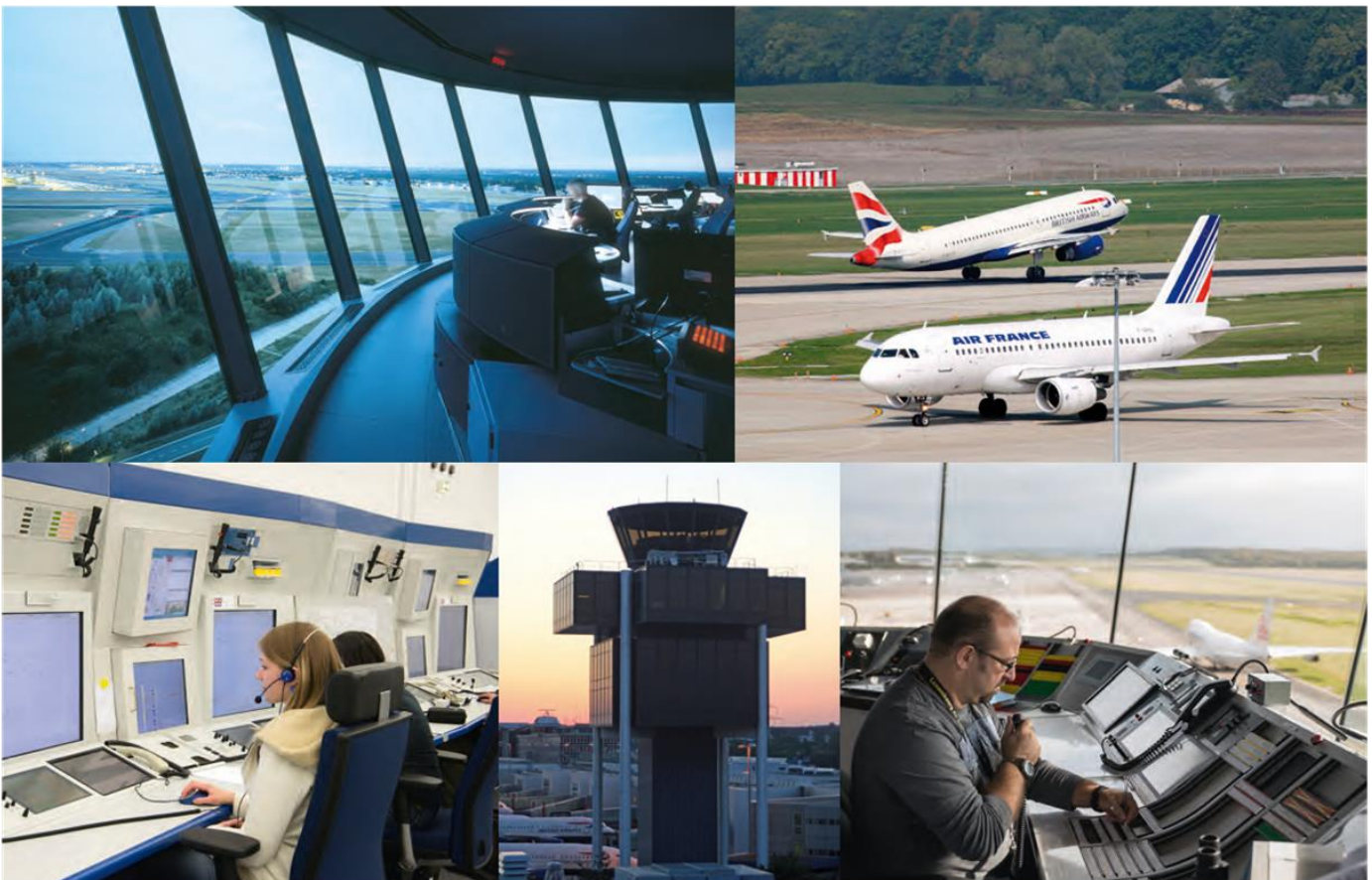




PERFORMANCE REPORT 2020 - 2024

# CAPACITY

September 2020



making the difference

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## Description & Analysis

### Europe

Network traffic fell by 54.1% in September 2020 (compared to September 2019) due to the effect of the COVID-19 pandemic. Average daily traffic was 15,840 flights. Since early September, traffic started to decrease but at a slower pace over the last week. The largest traffic reduction (compared to the same operational day of 2019) was 57.4% on 22 September 2020 with 14,524 flights. Friday 04 September was the busiest traffic day with 18,301 flights. Fridays were the busiest days throughout September. Ryanair remained the busiest operator with, on average, 1,298 movements per day, followed by easyJet (731), Turkish Airlines (664), Air France (595) and Lufthansa (510). Ryanair total flights decreased from 51,475 flights in August to 38,939 flights (-24%) in September. Easyjet group decreased by 30%, IAG Airlines by 21%, Lufthansa group by 5% and Air France/KLM by 0.5% compared to August 2020.

NM held weekly Ad-hoc Coordination meetings to share network status and provided a consolidated view of relevant NOTAMs on the NOP Portal. In parallel, NM has been producing a weekly Recovery Plan that outlined how the network is expected to achieve an orderly return to traffic and capacity levels in the coming months. There were some network flow protective measures in September that generated 14,850 minutes of ATFM delay. The measures were mainly applied at Amsterdam/Schiphol airport due to weather issues.

*In the current circumstances, the NM will not report indicators on ATFM delay per flight until traffic recovers. (Source: NM).*

### Delays from the passengers' point of view

For September 2020, the Central Office for Delay Analysis (CODA) reported that the average delay per flight on departure was 11.2 minutes per flight - a decrease of 2.7 minutes per flight compared to September 2019. 2% of the total delay can be attributable to air traffic control. Airlines caused 15% of the total delay, resulting from such issues as technical problems, staff shortages or turnaround times that are too tightly scheduled. Airports caused 1% of the delays while the rest (IATA Code 85,86,71-79,97-99) of around 82% can be allocated to other reasons (Source: CODA-Dashboard-09-2020, Date 23/10/2020).

### FABEC

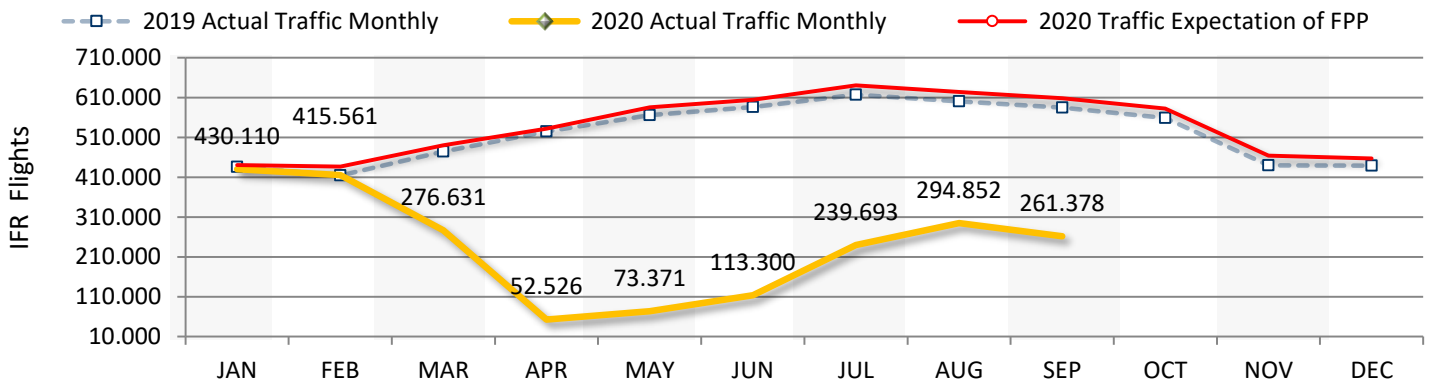
In the FABEC area, traffic decreased by 55.3% in September 2020 compared to the same month in 2019, leading to a 55.1% traffic decrease YTD. Traffic was down in a similar way in all ANSPs, from -57.2% in skyguide to -51.5% in LVNL. Airport traffic was down to a comparable extent (-54.7% in the FABEC area) but with more disparities between ANSPs. Landings decreased by 56.4% in DFS, but "only" 49.9% in skeyes or 45.8% in ANA LUX.

