



PERFORMANCE REPORT 2020 - 2024

ENVIRONMENT

September 2021



making the difference

Contents

Description & Analysis	3
KPI #1: KEA/HFE at FABEC level (excl. 10 best/worst days)	4
PI #1: HFE based on Actual at FABEC level (incl. all days)	4
PI #2: KEP/HFE based on filed FPL at FABEC level (excl. 10 best/worst days)	5
PI #3: HFE based on filed FPL at FABEC level (incl. all days)	5
PI #4: HFE based on Actual at State level (incl. all days)	6
PI #5: HFE based on filed FPL at State level (incl. all days)	7
<i>PI #6: ASMA</i>	
<i>PI #7: aTXOT</i>	
<i>PI #8: Effectiveness of Booking Procedure for FUA</i>	
<i>PI #9: Effectiveness of SUA usage</i>	
Glossary	8

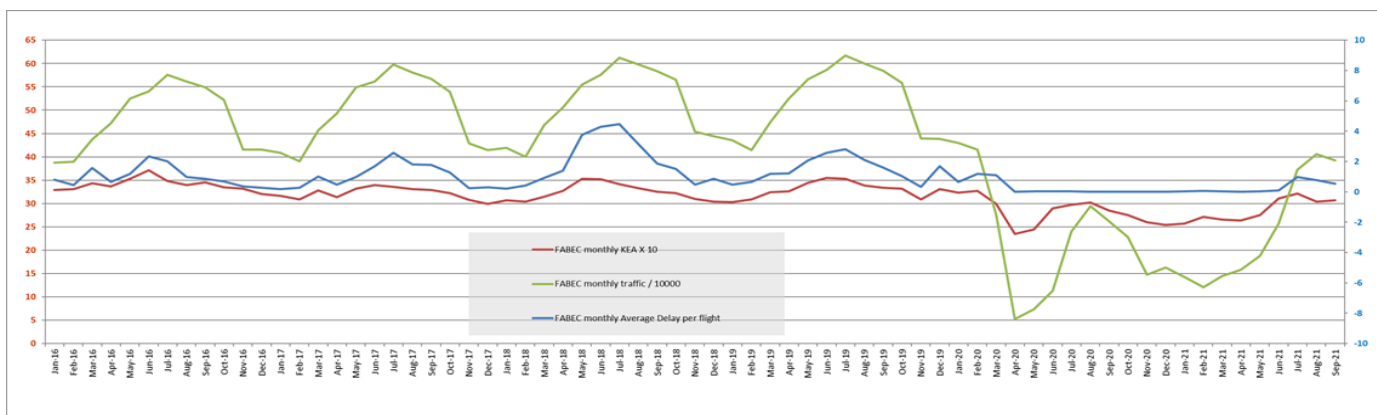
Description & Analysis

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 97,10% for the period of Oktober 2020 - September 2021, excluding the 10 best and 10 worst days. This value is 0.04 pp less than the value from the previous month, and 0.14pp less than the highest yearly rolling KEA value since 2015 reached in March and April 2021 (97,24%). The rolling KEA indicator has been increasing slowly but steadily during the last year from 96,90% in September 2020, reaching the peak in March and April 2021. The indicator is 0.15pp below the FABEC target for 2021, which was set to 97,25%. The difference between KEA and KEP is 2.92pp, which is 0.06pp 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 96,93% in September 2021, which is 0.03pp lower compared to August 2021 (96,96%) and 0.72pp lower compared to April 2020 (97,65%), which is the highest value since January 2015. The KEA in September 2021 has decreased by 0.22pp compared to the same month in 2020 (KEA in September 2020 was 97,15%). The 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 reached 94,18% for September 2021 which is the highest yearly rolling KEP value since 2015. This value is by 0.02pp higher than KEP rolling average month prior (94,16% in August 2021). It has increased by 0.20pp as compared to 93,98% of the 12-month rolling average of September 2020. The rolling average has been increasing slowly but steadily during the year of 2020 from 93,98% in September 2020 until it reached 94,18% in September 2021.

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

The figure shows an decrease of flight efficiency in September 2021 (94,33%) by 0.02pp compared to August 2021 (94,35%) and a significant increase in flight efficiency based on filed flight plan in September 2021 by 0.11pp compared to the value in September 2020 (94,33% in September 2021 vs 94,22% in September 2020).

