



PERFORMANCE REPORT 2020 - 2024

# ENVIRONMENT

March 2021



making the difference

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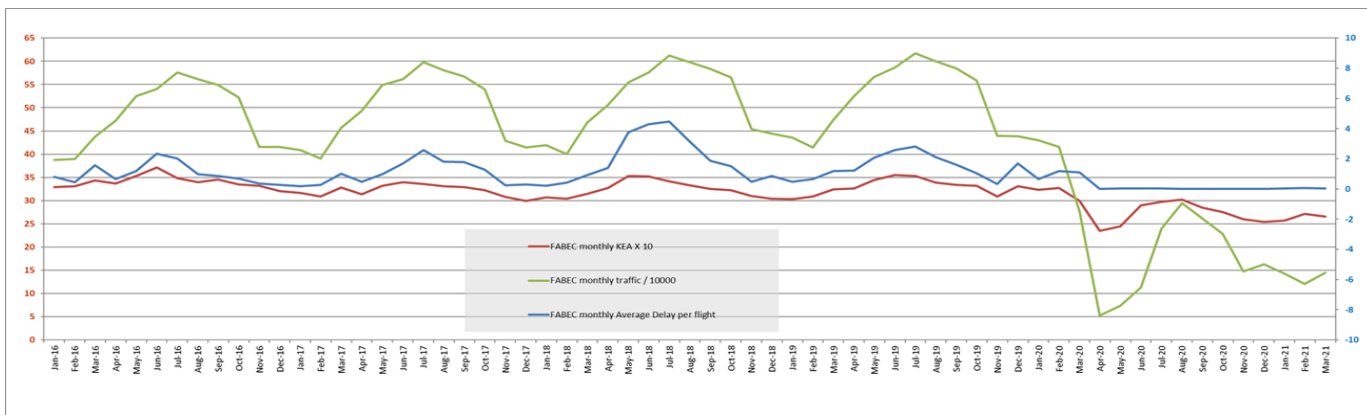
## Description & Analysis

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

In the FABEC area, the yearly rolling average value of efficiency of flown trajectory (expressed in KEA) was 97,24% for the period of April 2020 - March 2021, excluding the 10 best and 10 worst days. This is the highest yearly rolling KEA value since 2015. The value has increased by 0.56pp compared to 96,68% in the period April - March 2019/2020. The value in March 2021 is 0.03pp greater than the value of one month prior and it has been increasing slowly but steadily during the last year from 96,68% in the period April - March 2019/2020. The indicator is 0.49pp above the FABEC target for 2021, which was set to 96,75%. The difference between KEA and KEP is 3.20pp, which is 0.05pp bigger than one month prior.

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

The flight efficiency (expressed in KEA including all days on monthly bases) has reached 97,34% in March 2021, which is 0.15pp higher compared to February 2021 (97,29%) and 0.31pp lower compared to April 2020 (97,65%), which is the highest value since January 2016. The KEA in March 2021 has increased drastically by 0.33pp compared to the same month in 2020 (KEA in March 2020 was 97,01%). The reason for such an increase in flight efficiency is a significant decrease of the traffic volume caused by the corona crisis. This positive correlation between flight efficiency, traffic and capacity 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 was 94,04% for March 2021. This value is by 0.2pp lower than KEP rolling average month prior (94,06% in February 2021) which is the highest yearly rolling KEP value since 2015. It has increased by 0.09pp as compared to 93,95% of the 12-month rolling average of January 2021. The rolling average has been increasing slowly but steadily during the year of 2020 from 93,94% in April - June (the lowest value of the year) until it reached 94,06% in February 2021.

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

The figure shows an increase of flight efficiency in March 2021 by 0.04pp compared to February 2021 (93,90%) and a decrease in flight efficiency based on filed flight plan in March 2021 by 0.013pp compared to the value in March 2020 (93,94% in March 2021 vs 94,07% in March 2020).

