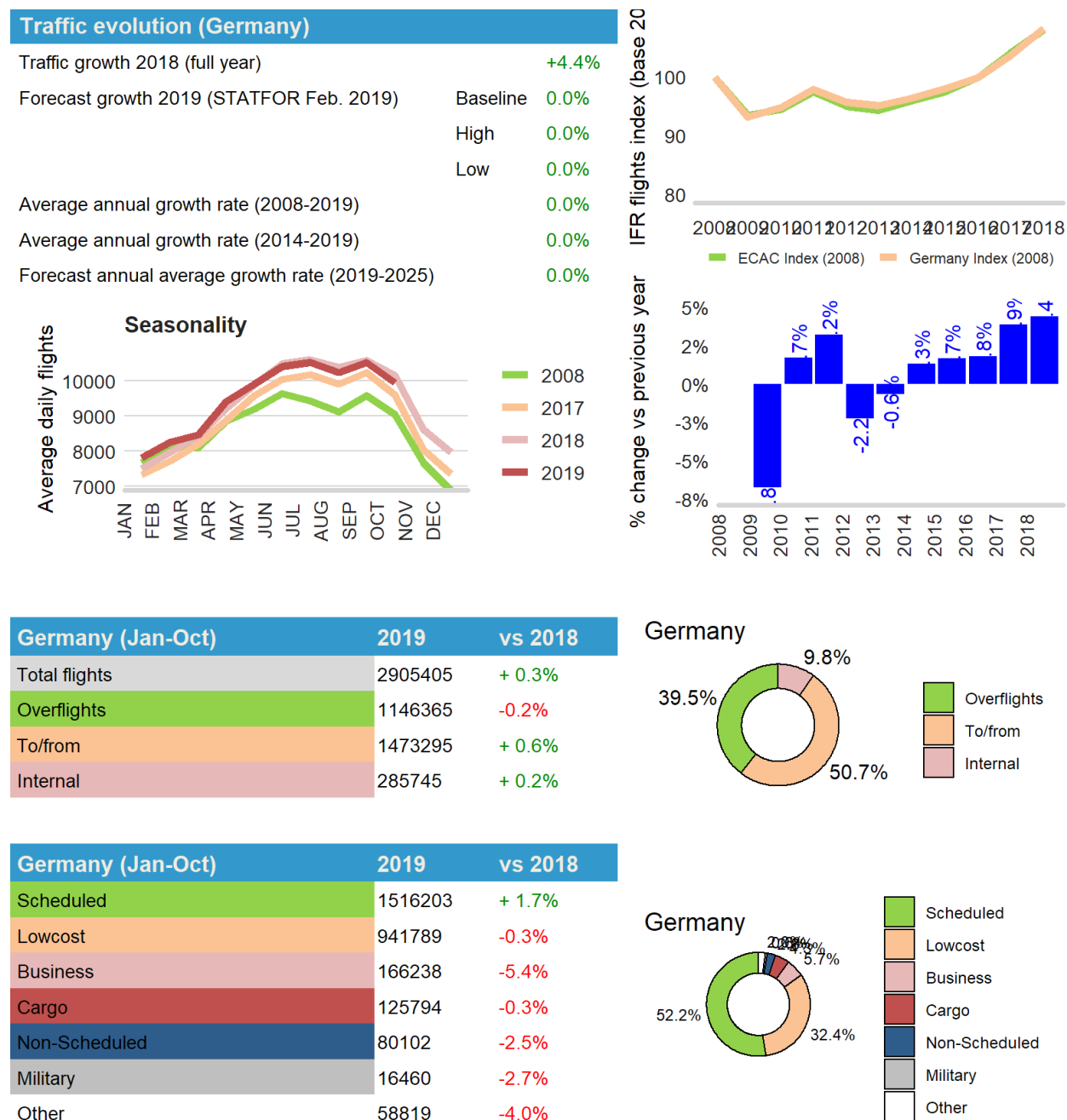


Figure 1: Traffic characteristics (IFR flights)

- In 2018, traffic increased by +4.4%. Between 2013 and 2018, traffic increased by 13.8%.
- In the first 10 months of 2019, traffic in Germany increased by +0.7% compared to the same period in 2018
- The largest traffic segment is traffic from and to Germany (50.7%), followed by overflights (39.5%) and domestic flights (9.8%).