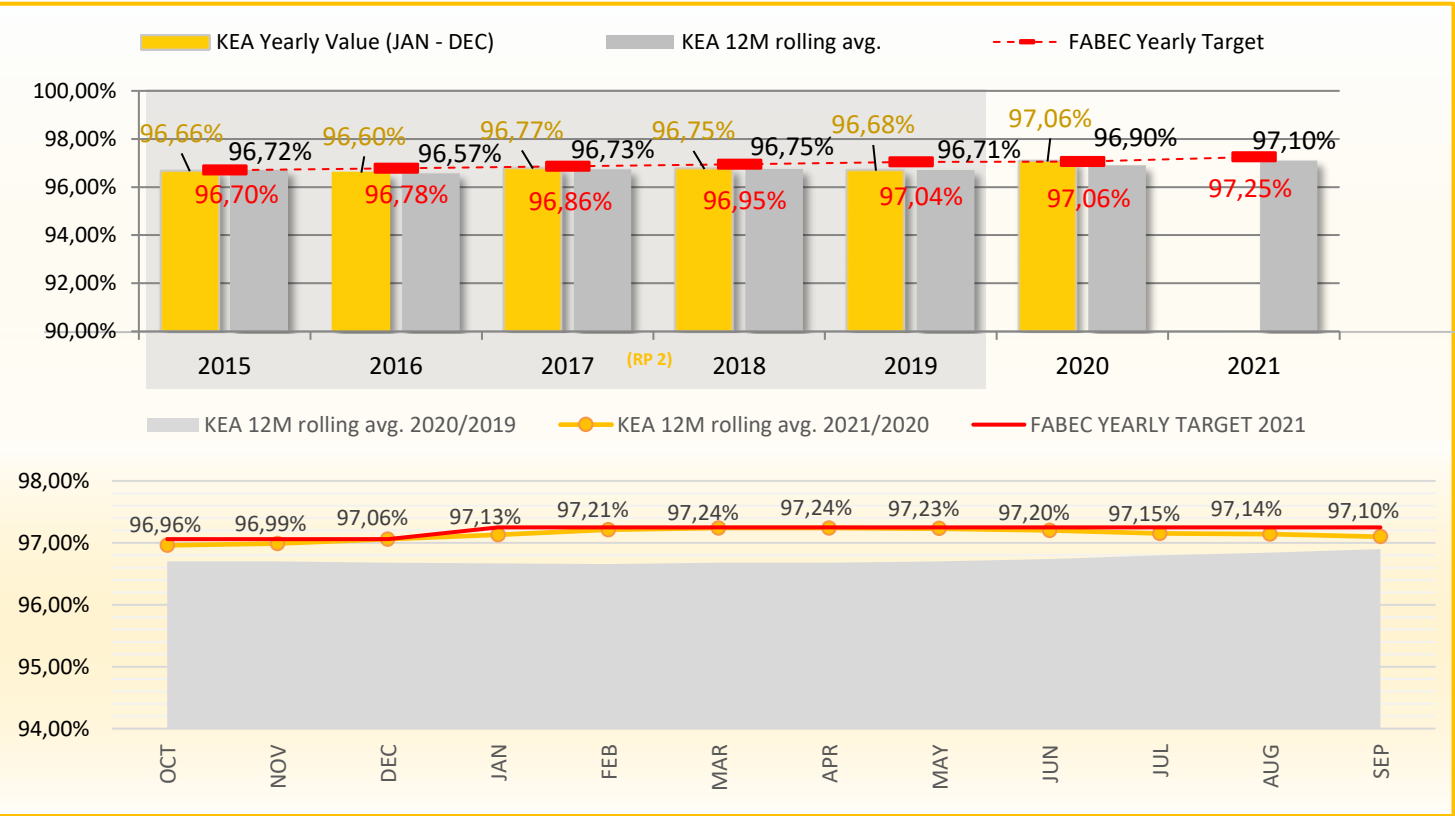
ENV PI#4: HFE based on Actual at State level (including all days)

At the national level in September 2021, Germany (0,1pp) and the Netherland (0,01pp) demonstrated an increase of flight efficiency based on actual trajectories compared to August 2021, but Switzerland (0,08pp), Belgium (0,01pp) and France (0,11pp) demonstrated a decrease in flight efficiency compared to one month prior.

