

# ATM Cost-Effectiveness (ACE)

## First look at ANSPs' 2022 data

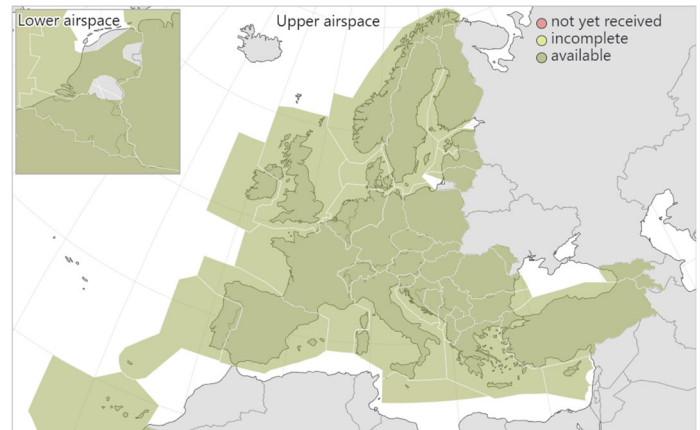
September 2023



**!** This publication is based on the data submissions received between 1<sup>st</sup> July 2023 and 29<sup>th</sup> August 2023 (covering the year 2022). Information contained in ANSPs data submission has been used, without validation from the Performance Review Unit. The data contained in this document is therefore subject to change following the data validation process and might differ from that to be published in the High-level Summary Report in December 2023 and the final ACE report in May 2024.

The map shows the ACE scope of analysis (covering 38 ANSPs). All monetary data are expressed in real terms (€2022).

The table below presents some preliminary key figures for the year 2022, as well as the percentage changes compared to 2021 and 2019.



ACE scope of analysis and status of 2022 data submission (29/08/2023)

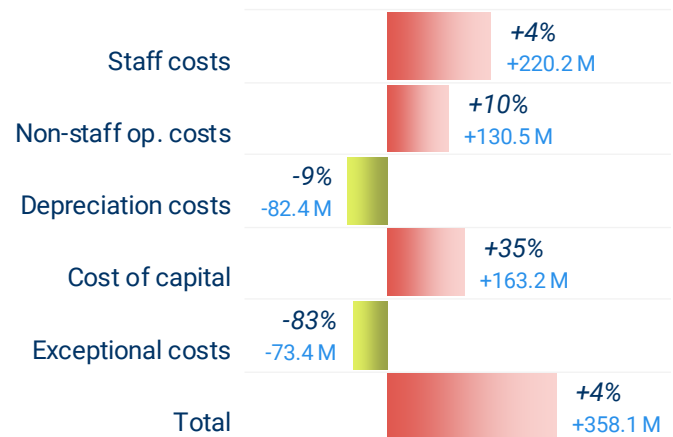
<b>Traffic</b> (composite flight-hours)	<b>19 M</b>	
	<b>+59%</b>	(%) 2021-22
	-13%	(%) 2019-22
<b>Revenues</b> (gate-to-gate)	<b>8 929 M</b>	
	<b>+54%</b>	(%) 2021-22
	-16%	(%) 2019-22
<b>Costs</b> (ATM/CNS provision costs)	<b>8 983 M</b>	
	<b>+4%</b>	(%) 2021-22
	-6%	(%) 2019-22
<b>Staff</b> (ATM/CNS staff, in FTEs)	<b>52 026</b>	
	<b>-0.2%</b>	(%) 2021-22
	-2%	(%) 2019-22
<b>Air traffic controllers</b> (ATCOs in OPS, in FTEs)	<b>17 335</b>	
	<b>+3%</b>	(%) 2021-22
	+1%	(%) 2019-22
<b>Fixed assets</b> (gate-to-gate NBV, end of 2022)	<b>7 645 M</b>	
	<b>-10%</b>	(%) 2021-22
	-10%	(%) 2019-22
<b>Capex</b> (gate-to-gate)	<b>1 136 M</b>	
	<b>-0.1%</b>	(%) 2021-22
	-24%	(%) 2019-22

**✈** Total gate-to-gate ANSP revenues rose by +54% in 2022 driven by an increase in revenues from charges which reflects the traffic recovery (+59% in terms of composite flight-hours). Despite this significant increase, ANSP revenues remained -13% below their pre-pandemic level. For some ANSPs, the war in Ukraine had a significant impact on the main traffic flows and the associated revenues.