### 3 Safety



## 4 Capacity

### 4.1 Air traffic flow management (ATFM) delays

Source: NM, PRU ANS Performance Data Portal [3] The data in this section is from the PRU ANS performance data portal (data section).

It is available at: <http://ansperformance.eu/data/performancearea/>

#### 4.1.1 En-route ATFM delays

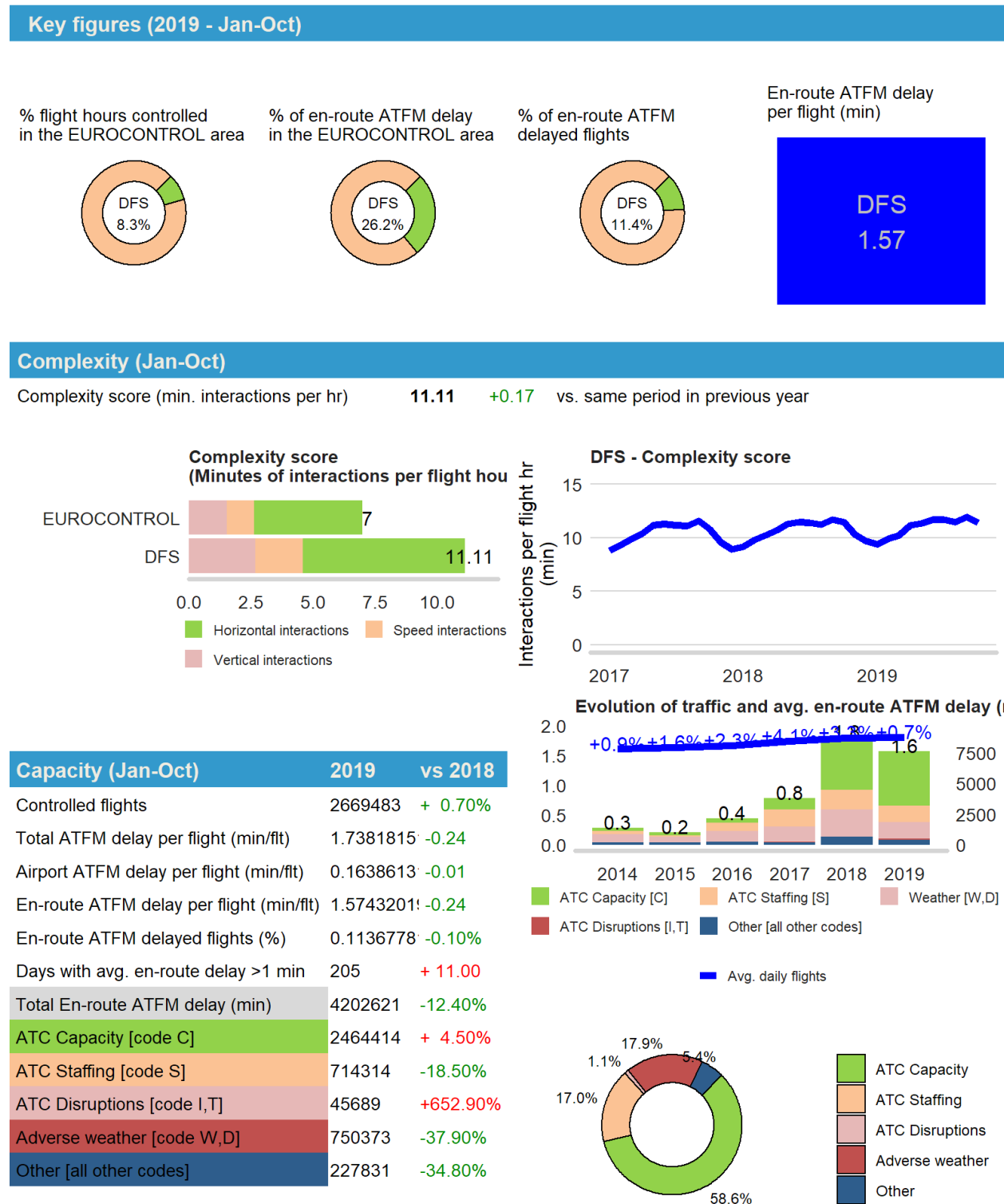
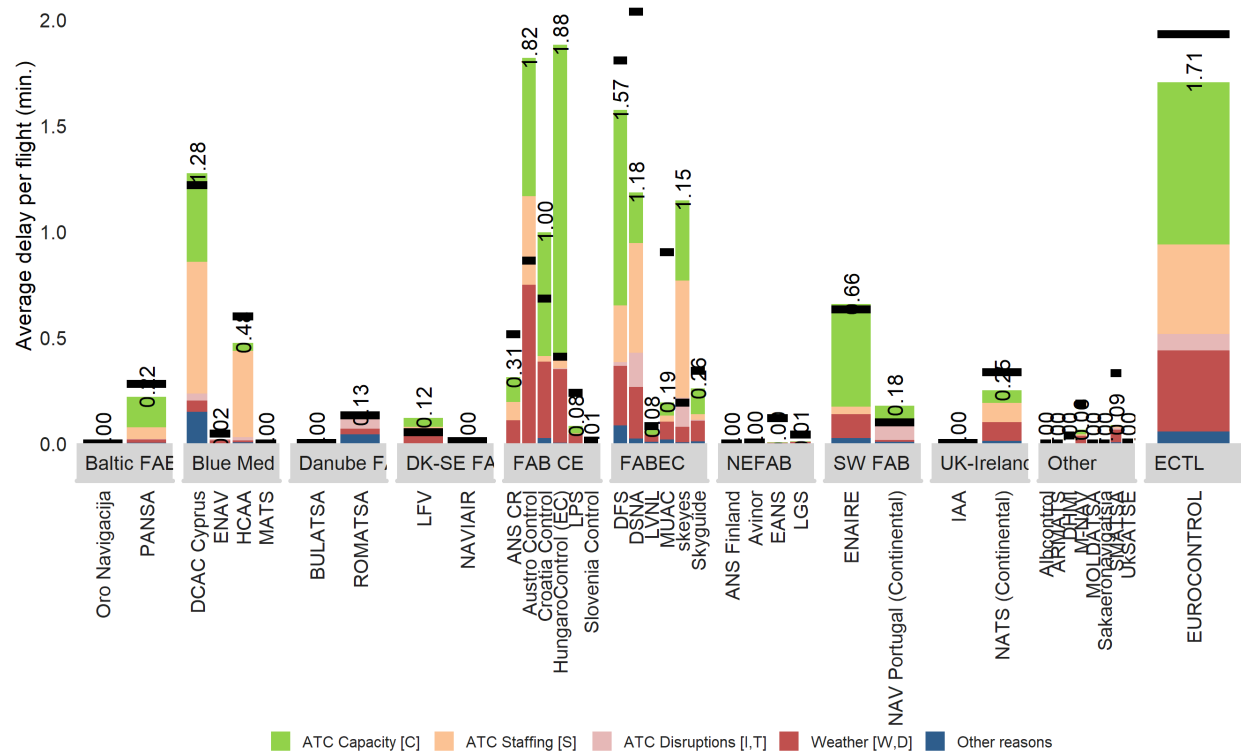