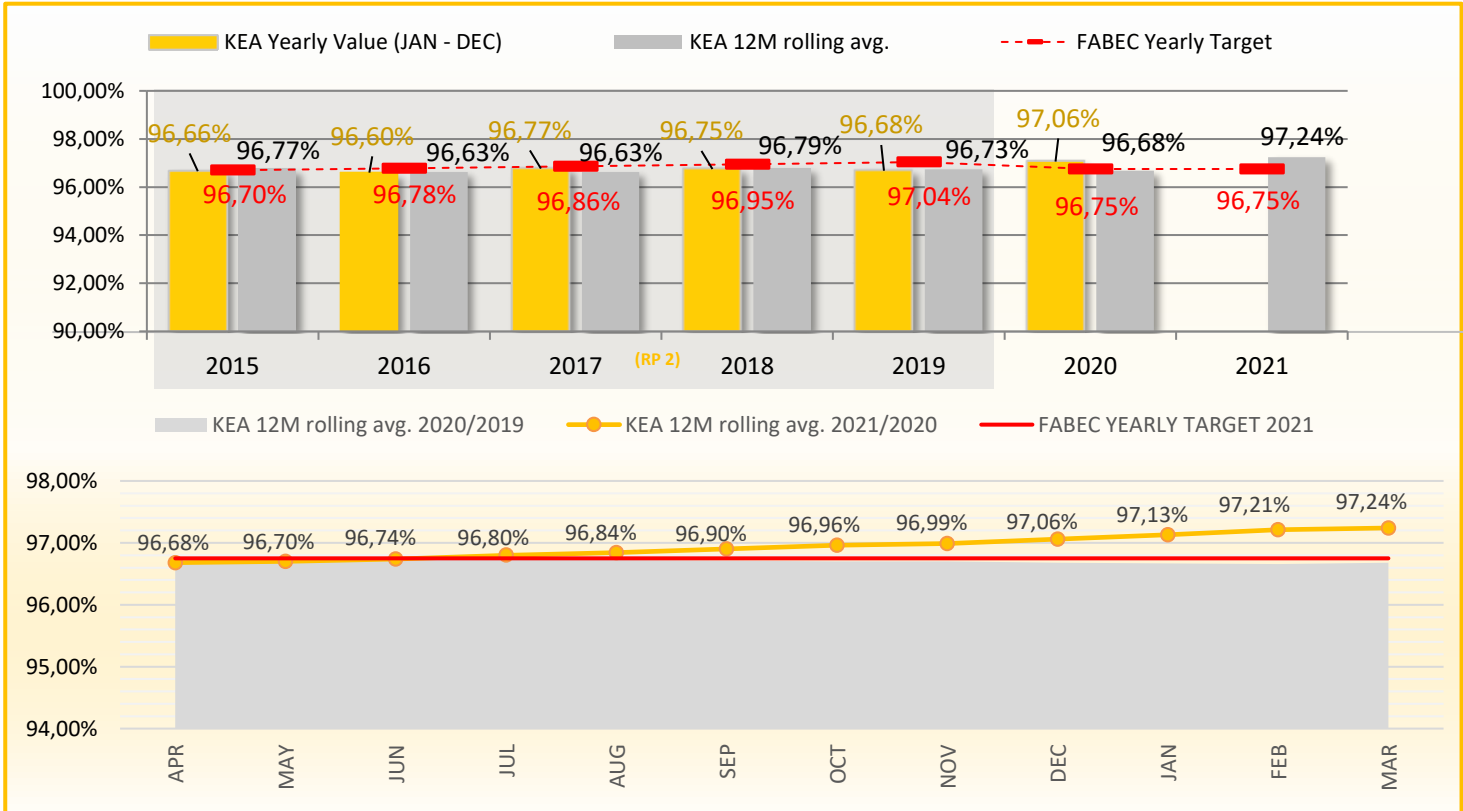
### ENV PI#4: HFE based on Actual at State level (including all days)

At national level, all countries except Belgium demonstrated an increase of flight efficiency based on actual trajectories in March 2021 compared to February 2021.

