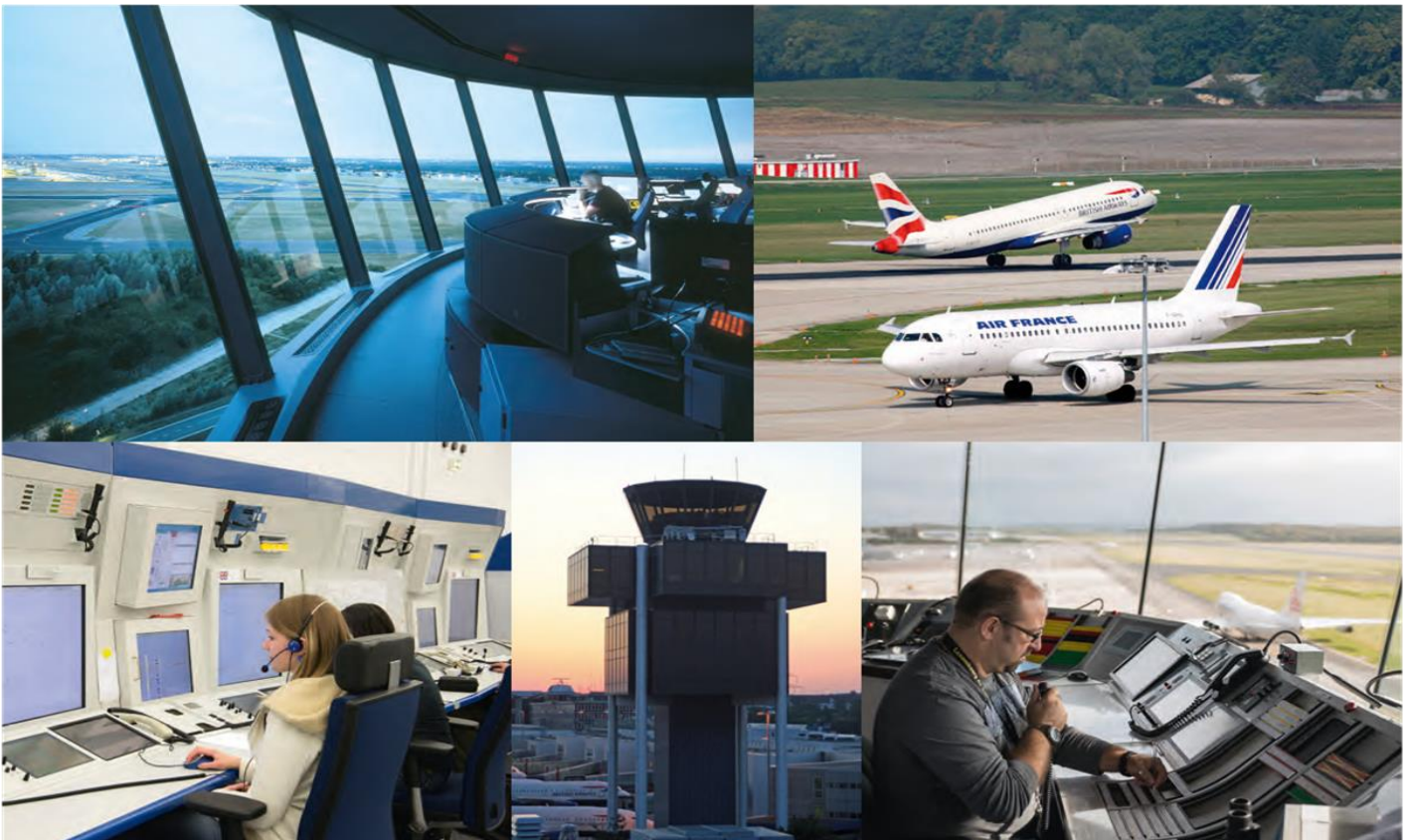




PERFORMANCE REPORT 2020 - 2024

# ENVIRONMENT

March 2020



making the difference

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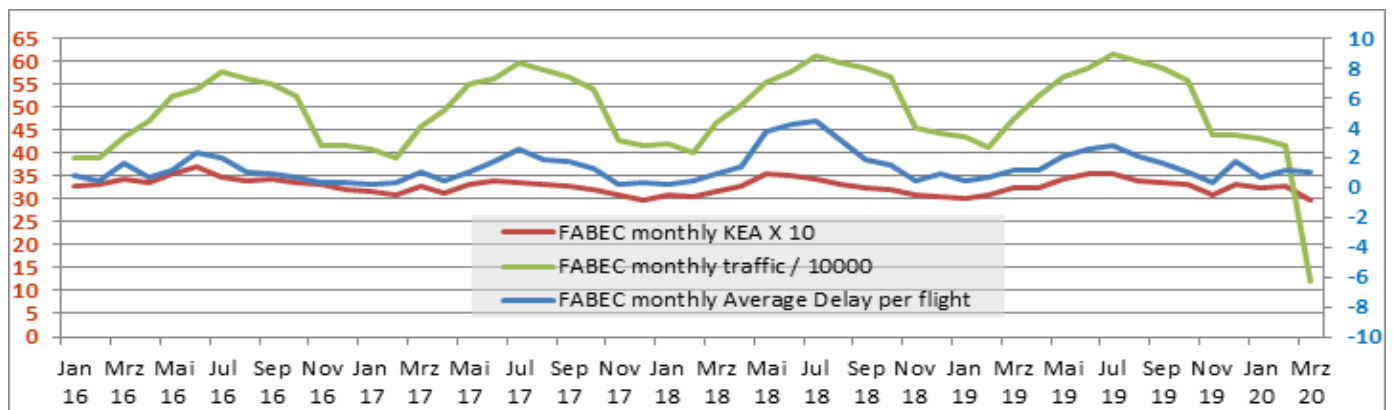
## Description & Analysis

### ENV KPI #1: KEA/HFE at FABEC level (excl. 10 best/worst days)

In the FABEC area, the yearly rolling average value of inefficiency of flown trajectory (expressed in KEA) was 3.32% for the period of April 2019 - March 2020, excluding the 10 best and 10 worst days. However, the value has increased by 0.05pp as compared to 3.27% in the period April - March 2018/2019. The value in March 2020 is 0.02pp lower than the value of one month prior. The rolling average has been increasing slowly but steadily during the last year from 3.26% in the period May - June 2019 to 3.34% in February 2020. The indicator still is 0.07pp above the FABEC target for 2020, which was set to 3.25%. The difference between KEA and KEP is 2.75pp, which is bigger than previous month.

### ENV PI#1: HFE based on Actual at FABEC level (including all days)

The inefficiency (expressed in KEA including all days) has decreased drastically by 0.28pp on a monthly basis compared to the previous month (KEA was 3.27% in February 2020) and decreased by 0.16pp compared to the same month in 2019 (KEA in February 2019 was 3.09%), reaching 2.99% in March 2020, which is the lowest value since December 2017. The reason for such reduction in the flight inefficiency is a significant decrease of traffic volume because of the corona crisis. This positive correlation between flight efficiency, delays and traffic can be seen in the graph below.



### ENV PI#2: KEP/HFE based on Filed FPL at FABEC level (excl. 10 best/worst days)

The KEP 12 month rolling average indicator has been stable since December 2018 reaching 6.00% in June 2019, but starting from August 2019 KEP shows a reversed trend increasing from 6.00% in July 2019 to 6.05% in January, February and March 2020. The KEP rolling value for March 2020 reached 6.05%, which is 0.04pp higher than the value of the same period one year prior, therefore showing no tendency for improvement.

### ENV PI#3: HFE based on Filed FPL at FABEC level (including all days)

The figure shows a significant increase of flight efficiency in March 2020 (5.93%) by 0.13pp compared to February 2020 (6.06%) and by 0.18pp compared to the value in March 2019 (5.93% in March 2020 vs 6.00% in March 2019). However, KEP doesn't show as large an increase in the flight efficiency as KEA.

