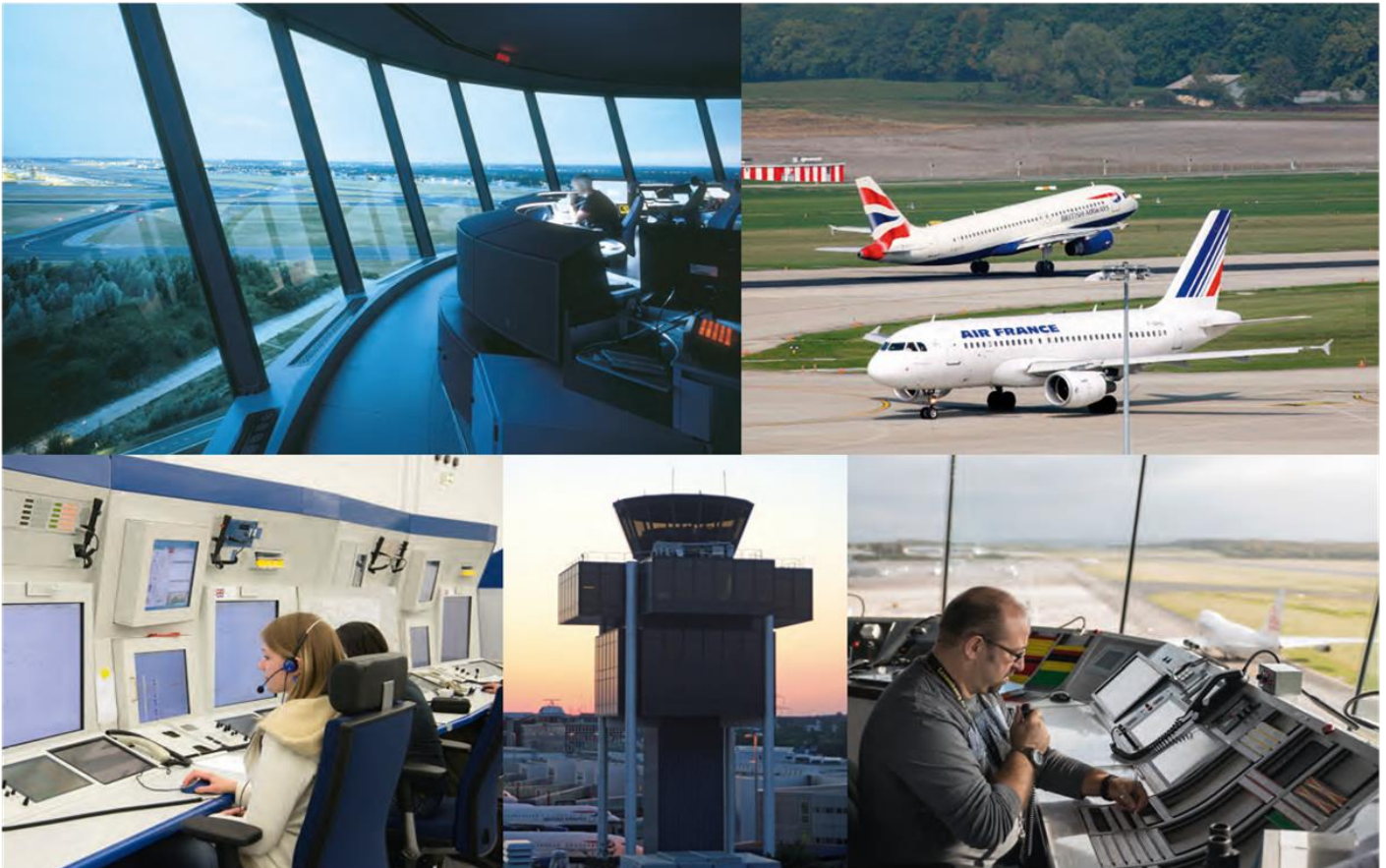




PERFORMANCE REPORT 2020 - 2024

# ENVIRONMENT

August 2020



making the difference

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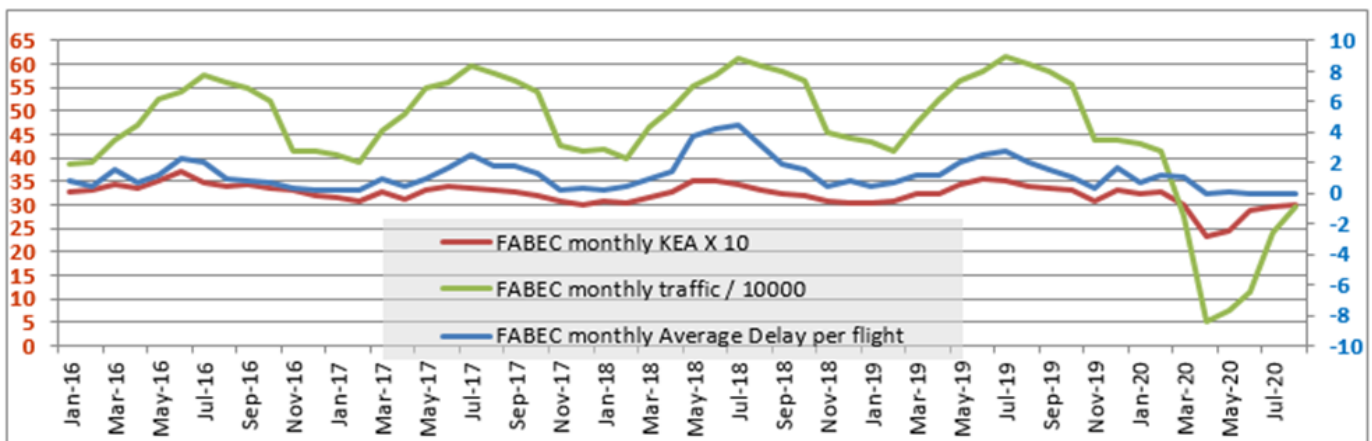
## Description & Analysis

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

In the FABEC area, the yearly rolling average value of efficiency of the flown trajectory (expressed in KEA) was 96,84% for the period of September 2019 - August 2020, excluding the 10 best and 10 worst days. This is the highest KEA value since 2015. It has increased by 0,12pp as compared to 96,72% in the period of September 2018 - August 2019 and increased by 0,04pp compared to the 12 month rolling average of July 2020. The rolling average has been decreasing slowly but steadily during the last year from 96,71% in the September 2019 to 96,66% in February 2020, then it started to increase until it reached 96,84% in August 2020, which is 0.09pp above the FABEC target for 2020, which was set to 96,75%. The difference between KEA and KEP is 2,88pp, which is 0,02p bigger than in the previous month.

### 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 96,98% in August 2020, which is 0,05pp lower when compared to July 2020 (97,03%), and 0,67pp lower compared to April 2020 (97,65%) which is the highest value since January 2016. The KEA in August 2020 has increased drastically by 0,37pp compared to the same month in 2019 (KEA in August 2019 was 96,61%). The reason for such an increase in the flight efficiency is a significant decrease of the traffic volume because of the corona crisis. 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)

Starting from September 2019 the KEP 12 month rolling average indicator shows slow but steady decrease from 93,98% in September 2019 to 93,95% in January, February and March 2020. KEP has been stable since April 2020 till July 2020 (93,94%). In August 2020 it increased by 0,02pp reaching 93,96%. The KEP rolling value for August 2020 is 0,03pp lower than the value of the same period one year prior, but showing 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 based on the filed flight plan by 0,34pp in August 2020 (94,24%) compared to July 2020 (93,90%), and by 0,87pp compared to June 2020 (93,37%) which was the lowest value since January 2016, indicating some problems in the filing of flight plans during the corona crisis. The KEP value for August 2020 is 0.24pp better than in August 2019.