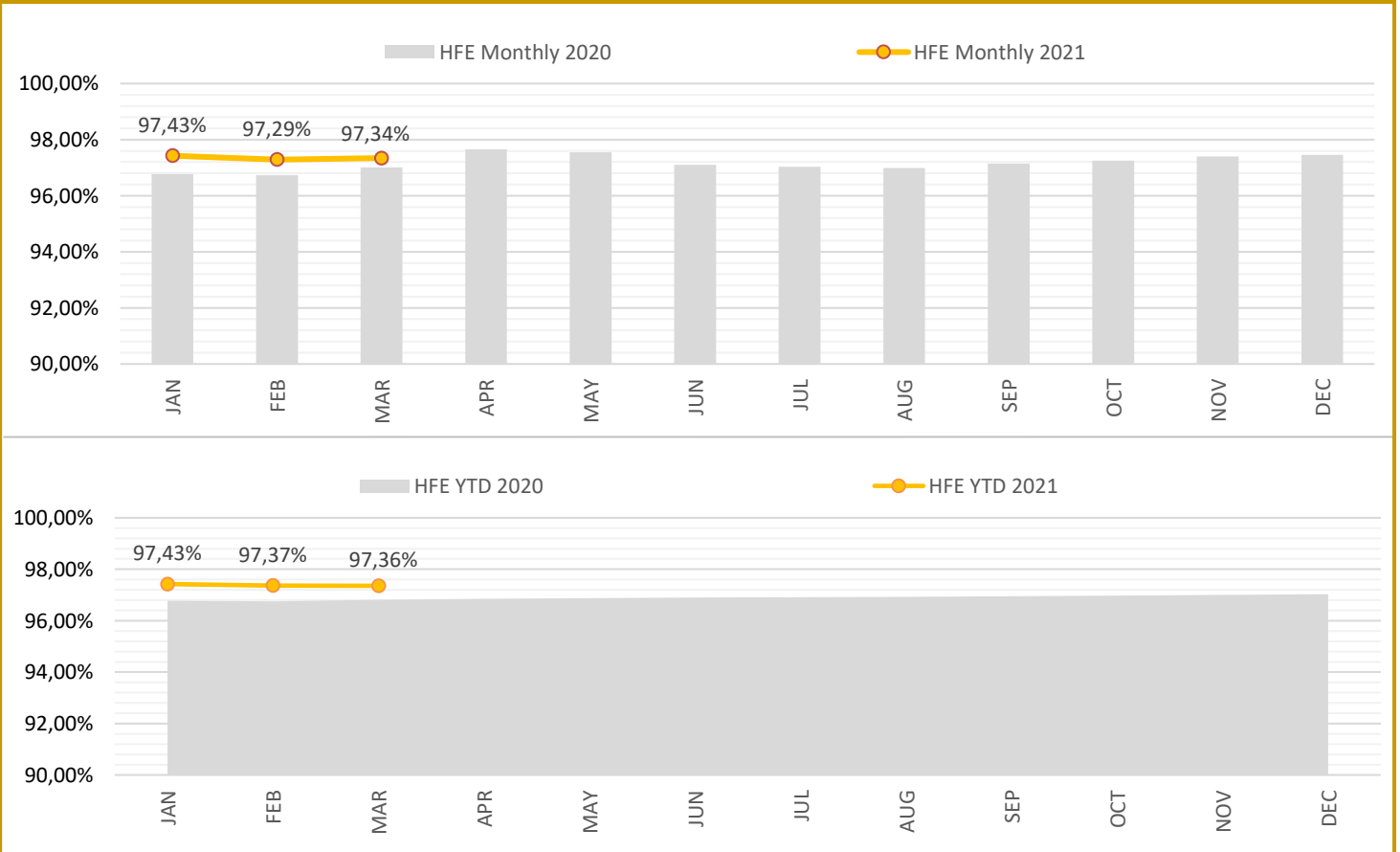
### ENV PI#5: HFE based on Filed FPL at State level (including all days)

At national level, all countries except Switzerland demonstrated an increase of flight efficiency based on filed flight plan in March 2021 compared to February 2021.