Figure 2: Traffic evolution and en-route ATFM delay

Average en-route ATFM delay per flight - Jan-Oct 2019 (min)

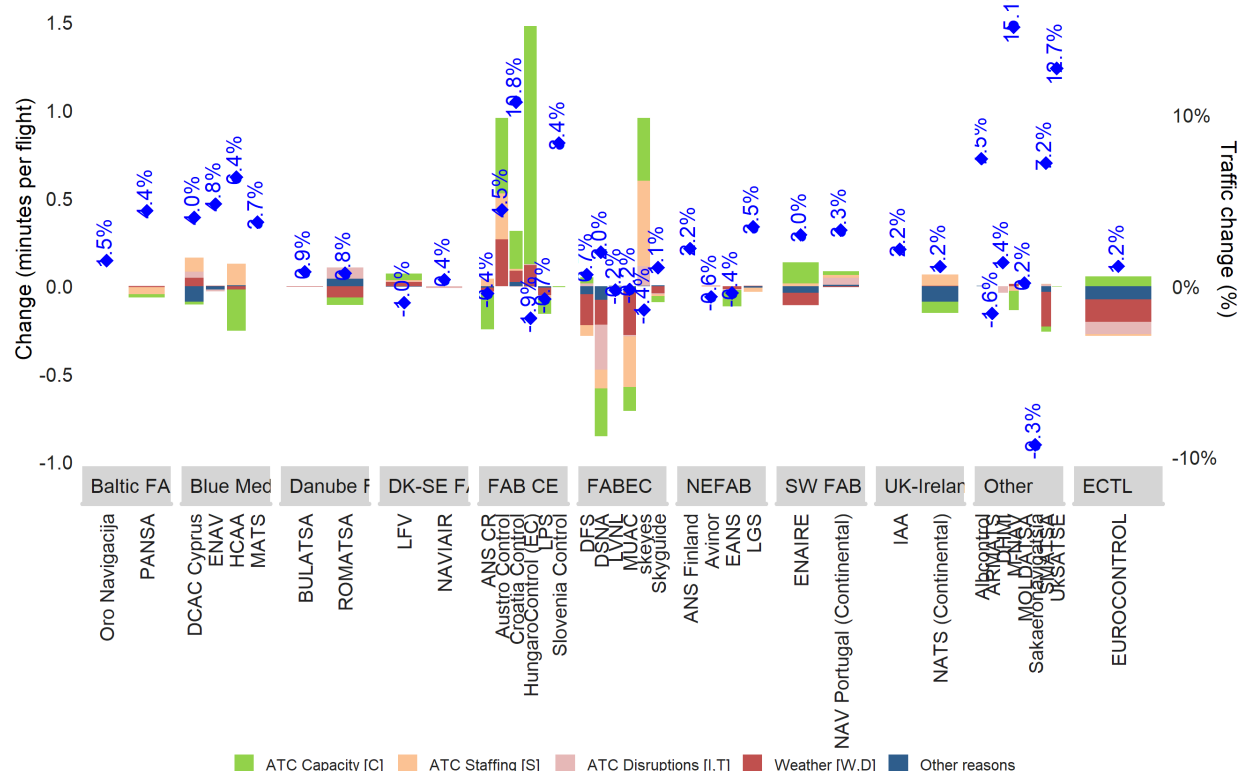


Source: PRU analysis



Figure 3: Average en route ATFM delay per flight (EUROCONTROL area)

Change in traffic and average en route ATFM delay per flight vs same period in the previous year (Jan-Oct 2019)



Source: PRU analysis



Figure 4: Year on year change of average en route ATFM delay per flight (EUROCONTROL area)

- In the first 10 months of 2019, Germany accounted for 8.3% of total controlled flight hours and generated 26.2% of total en-route ATFM delays in the EUROCONTROL area. Overall, 11.4% of the controlled flights in the respective airspace were delayed by en-route ATFM delays (Jan-Oct 2019).
- Delays decreased in 2019 (-12.4% vs. Jan-Oct 2018) to reach 1.57 minutes per flight.