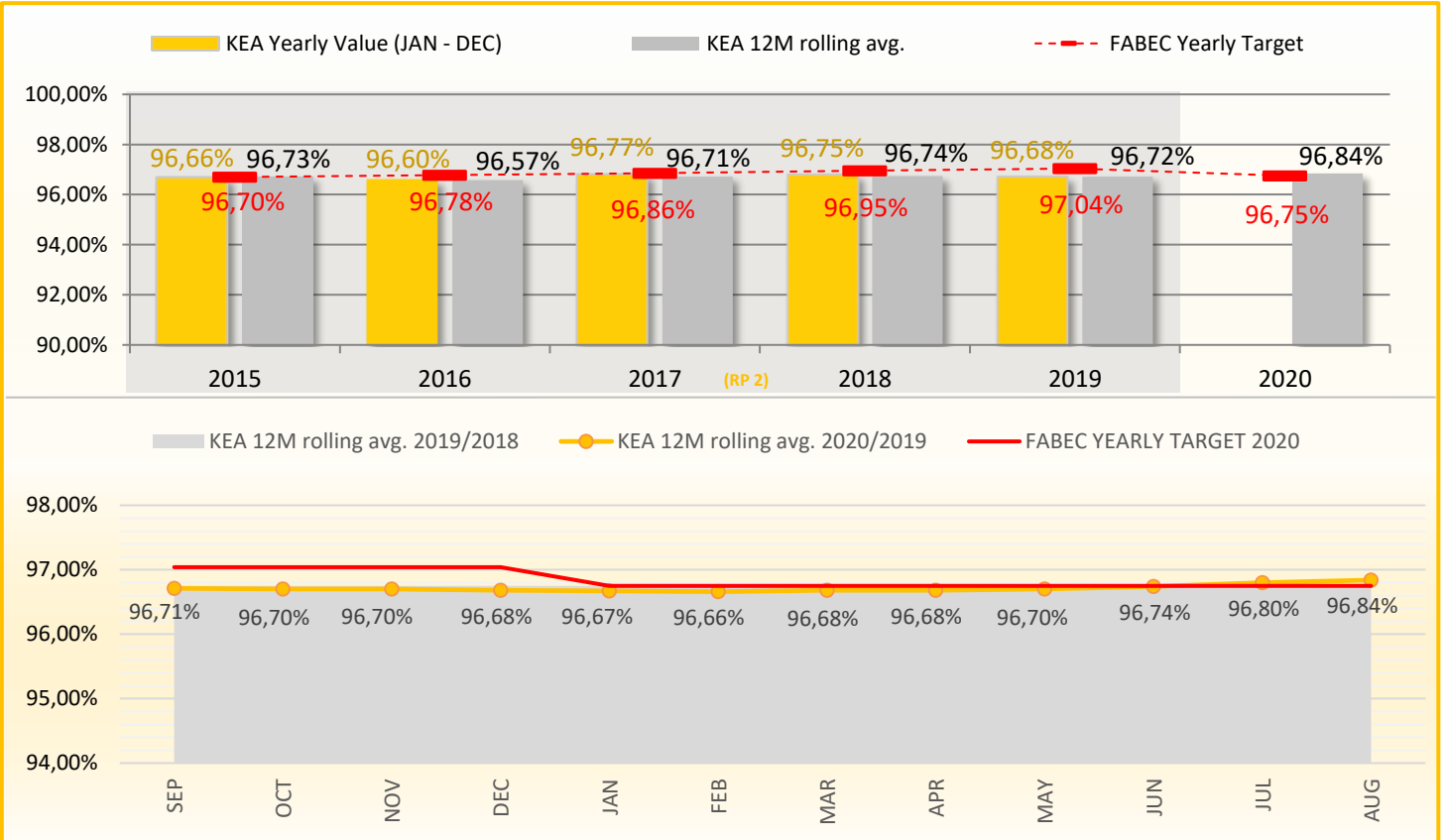
### ENV PI#4: HFE based on Actual at State level (including all days)

At the national level in August 2020, Belgium (0,04pp), Germany (0,12pp) and the Netherland (0,36pp) demonstrated a decrease of flight efficiency based on actual trajectories compared to August 2020, but France (0,04pp), and Switzerland (0,13pp) demonstrated an increase in flight efficiency compared to one month prior.