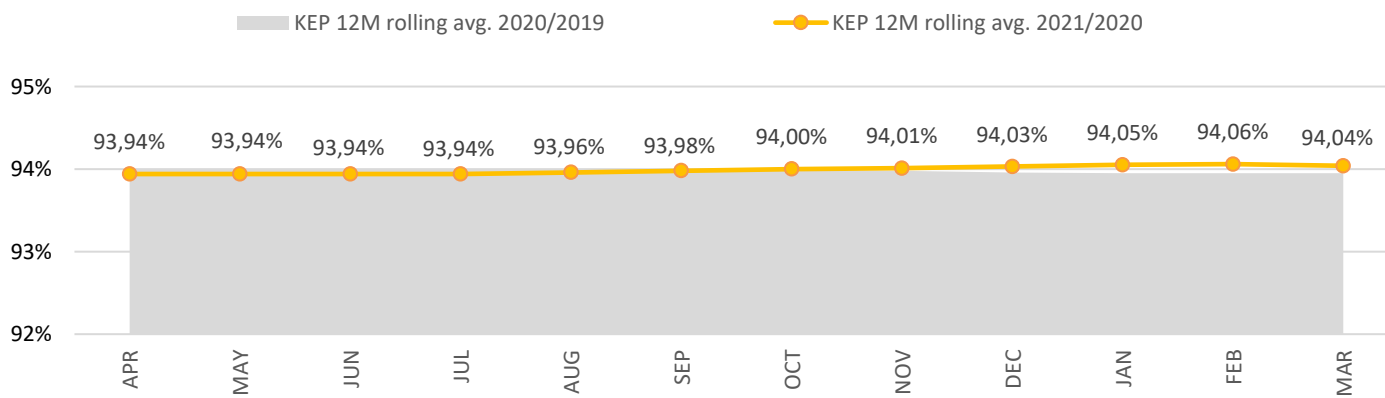
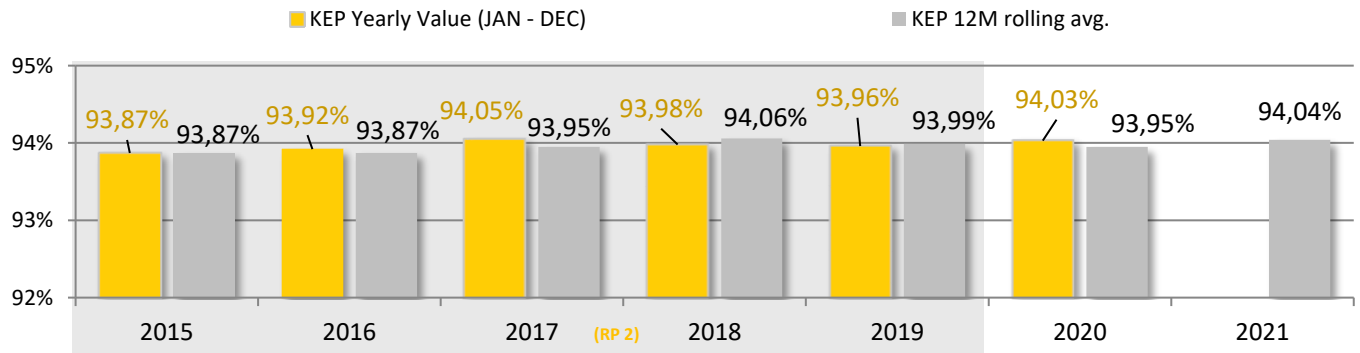
## KPI #1: KEA/HFE at FABEC level (excl. 10 best/worst days)