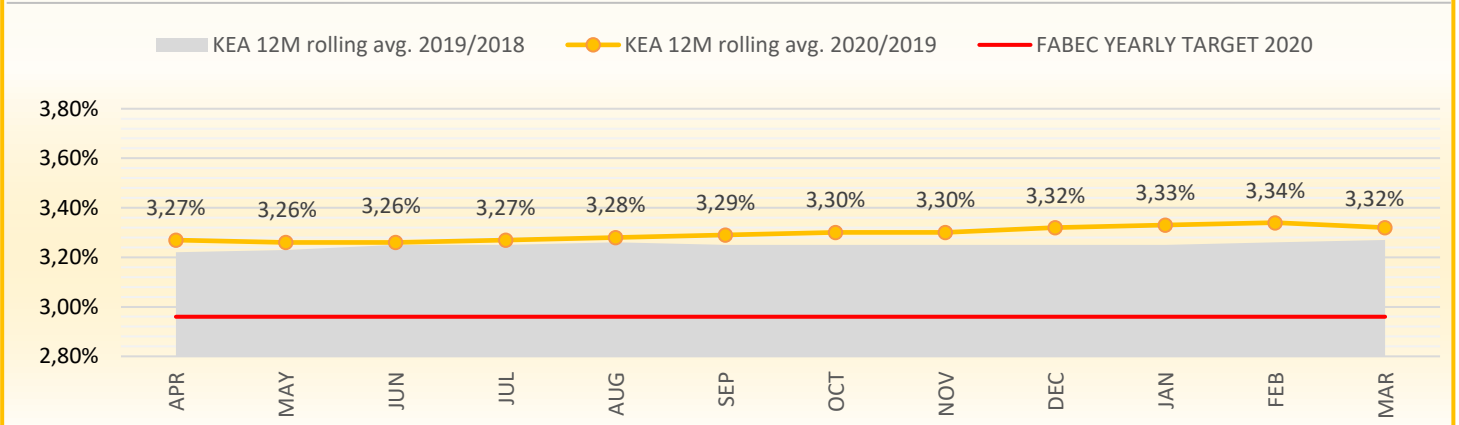
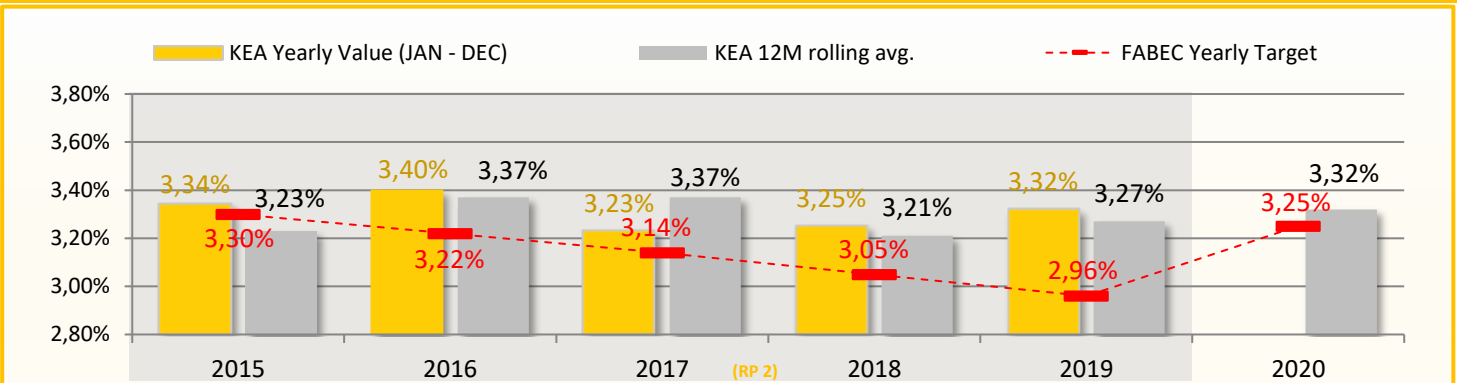
### ENV PI#4: HFE based on Actual at State level (including all days)

At the national level in March 2020, all states demonstrated a significant increase of flight efficiency based on actual trajectories compared to March 2019: Belgium (0.38pp), France (0.21pp), Germany 0.28pp), the Netherland (0.47pp) and Switzerland (0.27pp).

