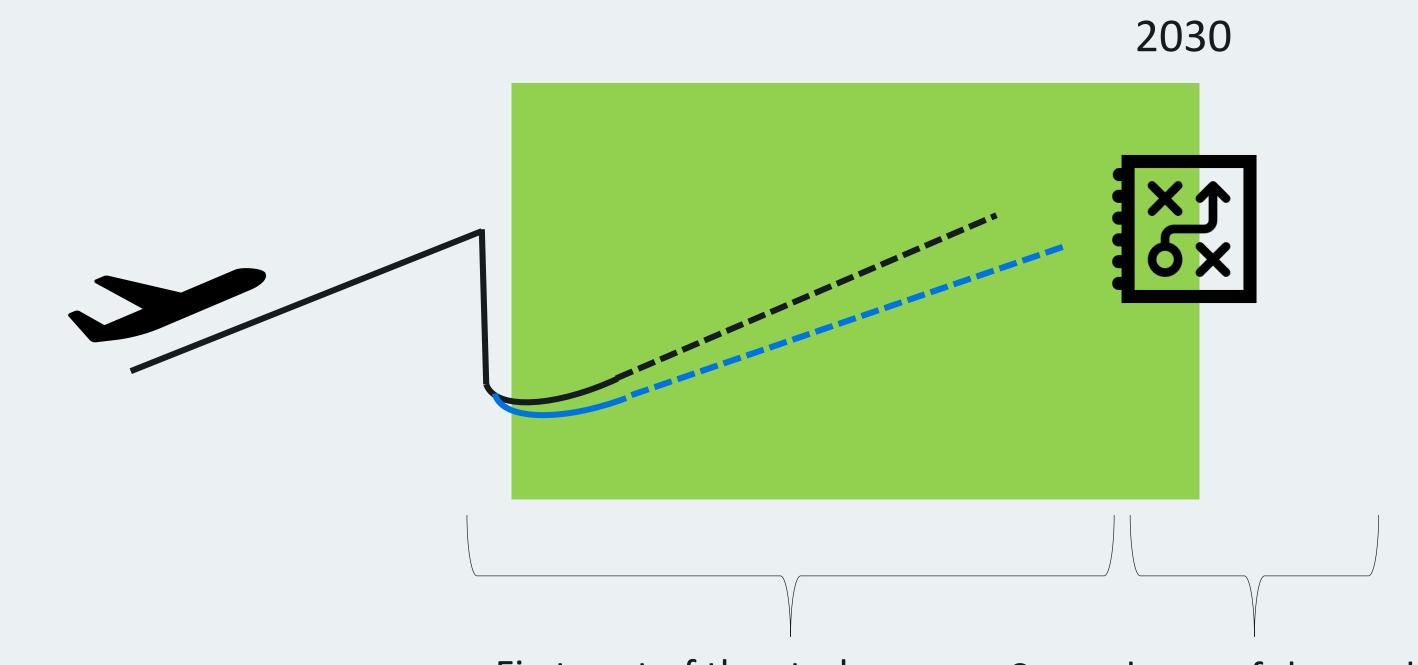


Introduction

- Steer conducted a study that provides up-to-date information and data on the impacts of the COVID-19 pandemic on European aviation
 - Scope
 - Timeline
 - Engagement with stakeholders