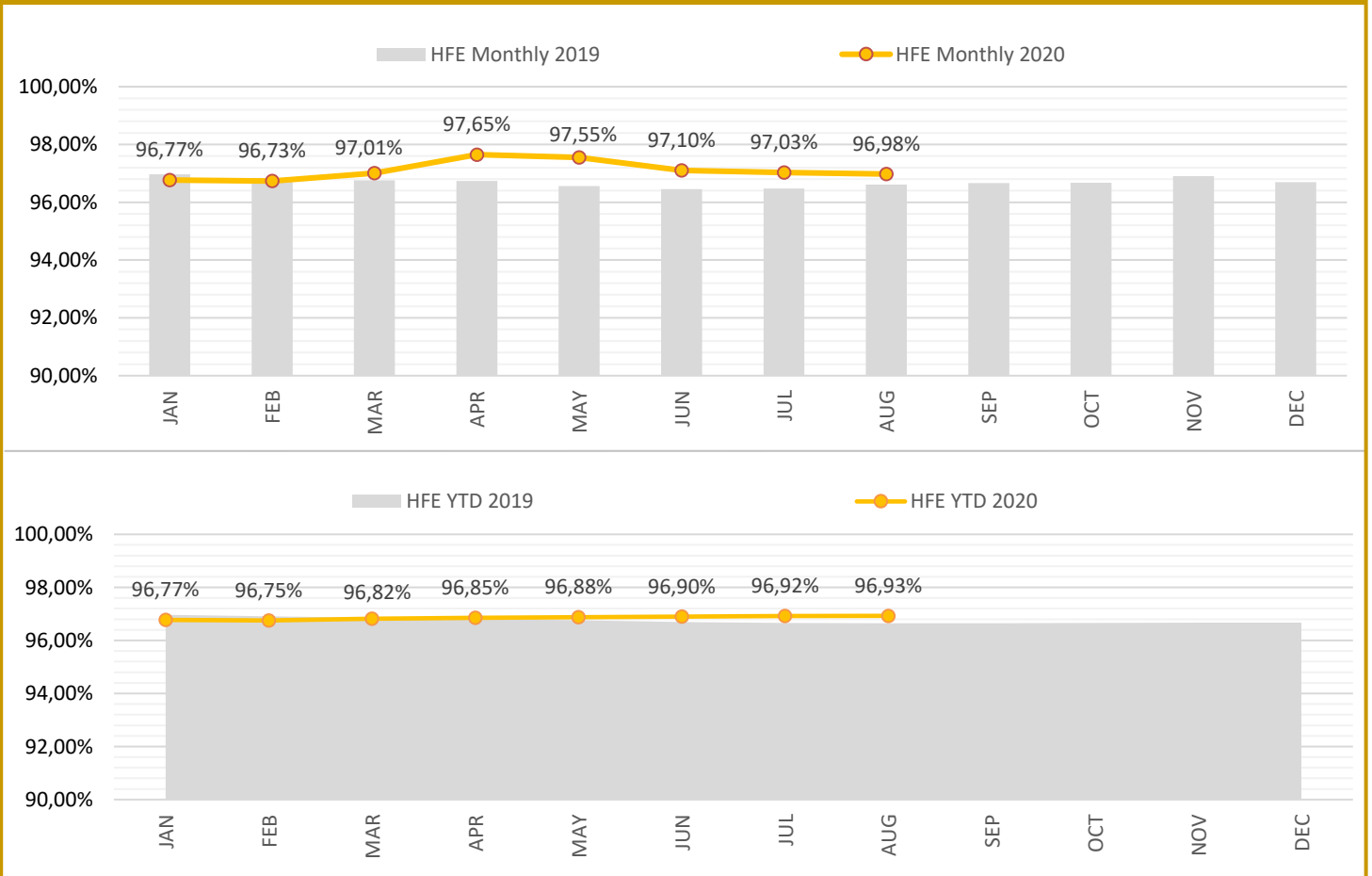
### ENV PI#5: HFE based on Filed FPL at State level (including all days)

At the national level in August 2020, all states demonstrated a significant increase of flight efficiency based on filed flight plan compared to July 2020: Belgium (0,64pp), France (0,34pp), Germany (0,39pp), the Netherlands (0,18pp) and Switzerland (0,54pp).