In September 2020, Paris ACC (1 229 min) and Zurich ACC (458 min) were the units to generate some en-route ATFM delays. In Paris, delays were due to 'Staffing' (81%), 'ATC-Capacity' (14%) and 'Special Event' (5%), whereas in Zurich, delays were due to 'ATC-Capacity' (87%), 'Technical' (9%) and 'Staffing' (4%). Airport ATFM delays were mainly generated in Amsterdam/EHAM (3 915 min) and were due to 'Weather' (88%) and 'Staffing' (12%).

## FABEC TRAFFIC DEVELOPMENT (*en-route*)

FABEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
2019 Actual Traffic Monthly	435.809	414.272	474.729	524.490	566.051	586.281	617.104	600.261	584.310	558.973	439.854	438.590	4.803.307
2020 Actual Traffic Monthly	430.110	415.561	276.631	52.526	73.371	113.300	239.693	294.852	261.378				2.157.422
Growth (%)	-1,3 %	0,3 %	-41,7 %	-90,0 %	-87,0 %	-80,7 %	-61,2 %	-50,9 %	-55,3 %				-55,1 %
2020 Traffic Expectation of FPP	440.186	436.609	490.117	531.721	585.472	604.612	640.569	624.188	608.495	582.617	463.715	456.759	6.465.057
2020 Traffic Evolution (%)	-2,3 %	-4,8 %	-43,6 %	-90,1 %	-87,5 %	-81,3 %	-62,6 %	-52,8 %	-57,0 %				
2020 Traffic Cumulated (%)	-2,3 %	-3,5 %	-17,9 %	-38,1 %	-49,8 %	-55,9 %	-57,1 %	-56,4 %	-56,5 %				

2019 Actual Traffic Monthly and 2020 Actual Traffic Monthly values represent actual movements (*source: PRU*). It should be noted that the FPP is still being coordinated and it is therefore very likely that the traffic forecast will be adjusted.

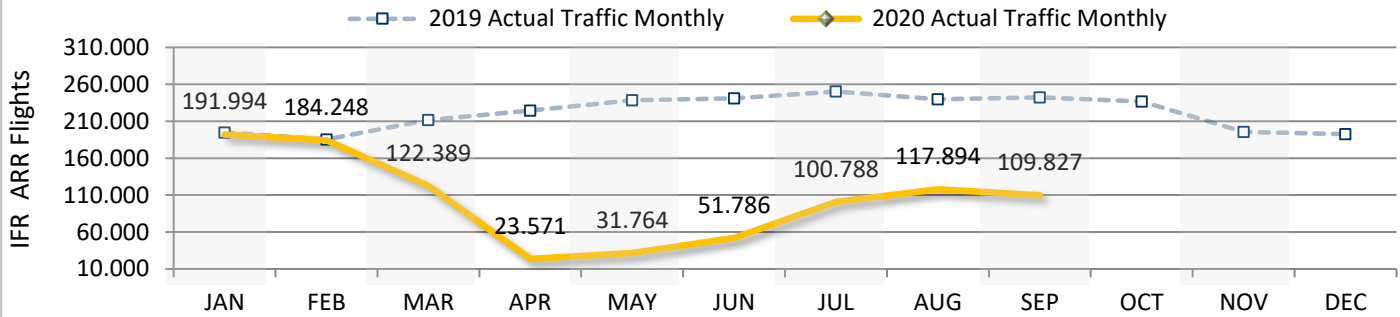


	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
<b>skeyes</b>													
2019 Actual Traffic Monthly	46.085	42.458	49.539	53.761	57.702	58.513	62.239	59.274	59.410	57.544	46.709	46.631	488.981
2020 Actual Traffic Monthly	44.865	43.754	30.860	7.531	9.492	13.158	26.573	29.137	25.192				230.562
Growth (%)	-2,6 %	3,1 %	-37,7 %	-86,0 %	-83,5 %	-77,5 %	-57,3 %	-50,8 %	-57,6 %				-52,8 %
<b>DFS</b>													
2019 Actual Traffic Monthly	222.009	211.766	240.686	258.289	282.291	286.199	299.444	292.210	291.681	284.915	225.050	223.636	2.384.575
2020 Actual Traffic Monthly	218.493	209.352	141.583	32.194	42.441	60.990	115.966	139.327	132.000				1.092.346
Growth (%)	-1,6 %	-1,1 %	-41,2 %	-87,5 %	-85,0 %	-78,7 %	-61,3 %	-52,3 %	-54,7 %				-54,2 %
<b>DSNA</b>													
2019 Actual Traffic Monthly	221.573	209.836	244.322	283.032	302.429	321.951	340.265	329.402	313.806	292.190	221.663	221.576	2.566.616
2020 Actual Traffic Monthly	217.787	213.859	140.091	19.006	27.568	49.864	131.897	166.442	134.236				1.100.750
Growth (%)	-1,7 %	1,9 %	-42,7 %	-93,3 %	-90,9 %	-84,5 %	-61,2 %	-49,5 %	-57,2 %				-57,1 %
<b>LVNL</b>													
2019 Actual Traffic Monthly	46.111	44.366	50.512	53.470	57.492	55.907	57.593	57.195	56.974	57.181	47.564	47.298	479.620
2020 Actual Traffic Monthly	46.552	44.046	32.102	6.404	9.188	12.648	22.853	30.023	28.650				232.466
Growth (%)	1,0 %	-0,7 %	-36,4 %	-88,0 %	-84,0 %	-77,4 %	-60,3 %	-47,5 %	-49,7 %				-51,5 %
<b>MUAC</b>													
2019 Actual Traffic Monthly	138.773	129.324	147.712	154.875	164.086	166.793	176.133	173.200	168.761	166.082	137.728	139.287	1.419.657
2020 Actual Traffic Monthly	133.754	127.979	91.834	18.524	24.874	32.882	65.762	86.306	79.956				661.871
Growth (%)	-3,6 %	-1,0 %	-37,8 %	-88,0 %	-84,8 %	-80,3 %	-62,7 %	-50,2 %	-52,6 %				-53,4 %
<b>skyguide</b>													
2019 Actual Traffic Monthly	89.334	86.268	99.645	110.651	120.991	127.214	133.394	127.821	124.023	115.533	86.141	89.466	1.019.341
2020 Actual Traffic Monthly	90.405	88.622	52.617	8.004	11.569	20.805	50.662	62.083	51.333				436.100
Growth (%)	1,2 %	2,7 %	-47,2 %	-92,8 %	-90,4 %	-83,6 %	-62,0 %	-51,4 %	-58,6 %				-57,2 %

## FABEC TRAFFIC DEVELOPMENT (arrival)

FABEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
2019 Actual Traffic Monthly	194.850	185.420	211.796	224.471	238.490	240.788	250.186	239.483	242.195	236.830	195.678	192.743	2.027.679
2020 Actual Traffic Monthly	191.994	184.248	122.389	23.571	31.764	51.786	100.788	117.894	109.827				934.261
Growth (%)	-1,5 %	-0,6 %	-42,2 %	-89,5 %	-86,7 %	-78,5 %	-59,7 %	-50,8 %	-54,7 %				-53,9 %