#### 4.1.2 Airport arrival ATFM delays

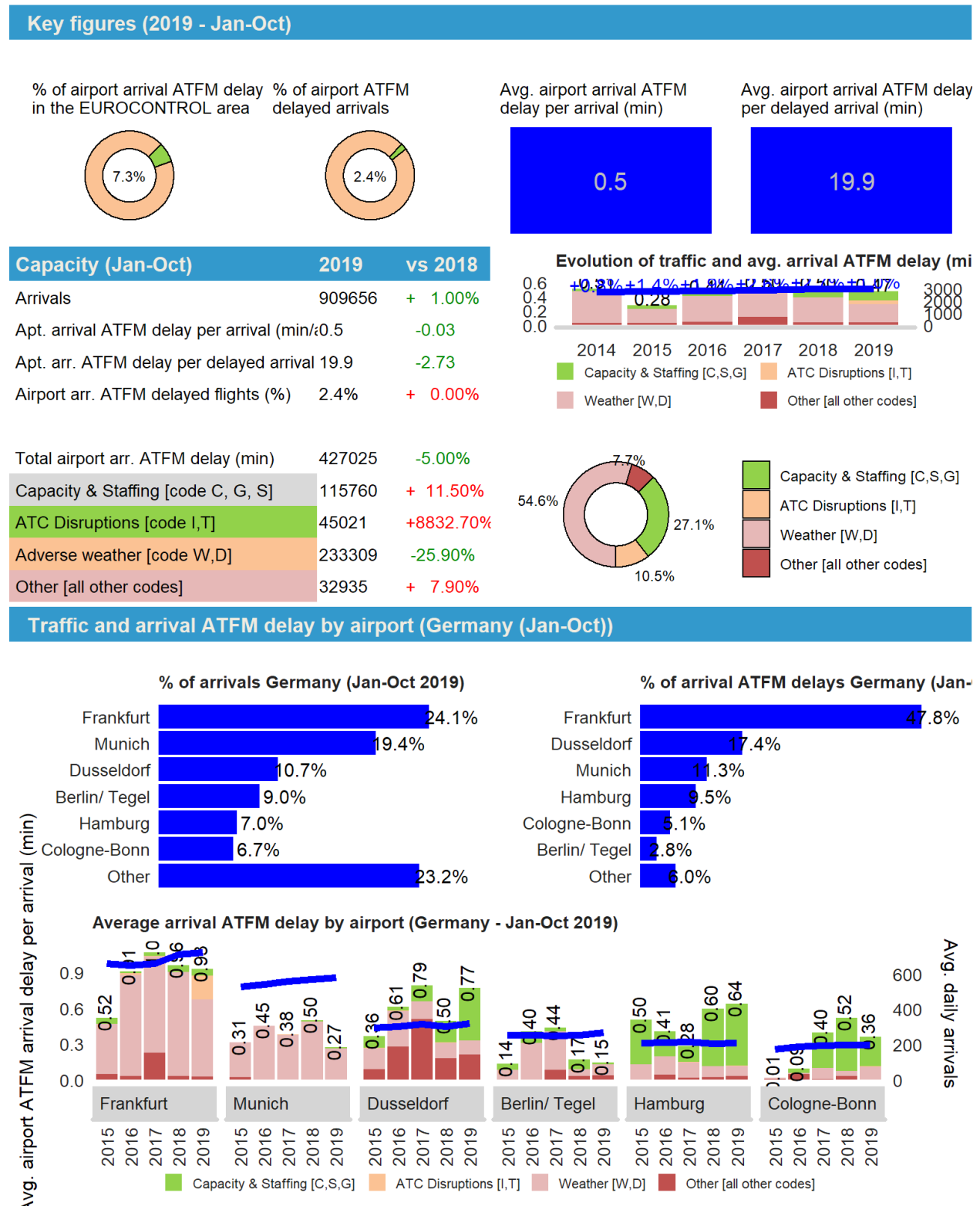


Figure 5: Traffic evolution of airport arrival ATFM delays

- Germany accounted for 7.3% of all arrival ATFM delay in the EUROCONTROL area (Jan-Oct 2019).
- Overall, 2.4% of the flights arriving at airports in Germany were delayed by arrival ATFM regulations (Jan-Oct 2019). Total arrival ATFM delay decreased by -5.0% vs. Jan-Oct 2018.
- The main share (47.8%) was generated by Frankfurt, closely followed by Dusseldorf accounting for 17.4% of all airport ATFM delay in Germany during the first 10 months of 2019.

## 5 Environment

Source: PRU ANS Performance Data Portal The data in this section is from the PRU ANS performance data portal (data section).