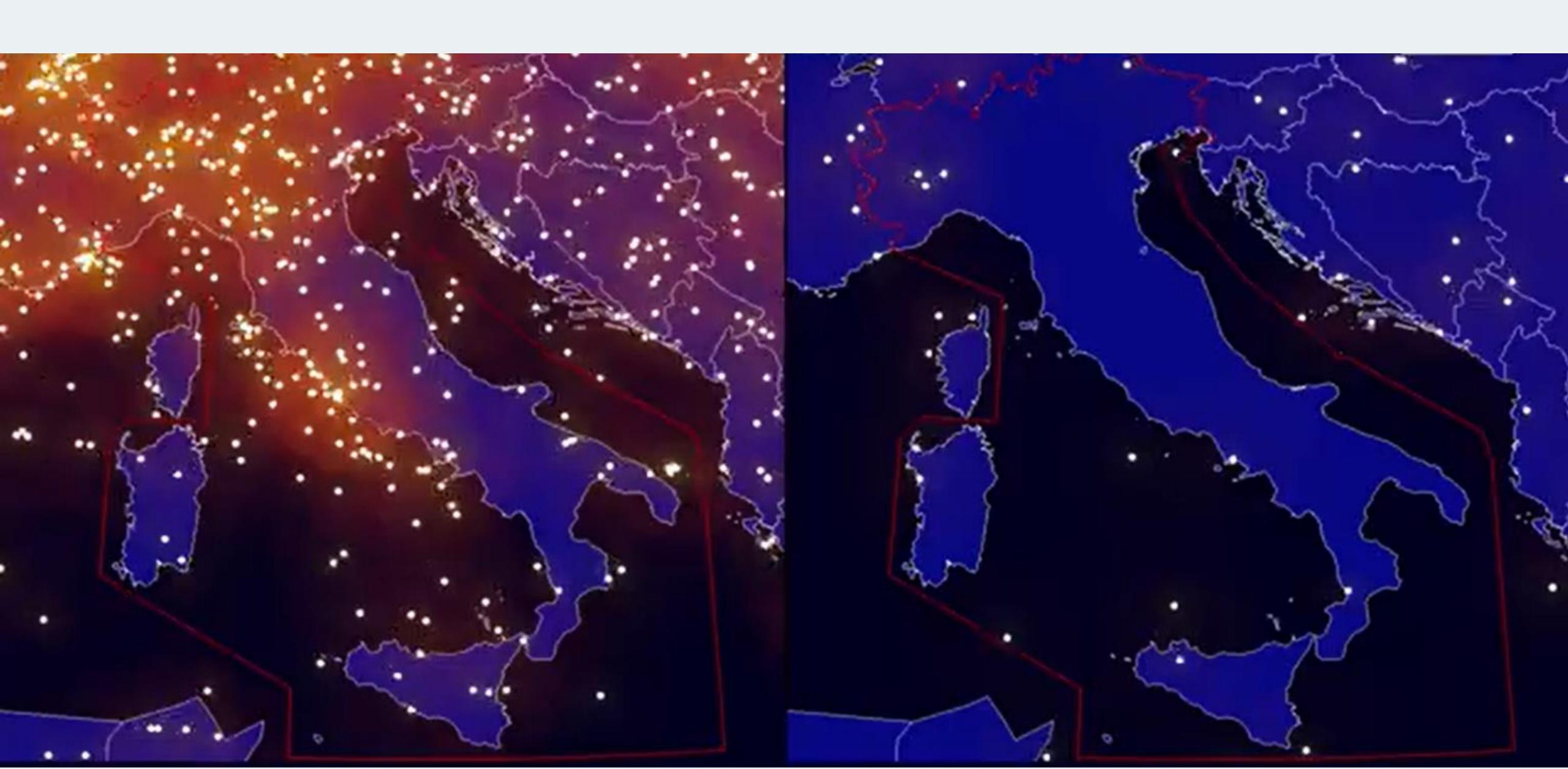


First part of the study:
Quantitative and
qualitative analysis of
market changes up to
2030

Second part of the study:
Drawing policy findings from
the first part of the study on
ACD, GH Directive, Slots
Regulation and emergency
ASR legislation



What happened?



Demand: what happened?

Limited bankruptcies during the pandemic, but European aviation did not operate as a single market

