



PERFORMANCE REPORT 2020 - 2024

# ENVIRONMENT

July 2022



making the difference

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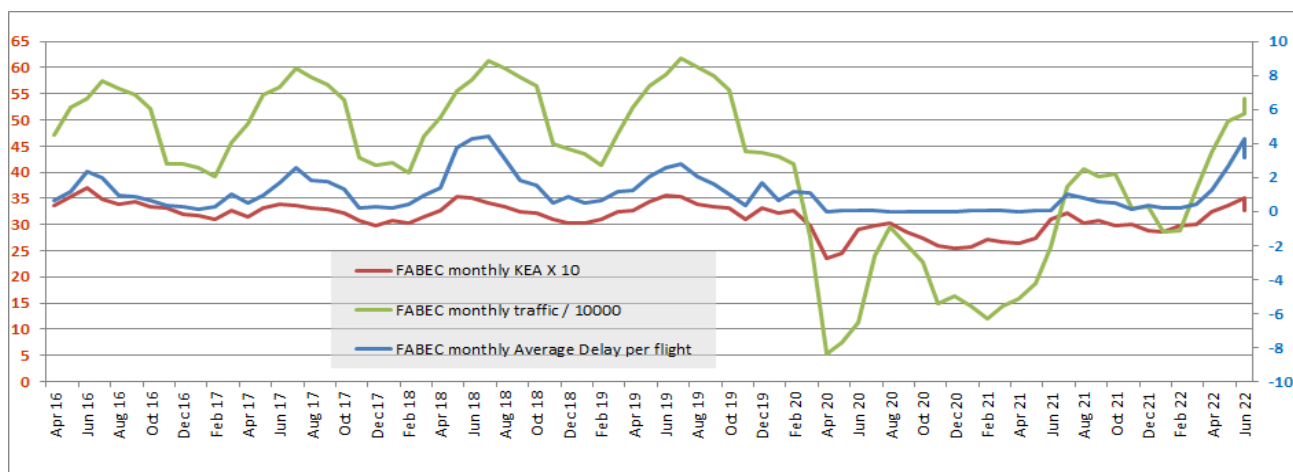
## Description & Analysis

### 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 96,88% for the period of August 2021 - July 2022, excluding the 10 best and 10 worst days. This value is 0.37pp less than the reference value (97,25%). The value in July 2022 is 0.01pp less than the value of one month prior and 0.36pp less than the highest yearly rolling KEA value since 2015 reached in March and April 2021 (97,24%). The rolling KEA indicator has been decreasing slowly but steadily during the last year from the peak in March and April 2021. In Ju 2022 the difference between KEA and KEP is 2.58pp, which is 0.02pp smaller 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 96,73% in July 2022, which is 0.25pp higher compared to June 2022 (96,48%) and 0.92pp lower compared to April 2020 (97,65%), which is the highest value since January 2016. The KEA in July 2022 has decreased by 0.36pp compared to the same month in 2021 (KEA in July 2021 was 97,09%). This positive correlation between flight efficiency 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 was 94,30% for July 2022 (the value is by 0,01pp higher than the value of the month prior). This is the highest yearly rolling KEP value since 2015. It has increased by 0.17pp as compared to 94,13% in July 2021. The rolling average has been increasing slowly but steadily during the year of 2021 and 2022 from 94,13% in July 2021 until it reached 94,30% in July 2022.

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

The figure shows a increase of flight efficiency in July 2022 (94,29%) by 0.12pp compared to June 2022 (94,17%) and a significant increase in flight efficiency in July 2022 compared to the value in July 2021 (94,15%).