It is available at: <http://ansperformance.eu/data/performancearea/>

## 5.1 Horizontal en-route flight efficiency

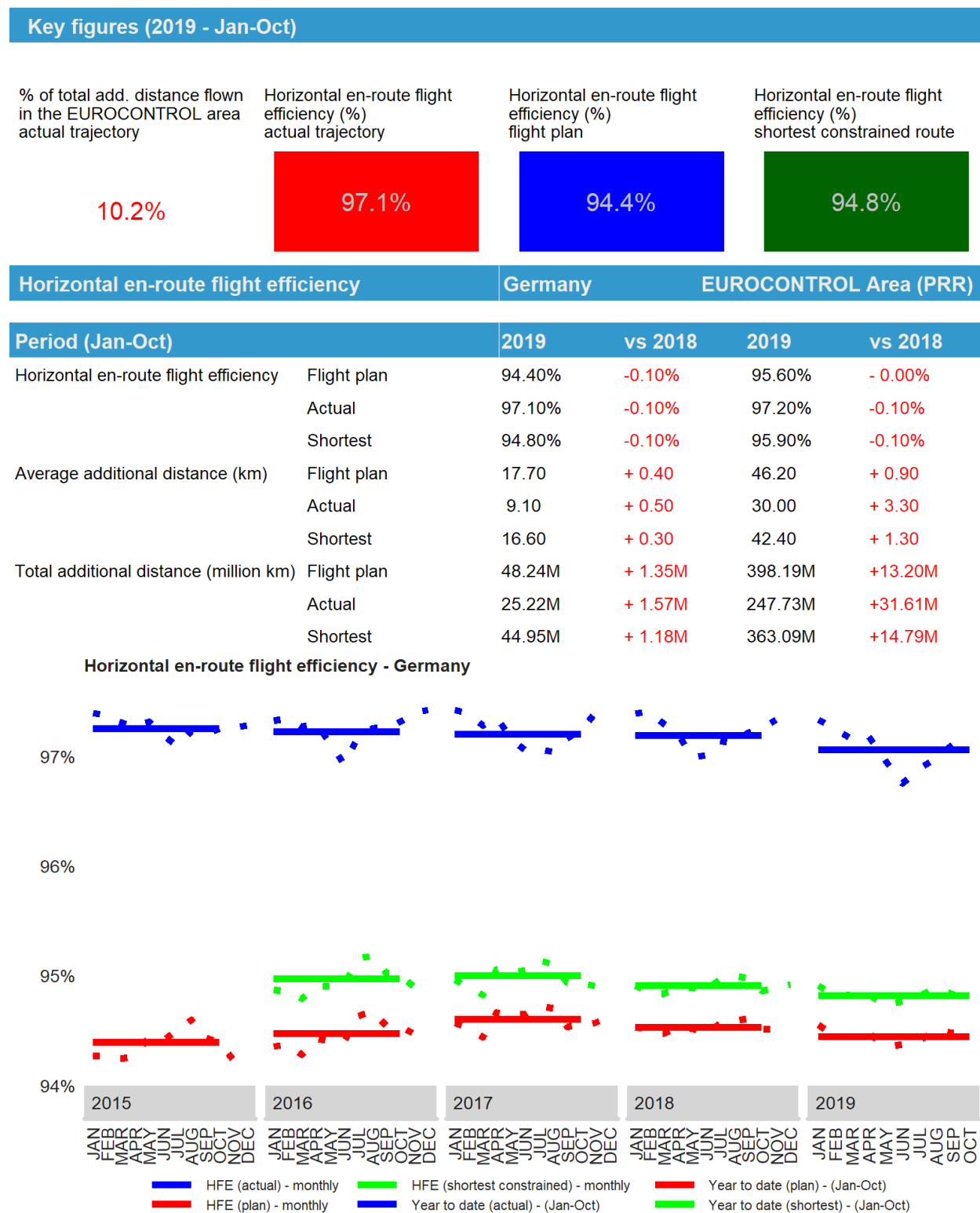


Figure 6: Horizontal en-route flight efficiency



- Overall, Germany accounted for 10.2% of the total additional distance flown in the EUROCONTROL area Jan-Oct 2019.
- Horizontal en-route flight efficiency (actual trajectory) is 97.1% which is below the EUROCONTROL area average (97.2%).



