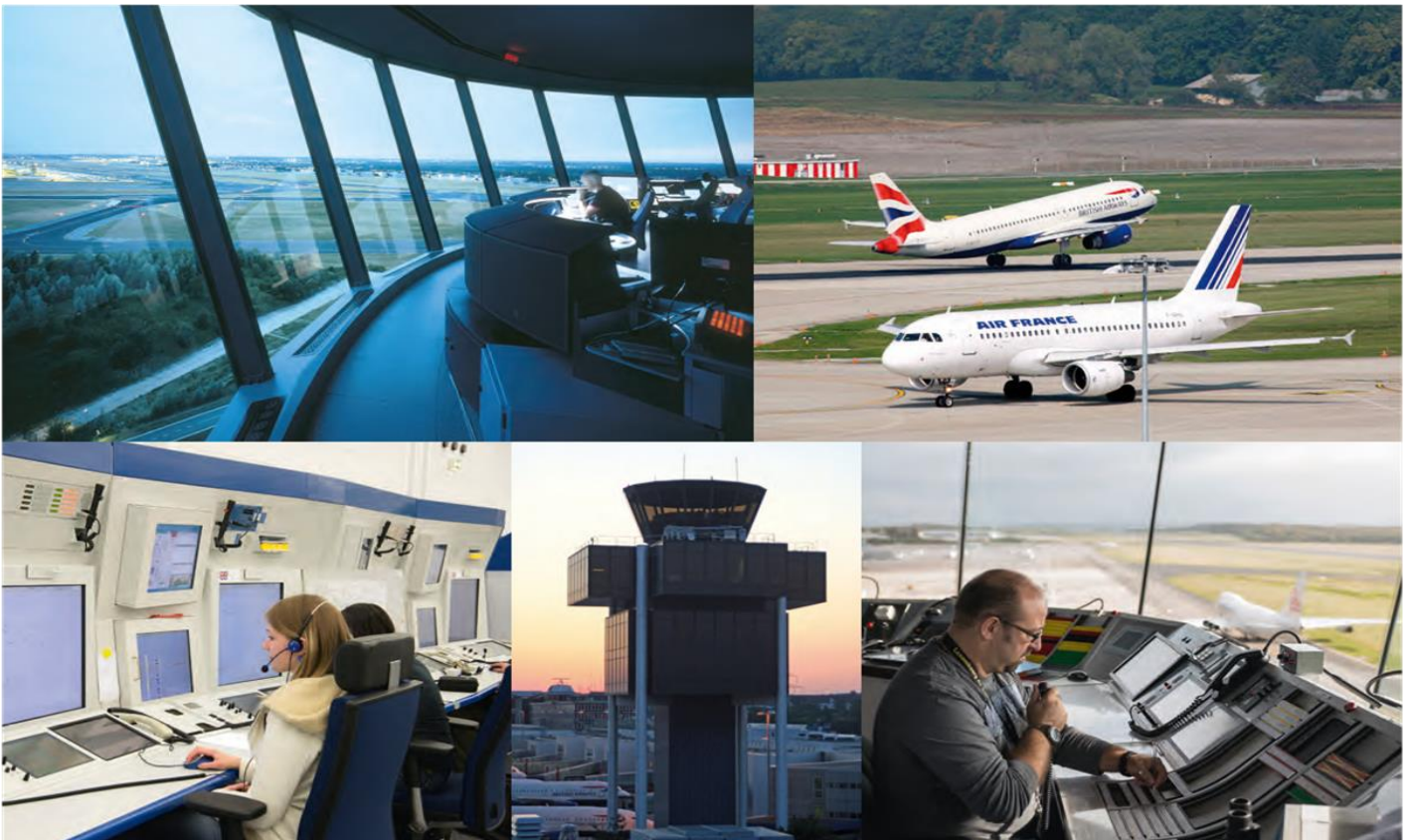




PERFORMANCE REPORT 2020 - 2024

# CAPACITY

March 2020



making the difference

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## Description & Analysis

### Europe

March 2020 saw network traffic fall from around 26.000 at the beginning of the month to just over 4.000 flights at the end, a decrease of 41.1% compared to March 2019. By the end of the month, most remaining traffic was cargo operations. The traffic decline started early in the month and accelerated very quickly mid-month because of the COVID-19 pandemic. The Top 5 Aircraft Operator groups (based on February traffic) were operating some 90% fewer flights by the end of March.

The Network Manager coordinated the response to the evolving operational situation and held weekly Ad-hoc Coordination teleconferences to share network status. ANSPs shared operational staff protection approaches and lifted route restrictions throughout March to support aircraft operations. There was an excellent level of cooperation between all operational partners to implement necessary changes and new measures. Given the traffic levels, particularly in the second half of March, there were few network events requiring flow management protective measures. The two significant events were: French ATC industrial action until 09 March generated high ATFM delay; Spanish authorities introduced a staff reduction program to manage the effect of COVID-19 that resulted in ATFM protective measures (14-16 March).

COVID-19 affected network traffic from the beginning of the month. The February reduction in the number of long-haul flights to Asia continued into March; Italian flight numbers fell from 14 March; quickly followed by Spanish flights from 21 March; and then the rest of European destinations. US restrictions on European passengers started to affect flight schedules from 13 March.

Most countries had a decrease of between a third and two thirds of their traffic. Italy was the most affected with a 66% traffic reduction compared to March 2019.

Similarly, all the top 40 airports had at least a 40% traffic reduction with the sharpest decrease (around two thirds fewer movements) at Italian airports.

All-Cargo flights represented close to 30% of all traffic by the end of March. The use of passenger aircraft for cargo flights increased in the last week of March.

*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 March 2020, the Central Office for Delay Analysis (CODA) reported that the average delay per flight on departure was 8.2 minutes per flight - a decrease of 3.2 minutes per flight compared to March 2019.

35 % of the total delay can be attributable to air traffic control. Airlines caused 42% of the total delay, resulting from such issues as technical problems, staff shortages or turnaround times that are too tightly scheduled. Airports caused 4% of the delays while the rest (IATA Code 85,86,71-79,97-99) of around 19% can be allocated to other reasons (Source: CODA-Dashboard-03-2020, Date 12/05/2020).

### FABEC

In the FABEC area, traffic decreased by 42% in March 2020 compared to the same month in 2019, leading to a 15.8% traffic decrease YTD.

Traffic began to decrease from the beginning of March and fell down as per mid-March. The evolution was the same everywhere. München airport lost 49.5% of its March traffic compared to the same period last year, Zurich airport 49.5%, Düsseldorf, Berlin and Paris Orly 47%, Lyon, Frankfurt and Hamburg more than 45%. At ANSP level, skyguide recorded a drop of traffic by more than 47%, DSN 43%, DFS 41%, MUAC 38%, skeyes 38% and LVNL 36%.

In March 2020, Marseille (84 245 min), Paris ACC (65 334 min), Karlsruhe (43 794 min) and Brest (41 323 min) were the units with the highest ATFM en-route delay. In Marseille, delays were due exclusively to 'Industrial Action'; in Paris, 'Industrial Action' (93%), 'Staffing' (5%) and 'Other' (1%); in Karlsruhe, 'ATC-Capacity' (59%), 'Staffing' (15%), 'Other' (15%), 'Airspace Management' (5%) and 'Weather' (5%); in Brest, 'Industrial Action' (89%), 'Other' (8%), 'Aerodrome Capacity' (1%) and 'Staffing' (1%).