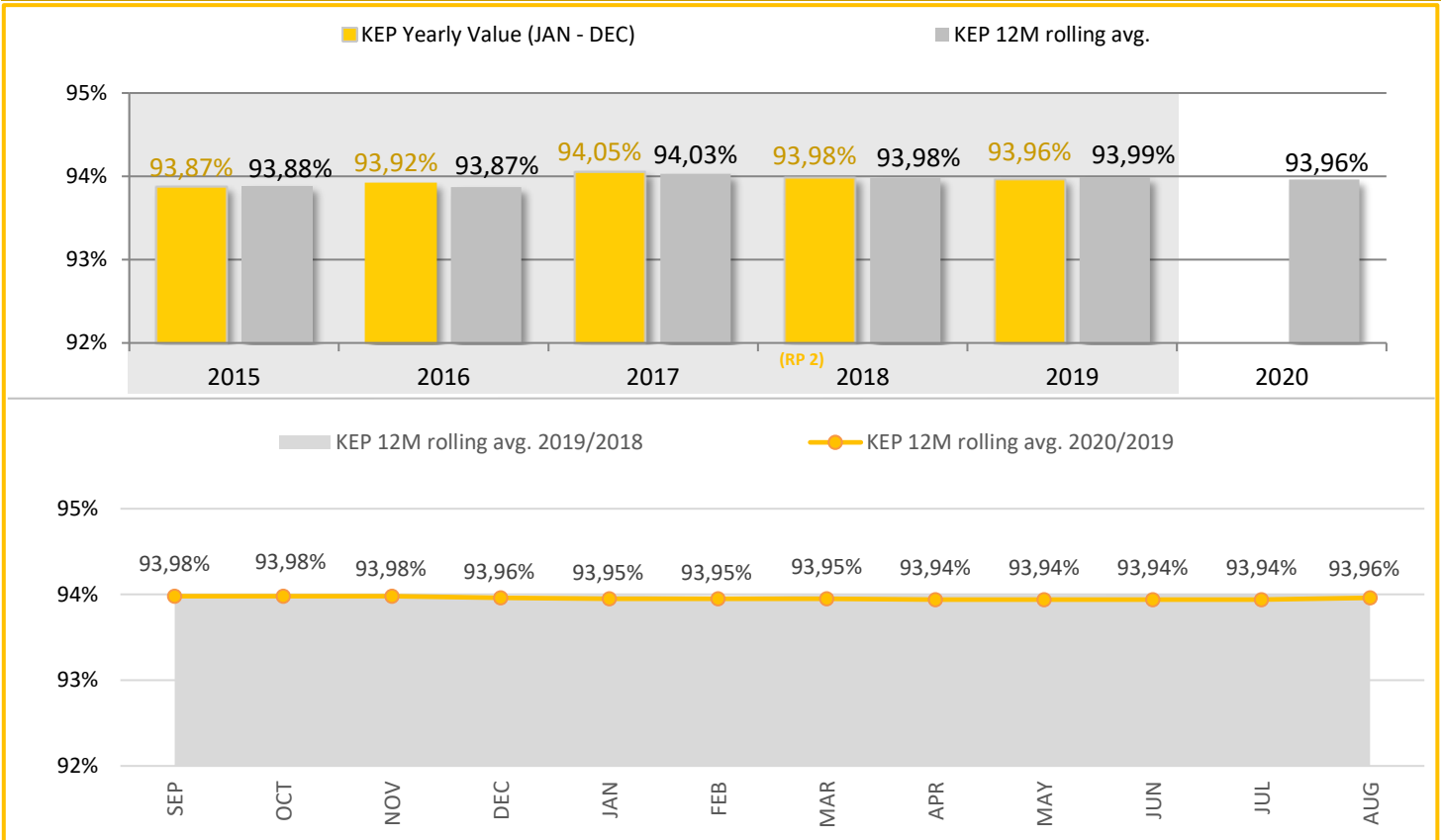
## KPI #1: KEA/HFE at FABEC level (excl. 10 best/worst days)