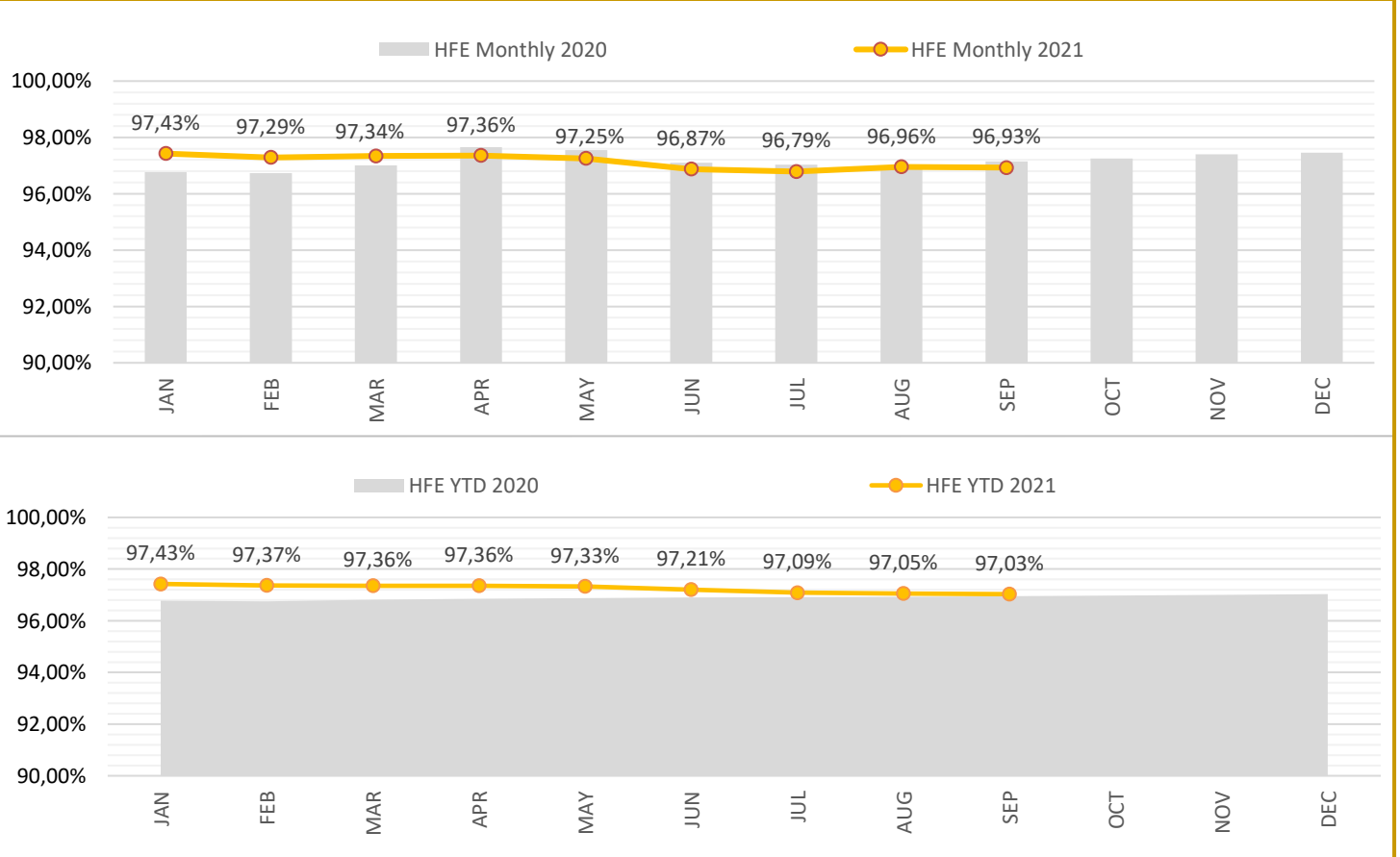
ENV PI#5: HFE based on Filed FPL at State level (including all days)

At the national level in September 2021, Germany (0,07pp) and the Netherland (0,15pp) demonstrated an increase of flight efficiency based on filed flight plan compared to August 2021 but Belgium (0,2pp), France (0,07pp) and Switzerland (0,27pp) demonstrated a decrease in flight efficiency compared to one month prior.