### World

Air travel has been one of the hardest-hit industries in the early days of the COVID-19 pandemic. Almost as soon as news of the virus became widespread in late-January, travel demand to Asia from the rest of the world plummeted. Even before the containment was adopted across the globe, airlines began to drastically cut flights to China, and other locations in Asia as coronavirus-related anxieties led passengers to avoid travel to the region.

Within weeks, however, it became apparent that flights to Asia were not the only routes to see lower demand. As the virus spread to Europe, followed by the Americas and Africa, passenger demand plummeted across the board. People were second-guessing trips anywhere away from home, and were trying to avoid anything involving air travel, given the inherent proximity to other people, some of whom could be carrying the virus. Notably, people were also delaying buying tickets for future travel, due to the uncertainty surrounding the outbreak.

The scale of the carnage for airlines became apparent when British regional airline Flybe ran out of cash and entered administration the first week of March. While Flybe had ongoing financial difficulties and was already on the brink, the coronavirus situation, and the associated decrease in bookings, served as the final nail in its coffin. As countries around the world have closed their borders, and many states and nations have locked down, air travel has declined significantly, with airlines suspending routes, grounding planes, and seeing low load factors on their few remaining flights.

While many US airlines would be safe for now thanks to the bailout bill working its way through Congress, several other airlines have already collapsed, and many more around the world are on the brink as the crisis drags on.

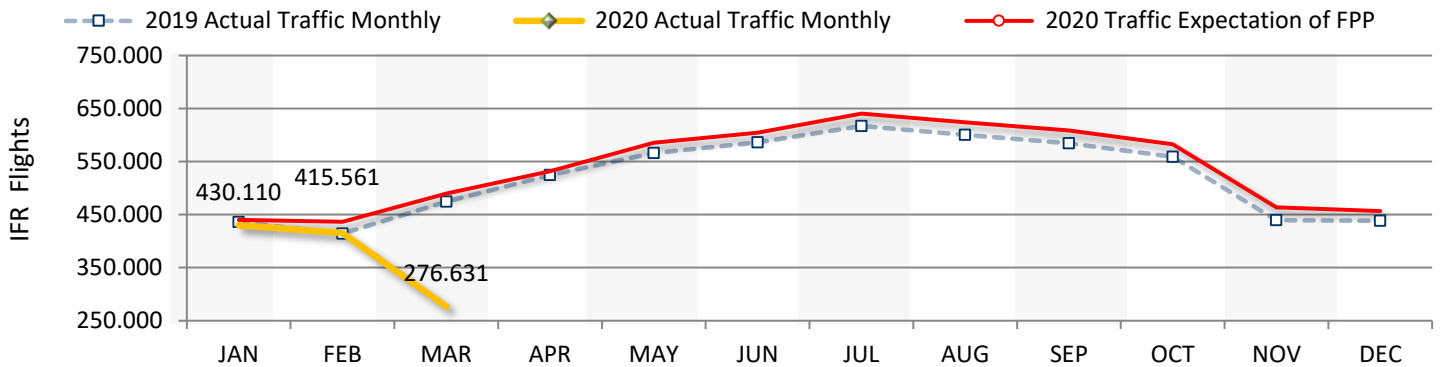
IATA estimates that airlines globally will lose at least \$314 billion due to the outbreak. Similarly, aviation consultancy CAPA said earlier this month that by the end of May, "most airlines in the world will be bankrupt" without coordinated government and industry intervention.

(Source: Business Insider, David Slotnick, Apr 21, 2020).

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

<b>FABEC</b>	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	<b>YTD</b>
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	1.324.810
2020 Actual Traffic Monthly	<b>430.110</b>	<b>415.561</b>	<b>276.631</b>										<b>1.122.302</b>
Growth (%)	<b>-1,3 %</b>	<b>0,3 %</b>	<b>-41,7 %</b>										<b>-15,3 %</b>
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	<b>6.465.057</b>
2020 Traffic Evolution (%)	<b>-2,3 %</b>	<b>-4,8 %</b>	<b>-43,6 %</b>										
2020 Traffic Cumulated (%)	<b>-2,3 %</b>	<b>-3,5 %</b>	<b>-17,9 %</b>										

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.

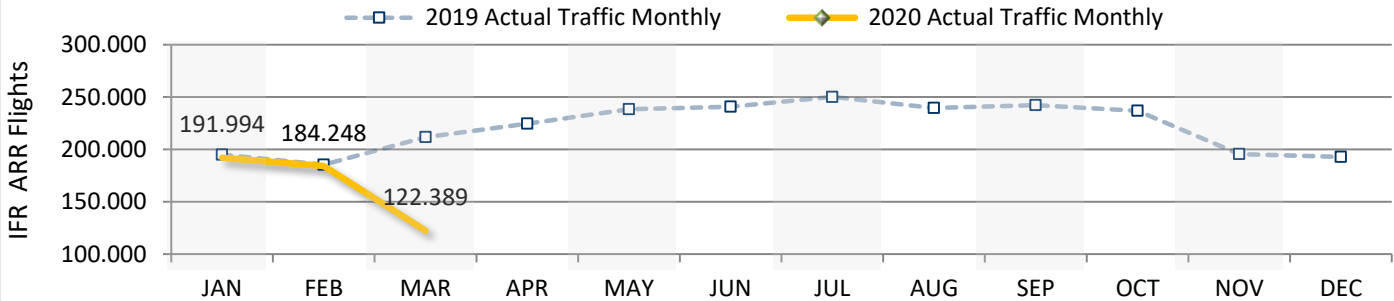


	<b>JAN</b>	<b>FEB</b>	<b>MAR</b>	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	<b>YTD</b>
<b>skeyes</b>													
2019 Actual Traffic Monthly	46.085	42.458	49.539	53.761	57.702	58.513	62.239	59.274	59.410	57.544	46.709	46.631	138.082
2020 Actual Traffic Monthly	<b>44.865</b>	<b>43.754</b>	<b>30.860</b>										<b>119.479</b>
Growth (%)	<b>-2,6 %</b>	<b>3,1 %</b>	<b>-37,7 %</b>										<b>-13,5 %</b>
<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	674.461
2020 Actual Traffic Monthly	<b>218.493</b>	<b>209.352</b>	<b>141.583</b>										<b>569.428</b>
Growth (%)	<b>-1,6 %</b>	<b>-1,1 %</b>	<b>-41,2 %</b>										<b>-15,6 %</b>
<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	675.731
2020 Actual Traffic Monthly	<b>217.787</b>	<b>213.859</b>	<b>140.091</b>										<b>571.737</b>
Growth (%)	<b>-1,7 %</b>	<b>1,9 %</b>	<b>-42,7 %</b>										<b>-15,4 %</b>
<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	140.989
2020 Actual Traffic Monthly	<b>46.552</b>	<b>44.046</b>	<b>32.102</b>										<b>122.700</b>
Growth (%)	<b>1,0 %</b>	<b>-0,7 %</b>	<b>-36,4 %</b>										<b>-13,0 %</b>
<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	415.809
2020 Actual Traffic Monthly	<b>133.754</b>	<b>127.979</b>	<b>91.834</b>										<b>353.567</b>
Growth (%)	<b>-3,6 %</b>	<b>-1,0 %</b>	<b>-37,8 %</b>										<b>-15,0 %</b>
<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	275.247
2020 Actual Traffic Monthly	<b>90.405</b>	<b>88.622</b>	<b>52.617</b>										<b>231.644</b>
Growth (%)	<b>1,2 %</b>	<b>2,7 %</b>	<b>-47,2 %</b>										<b>-15,8 %</b>