2018 Monthly and 2019 Monthly values represent actual arrivals (source: PRU).



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
<b>ANA LUX</b>													
2019 Actual Traffic Monthly	2.728	2.640	3.007	3.285	3.451	3.420	3.410	3.160	3.445	3.466	3.150	3.022	28.546
2020 Actual Traffic Monthly	2.880	2.741	1.942	564	696	1.111	1.856	1.878	1.810				15.478
Growth (%)	5,6 %	3,8 %	-35,4 %	-82,8 %	-79,8 %	-67,5 %	-45,6 %	-40,6 %	-47,5 %				-45,8 %

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
<b>skeyes</b>													
2019 Actual Traffic Monthly	9.804	8.825	10.293	11.083	11.763	11.678	12.607	12.086	12.016	11.632	10.315	9.981	100.155
2020 Actual Traffic Monthly	9.686	9.401	6.802	2.282	2.766	3.256	5.436	5.650	4.946				50.225
Growth (%)	-1,2 %	6,5 %	-33,9 %	-79,4 %	-76,5 %	-72,1 %	-56,9 %	-53,3 %	-58,8 %				-49,9 %

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
<b>DFS</b>													
2019 Actual Traffic Monthly	78.274	75.894	85.673	88.848	96.254	95.027	98.049	95.422	98.321	97.898	79.529	76.266	811.762
2020 Actual Traffic Monthly	75.189	72.929	48.623	11.000	13.304	19.213	34.831	39.692	39.174				353.955
Growth (%)	-3,9 %	-3,9 %	-43,2 %	-87,6 %	-86,2 %	-79,8 %	-64,5 %	-58,4 %	-60,2 %				-56,4 %

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
<b>DSNA</b>													
2019 Actual Traffic Monthly	66.766	63.317	73.401	81.023	84.477	88.656	92.799	86.055	86.206	81.851	67.332	66.631	722.700
2020 Actual Traffic Monthly	67.423	64.708	41.799	6.209	9.982	20.162	42.454	49.573	44.823				347.133
Growth (%)	1,0 %	2,2 %	-43,1 %	-92,3 %	-88,2 %	-77,3 %	-54,3 %	-42,4 %	-48,0 %				-52,0 %

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
<b>LVNL</b>													
2019 Actual Traffic Monthly	18.998	18.021	20.363	21.455	22.973	22.330	22.933	23.046	22.639	22.777	19.390	19.628	192.758
2020 Actual Traffic Monthly	19.189	17.942	12.910	2.280	3.152	4.385	8.373	12.008	11.519				91.758
Growth (%)	1,0 %	-0,4 %	-36,6 %	-89,4 %	-86,3 %	-80,4 %	-63,5 %	-47,9 %	-49,1 %				-52,4 %

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
<b>skyguide</b>													
2019 Actual Traffic Monthly	18.280	16.723	19.059	18.777	19.572	19.677	20.388	19.714	19.568	19.206	15.962	17.215	171.758
2020 Actual Traffic Monthly	17.627	16.527	10.313	1.236	1.864	3.659	7.838	9.093	7.555				75.712
Growth (%)	-3,6 %	-1,2 %	-45,9 %	-93,4 %	-90,5 %	-81,4 %	-61,6 %	-53,9 %	-61,4 %				-55,9 %

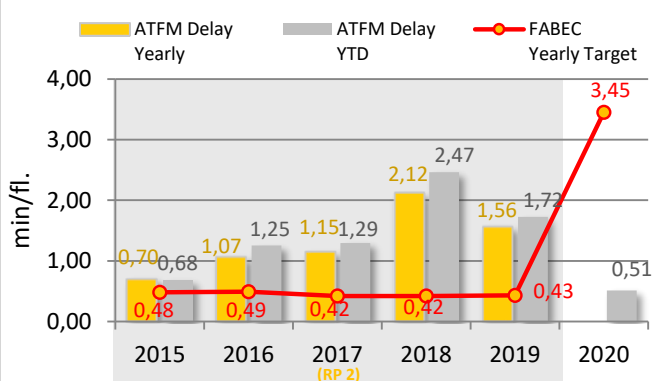


## KPI #1: En-route ATFM delay per controlled flight (FABEC)

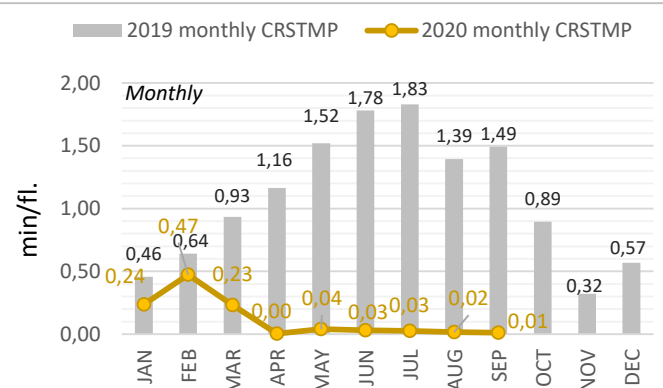
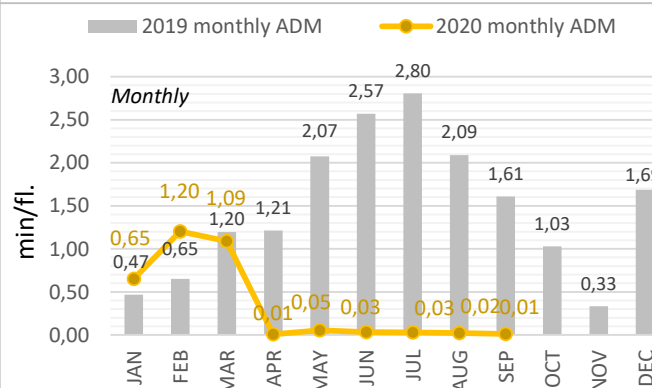
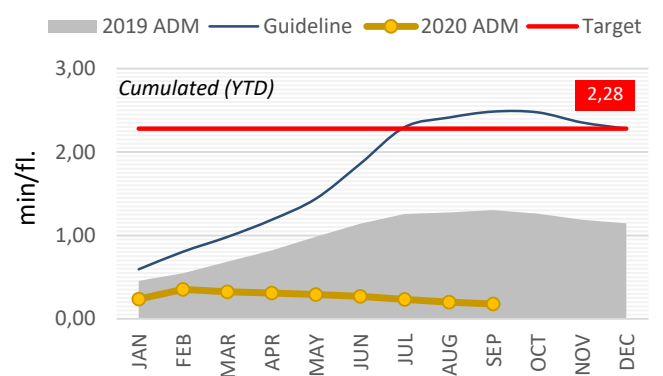
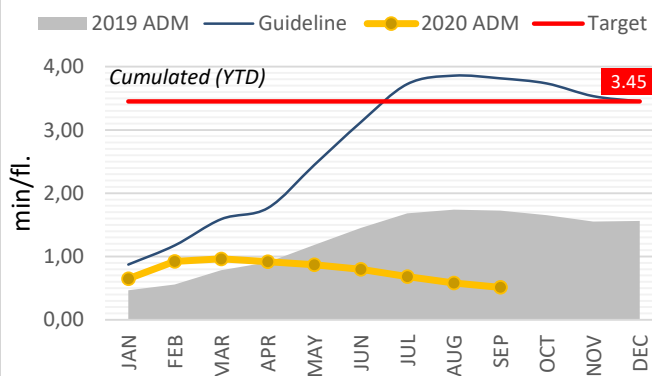
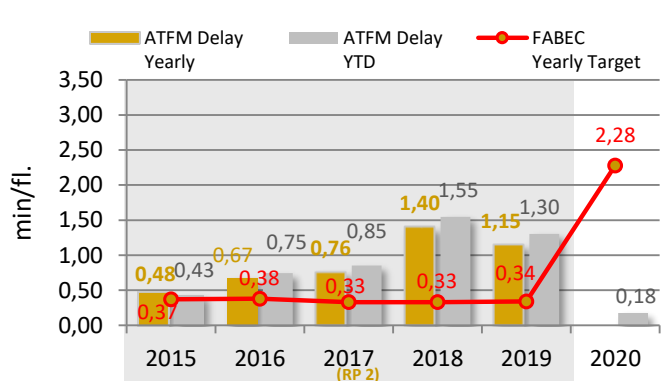
	YTD 2020	YTD 2019	YTD 2020	YTD 2019
<b>En-route Delay All causes</b>	<b>0,51</b>	1,72	<b>0,18</b>	1,30
FABEC Target (yearly value)	<b>3,45</b>		<b>2,28</b>	
Guideline	3,81		2,48	
Minute ('000) ALL causes	<b>1.105</b>	8.283	<b>383</b>	6.259
Diff. 2020 - 2019	- 86,7 %		- 94 %	
Traffic ('000)	<b>2.157</b>	4.803		
Diff. 2020 - 2019	- 55,1 %			
			<i>Potential savings (*) due to underbid the delay Target</i>	
			<i>(all Causes) in Mio EURO (YTD)</i> <span style="float: right;">0,0</span>	