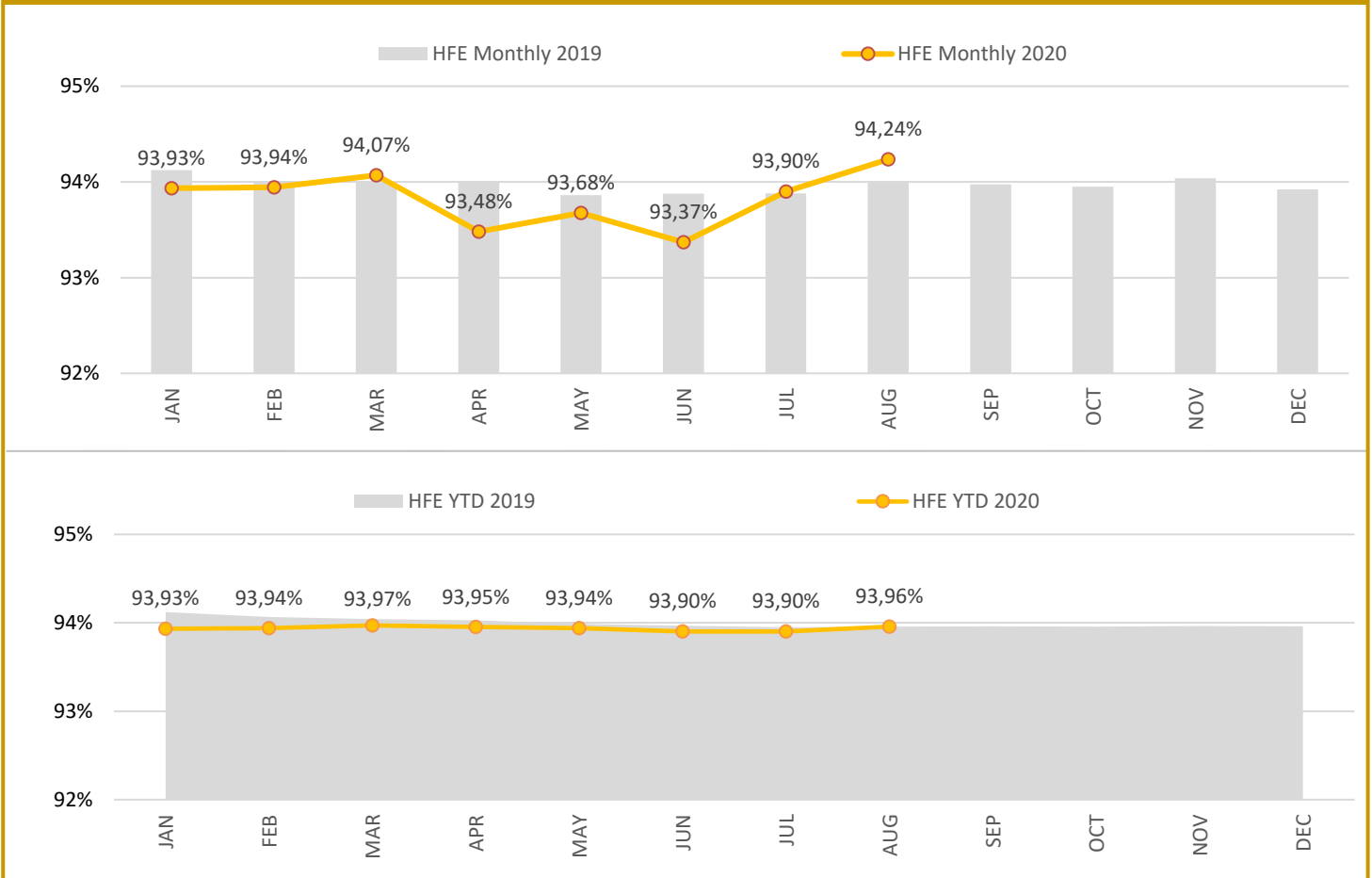
## PI #1: HFE based on Actual at FABEC level (incl. all days)