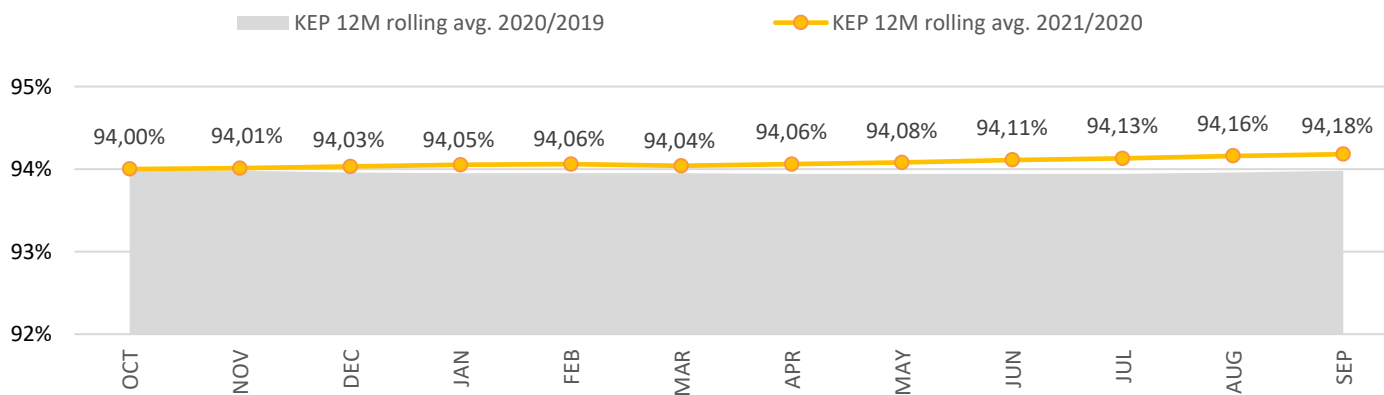
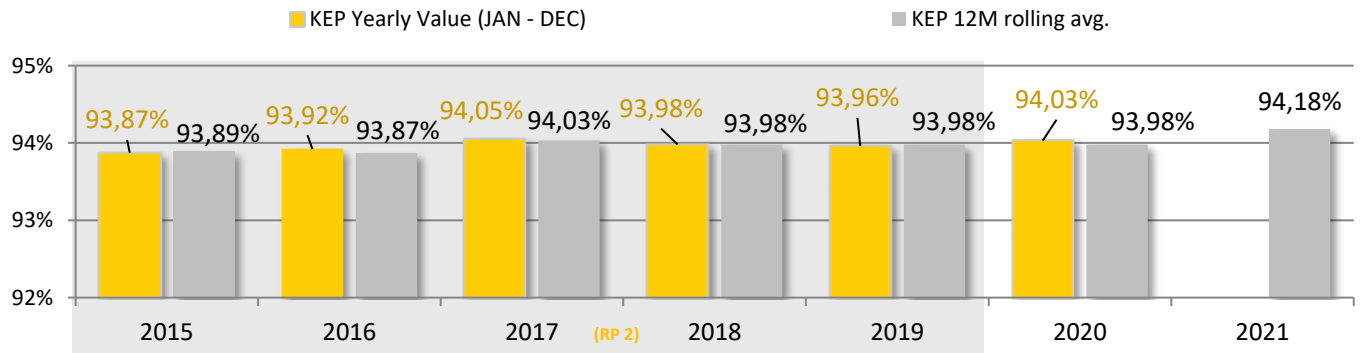
KPI #1: KEA/HFE at FABEC level (excl. 10 best/worst days)