\* Cost of ATFM-delay per min = 87 €

### All Delay Causes



### CRSTMP Delay Causes



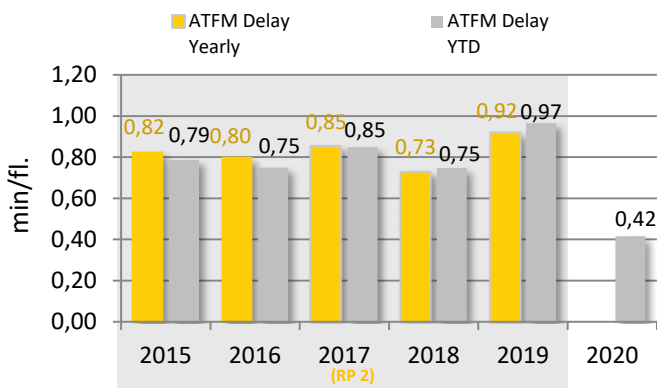
The guideline for the en-route ATFM delay per movement is a basic cumulative extrapolation of the previous three years monthly allocation and is designed to give an impression, how the YTD figures should be, in order to reach the yearly 2020 published targets (3,45 min per flight for all delay causes and 2,28 min per flight for the delay causes CRSTMP). It should be noted that the FPP is still being coordinated and it is therefore very likely that the target value will be adjusted.

## KPI #2: Arrival ATFM delay per controlled flight (FABEC)

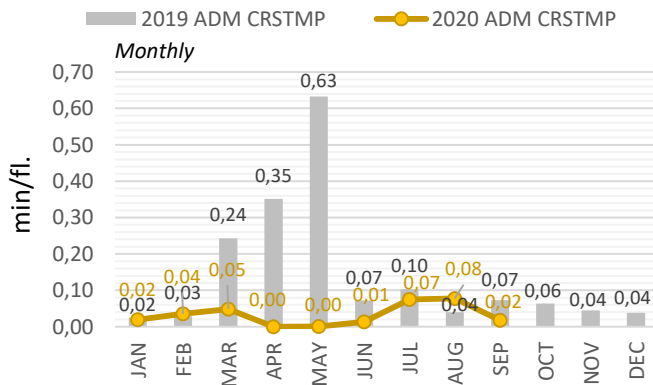
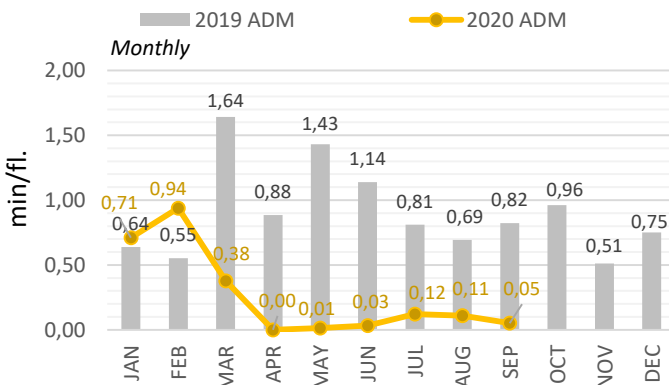
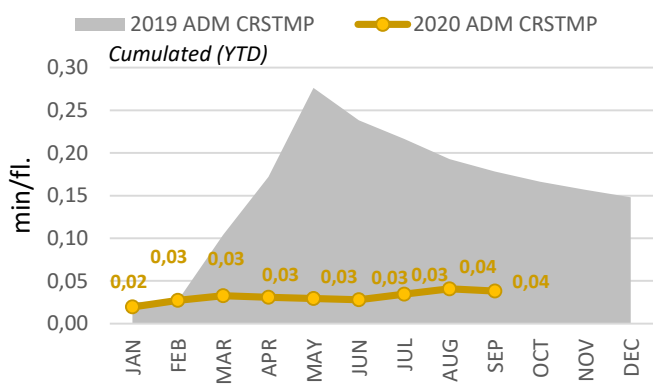
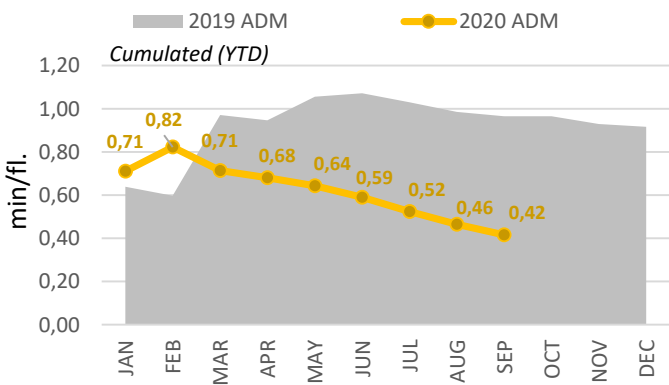
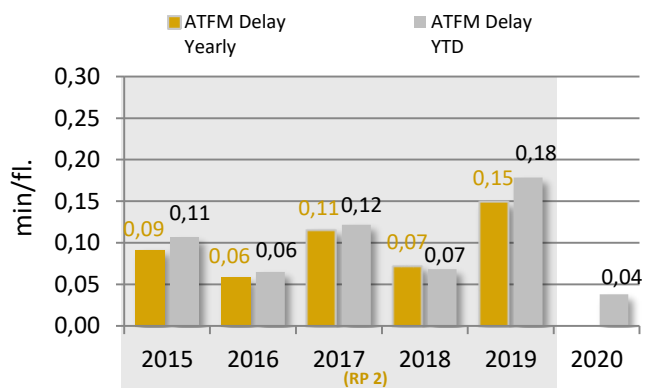
	YTD 2020	YTD 2019
<b>Arrival Delay All causes</b>	<b>0,42</b>	0,97
Diff. 2020 - 2019	- 57 %	
<b>Minute ('000) ALL causes</b>	<b>388</b>	1.957
Diff. 2020 - 2019	- 80 %	
<b>Traffic ('000)</b>	<b>934</b>	2.028
Diff. 2020 - 2019	- 53,9 %	