## FABEC TRAFFIC DEVELOPMENT (arrival)

<b>FABEC</b>	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	592.066
2020 Actual Traffic Monthly	<b>191.994</b>	<b>184.248</b>	<b>122.389</b>										<b>498.631</b>
Growth (%)	-1,5 %	-0,6 %	-42,2 %										-15,8 %

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	8.375
2020 Actual Traffic Monthly	<b>2.880</b>	<b>2.741</b>	<b>1.942</b>										<b>7.563</b>
Growth (%)	5,6 %	3,8 %	-35,4 %										-9,7 %

	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	28.922
2020 Actual Traffic Monthly	<b>9.686</b>	<b>9.401</b>	<b>6.802</b>										<b>25.889</b>
Growth (%)	-1,2 %	6,5 %	-33,9 %										-10,5 %

	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	239.841
2020 Actual Traffic Monthly	<b>75.189</b>	<b>72.929</b>	<b>48.623</b>										<b>196.741</b>
Growth (%)	-3,9 %	-3,9 %	-43,2 %										-18,0 %

	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	203.484
2020 Actual Traffic Monthly	<b>67.423</b>	<b>64.708</b>	<b>41.799</b>										<b>173.930</b>
Growth (%)	1,0 %	2,2 %	-43,1 %										-14,5 %

	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	57.382
2020 Actual Traffic Monthly	<b>19.189</b>	<b>17.942</b>	<b>12.910</b>										<b>50.041</b>
Growth (%)	1,0 %	-0,4 %	-36,6 %										-12,8 %

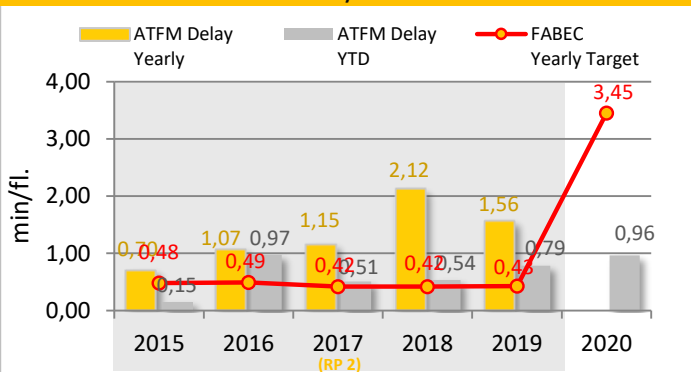
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
<b>skyguide</b>													
2019 Actual Traffic Monthly	18.280	16.723	19.059	18.777	19.572	19.677	20.388	19.714	19.568	19.206	15.962	17.215	54.062
2020 Actual Traffic Monthly	<b>17.627</b>	<b>16.527</b>	<b>10.313</b>										<b>44.467</b>
Growth (%)	-3,6 %	-1,2 %	-45,9 %										-17,7 %

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

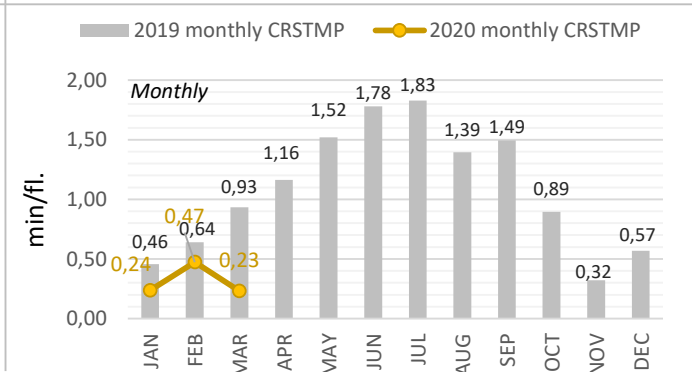
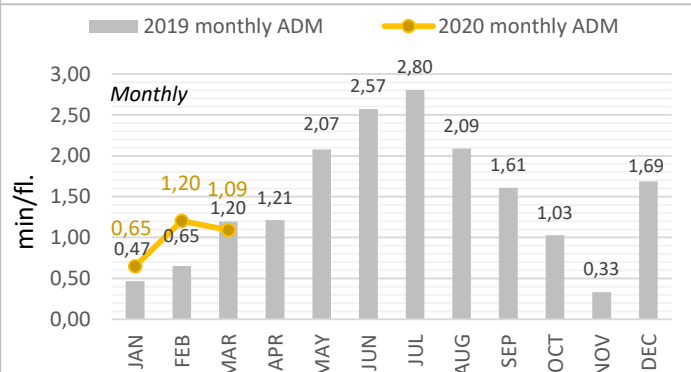
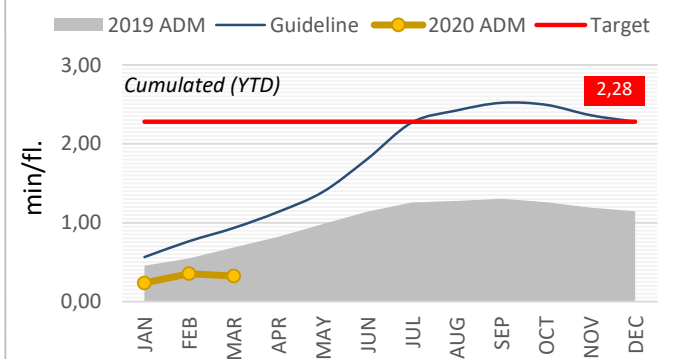
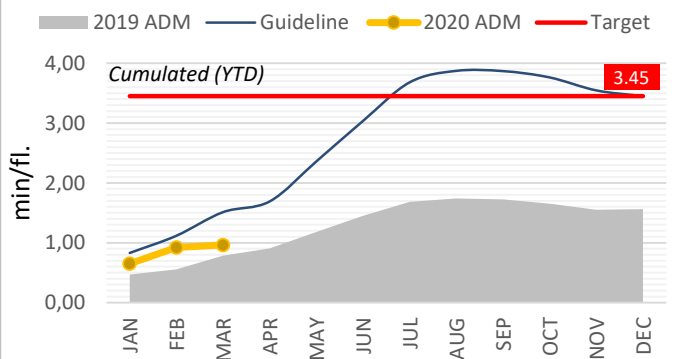
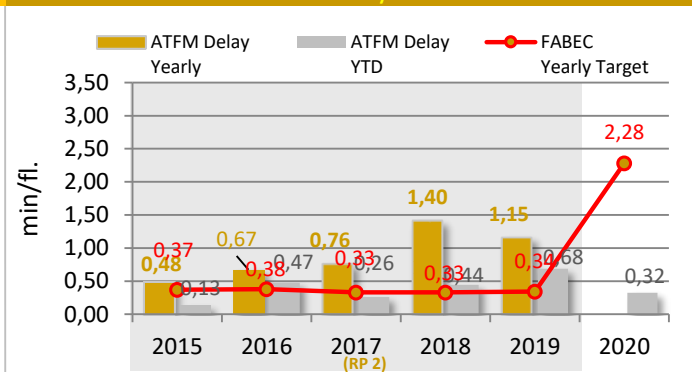
	YTD 2020	YTD 2019		YTD 2020	YTD 2019
<b>En-route Delay All causes</b>	<b>0,96</b>	0,79	<b>En-route Delay CRSTMP causes</b>	<b>0,32</b>	0,68
FABEC Target (yearly value)	3,45		FABEC Target (yearly value)	2,28	
Guideline	1,51		Guideline	0,93	
Minute ('000) ALL causes	1.081	1.041	Minute ('000) CRSTMP causes	363	907
Diff. 2020 - 2019	+ 3,8 %		Diff. 2020 - 2019	- 60 %	
Traffic ('000)	1.122	1.325	<i>Potential savings (*) due to underbid the delay Target</i>		
Diff. 2020 - 2019	- 15,3 %		<i>(all Causes) in Mio EURO (YTD)</i> ▶ 0,0		