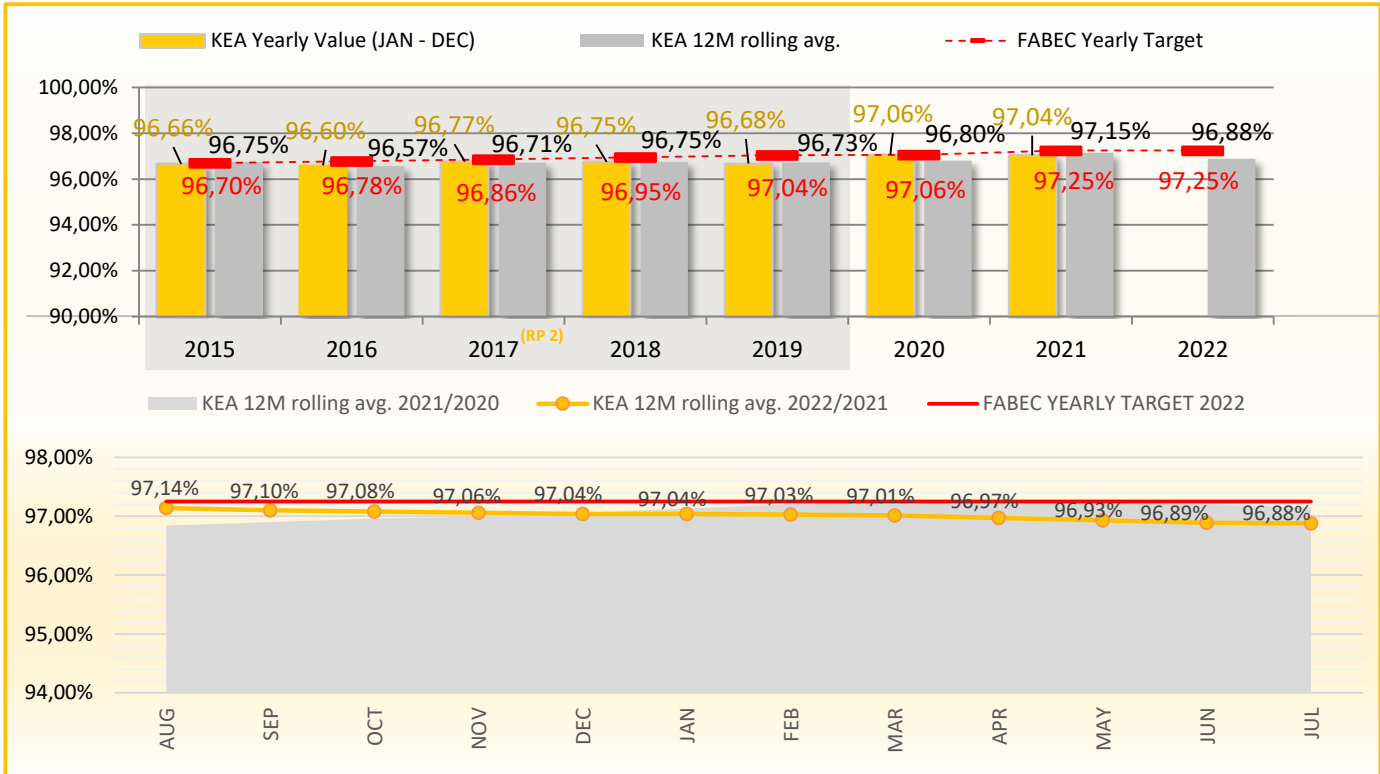
### ENV PI#4: HFE based on Actual at State level (including all days)

At national level, all countries demonstrated a increase of flight efficiency based on actual trajectories in July 2022 compared to June 2022.