	YTD 2020	YTD 2019
<b>Arrival Delay CRSTMP causes</b>	<b>0,04</b>	0,18
Diff. 2020 - 2019	- 79 %	
<b>Minute ('000) CRSTMP causes</b>	<b>36</b>	362
Diff. 2020 - 2019	- 90 %	

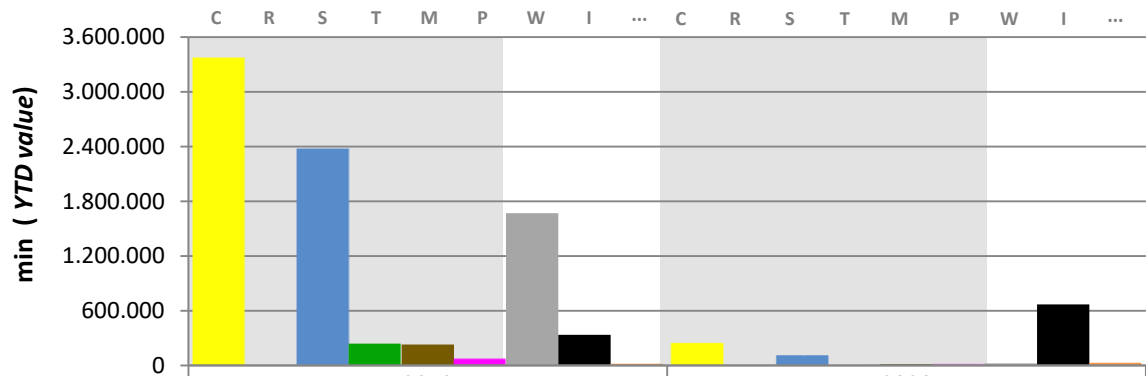
### All Delay Causes



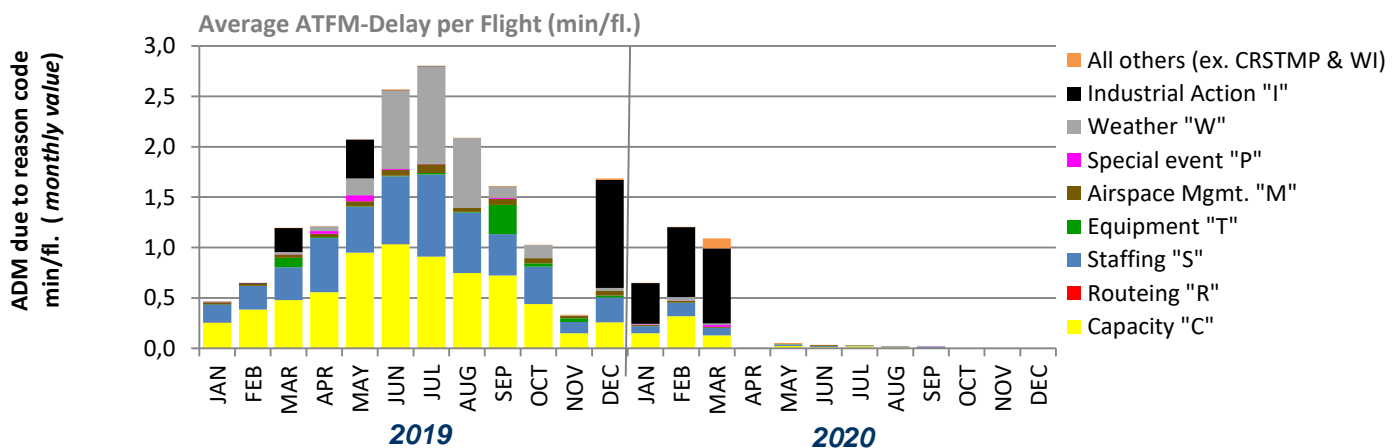
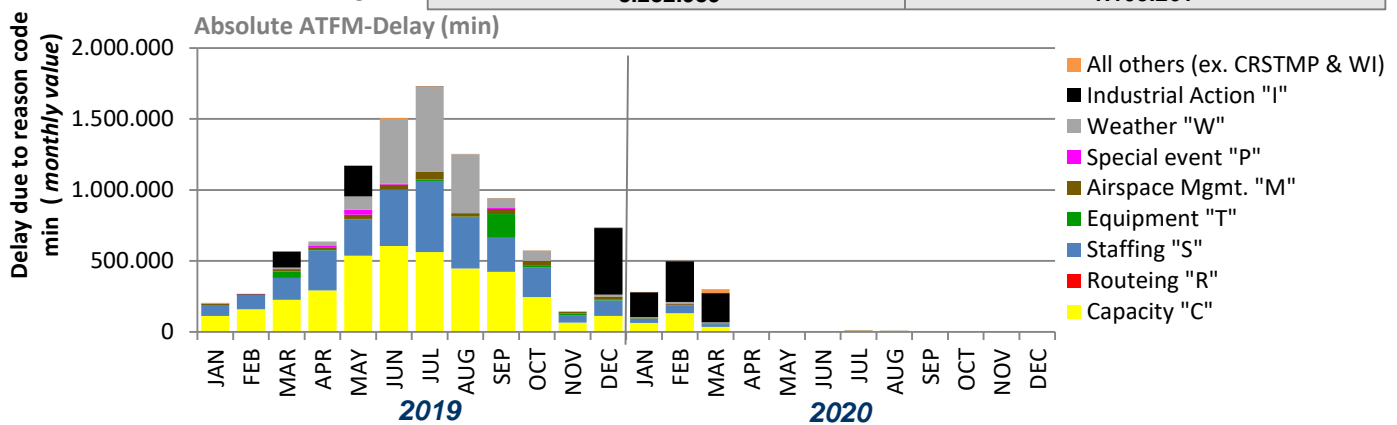
### CRSTMP Delay Causes



## KPI #1: En-route ATFM delay per reason code (FABEC)

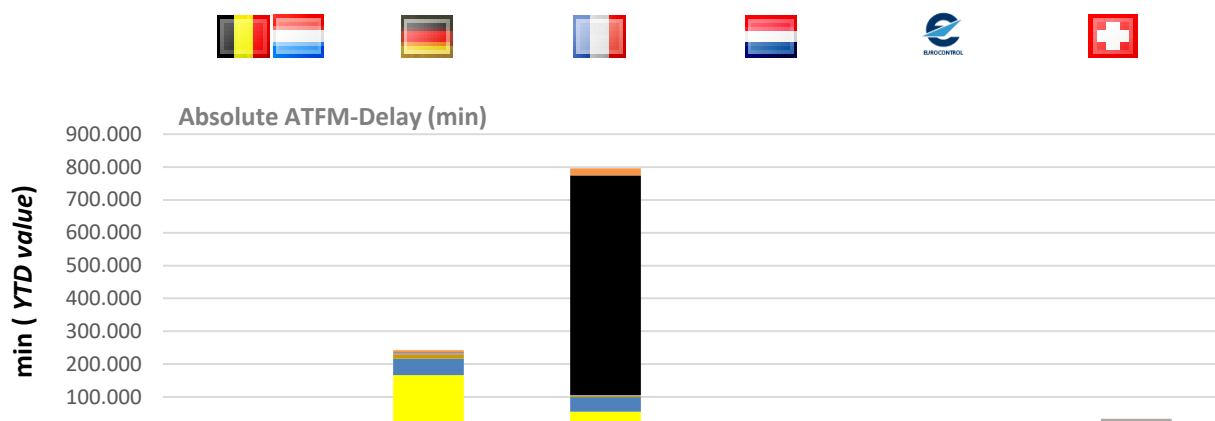


Delay due to reason code:	2019	2020
Capacity "C"	3.365.110	244.981
Routeing "R"	127	0
Staffing "S"	2.367.212	112.151
Equipment "T"	235.930	1.886
Airspace Mgmt. "M"	228.087	15.962
Special event "P"	62.946	8.199
Weather "W"	1.669.497	23.595
Industrial Action "I"	334.855	668.510
All others (ex. CRSTMP & WI)	19.225	29.977
<b>CRSTMP:</b>	<b>6.259.412</b>	<b>383.179</b>
<b>TOTAL:</b>	<b>8.282.989</b>	<b>1.105.261</b>