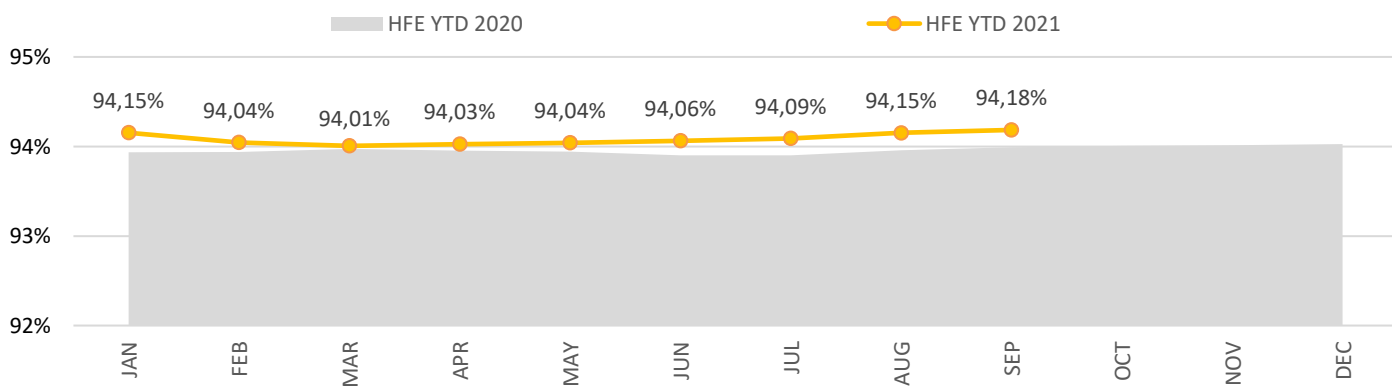
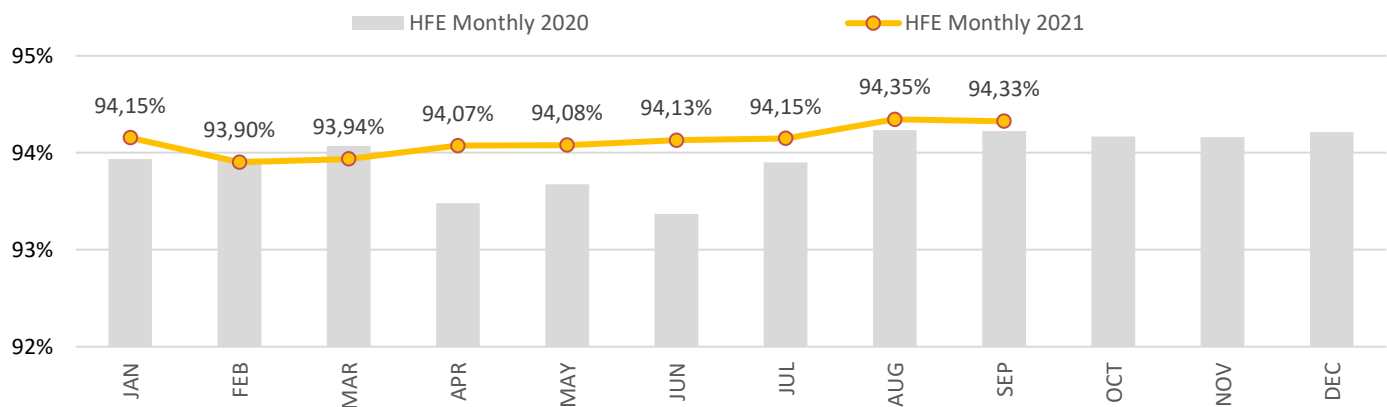
PI #1: HFE based on Actual at FABEC level (incl. all days)