Number of flights by airline, percentage change vs. 2019

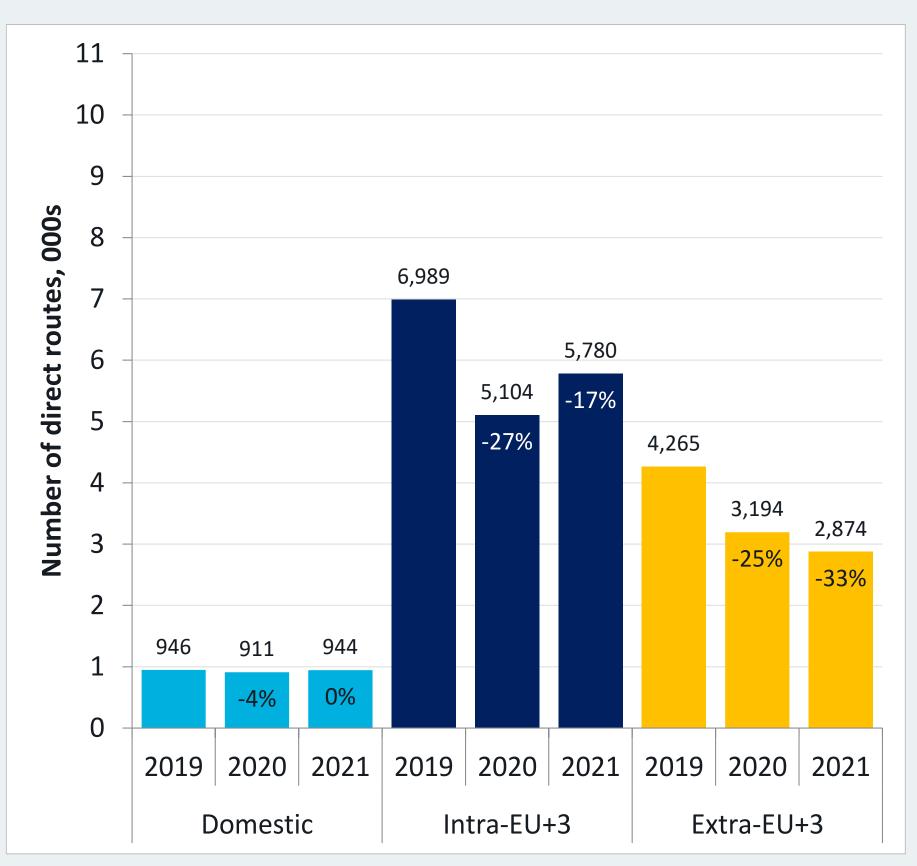




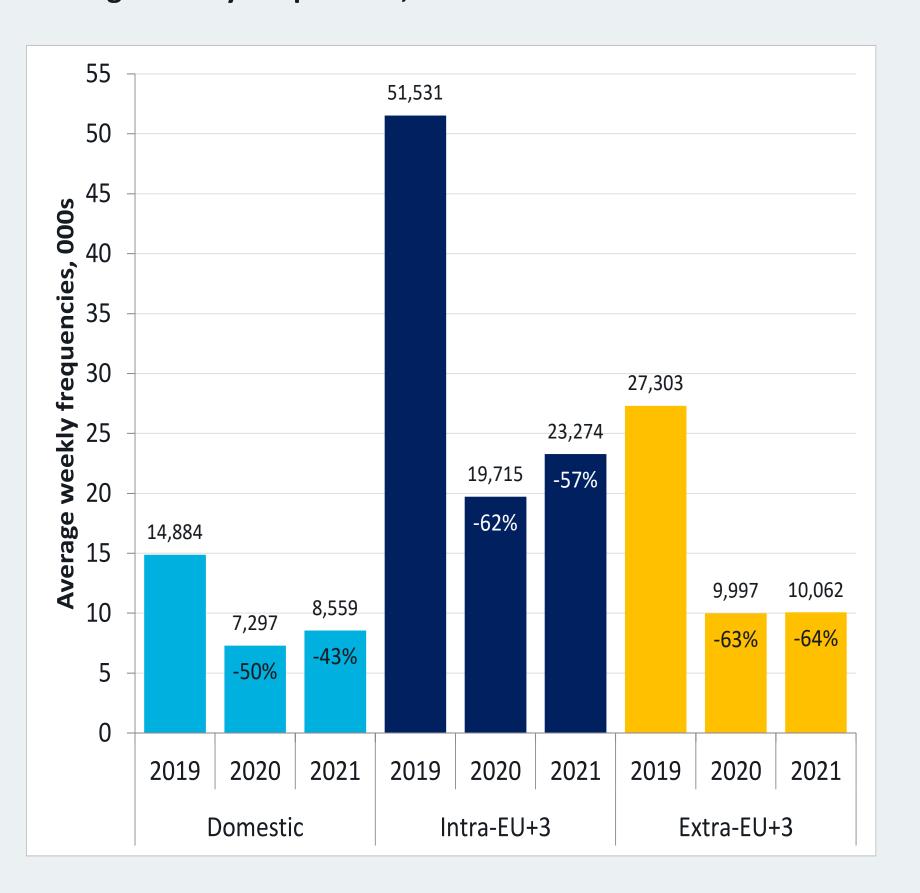
Connectivity: what happened?