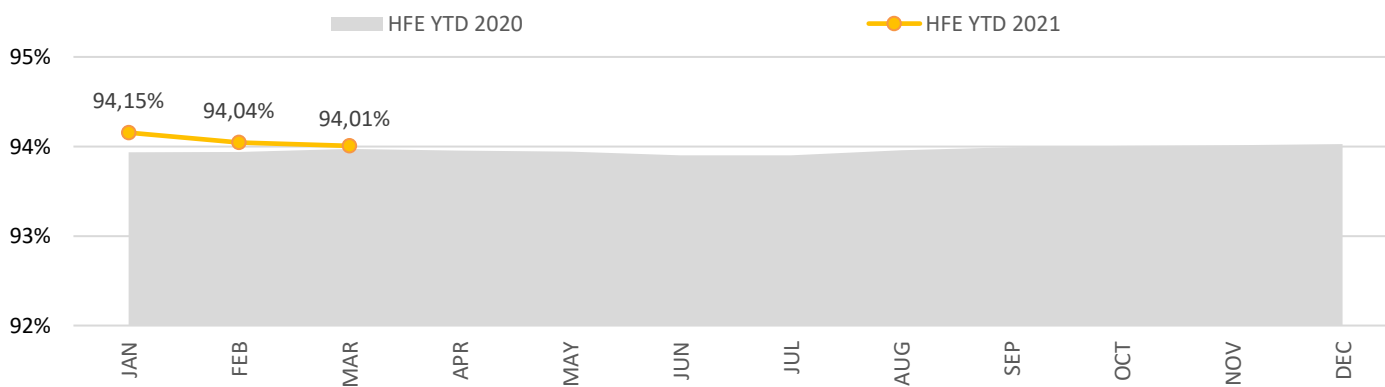
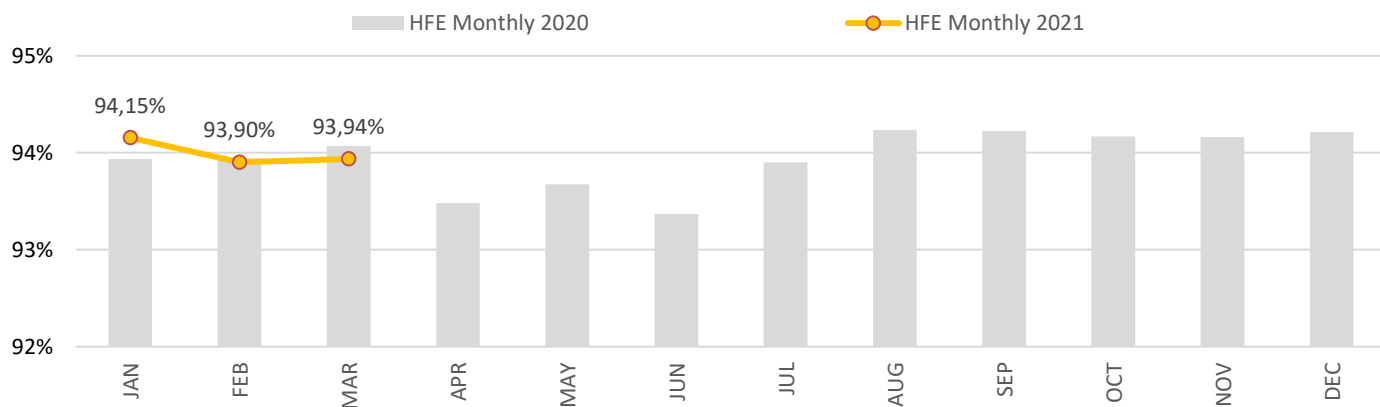
## PI #1: HFE based on Actual at FABEC level (incl. all days)



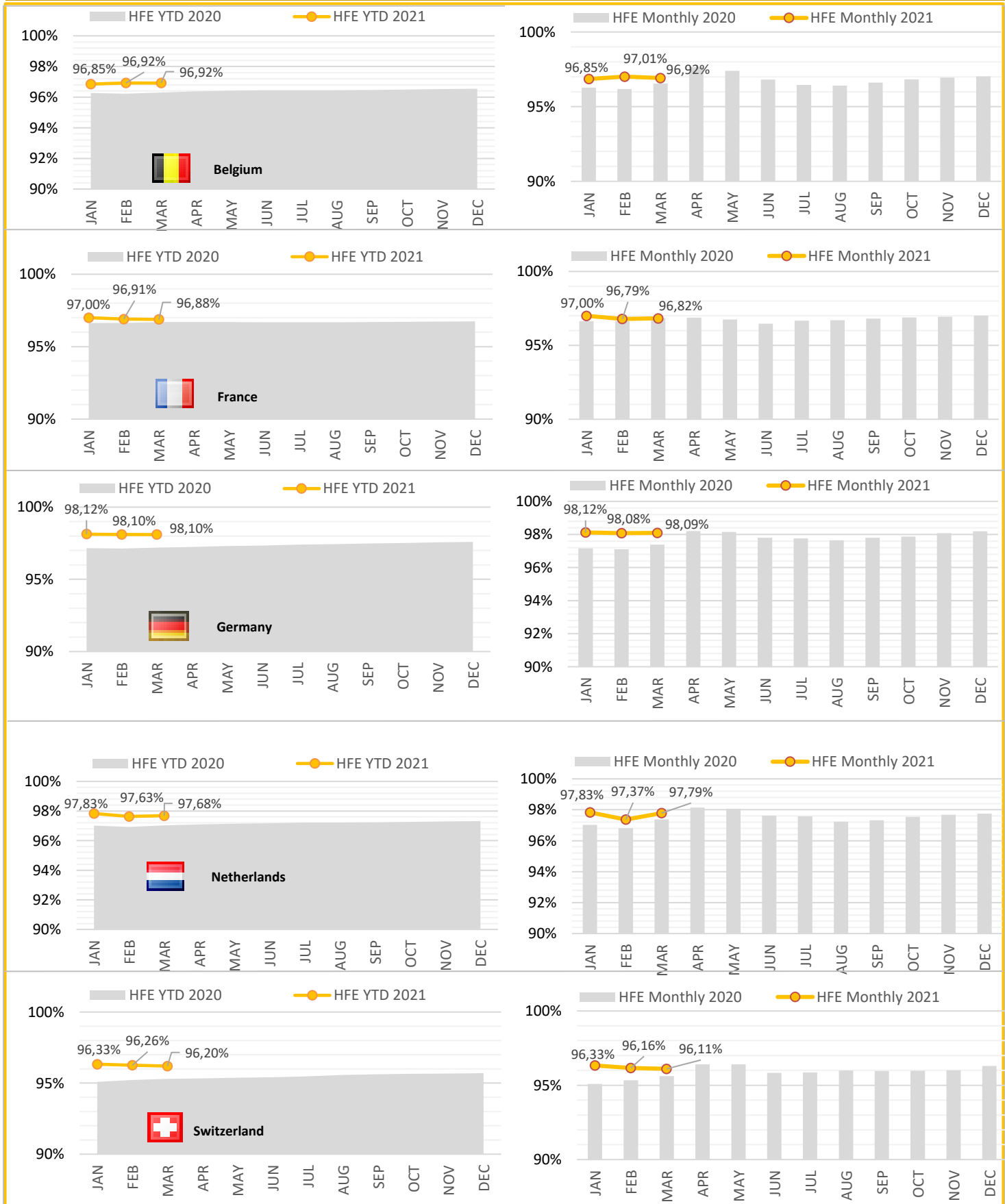
**PI #2: KEP/HFE based on filed FPL at FABEC level (excl. 10 best/worst days)**