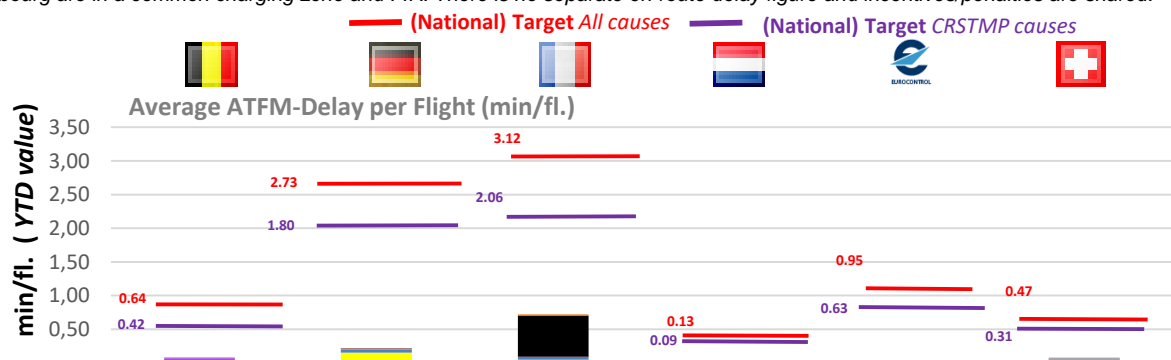
## KPI #1: En-route ATFM delay per controlled flight (ANSP)



	skeyes	DFS	DSNA	LVNL	MUAC	skyguide
All others (ex. CRSTMP & WI)		6.633	22.382			962
Industrial Action "I"		113	668.397			
Weather "W"		6.541	2.197		2.271	12.586
Special event "P"	3.691	404	442		1.919	1.743
Airspace Mgmt. "M"		11.970	2.827		1.165	
Equipment "T"		715	1.033			138
Staffing "S"	10.713	49.375	44.292	29	4.872	2.870
Routeing "R"						
Capacity "C"	4.120	166.950	54.949	2.468	611	15.883

<b>CRSTMP:</b>	<b>18.524</b>	<b>229.414</b>	<b>103.543</b>	<b>2.497</b>	<b>8.567</b>	<b>20.634</b>
<b>TOTAL:</b>	<b>18.524</b>	<b>242.701</b>	<b>796.519</b>	<b>2.497</b>	<b>10.838</b>	<b>34.182</b>

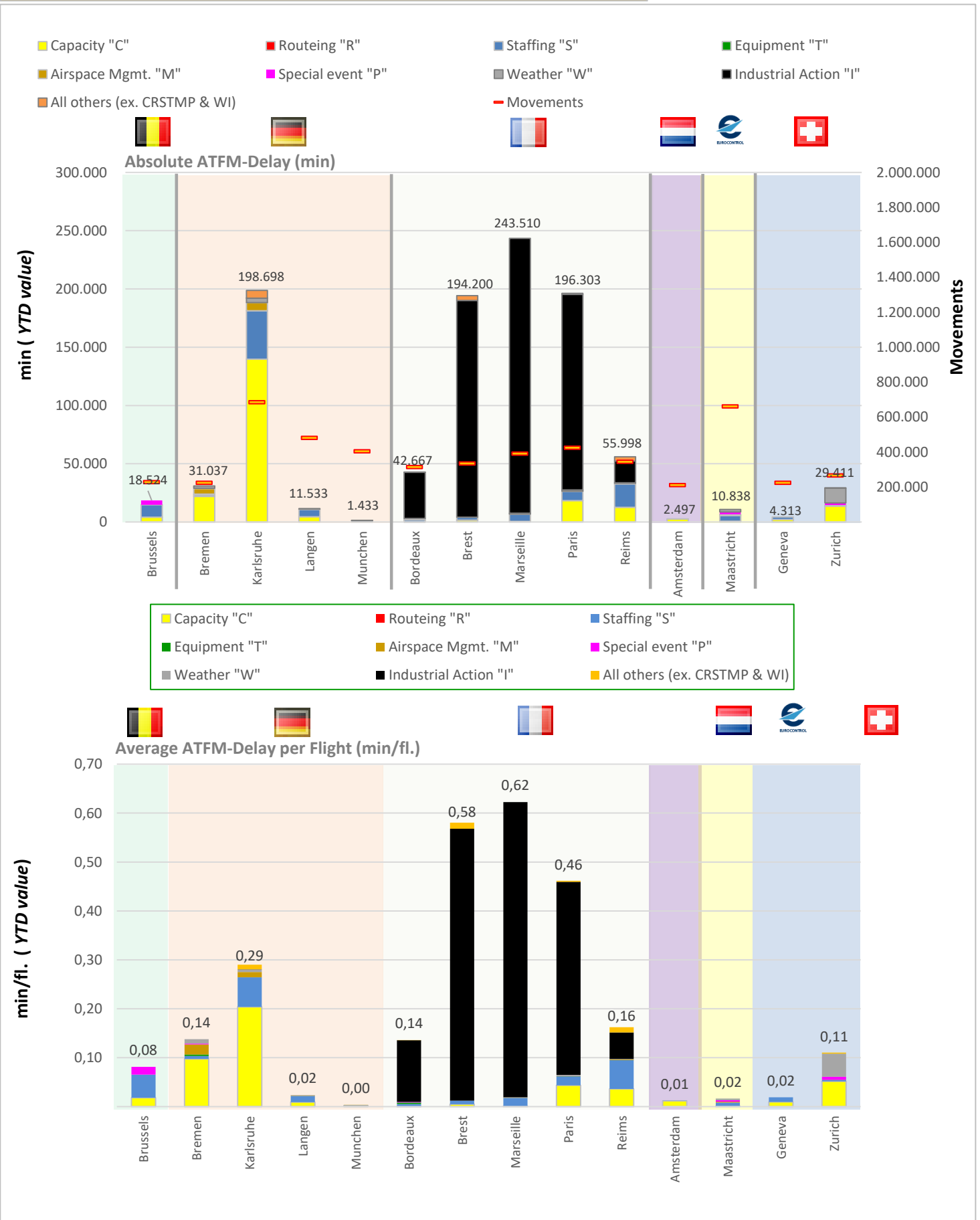
\*Belgium and Luxembourg are in a common charging zone and FIR. There is no separate en-route delay figure and incentives/penalties are shared.