## 5.2 Vertical en-route flight efficiency

## 5.3 Vertical flight efficiency during climb & descent

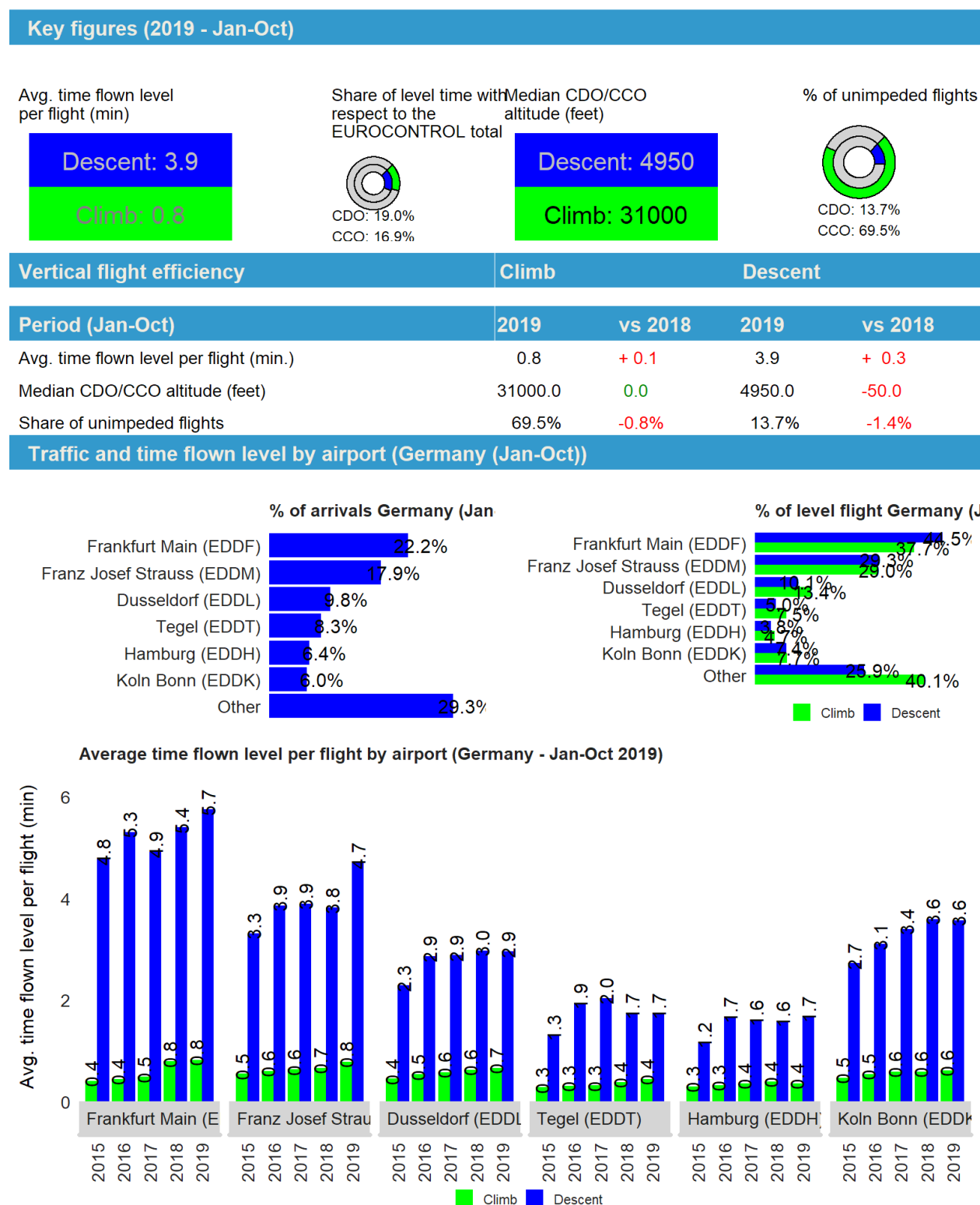


Figure 7: Vertical flight efficiency during climb and descent

## 6 Cost-effectiveness

## 7 Annex 1: Evolution of cost-effectiveness performance (2012-2017)

## 8 Annex 2: Network Operations Plan (2018-2019/22)

## References

- [1] Performance Review Unit, “ATM cost-effectiveness (ace) 2015 benchmarking report with 2016-2020 outlook,” EUROCONTROL/PRU, Report, May 2017.
- [2] STATFOR, “EUROCONTROL seven-year forecast february 2019,” EUROCONTROL/STATFOR, Report, 2017.
- [3] Performance Review Unit, “ANS performance data portal,” 2019. [Online]. Available: <http://ansperformance.eu/>.
- [4] CRCO, “Service unit dashboard,” 2019. [Online]. Available: <http://www.eurocontrol.int/ServiceUnits/Dashboard/LongTermEvolution.html>.