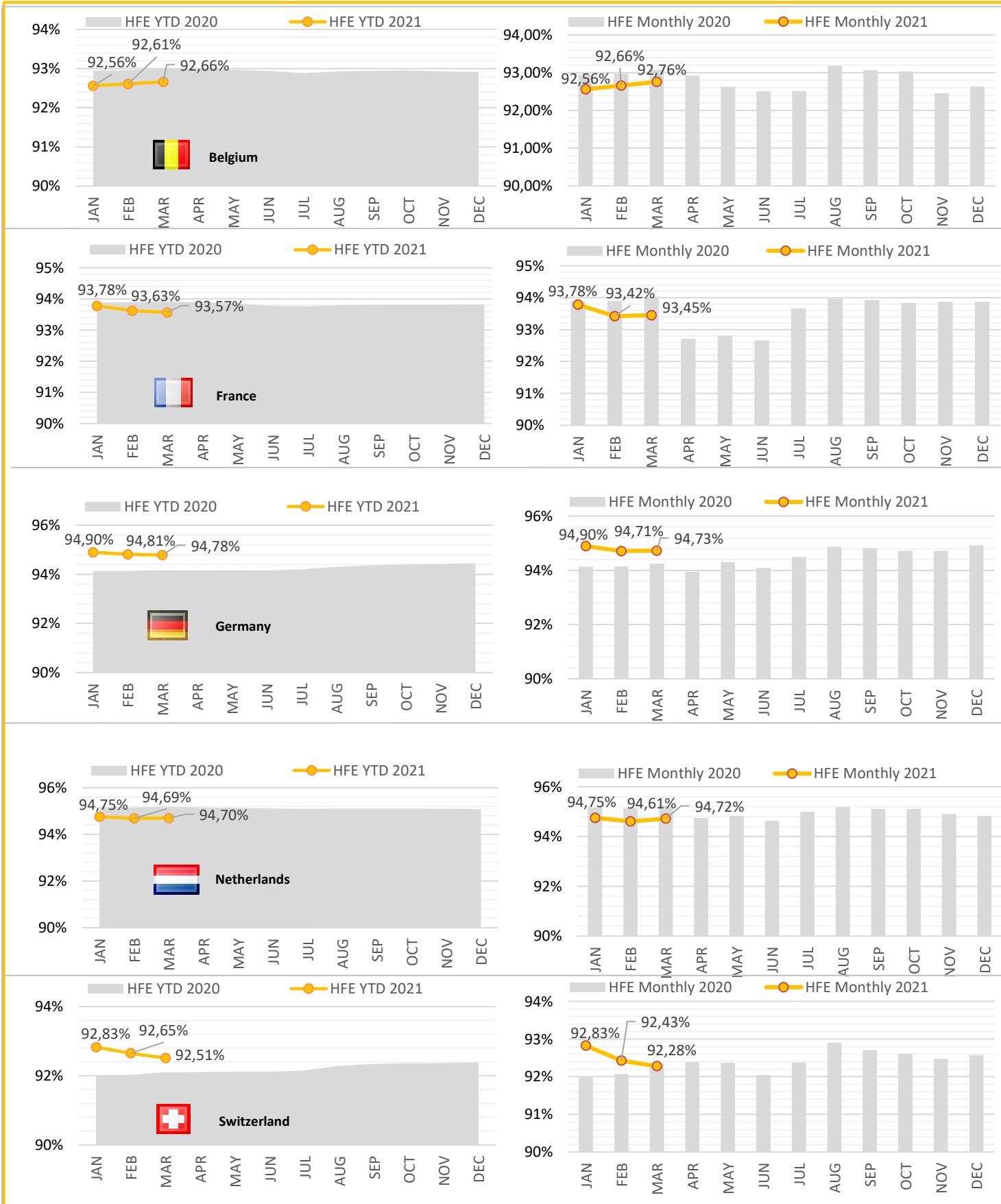
**PI #3: HFE based on filed FPL at FABEC level (incl. all days)**



