

Global Services Forecast

2022 > 2041

Commercial Aviation

It takes millions of people to keep you flying





Toulouse, October 6th 2022



Our speakers



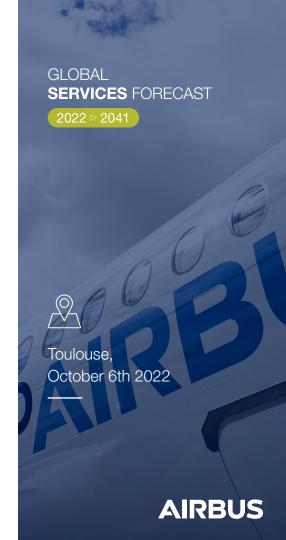
Philippe Mhun
Executive Vice President Programmes & Services



Amaya Rodriguez GonzalezVice President Aftermarket Strategy



Stan ShparbergSenior Vice President & Head of Marketing



Services supporting our industry through two years of turbulence



Maintain

From high demand for parking & storage services

To robust operations restart



Train & Operate

Maintain key competencies with agility and distance learning

More flexibility in fleet utilisation combining cargo & cabin



Enhance

Optional upgrades largely delayed

Demand for Passenger to Freighter conversions

Accelerated Digitalisation



More than 11 million skilled people* are working hard to keep more than 23,500 aircraft** flying.

Did you know that each new aircraft which enters into service, creates as many new jobs as a mid-size company?



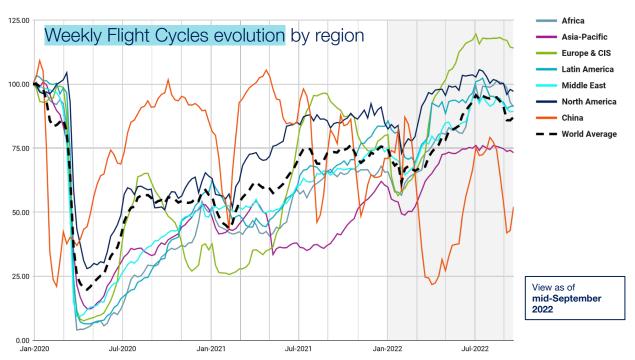
People want and need to travel again. Services play a crucial role to safely fulfil the demand.

3.3 Bn

Expected passengers in **2022** (+43% vs 2021 - EoY forecast)*

A continuous recovery, with regional disparities

base 100 at Jan-2020



During the summer, global flight cycles had reached an unprecedented 95% of 2019 levels, confirming the expected seasonal boost.

Flight Hours / Flight Cycles power the services demand.



Services, powering up now.

\$95Bn +21% vs 2021

Estimated global aftermarket value for 2022

Maintenance and Training markets leading recovery, strongly enabled by accelerated digitalisation Increasing opportunities for end-of-life services, USM* trading and digital/fleet efficiency solutions

Upgrades recovery thanks to high market confidence



The future of commercial aviation will be shaped by

Sustainability



Short term

Act on carbon, waste & noise emissions, and introduce alternative fuels (SAF*)



Mid term

Renew the operated fleet and engage further on decarbonisation innovation



Long Term

Care for a cleaner way to fly with carbon neutral operations

Today, services are key for customers wishing to reduce their carbon footprint, waste & noise emissions



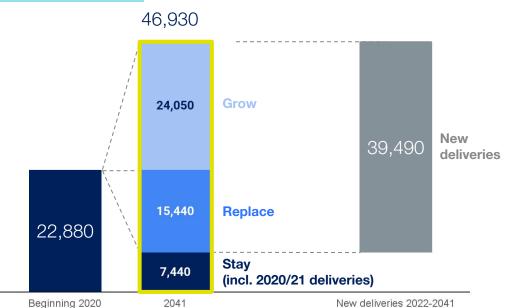
2022 - 2041

Almost 47,000 in service aircraft in 2041

Source: Airbus GMF

Notes: Passenger aircraft above 100 seats & freighters with a payload above 10t

Number of aircraft



22,880 aircraft in-service beginning of 2020:

33% will stay in-service (including 2020 & 2021 deliveries) **67%** will be replaced

39,490 new deliveries 2022-2041:

60% for growth **40%** for replacement



By 2041, new generation passenger aircraft will represent >95% of the fleet

Source: Cirium, Airbus GMF

Number of passenger aircraft in service*



^{*} Western built passenger aircraft above 100 seats – pax aircraft only / **1st generation: A300, DC 9, DC10, 707, 727, 737, 747 / 2nd generation: A310, MD11, MD80, MD90,737, 747, 757, 767, F100 Previous generation: A320 Fam., A330, A340, 717,737NG, 747, 777 / New generation: A220, A320neo Fam., A330neo, A350, A380, 737Max, 777X, 787 & new programs



Digitalisation is shaping the services of tomorrow.