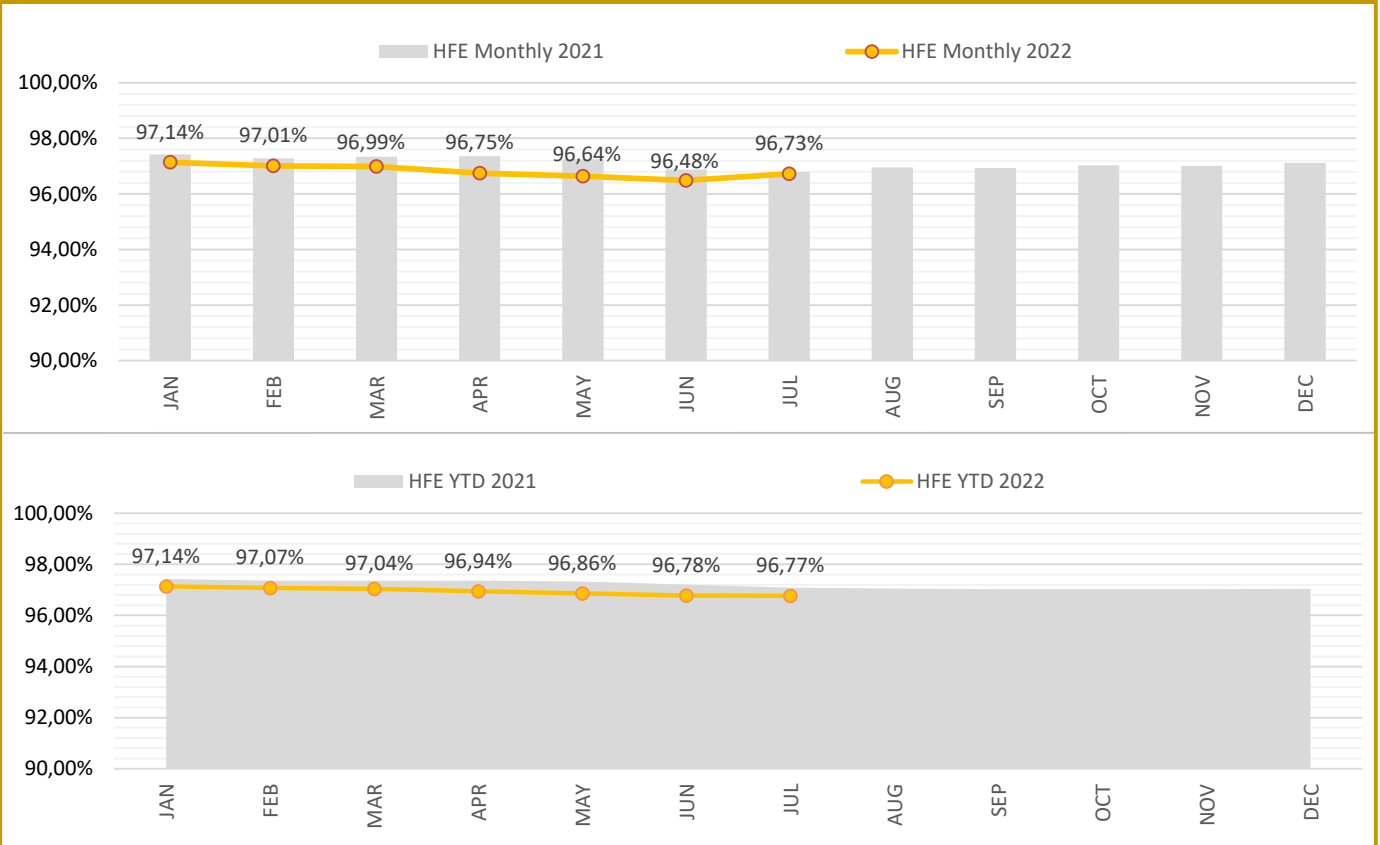
### ENV PI#5: HFE based on Filed FPL at State level (including all days)

At national level, all countries demonstrated an increase in flight efficiency based on the filed FPL compared to June 2022.