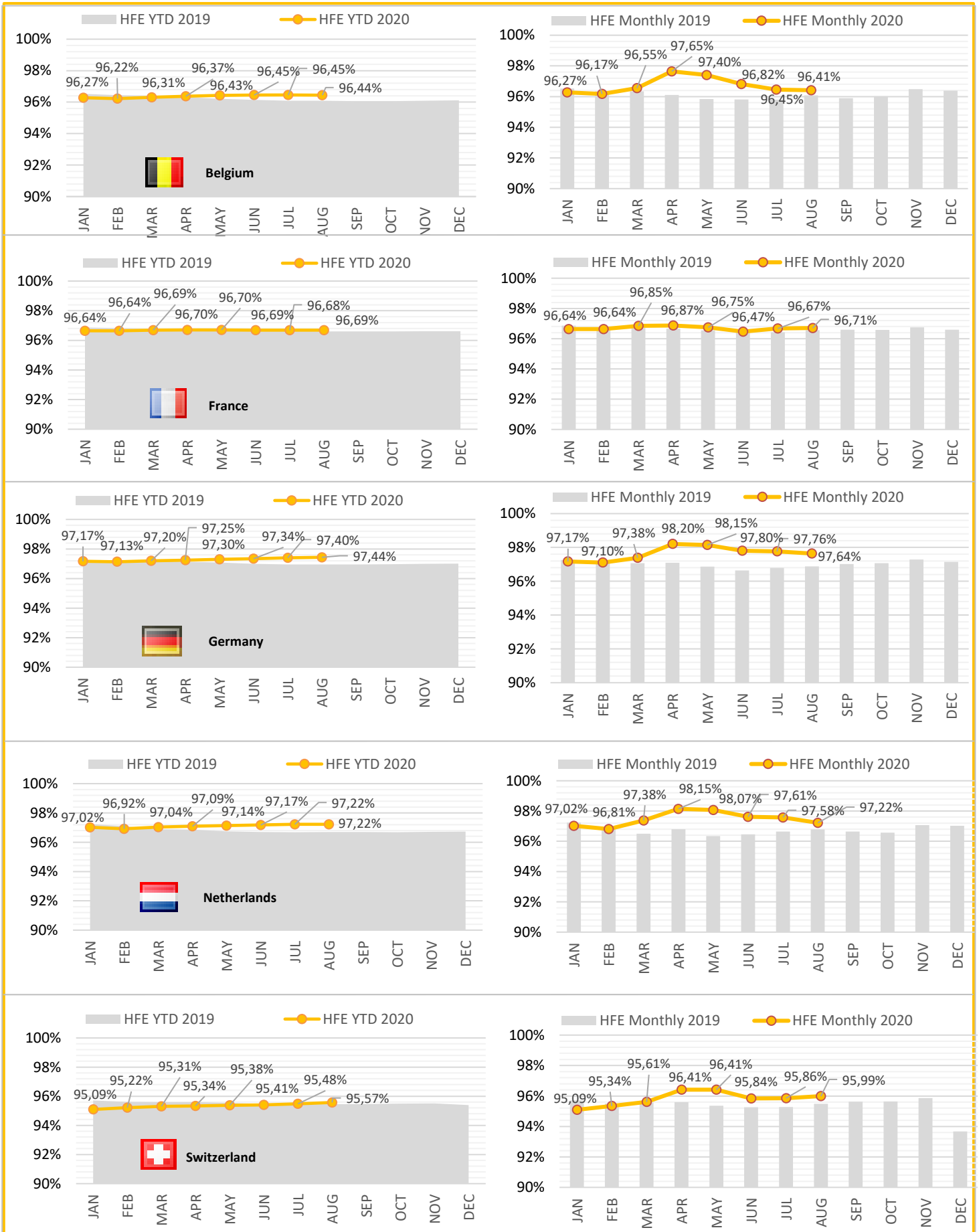
## PI #2: KEP/HFE based on filed FPL at FABEC level (excl. 10 best/worst days)