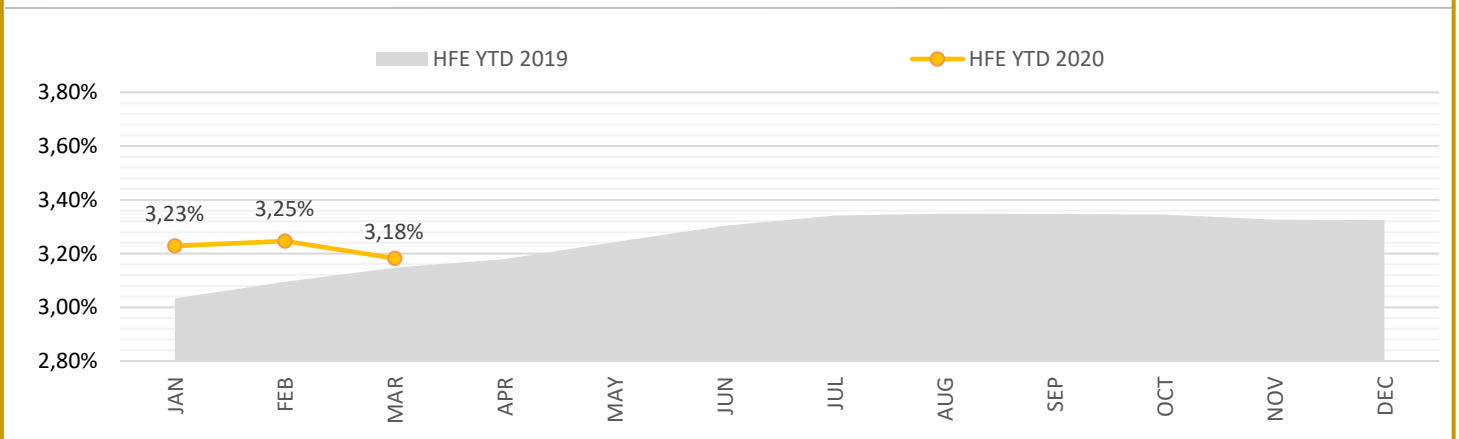
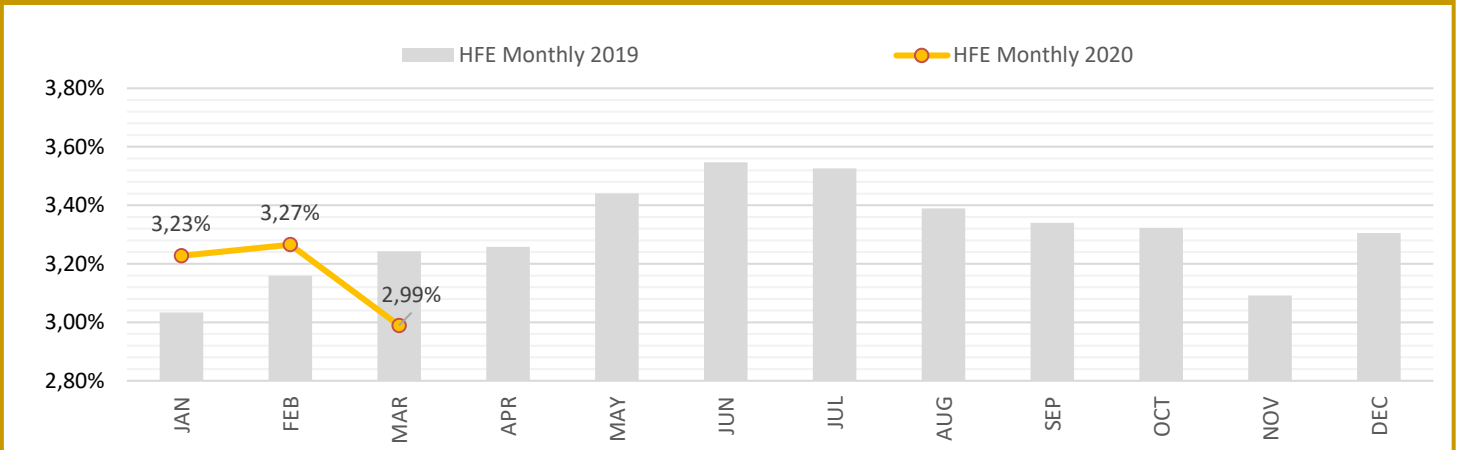
### ENV PI#5: HFE based on Filed FPL at State level (including all days)

At the national level, all countries demonstrated an increase in flight efficiency based on the filed FPL compared to one month prior: Belgium (0.10pp), France (0.11pp), Germany (0.10pp), the Netherland (0.11pp) and Switzerland (0.28pp).