**✈** Inflation rates reached record levels in 2022 (above +10% for many States). Despite being calculated in real terms, ATM/CNS provision costs rose by +4%, mainly reflecting increases in staff costs (+€220.2M) following cumulative reductions of -550.6M over the 2020-2021 period and a large increase in the cost of capital (+€163.2M).

### 2022-2021 changes by cost category

(Gate-to-gate, in €2022)



A comprehensive description of the ACE benchmarking framework and its indicators can be found in the [ACE handbook](#) and the [EUROCONTROL Specification for Economic Information Disclosure](#). The ACE dashboard and previous ACE reports are available on the [ACE website](#).



# First look at ANSPs' ACE 2022 data

## Trends in cost-effectiveness KPIs

September 2023



✈ In 2022, ATFM delays increased by a factor of almost seven to reach a level of 19.3M minutes. As a result, the share of costs of ATFM delays in the 2022 unit economic costs reached 20% (close to 2019 level).

✈ ATM/CNS provision costs per composite flight-hour (€473) fell by -34% in 2022 reflecting a combination of increases in ANSPs cost-bases (+4%) and growth in traffic (+59%, expressed in composite flight-hours). This level of financial cost-effectiveness is close to that measured in 2015 and 2016.

✈ ATCO-hour productivity rose by +46% while employment costs per ATCO-hour on duty decreased by -3% and support costs per composite flight-hour fell by -35%.

### Financial cost-effectiveness

ATM/CNS provisions costs / composite flight-hours  
Changes in real terms (€2022)

**€473**      -34% vs. 2021  
                  +9% vs. 2019

### Productivity

Composite flight-hours / ATCO in OPS hours on duty

**0.88**      +46% vs. 2021  
                  -10% vs. 2019

### Employment costs per ATCO-hour

ATCO in OPS employment costs / ATCO in OPS hours on duty  
Changes in real terms (€2022)