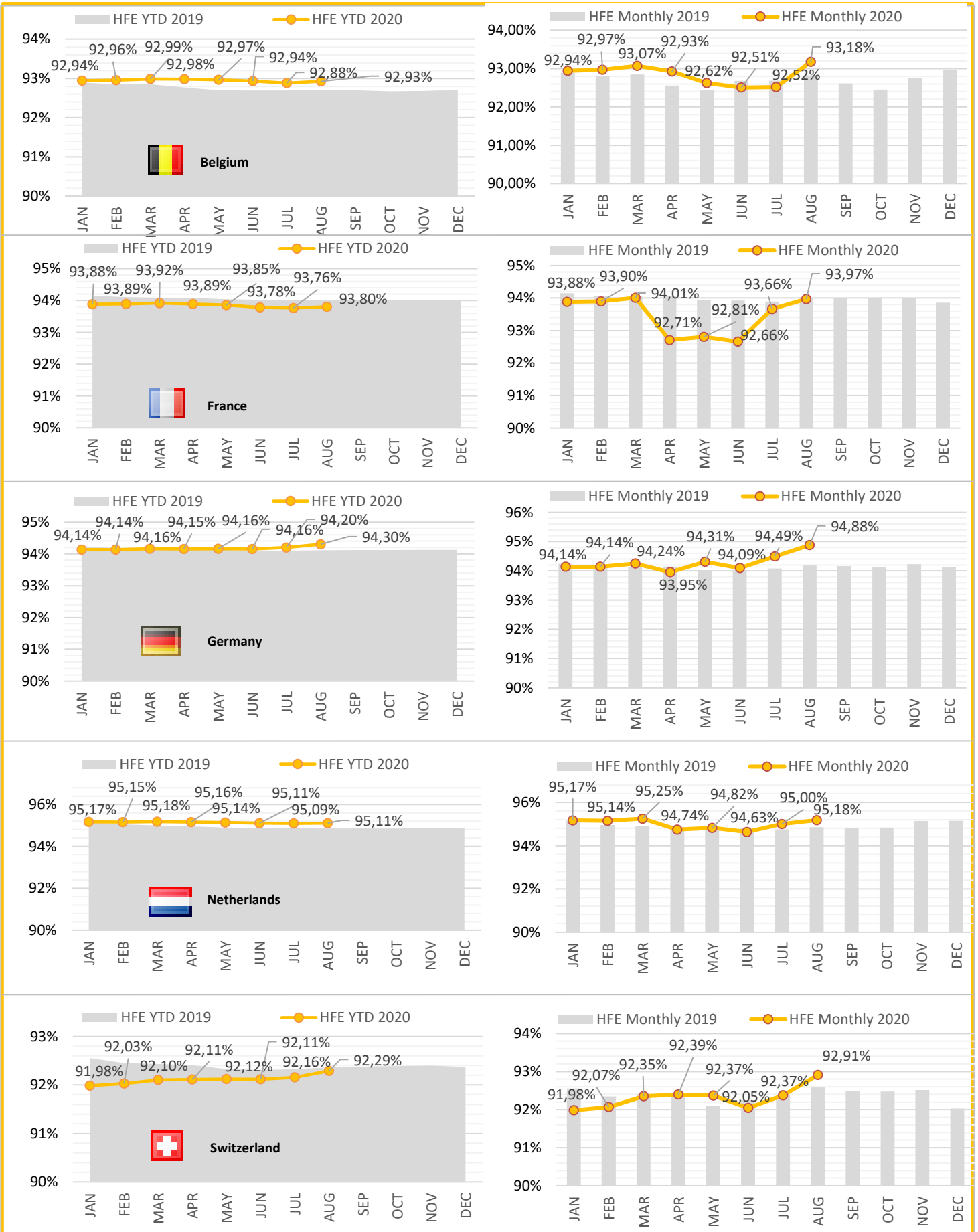
## PI #3: HFE based on filed FPL at FABEC level (incl. all days)