## 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)



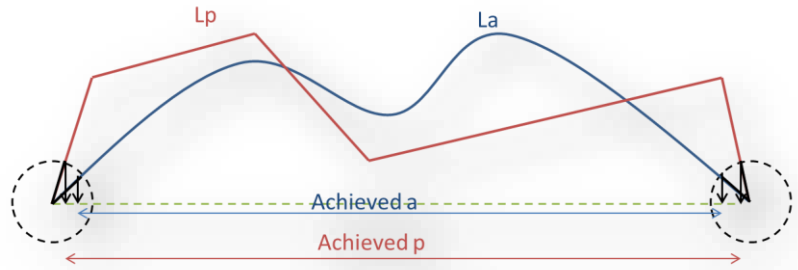


## Glossary

### 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

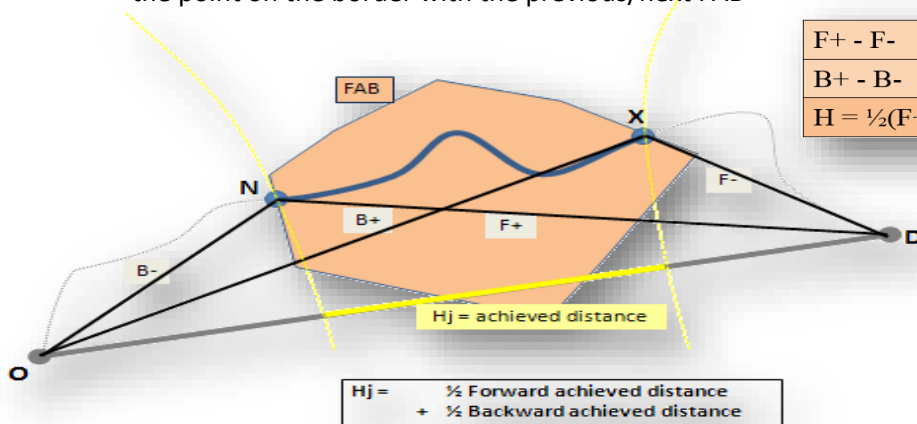
4 reference points are identified for KEP/KEA calculation :

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



F+ - F-	Forward achieved distance
B+ - B-	Backward achieved distance
$H = \frac{1}{2}(F+ - F-) + \frac{1}{2}(B+ - B-)$	Achieved distance

$$H_j = \frac{1}{2} \text{ Forward achieved distance} + \frac{1}{2} \text{ Backward achieved distance}$$

### 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:

Editor: FABEC PMG  
Sources: EUROCONTROL PRU (<http://ansperformance.eu/>), FABEC ANSPs  
Status: March 2021

[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 PMG's attention.