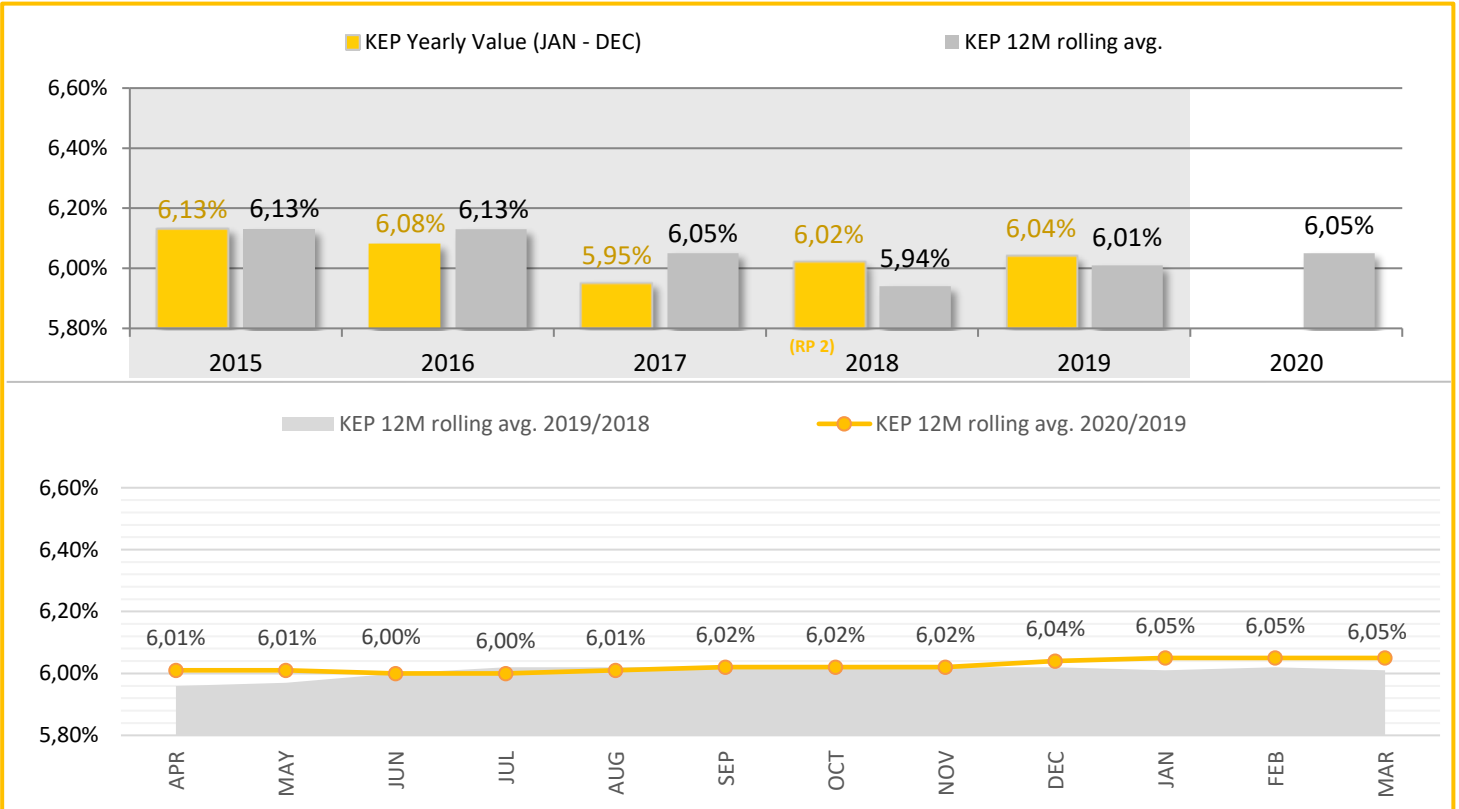
## KPI #1: KEA/HFE at FABEC level (excl. 10 best/worst days)



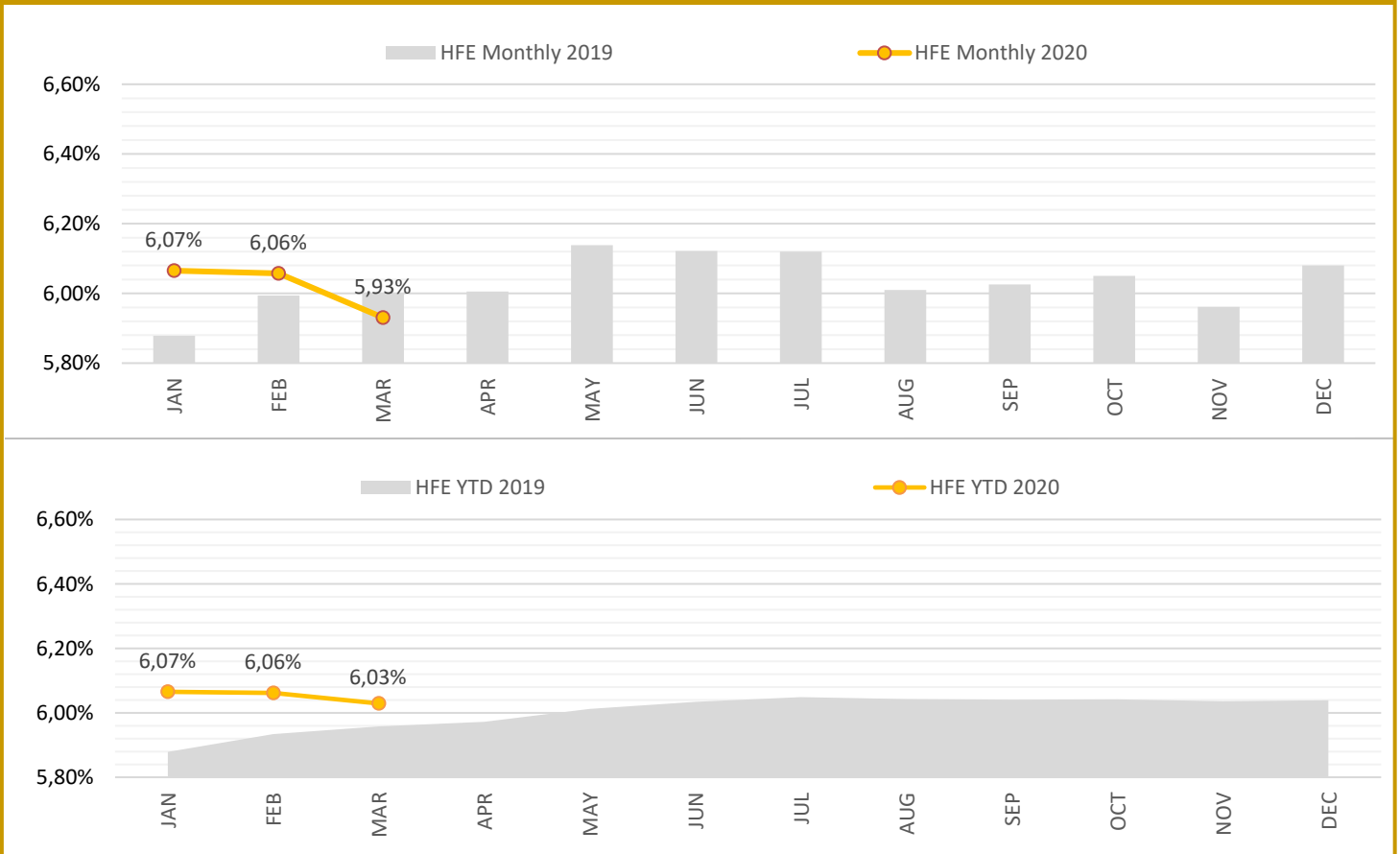
## PI #1: HFE based on Actual at FABEC level (incl. all days)