\* Cost of ATFM-delay per min = 87 €

### All Delay Causes



### CRSTMP Delay Causes

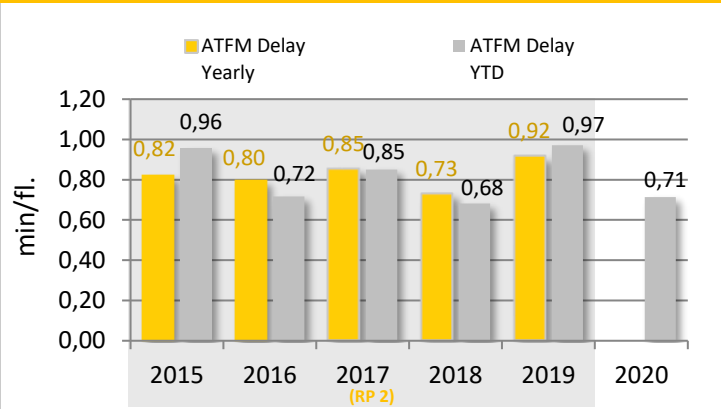


The guideline for the en-route ATFM delay per movement is a basic cumulative extrapolation of the previous three years monthly allocation and is designed to give an impression, how the YTD figures should be, in order to reach the yearly 2020 published targets (3,45 min per flight for all delay causes 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.

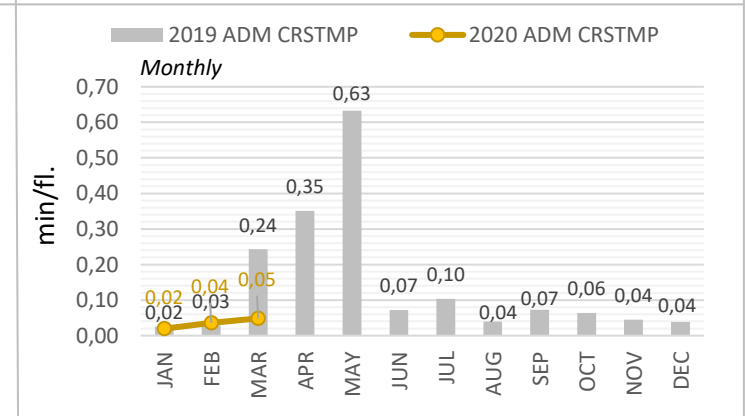
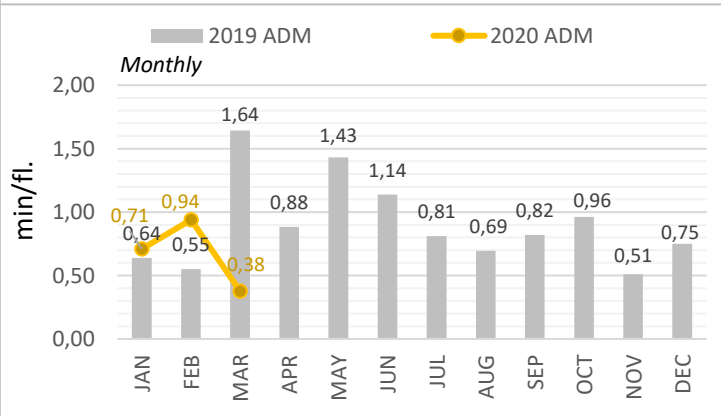
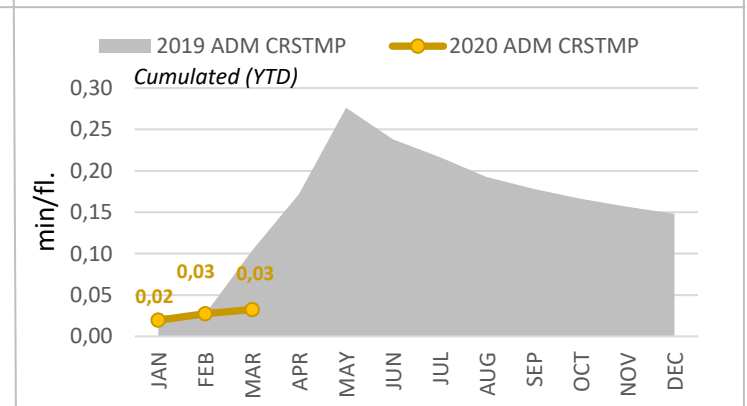
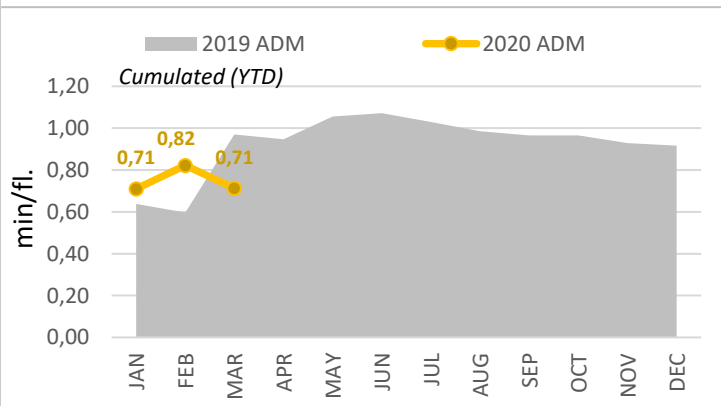
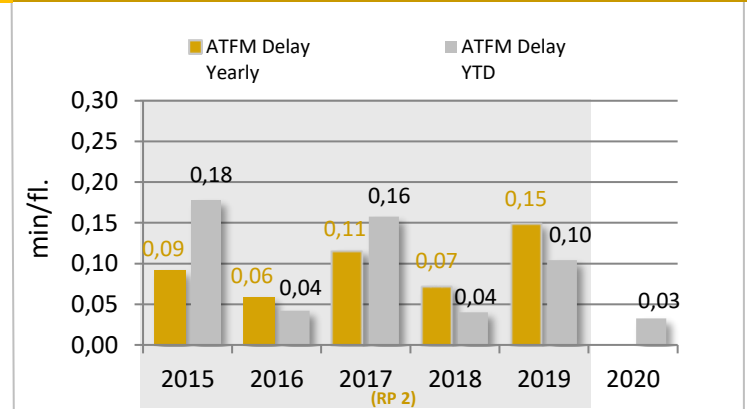
## KPI #2: Arrival ATFM delay per controlled flight (FABEC)