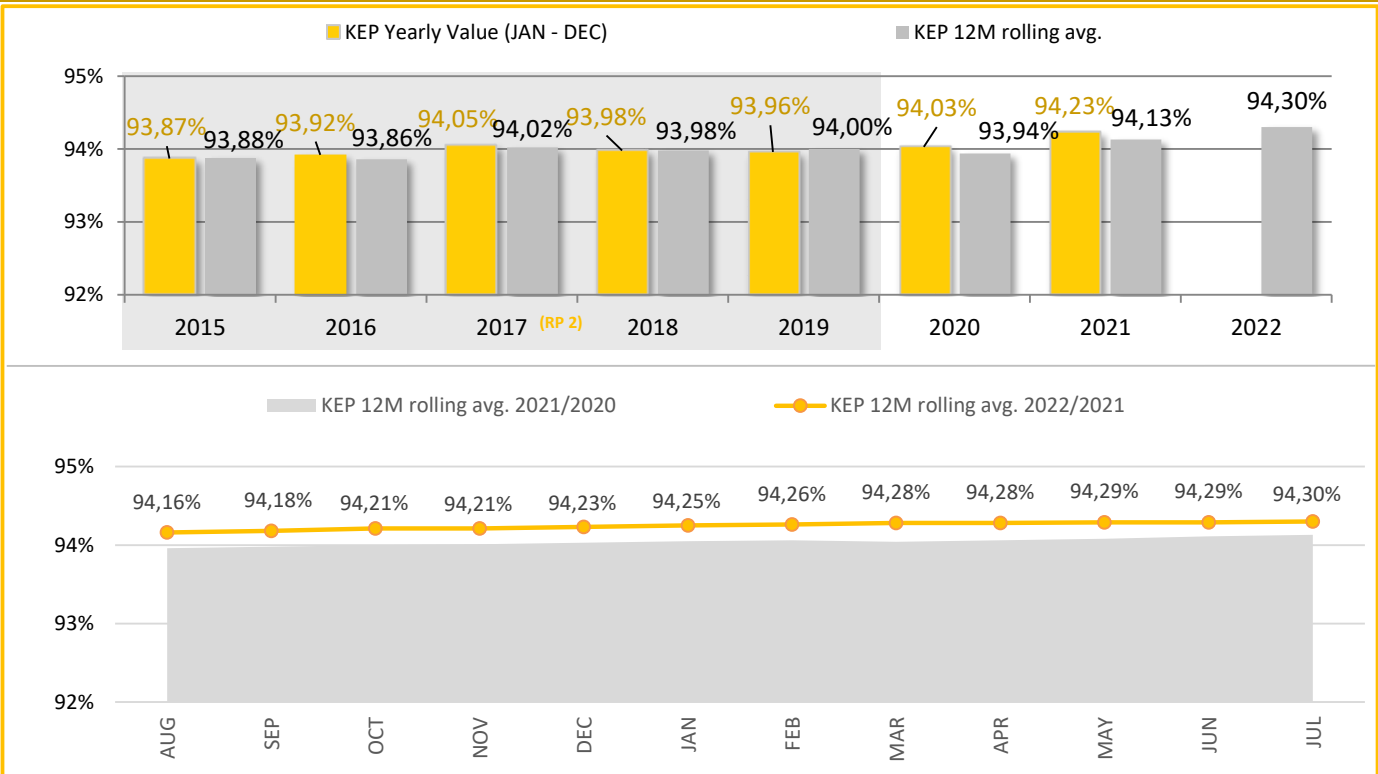
## KPI #1: KEA/HFE at FABEC level (excl. 10 best/worst days)