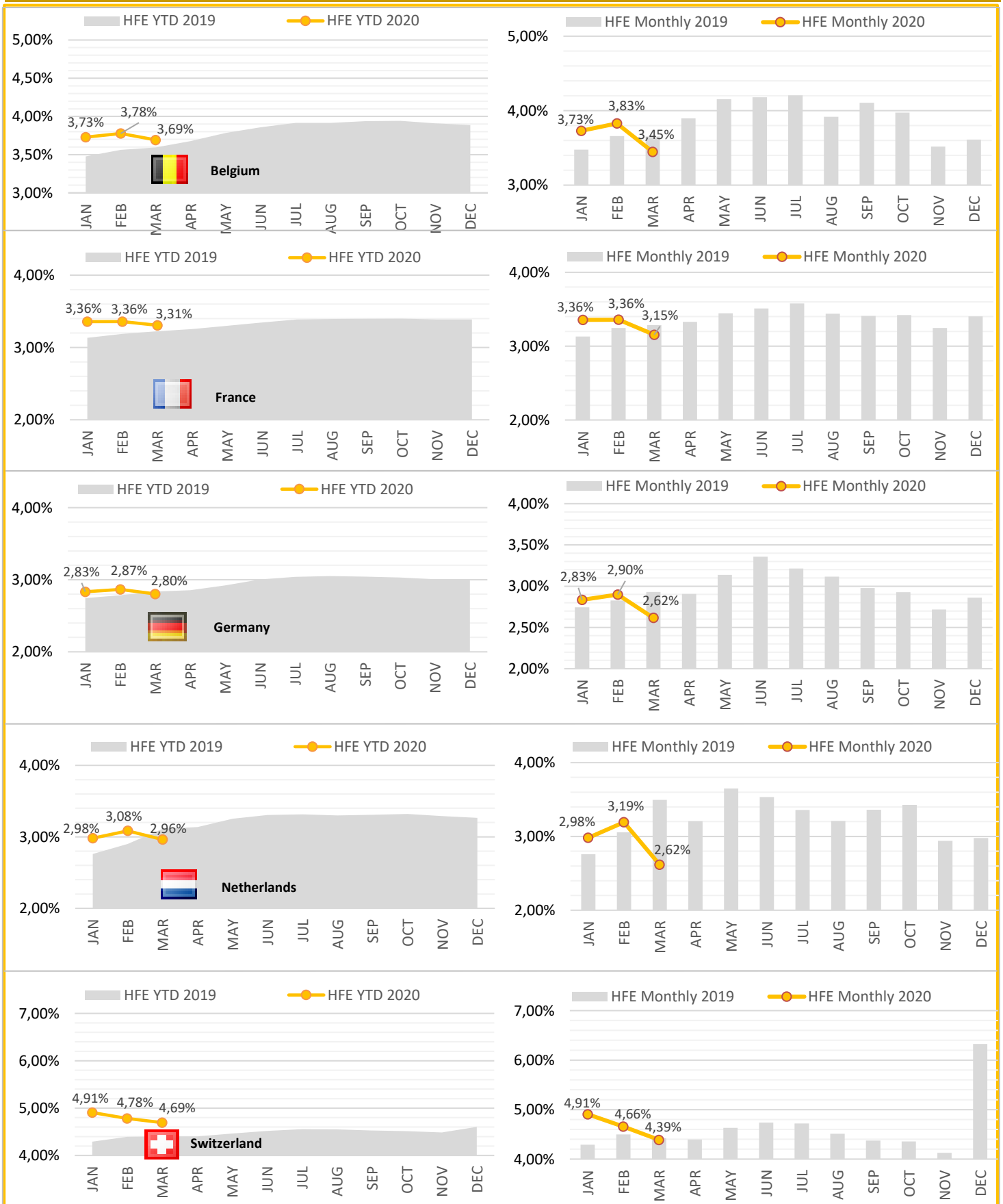
PI #2: KEP/HFE based on filed FPL at FABEC level (excl. 10 best/worst days)