	YTD 2020	YTD 2019		YTD 2020	YTD 2019
<b>Arrival Delay All causes</b>	<b>0,71</b>	0,97	<b>Arrival Delay CRSTMP causes</b>	<b>0,03</b>	0,10
<i>Diff. 2020 - 2019</i>	- 27 %		<i>Diff. 2020 - 2019</i>	- 69 %	
<b>Minute ('000) ALL causes</b>	<b>355</b>	575	<b>Minute ('000) CRSTMP causes</b>	16	62
<i>Diff. 2020 - 2019</i>	- 38 %		<i>Diff. 2020 - 2019</i>	- 74 %	
<b>Traffic ('000)</b>	<b>499</b>	592			
<i>Diff. 2020 - 2019</i>	- 15,8 %				

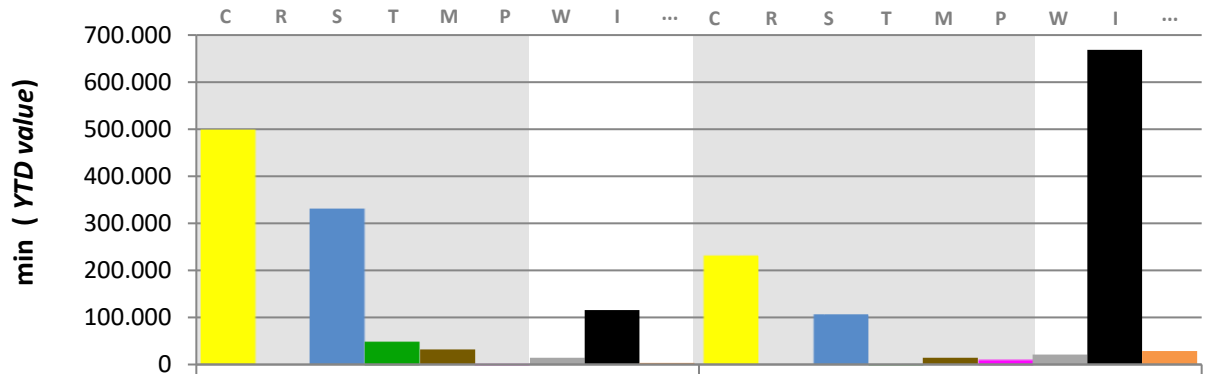
### All Delay Causes



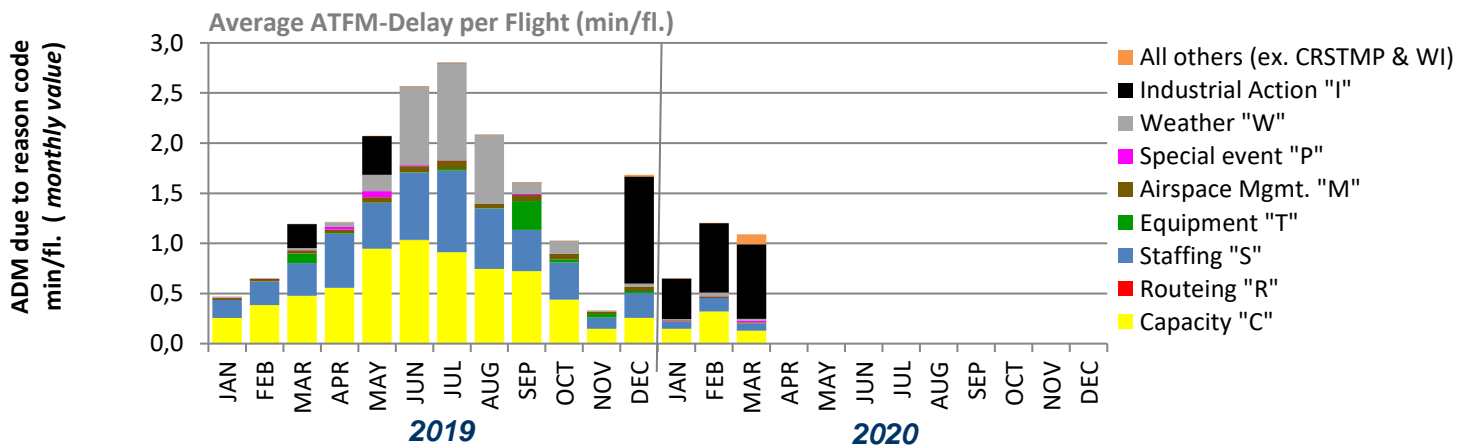
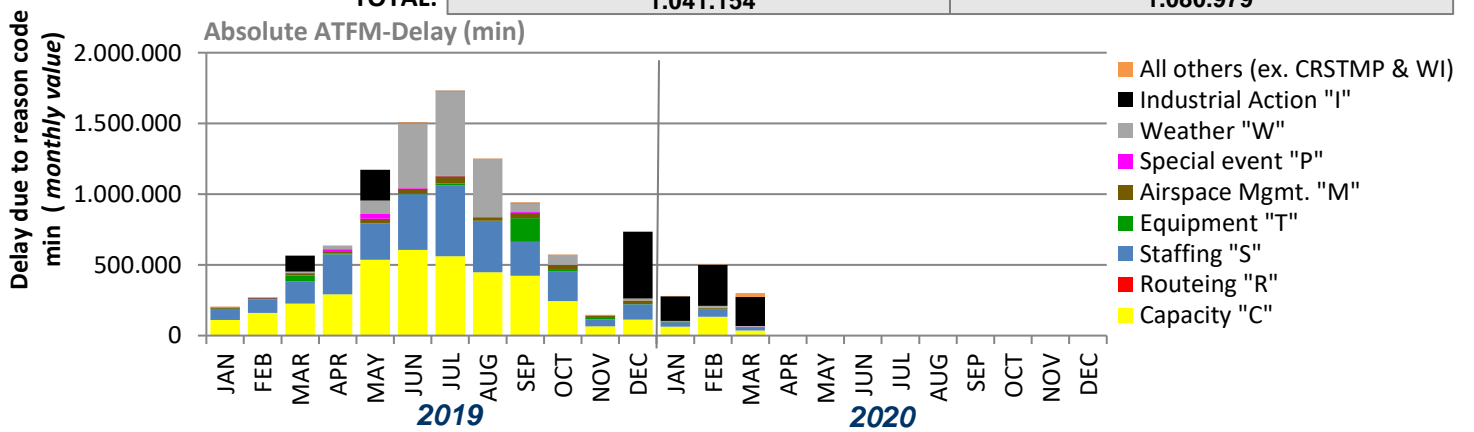
### CRSTMP Delay Causes