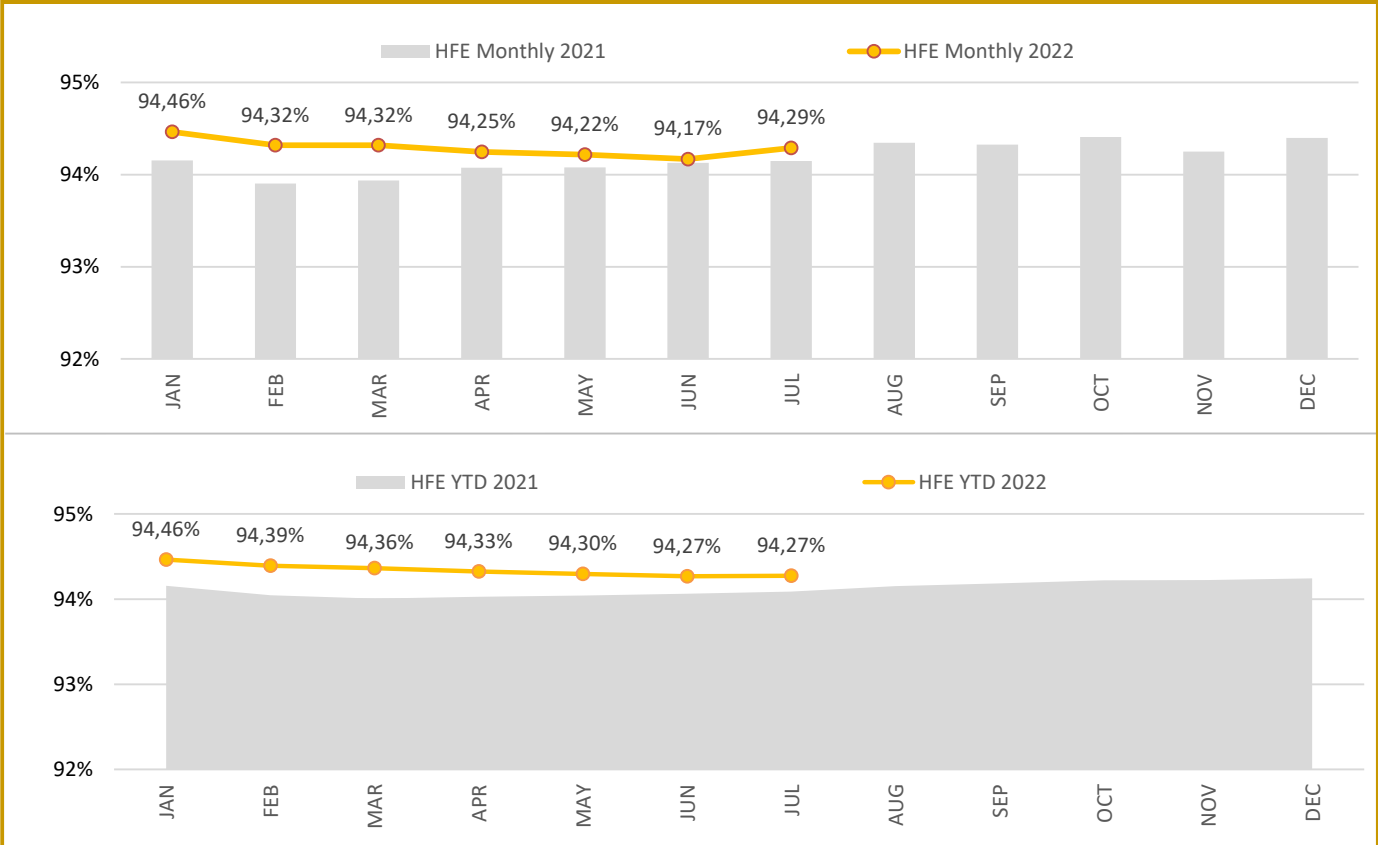
## PI #1: HFE based on Actual at FABEC level (incl. all days)