Domestic connectivity more resilient. More frequencies lost than routes

Number of direct routes, 2019-2021



Average weekly frequencies, 2019-2021





Slots: what happened?

Emergency slot legislation has nearly "frozen" the slot landscape to pre-pandemic, but dynamic changes nonetheless occurred

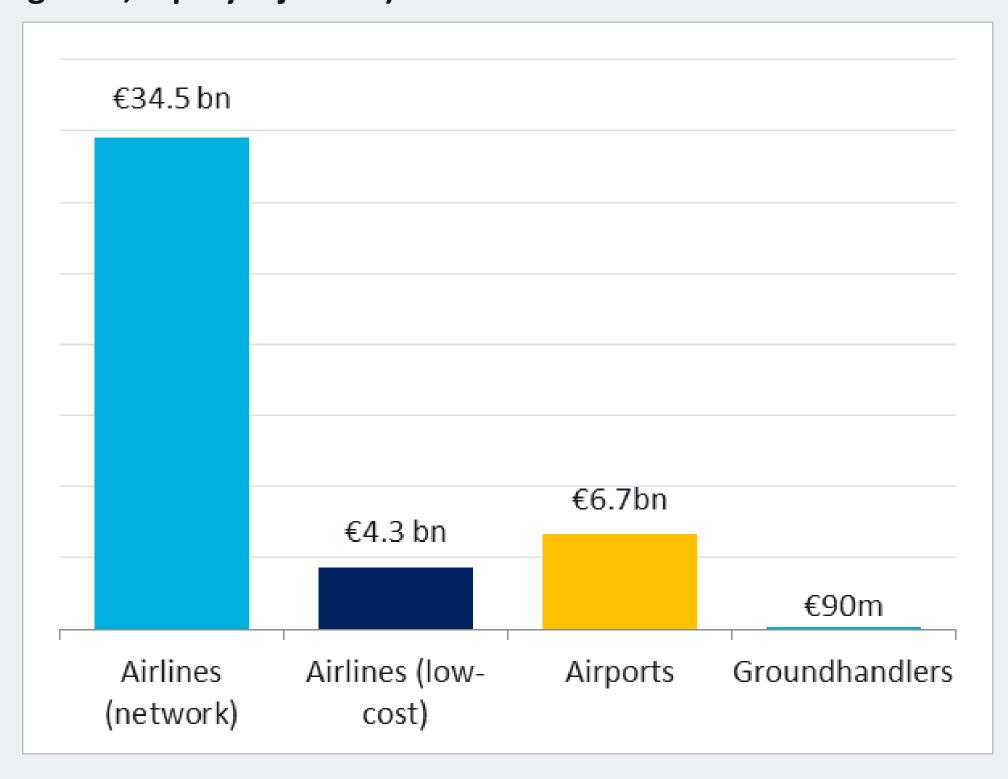
Impact of Regulation 2021/250						
New entrants rule	 Not used much Not used in OS, CZ, DE, NL, NO, PT, CH Used in IT, ES but "in a few cases" Only used in S22 in BE Not clear in FI, ACL 					
Use of JNUS	 Many airlines have made use of the amended Force Majeure provisions Unclear JNUS provisions leaving room for interpretation Lack of uniform application across Europe 					
Did airline return slots they were not going to operate on-time?	 Depends Sometimes required a lot of coordinator pressure 					