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

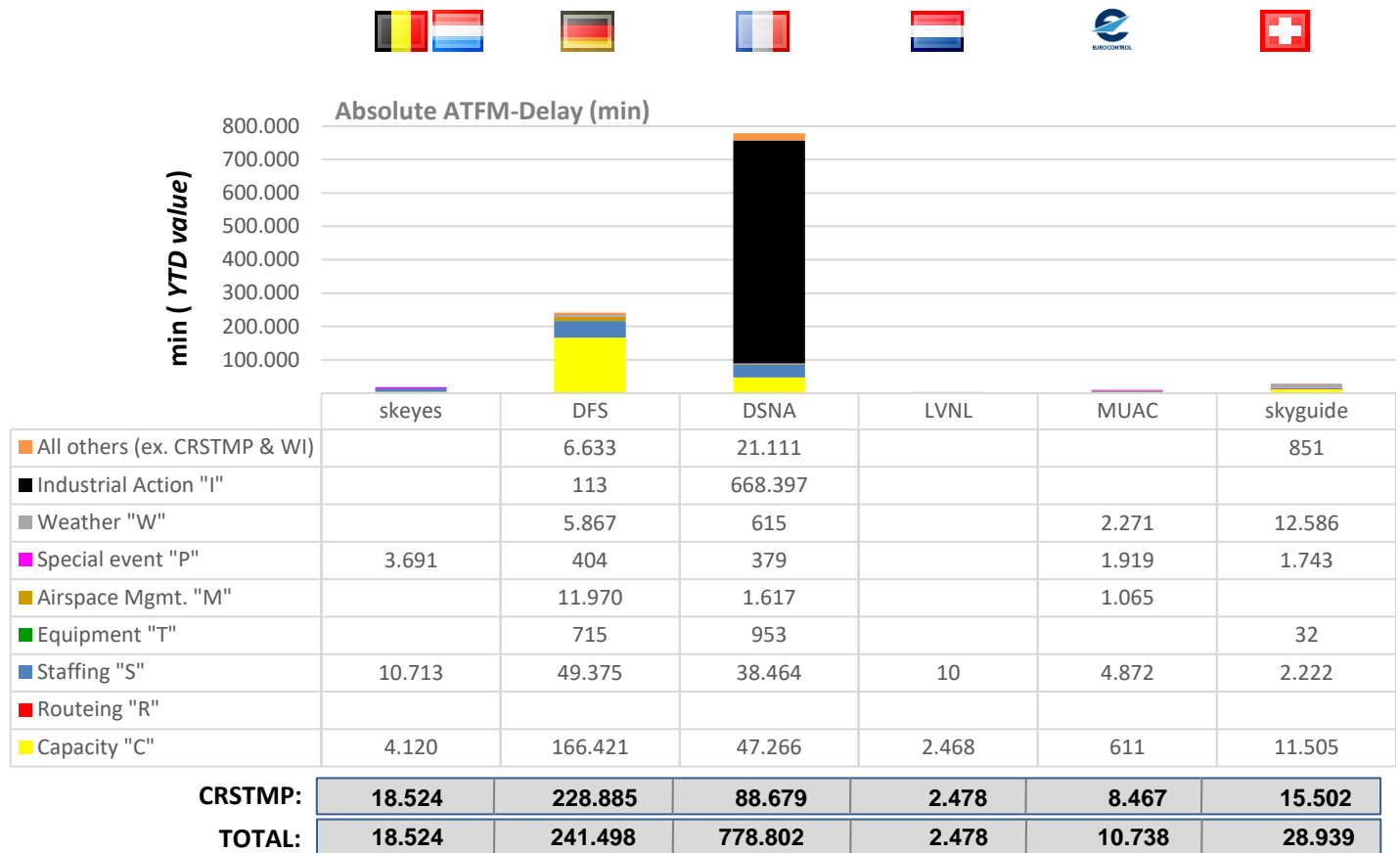


Delay due to reason code:	2019	2020
Capacity "C"	498.579	232.391
Routeing "R"	12	0
Staffing "S"	328.808	105.656
Equipment "T"	45.987	1.700
Airspace Mgmt. "M"	32.061	14.652
Special event "P"	1.754	8.136
Weather "W"	14.586	21.339
Industrial Action "I"	115.617	668.510
All others (ex. CRSTMP & WI)	3.750	28.595
<b>CRSTMP:</b>	<b>907.201</b>	<b>362.535</b>
<b>TOTAL:</b>	<b>1.041.154</b>	<b>1.080.979</b>