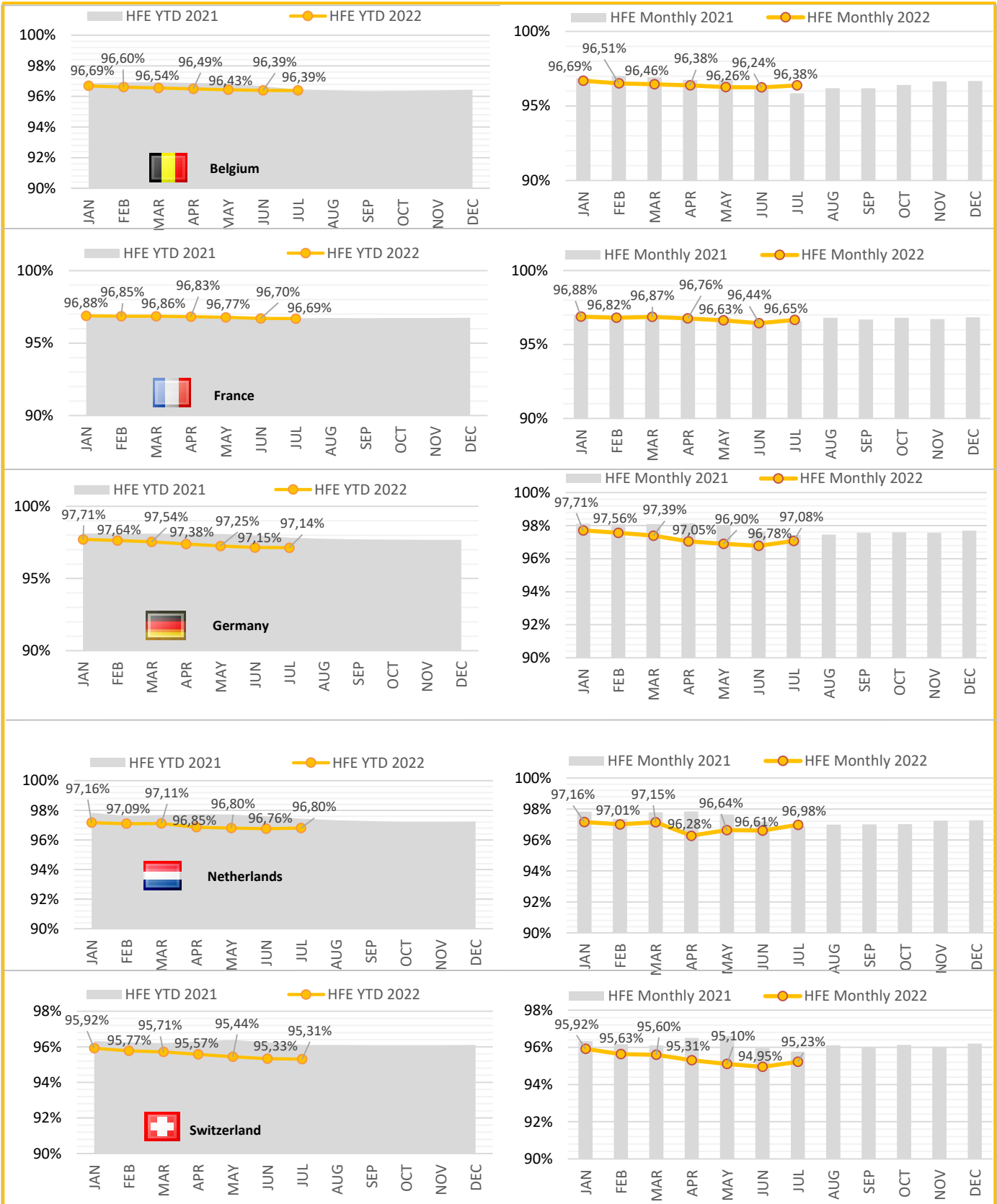
PI #2: KEP/HFE based on filed FPL at FABEC level (excl. 10 best/worst days)