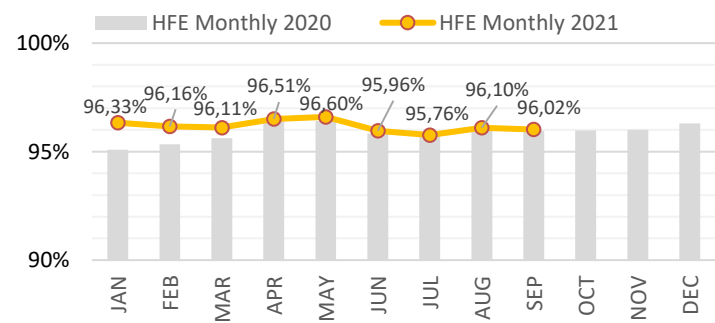
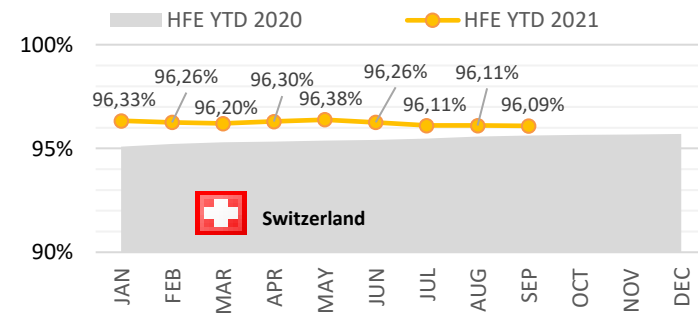
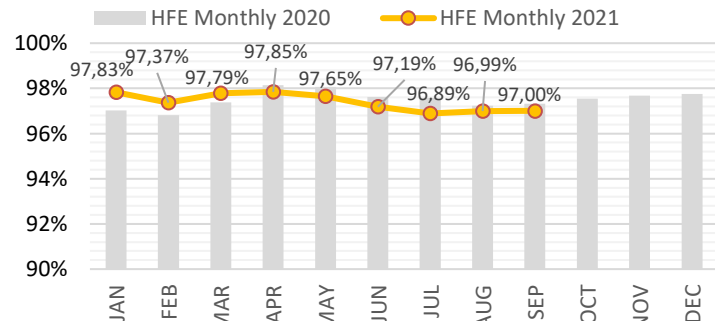
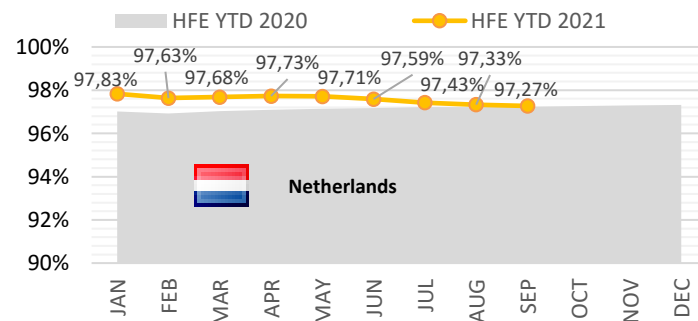
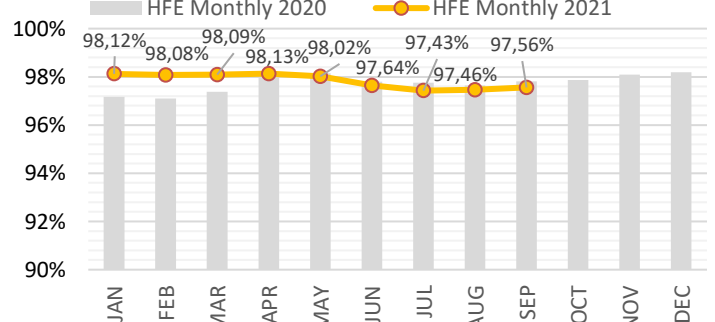
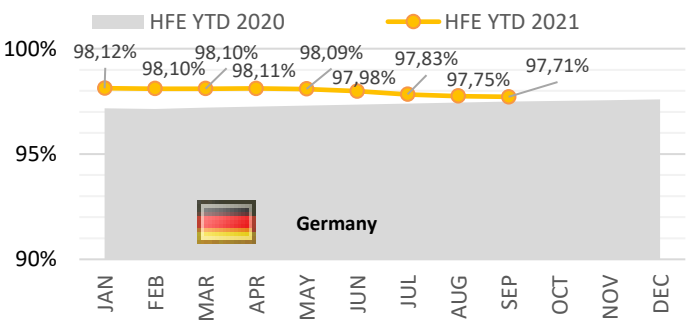
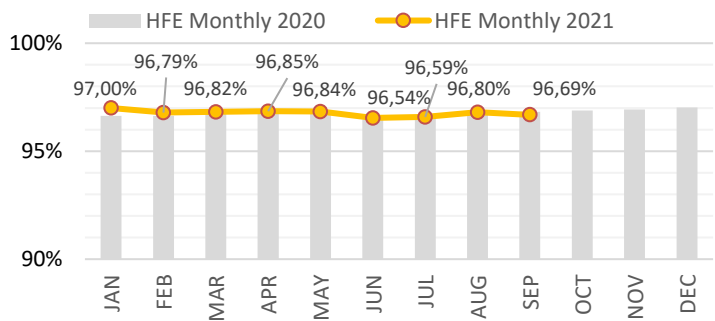
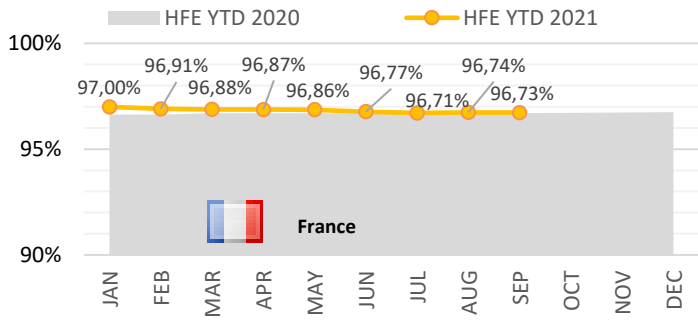
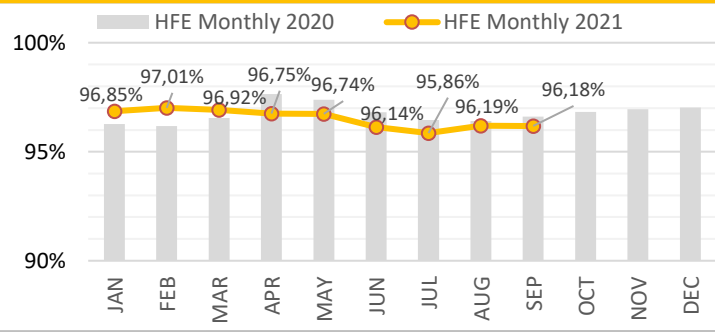
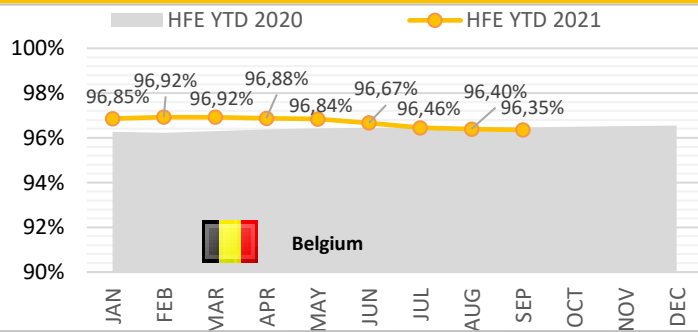
PI #2: KEP/HFE based on filed FPL at FABEC level (excl. 10 best/worst days)