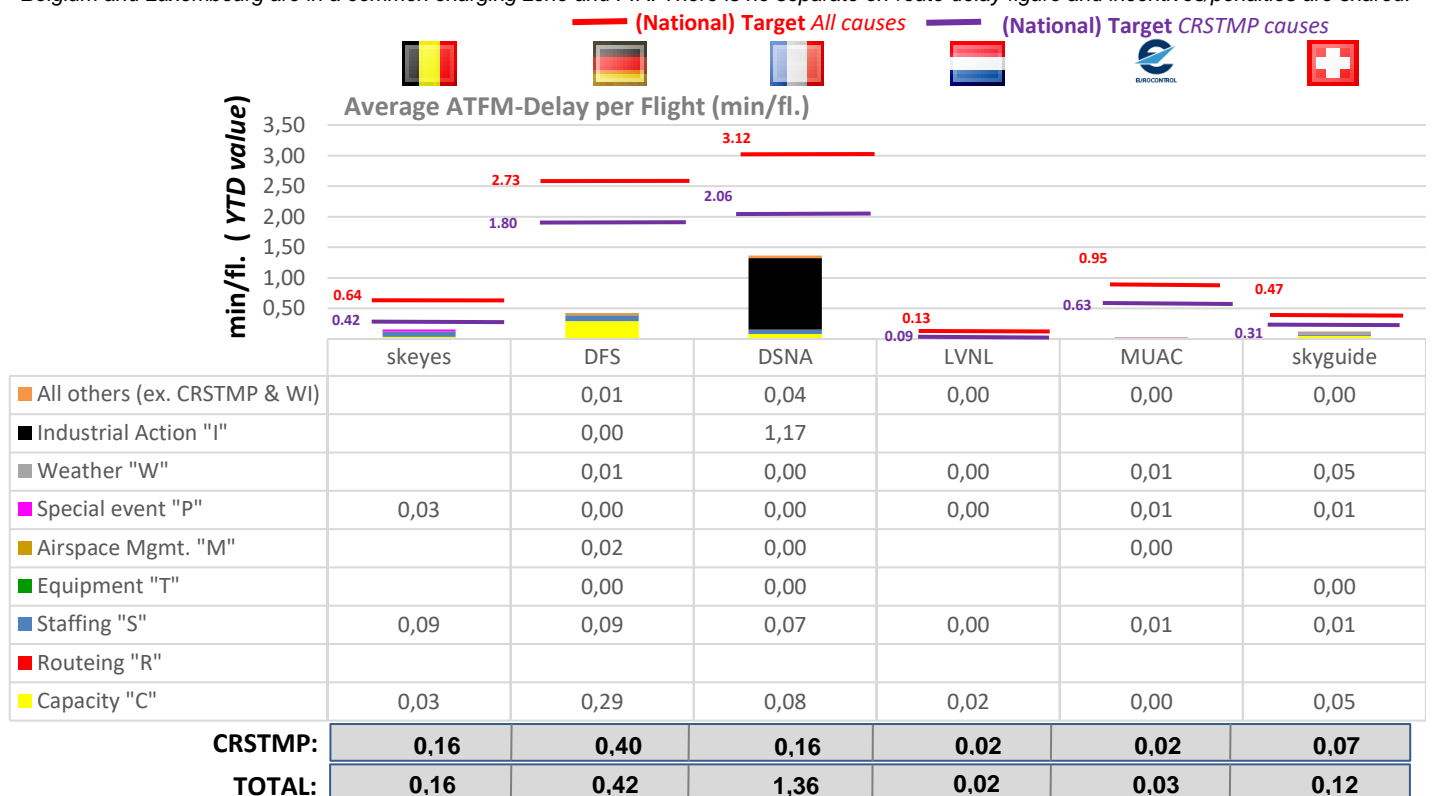




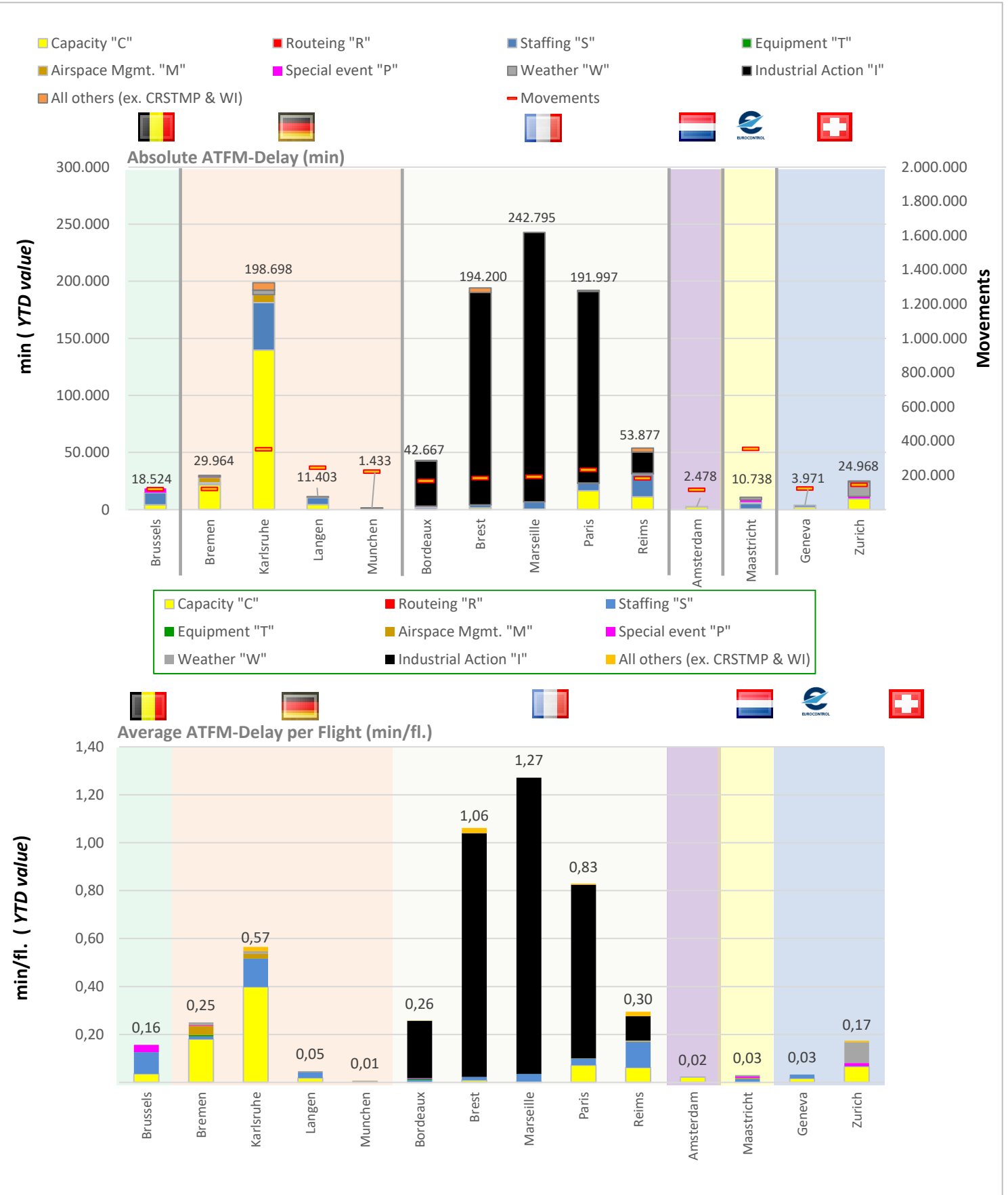
## KPI #1: En-route ATFM delay per controlled flight (ANSP)



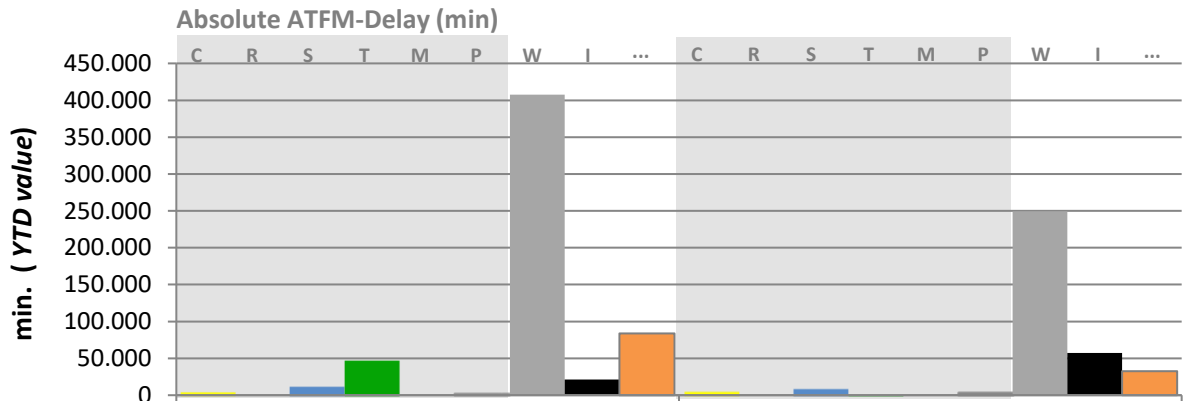
\*Belgium and Luxembourg are in a common charging zone and FIR. There is no separate en-route delay figure and incentives/penalties are shared.