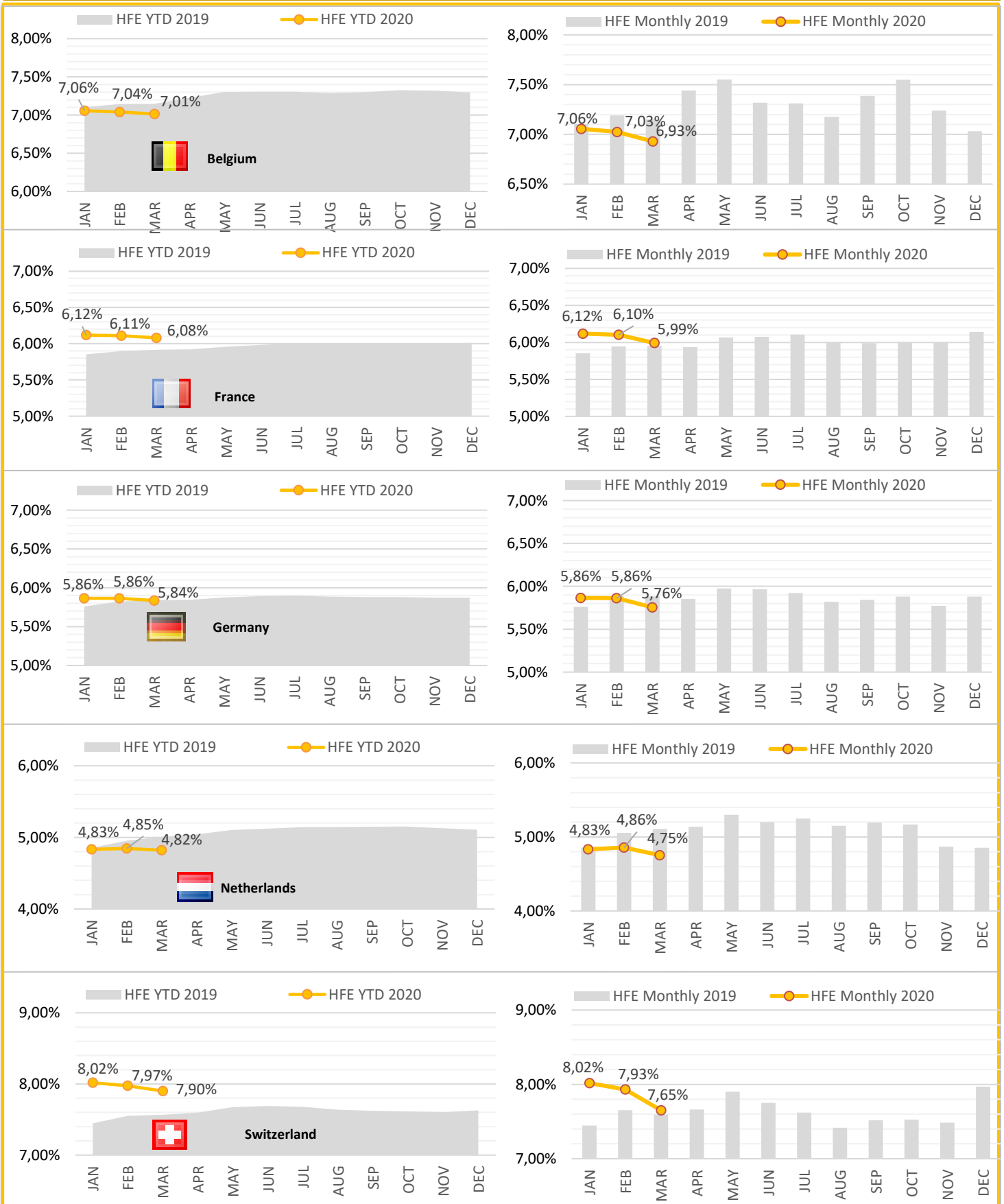
PI #3: HFE based on filed FPL at FABEC level (incl. all days)