## 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)

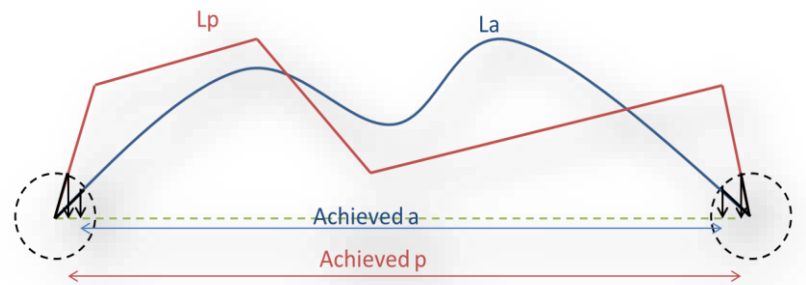


## Glossary

### 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

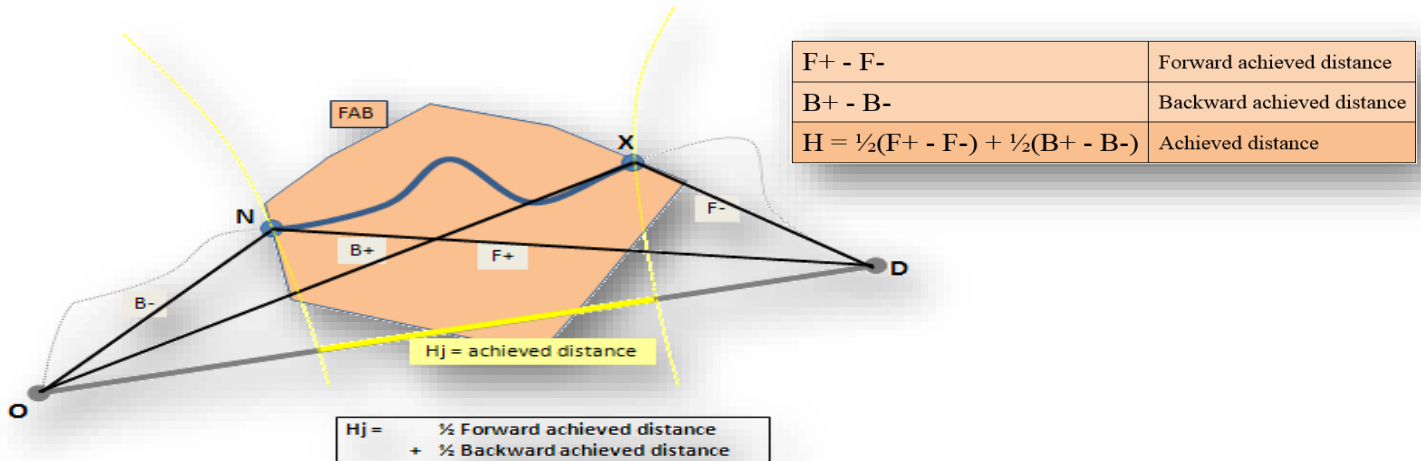
4 reference points are identified for KEP/KEA calculation :

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



For further details on PRU methodology, please refer to the following documentation:

[http://prudata.webfactional.com/wiki/images/6/61/HFE\\_Methodology\\_2014\\_05\\_23.pdf](http://prudata.webfactional.com/wiki/images/6/61/HFE_Methodology_2014_05_23.pdf)

### 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](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.