A world where mechanics and data scientists work together, where technology alleviates repetitive work.



Progressive shift to data-driven and integrated digital services



Arrival of new aircraft with disruptive technology



Sustainability will influence the entire aftermarket



Services innovation will require new skills

2022 - 2041

Services market to

more than double in value by 2041



Aftermarket value back to 2019 levels in 2023. Market shifting from cash intensive solutions to asset free solutions.

Sustainability, digitalisation, increased aircraft productivity, maintenance optimisation, and seamless passenger experience are all driving the long-term growth.

Source: Airbus Global Services Forecast 2022-2041 Note: Passenger aircraft above 100 seats & freighters with a payload above 10t CAGR: Compound Annual Growth Rate

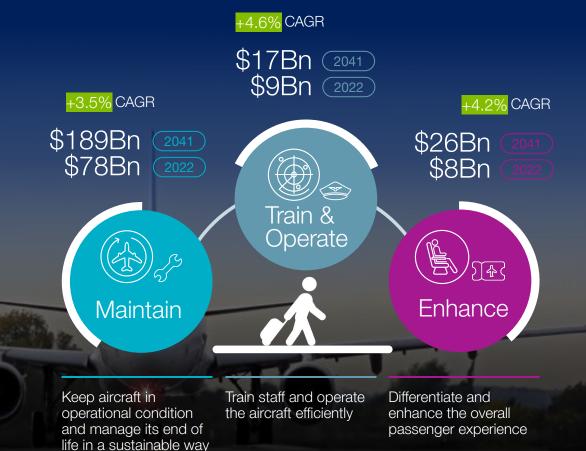


2022 - 2041

3 services streams addressing the needs of commercial aviation



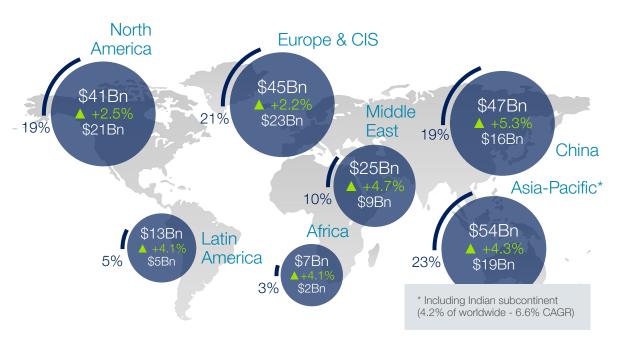
CAGR* 2019-2041 🛆



Aftermarket demand evolution per region

AIRBUS Amber









In 2041, the commercial services demand in some figures...

1,100+
DISMANTLED
& RECYCLED
AIRCRAFT





440,000

Daily **FLIGHT HOURS**



8,000,000

Hours required IN SIMULATORS





The number of aircraft to support >95% new generation pax aircraft





2,200 CABINS UPGRADED OR REFURBISHED

75% Single Aisle | 25% Wide Body



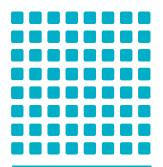
4 times more aircraft with INFLIGHT CONNECTIVITY for passengers

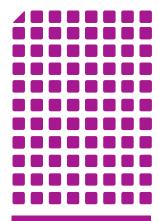




2022-2041 cumulative workforce needs

640,000 New technicians 585,000 New pilots 875,000 New cabin crews





new technicians required every day on average

new pilots
required every day
on average

120

new cabin crew required every day on average



Building a stronger future for Commercial Aviation

Resilience

2022 is a year of transition for Services, the industry is finding its feet again. (+21% in value vs 2021)

Anticipation

Moving from demand to supply-constrained. Adjust the overall supply chain and reinforce capabilities to adapt services to meet new levels.

Sustainable Growth

Services market expected to more than double in 20 years (+3.7% CAGR), boosted by digitalisation and disruptive innovation to change the way we fly.

TODAY

TOMORROW

FUTURE

Airbus Global Services Forecast 2022

Copyrights © Airbus SAS. 2022 All rights reserved.

AIRBUS



Millions of skilled people are working hard to operate, maintain and enhance more than 23,500 aircraft and keep staff trained.

Services, a business worth **\$95Bn today**, over **\$230Bn in 2041** Market more than **doubling by 2041** (+3.7% CAGR).

An additional **+21%** spend expected in **2022** (vs 2021)

Recovery to pre-crisis levels in 2023,

Maintenance and Training leading the recovery, **strongly enabled by digitalization**.

New services to **enhance fleet efficiency**, supporting the industry's CO2 net zero ambitions.

Demand for highly skilled labour to increase by **more than 2 million people** (pilots, technicians, cabin crews) over the next 20 years.