## PI #4: HFE based on Actual at State level (incl. all days)



PI #5: HFE based on filed FPL at State level (incl. all days)

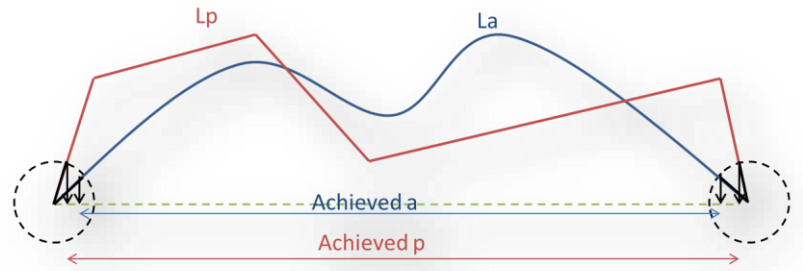


## Glossary

### KEP / KEA definition

KEP compares the length of the en route section of the last filed flight plan  $L_p$  with the corresponding Achieved  $p$  of the great circle distance.

KEA compares the length of the en route section of the actual trajectory  $L_a$  with the corresponding Achieved  $a$  of the great circle distance.



$$KEA = (L_a - \text{Achieved } a) / \text{Achieved } a$$

$$KEP = (L_p - \text{Achieved } p) / \text{Achieved } p$$

KEP is the reference for SES-wide improvement with a global target set by the European Commission. KEA is the reference for FAB improvements with individual targets set by the European Commission.

### Achieved distance calculation

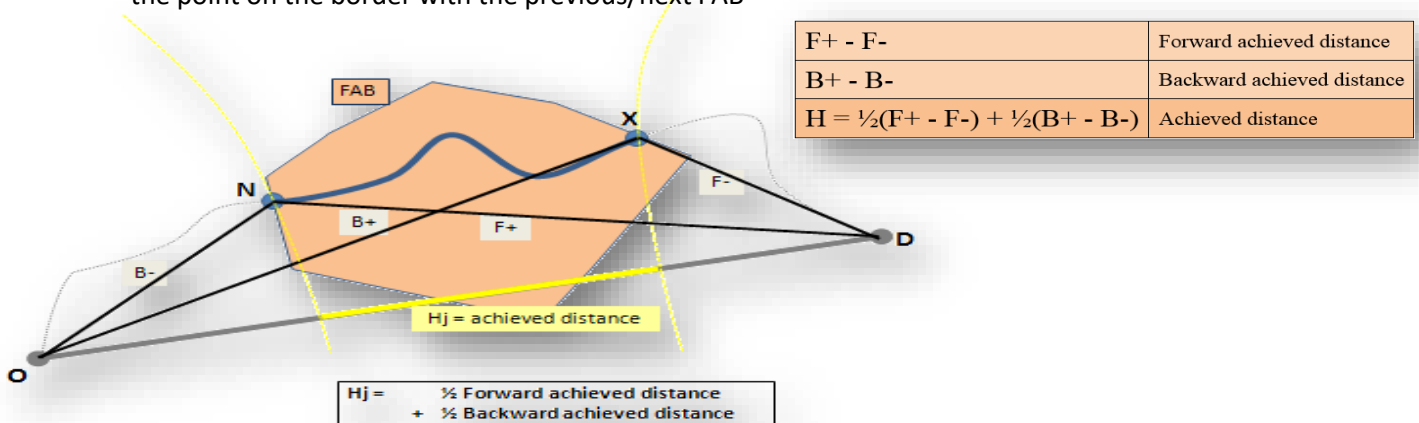
4 reference points are identified for KEP/KEA calculation :

The **O**rigin and **D**estination points are the targets of the trajectory and the reference points for the Great Circle:

- the airports inside the SES area
- when the airports are outside the SES area, they are the trajectory point at the SES border

The **eN**try and **eX**it points are the first and last points of the part of the trajectory considered within a FAB:

- the point on the 40NM circle around departure or arrival airport
- the point on the border with the previous/next FAB



### TABLE OF ABBREVIATIONS

**ADEP** - Airport of Departure

**ANSP** - Air Navigation Service Provider

**ATFM** - Air Traffic Flow Management

**FABEC** - Functional Airspace Block Europe Central

**TMA** - Terminal Manoeuvring Area, delimited by a 40 NM circle around the origin and destination airport.

**ADES** - Airport of Destination

**PRU** - Performance Review Unit

**YTD** - Year to Date value

**FPP** - FABEC Performance Plan



## FABEC Performance Report Environment:

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Status: March 2020

[www.FABEC.eu](http://www.FABEC.eu)

### 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.