**€132**      -3% vs. 2021  
                  -3% vs. 2019

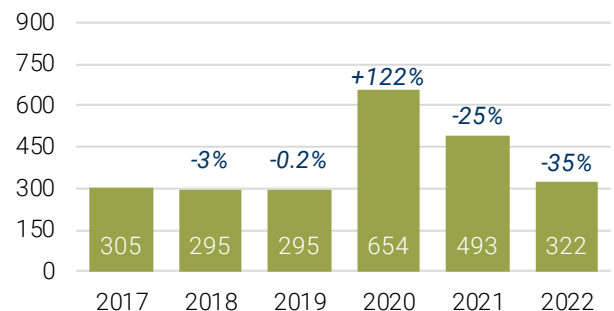
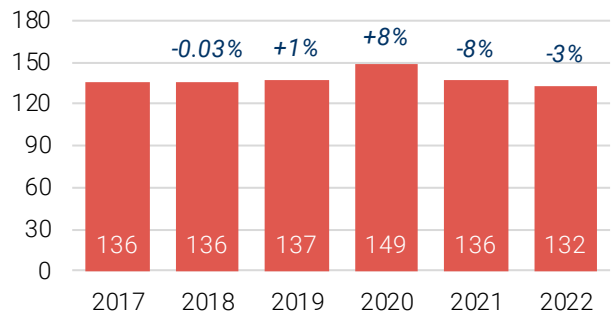
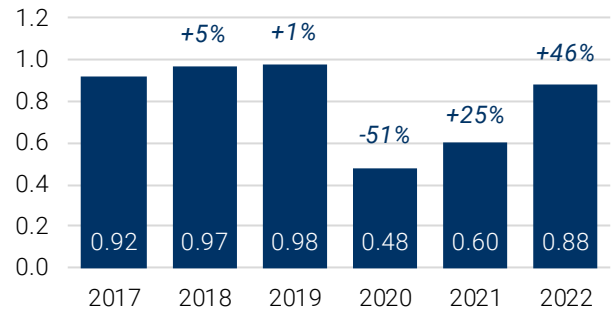
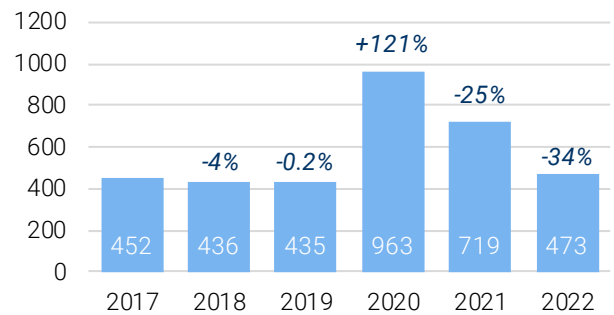
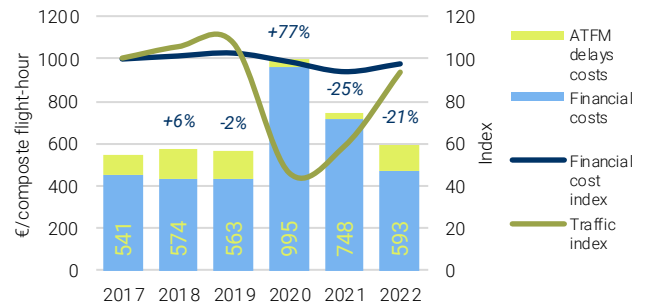
### Support costs per composite flight-hour

Total support costs per composite flight-hour  
Changes in real terms (€2022)

**€322**      -35% vs. 2021  
                  +9% vs. 2019

### Economic cost-effectiveness

**€593**



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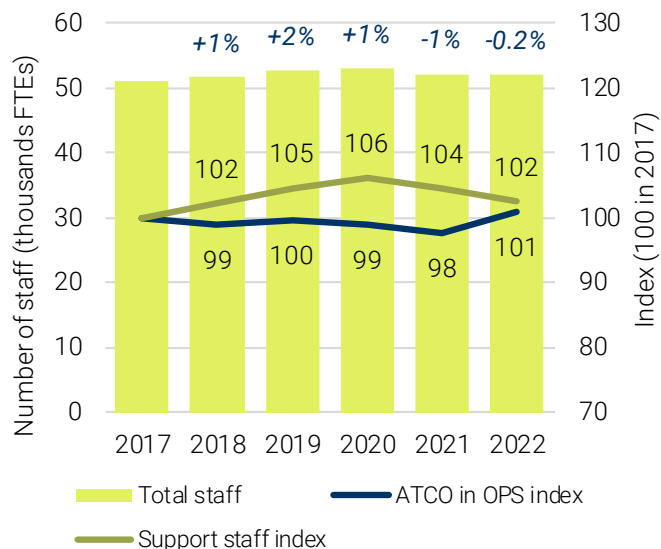
## Trends in staff, capex and financial indicators