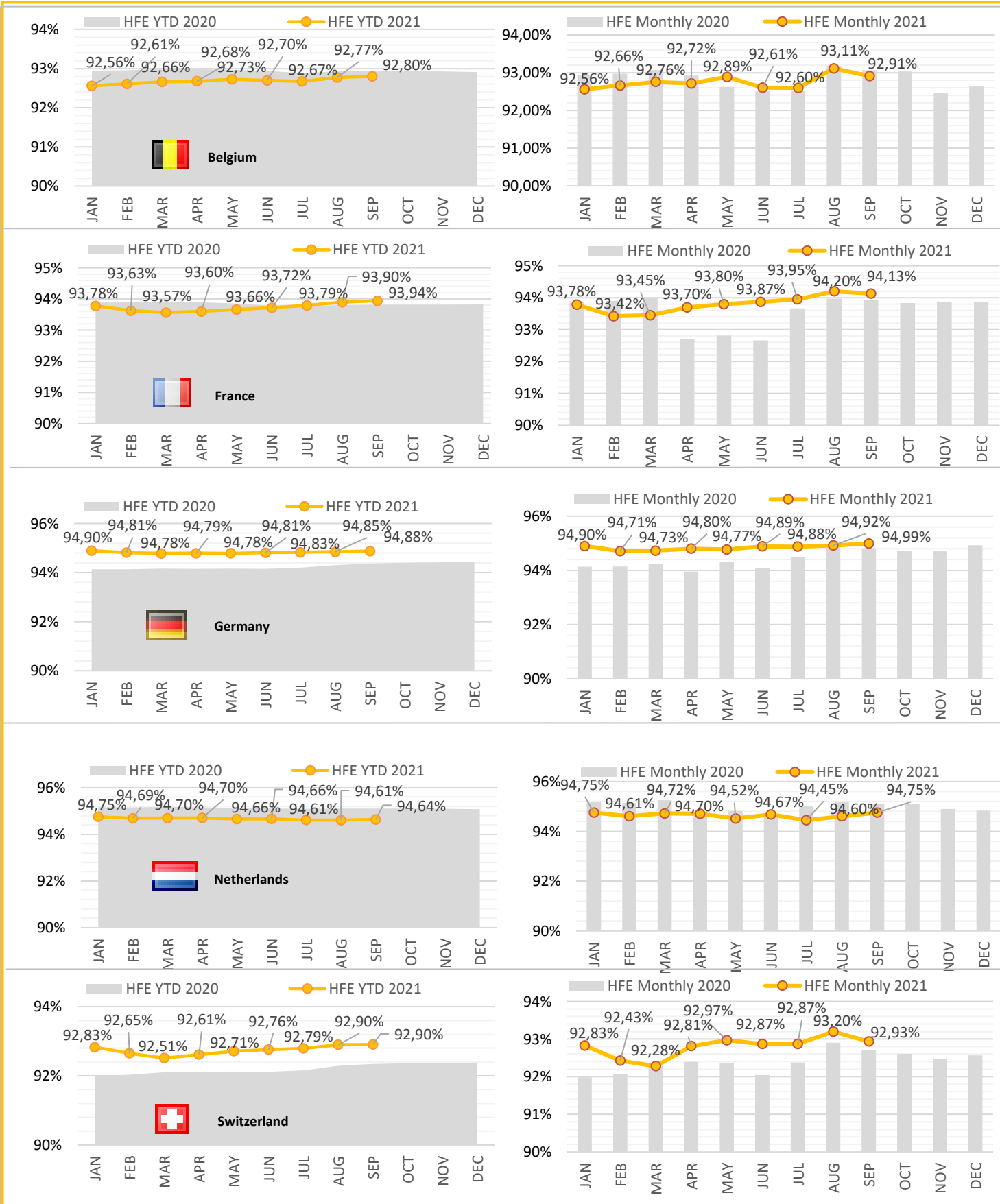
PI #3: HFE based on filed FPL at FABEC level (incl. all days)