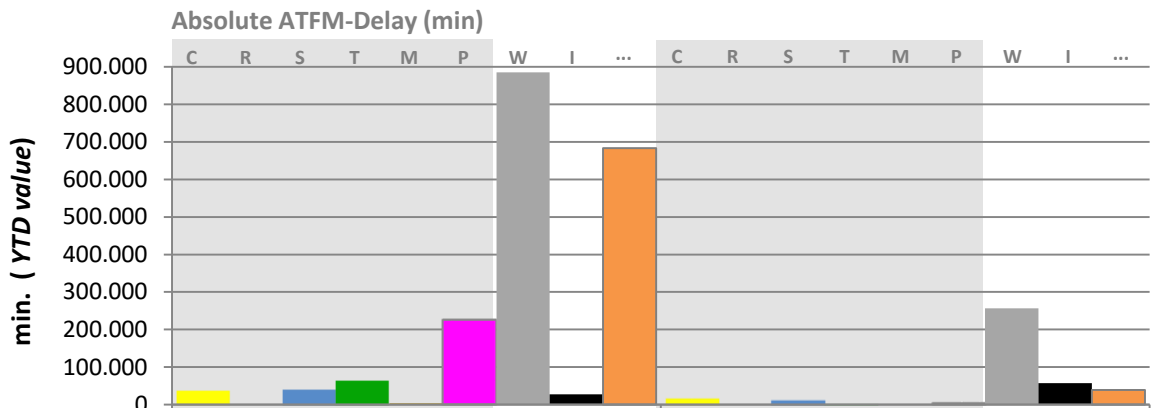
	skeyes	DFS	DSNA	LVNL	MUAC	skyguide
All others (ex. CRSTMP & WI)		0,01	0,02	0,00	0,00	0,00
Industrial Action "I"		0,00	0,61			
Weather "W"		0,01	0,00	0,00	0,00	0,03
Special event "P"	0,02	0,00	0,00	0,00	0,00	0,00
Airspace Mgmt. "M"		0,01	0,00		0,00	
Equipment "T"		0,00	0,00			0,00
Staffing "S"	0,05	0,05	0,04	0,00	0,01	0,01
Routeing "R"						
Capacity "C"	0,02	0,15	0,05	0,01	0,00	0,04

<b>CRSTMP:</b>	<b>0,08</b>	<b>0,21</b>	<b>0,09</b>	<b>0,01</b>	<b>0,01</b>	<b>0,05</b>
<b>TOTAL:</b>	<b>0,08</b>	<b>0,22</b>	<b>0,72</b>	<b>0,01</b>	<b>0,02</b>	<b>0,08</b>

## KPI #1: En-route ATFM delay per controlled flight (ACC)

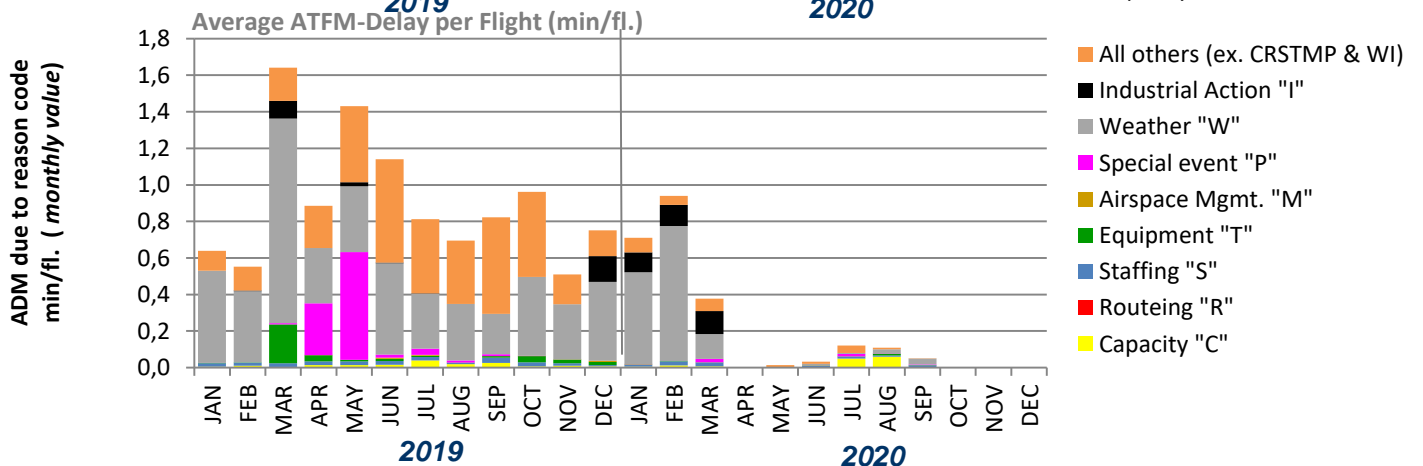
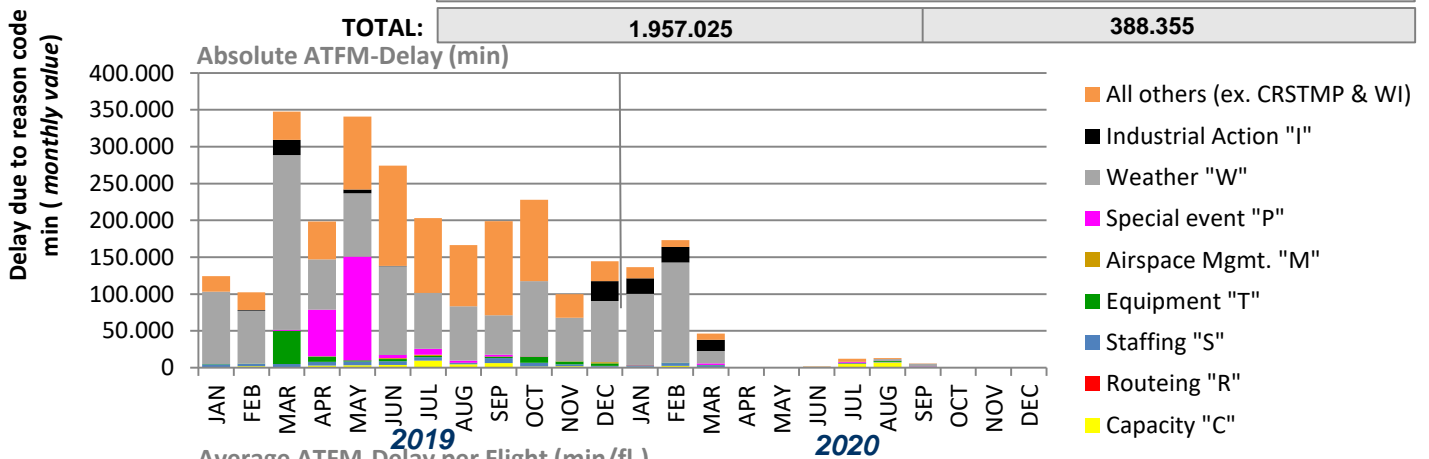