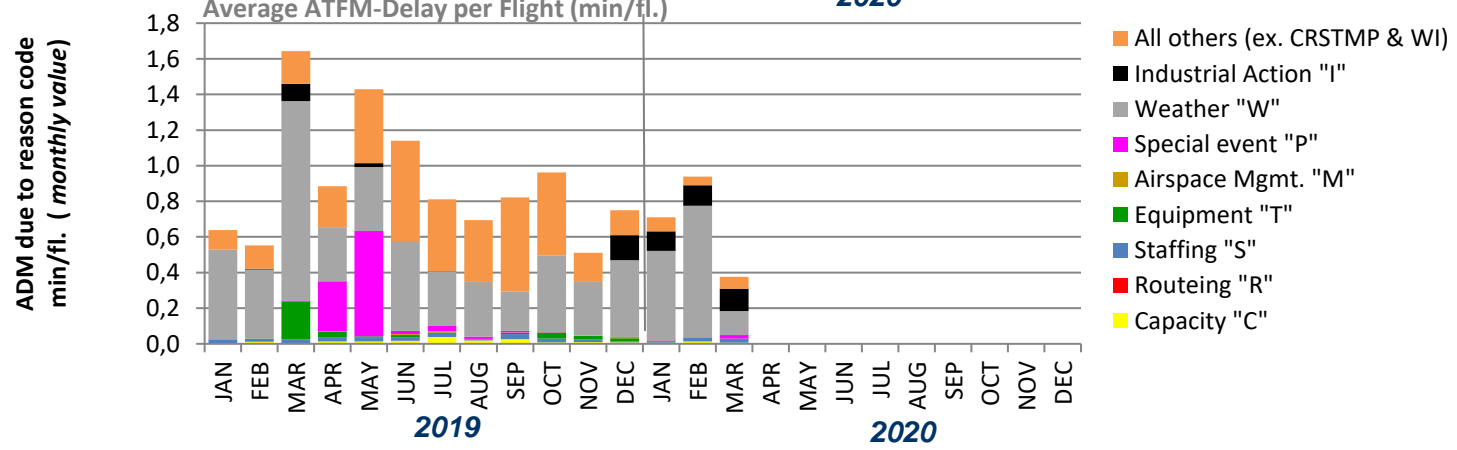
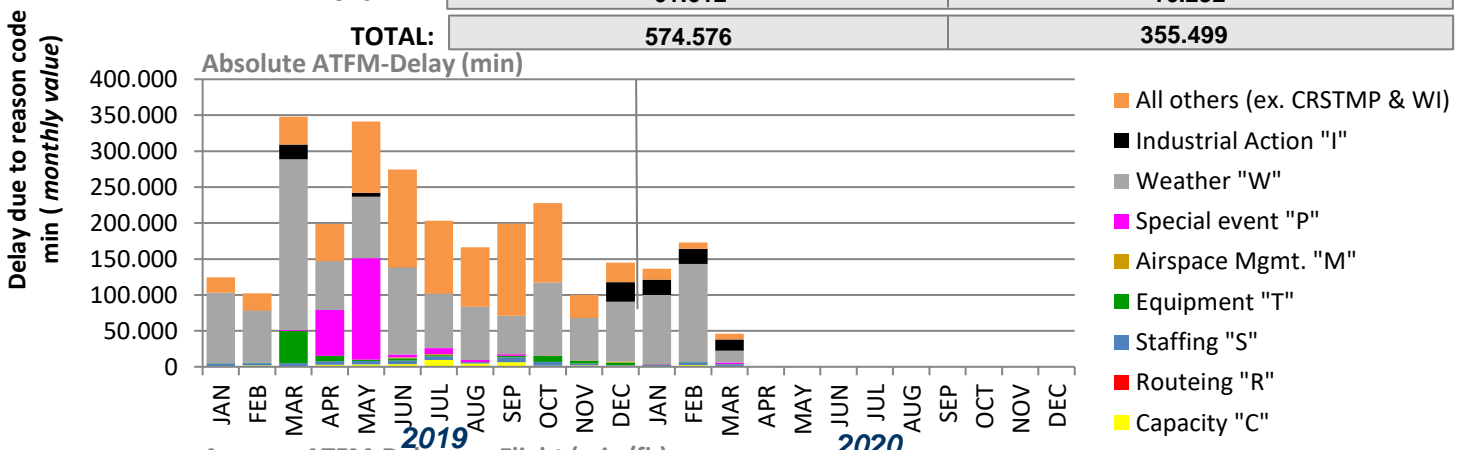
## KPI #1: En-route ATFM delay per controlled flight (ACC)



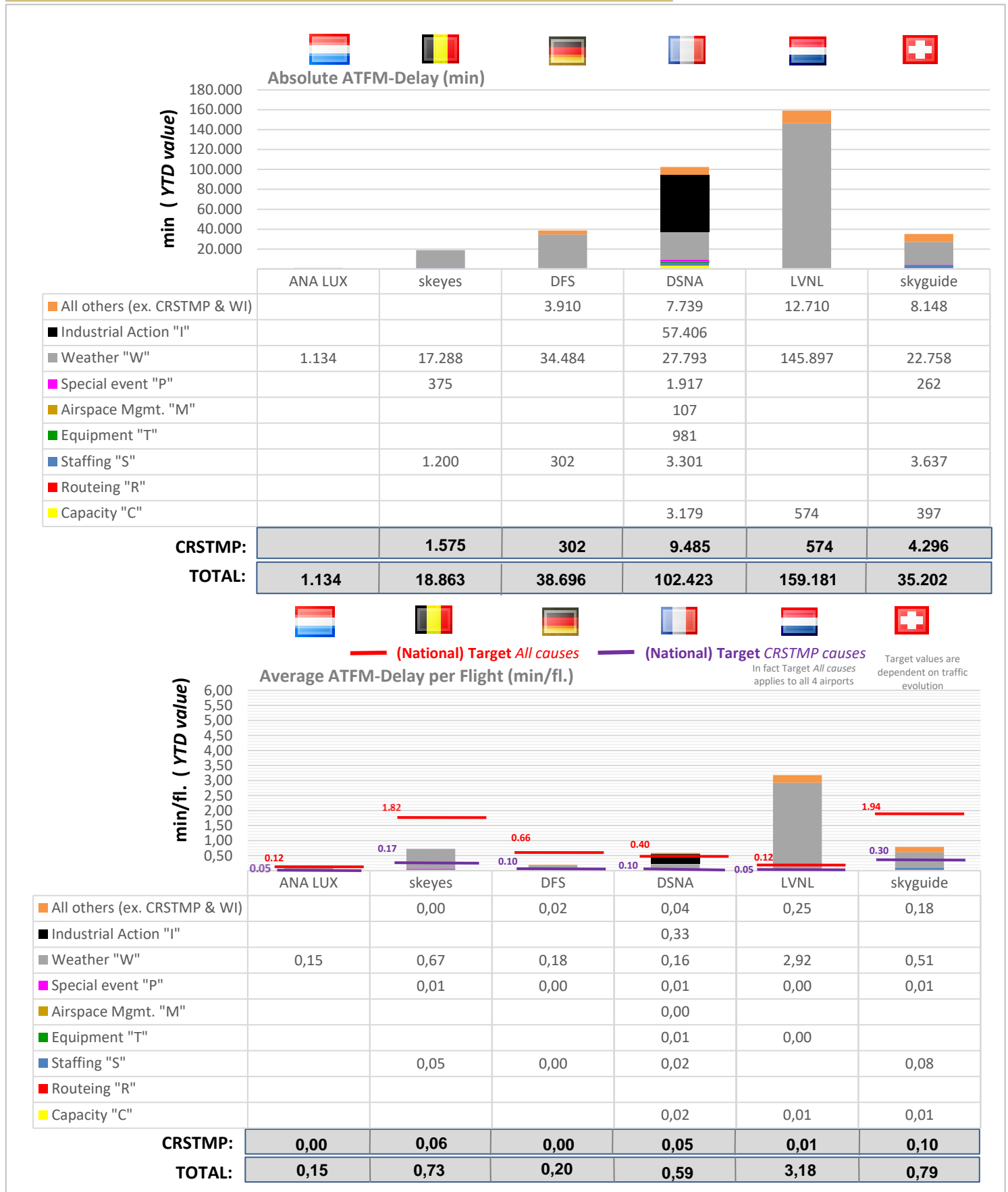
## KPI #2: Arrival ATFM delay per reason code (FABEC)



Delay due to reason code:	2019	2020
Capacity "C"	3.786	4.150
Routeing "R"	0	0
Staffing "S"	10.995	8.440
Equipment "T"	45.469	981
Airspace Mgmt. "M"	0	107
Special event "P"	1.362	2.554
Weather "W"	407.765	249.354
Industrial Action "I"	21.201	57.406
All others (ex. CRSTMP & WI)	83.998	32.507
<b>CRSTMP:</b>	<b>61.612</b>	<b>16.232</b>
<b>TOTAL:</b>	<b>574.576</b>	<b>355.499</b>



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



## Glossary

### KPI #1:

KPI #1 is set by IR (EU) 317/2019 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) 317/2019 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 391/2013) 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.