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)

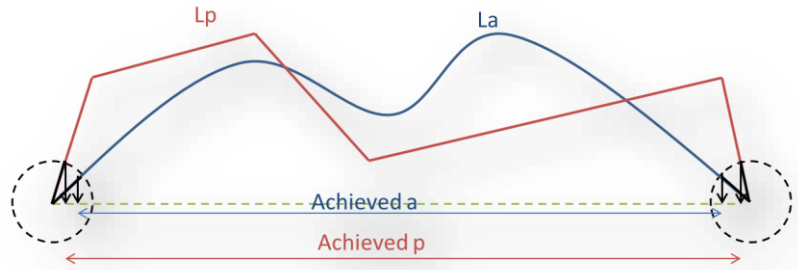


Glossary

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

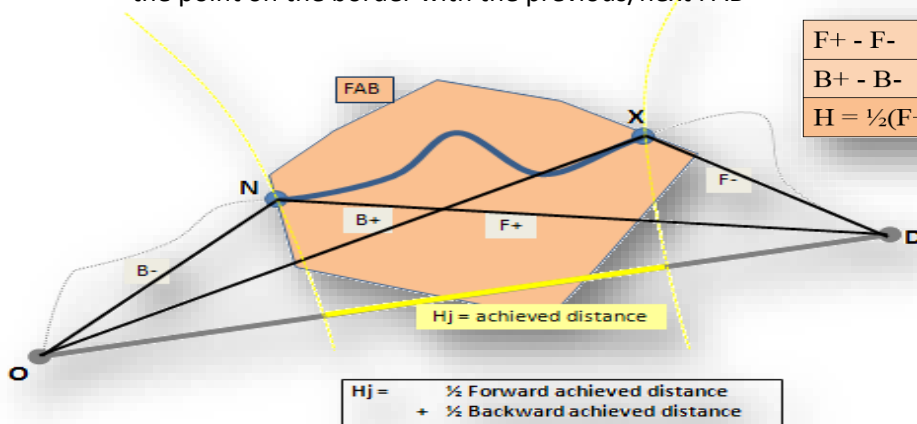
4 reference points are identified for KEP/KEA calculation :

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:

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www.FABEC.eu

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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.