September 2023



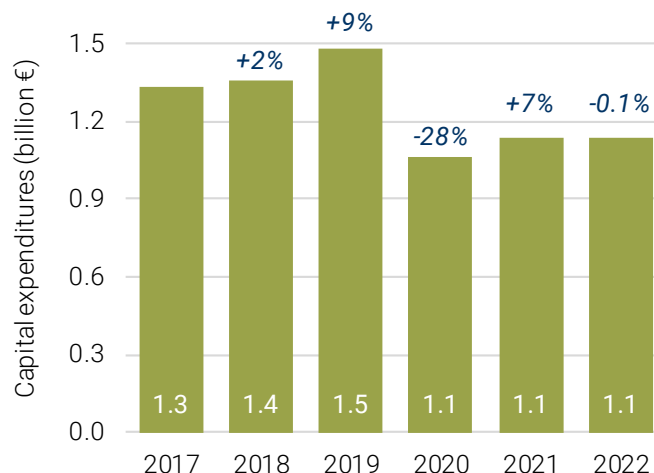
### Trends in the number of ATM/CNS staff

(Gate-to-gate)



### Trends in capital expenditures

(Gate-to-gate, in €2022)



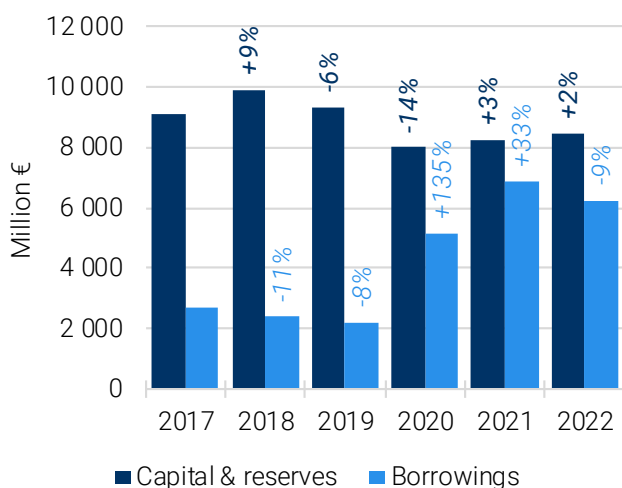
Total capex comprises the sum of investments in land & buildings, systems & equipment, intangible assets and common projects. (€2022 prices)

In 2022, the gate-to-gate ATM/CNS staff employed by ANSPs remained almost stable (-0.2%) compared to 2021 due to a combination of a slight decrease in the number of support staff (-2%) and a +3% increase in the number of ATCOs in OPS.

ANSPs' capital expenditures remained mostly unchanged (-0.1%) in 2022, still some -23% lower than in 2019. Since 2020, many ANSPs scaled down or postponed their investments in order to reduce cash outflow in a context of lower traffic and lower income.

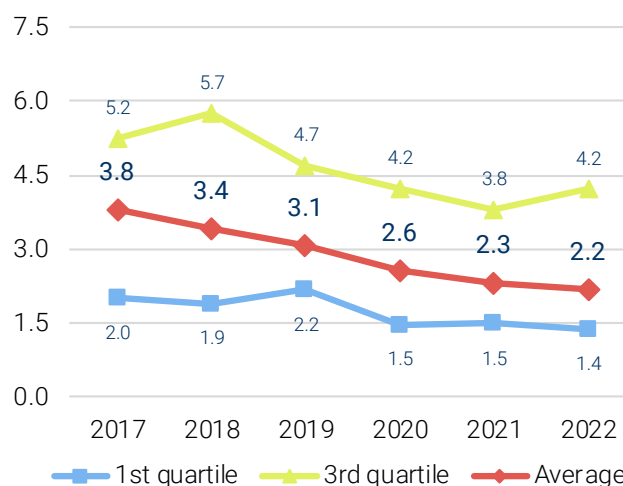
### Trends in capital & reserves and borrowings

(Borrowings include both short and long term borrowings, at total ANS level)



### Trends in the current ratio

(Current assets / current liabilities, total ANS level)



In 2022, capital & reserves increased by +2% while the level of indebtedness fell by -9%. The amount of debt in 2022 remained however almost three times higher than in 2019.

The average current ratio, which indicates the ability of an organisation to finance its short-term liabilities with short-term assets, decreased further in 2022, marking the fifth consecutive year of continuous decrease (from 3.8 in 2017 to 2.2 in 2022).

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