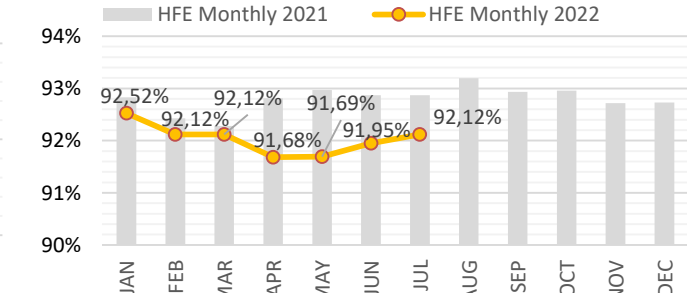
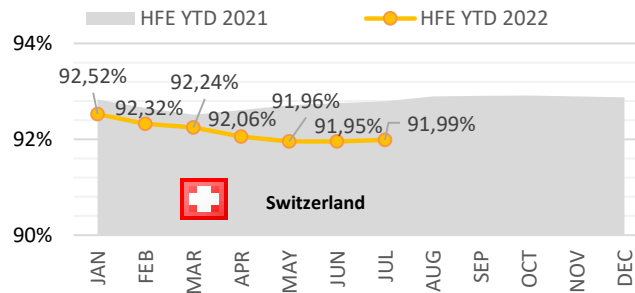
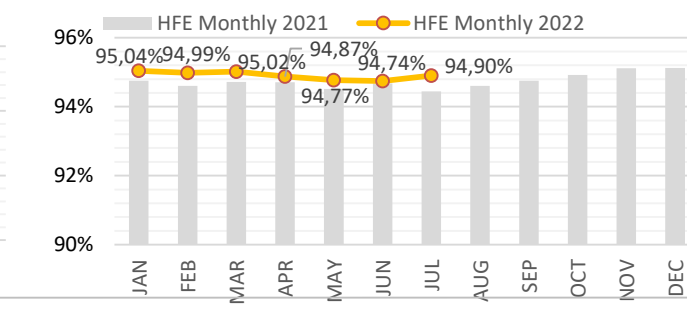
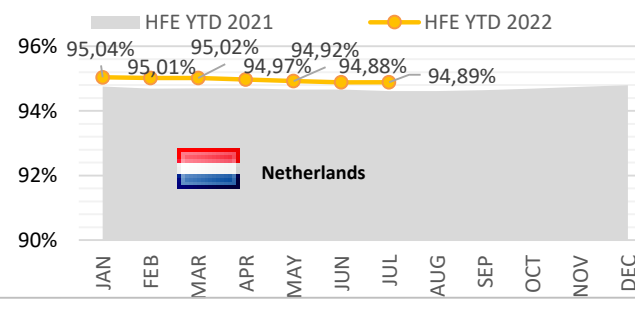
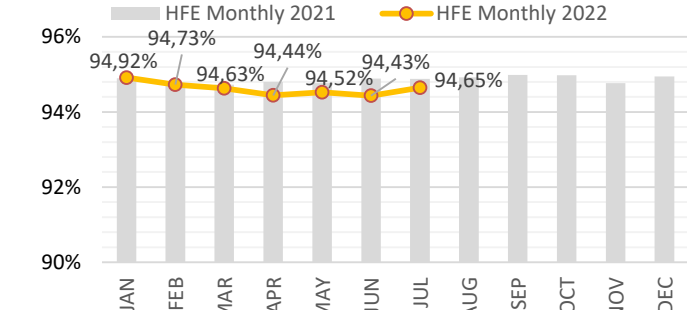
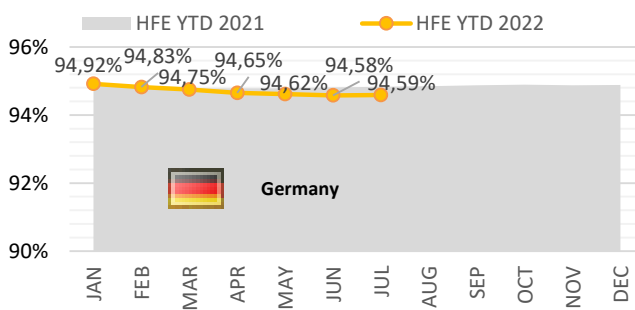
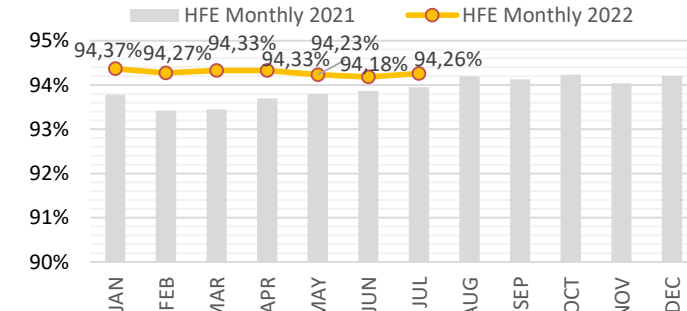
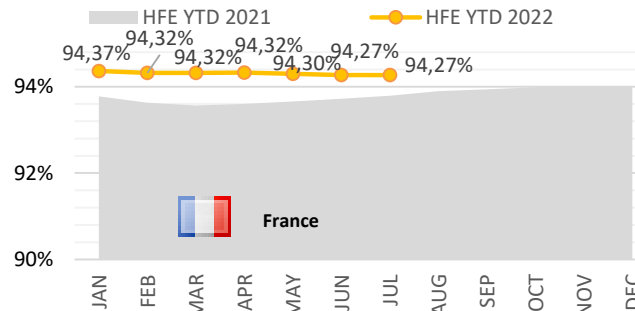
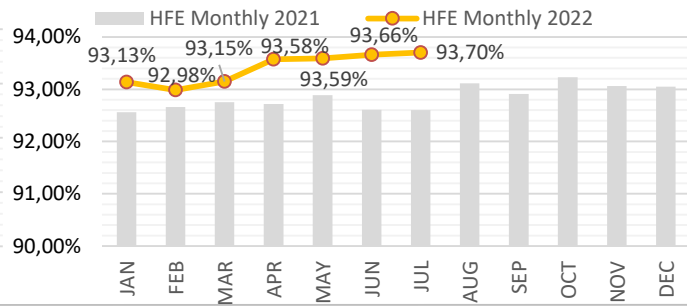
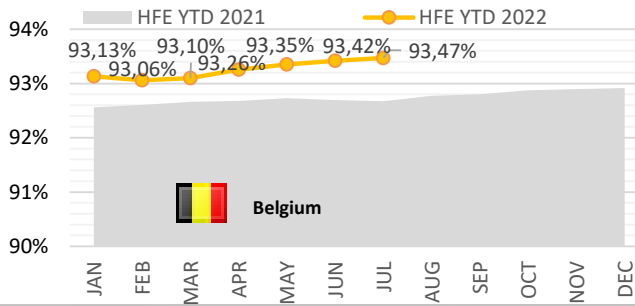
PI #3: HFE based on filed FPL at FABEC level (incl. all days)