## KPI #2: Arrival ATFM delay per reason code (FABEC)

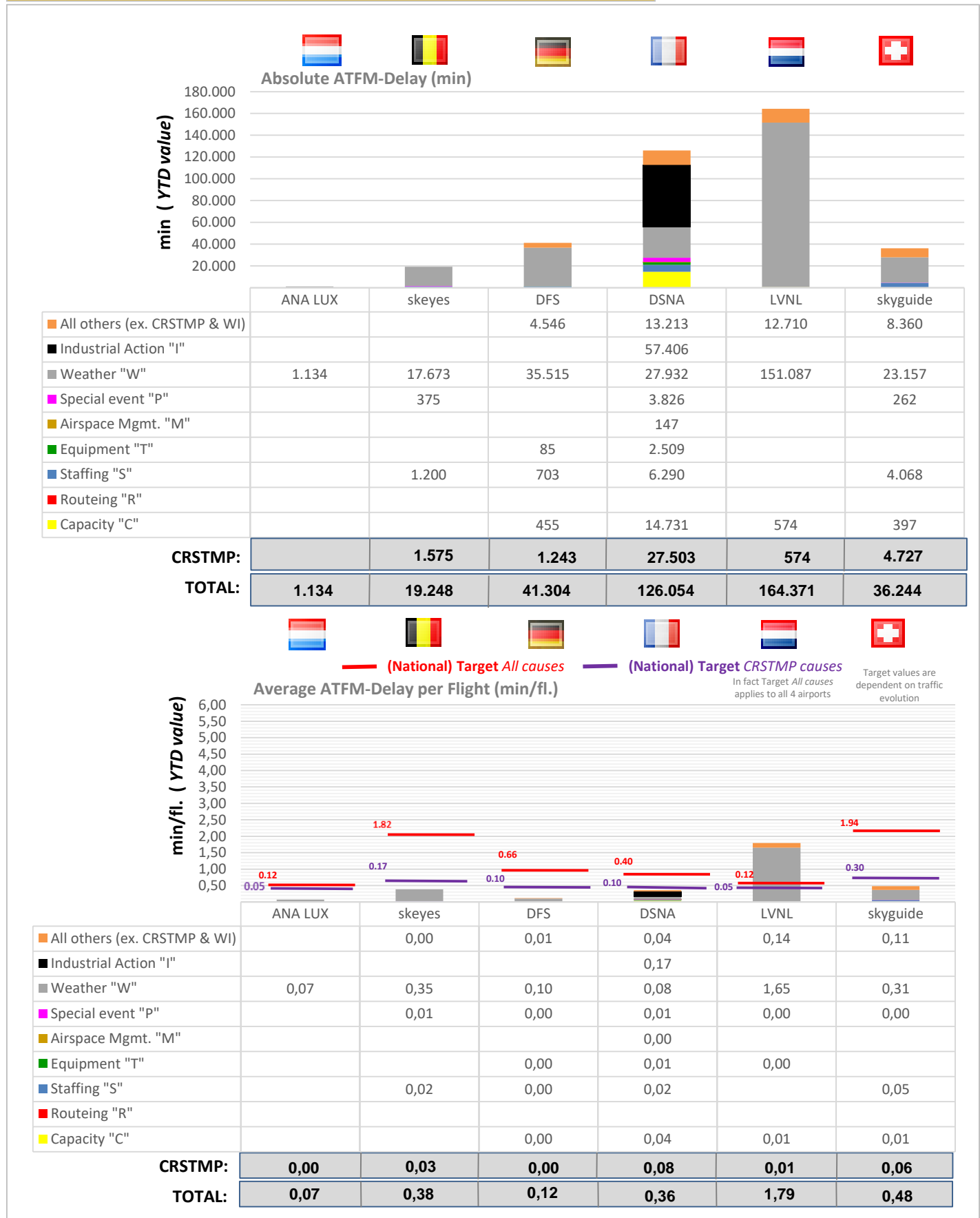


Delay due to reason code:	2019	2020
Capacity "C"	34.292	16.157
Routeing "R"	0	0
Staffing "S"	38.743	12.261
Equipment "T"	61.958	2.594
Airspace Mgmt. "M"	3.117	147
Special event "P"	223.521	4.463
Weather "W"	884.947	256.498
Industrial Action "I"	26.955	57.406
All others (ex. CRSTMP & WI)	683.492	38.829

<b>CRSTMP:</b>	<b>361.631</b>	<b>35.622</b>
<b>TOTAL:</b>	<b>1.957.025</b>	<b>388.355</b>



## KPI #2: Arrival ATFM delay per controlled flight (ANSP)



## Glossary

### KPI #1:

KPI #1 is set by IR (EU) 2019/317 and is expressed in minutes per flight. The EU-wide targets set for RP3 for this indicator are for 2020: 0.9 min/fl., 2021: 0.9 min/fl., 2022: 0.7 min/fl., 2023: 0.5 min/fl., 2024: 0.5 min/fl.

The targets set at FABEC level are as follows for the indicator 'En-route ATFM delay (all regulation causes) per controlled flight' for 2020: 3.45 min/fl., 2021: 3.88 min/fl., 2022: 3.61 min/fl., 2023: 2.19 min/fl., 2024: 1.78 min/fl.

The targets set at FABEC level are as follows for the indicator 'En-route ATFM delay (CRSTMP regulation causes) per controlled flight' for 2020: 2.28 min/fl., 2021: 2.56 min/fl., 2022: 2.38 min/fl., 2023: 1.45 min/fl., 2024: 1.17 min/fl.

### KPI #2:

KPI #2 is set by IR (EU) 2019/317 and is expressed in minutes per flight. For this indicator, no targets have been defined at EU and FABEC level for RP3. The targets have been set at local level.

Cause	CODE	Guidelines for Application
ATC Capacity	<b>C</b>	En Route: Demand exceeds or complexity reduces declared or expected ATC capacity Airport: Demand exceeds declared or expected ATC capacity.
ATC Industrial Action	<b>I</b>	Reduction in any capacity due to industrial action by ATC staff
ATC Routeings	<b>R</b>	Network solutions / scenarios used to balance demand and capacity
ATC Staffing	<b>S</b>	Unplanned staff shortage reducing expected capacity.
ATC Equipment	<b>T</b>	Reduction of expected or declared capacity due to the non-availability or degradation of equipment used to provide an ATC service.
Accident / Incident	<b>A</b>	Reduction of expected ATC capacity due to an aircraft accident / incident.
Aerodrome Capacity	<b>G</b>	Reduction in declared or expected capacity due to the degradation or non-availability of infrastructure at an airport. e.g. Work in Progress, shortage of aircraft stands etc. Or when demand exceeds expected aerodrome capacity.
Equipment NON ATC- to be Aerodrome Services	<b>E</b>	Reduced capacity due to the degradation or non-availability of support equipment at an airport e.g. Fire Service, De-icing / snow removal equipment or other ground handling equipment.
Industrial Action NON ATC	<b>N</b>	A reduction in expected / planned capacity due to industrial action by non ATC personnel.
Airspace Management	<b>M</b>	Reduction in declared or expected capacity following changes in airspace / route availability due to small scale military activity.
Special Event	<b>P</b>	Reduction in planned, declared or expected capacity or when demand exceeds the above capacities as a result of a major sporting, governmental or social event. It may also be used for ATM system upgrades and transitions. Large multinational military exercises may also use this reason. This category should only be used with prior approval during the planning process.
Weather	<b>W</b>	Reduction in expected capacity due to any weather phenomena. This includes where weather impacts airport infrastructure capacity, but where aerodrome services are operating as planned / expected.
Environmental Issues	<b>V</b>	Reduction in any capacity or when demand exceeds any capacity due to agreed local noise, runway usage or similar procedures. This category should only be used with prior agreement in the planning process.
Other	<b>O</b>	This should only be used in exceptional circumstances when no other category is sufficient. An explanatory ANM remark MUST be given to allow post ops analysis.

### CRSTMP:

ATC Capacity (**C**), ATC Routeings (**R**), ATC Staffing (**S**), ATC Equipment (**T**), Airspace Management (**M**), Special Event (**P**); a set of regulation codes which are defined in the Common Charging Scheme Regulation (IR 2019/317) and subject to financial incentive.

**Note:** Arrival figures (traffic and delay) do only include EBBR and EBLG for Belgium and only EHAM for the Netherlands.

### TABLE OF ABBREVIATIONS

**ADM** - Average en-route ATFM Delay per Movement

**ANSP** - Air Navigation Service Provider

**ATFM** - Air Traffic Flow Management

**ANM** - Aeronautical Notification Message

**FABEC** - Functional Airspace Block Europe Central

**ATM** - Air Traffic Management

**PRU** - Performance Review Unit

**YTD** - Year to Date value

**FPP** - FABEC Performance Plan

**CODA** - Central Office for Delay Analysis

## FABEC Performance Report Capacity:

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### 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.