**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)

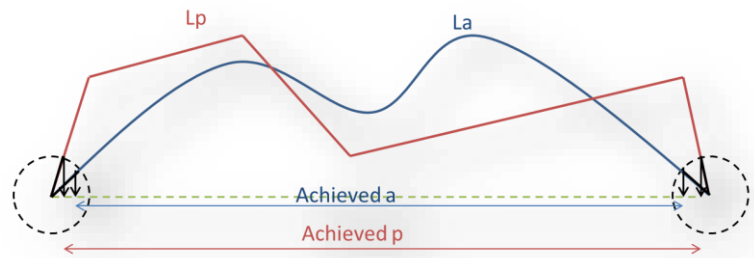


## Glossary

### 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

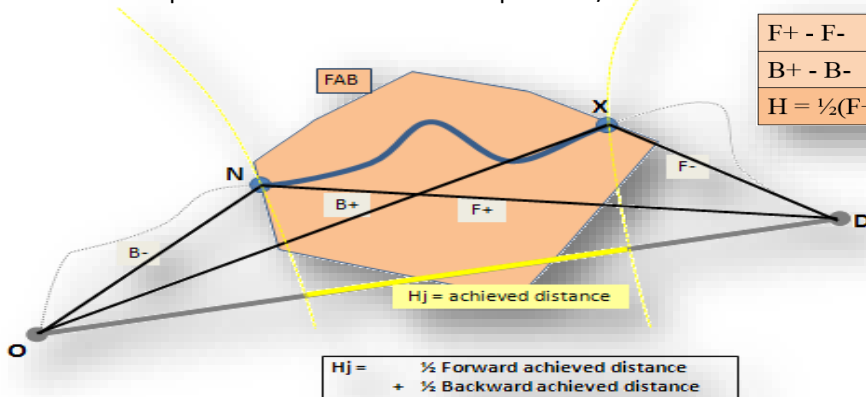
4 reference points are identified for KEP/KEA calculation :

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  
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[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.