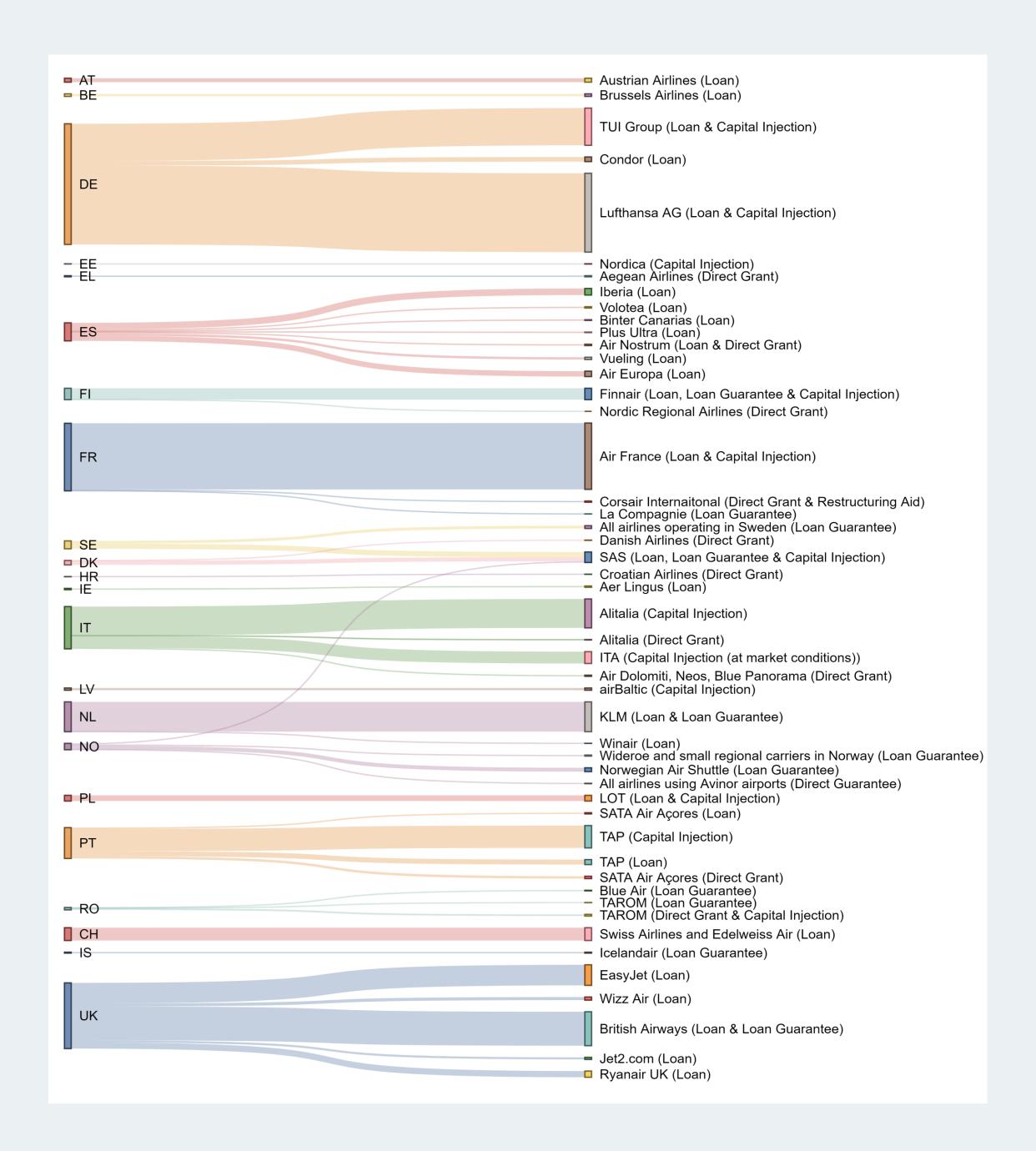


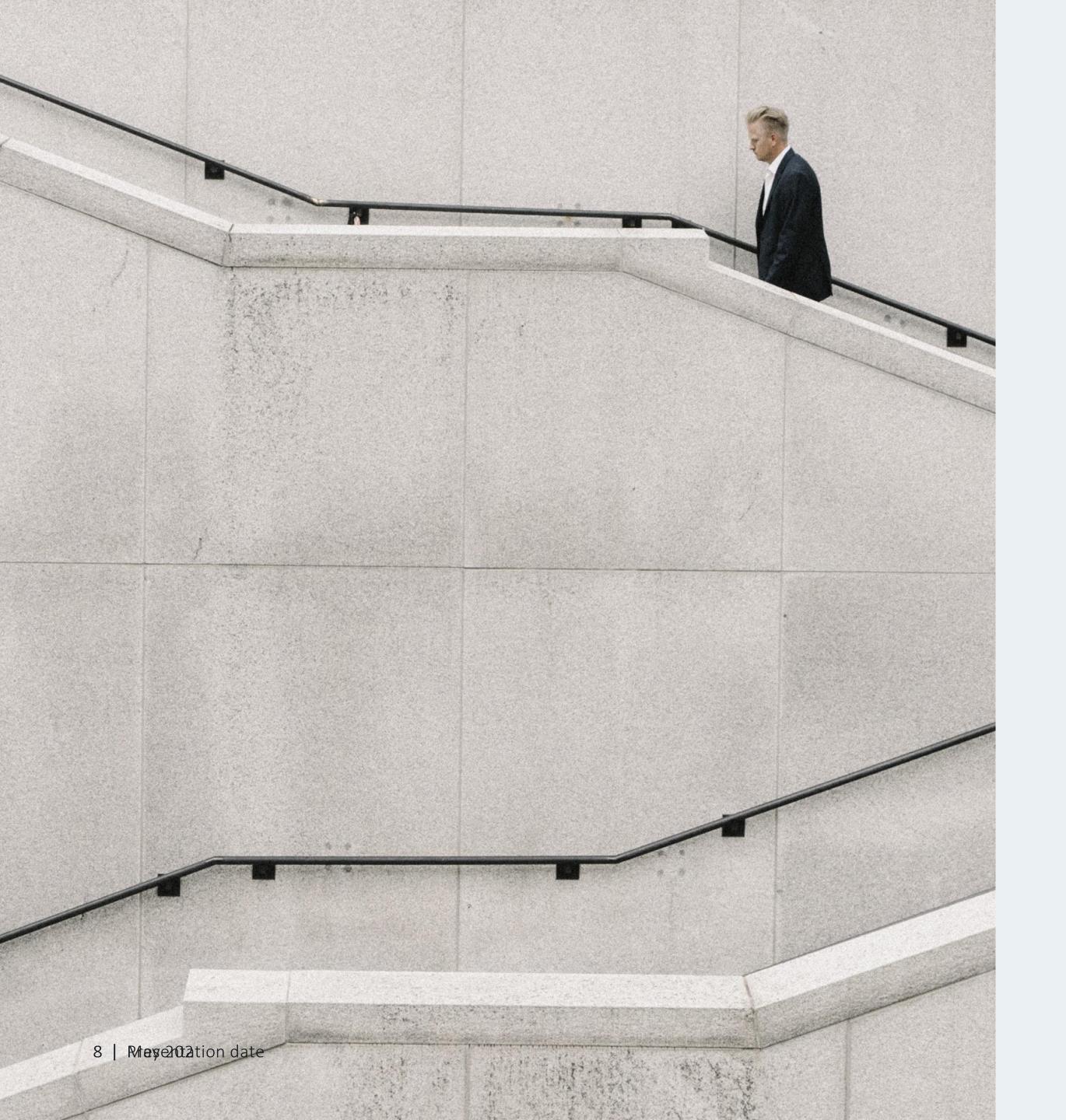
Public aid distributed

Public aid took many forms and was distributed with significant disparities across Europe

Public aid distributed (loan guarantees, loans, grants, equity injection) in EU27+3 +UK







Social impacts



Social impacts of COVID-19: job losses

Significant employment impacts, with some key differences across sectors

Staff category	Employment impacts
Groundhandling staff	Significant use of job protection schemes mechanism (up to 60%-85% of staff at its peak). Permanent loss of staff across Europe estimated at 32,000-40,000 people (25%)
Airline staff	Pilots and cabin crew: Significant use of job protection schemes mechanism (up to 85% of staff at its peak). Permanent loss of pilots across Europe estimated at 15% Overall lost of staff at European airlines estimated between 7% and 20%
Airport staff	Significant use of job protection schemes mechanism (up to 30%-40% of staff at its peak). Most airports reduced their headcount in a range of 0-20%
Other ground staff (airport retail/airport concession staff/security staff)	Significant use of job protection schemes mechanism (up to 60-75% of staff at its peak). Staff permanent losses could be in the order of 25-50% (to be confirmed)
ANSP staff	Very limited changes to the overall profile and demographics of the ATM labour pool
Member States and authorities (slot coordinators, ISAs, MS)	Minimal loss of staff, some limited increases in staff reported

• Specific issues for customer-facing staff, cross-border staff, quarantine conditions.



Social impacts of COVID-19: working conditions and outlook

Changes in working conditions and pay levels varied by air transport sector. Concerns on recruitment across the whole industry.

Outlook to 2030

- Concerns on services delivered.
- Concerns on staff retention.
- Concerns on talent attraction.

Some working condition changes that took place during COVID-19

Collective labour agreements in place were terminated/suspended and replaced by emergency agreements

Change employment terms of contractors/staff employed through an agency/self-employed staff

Firing staff followed by re-hiring a couple of months later

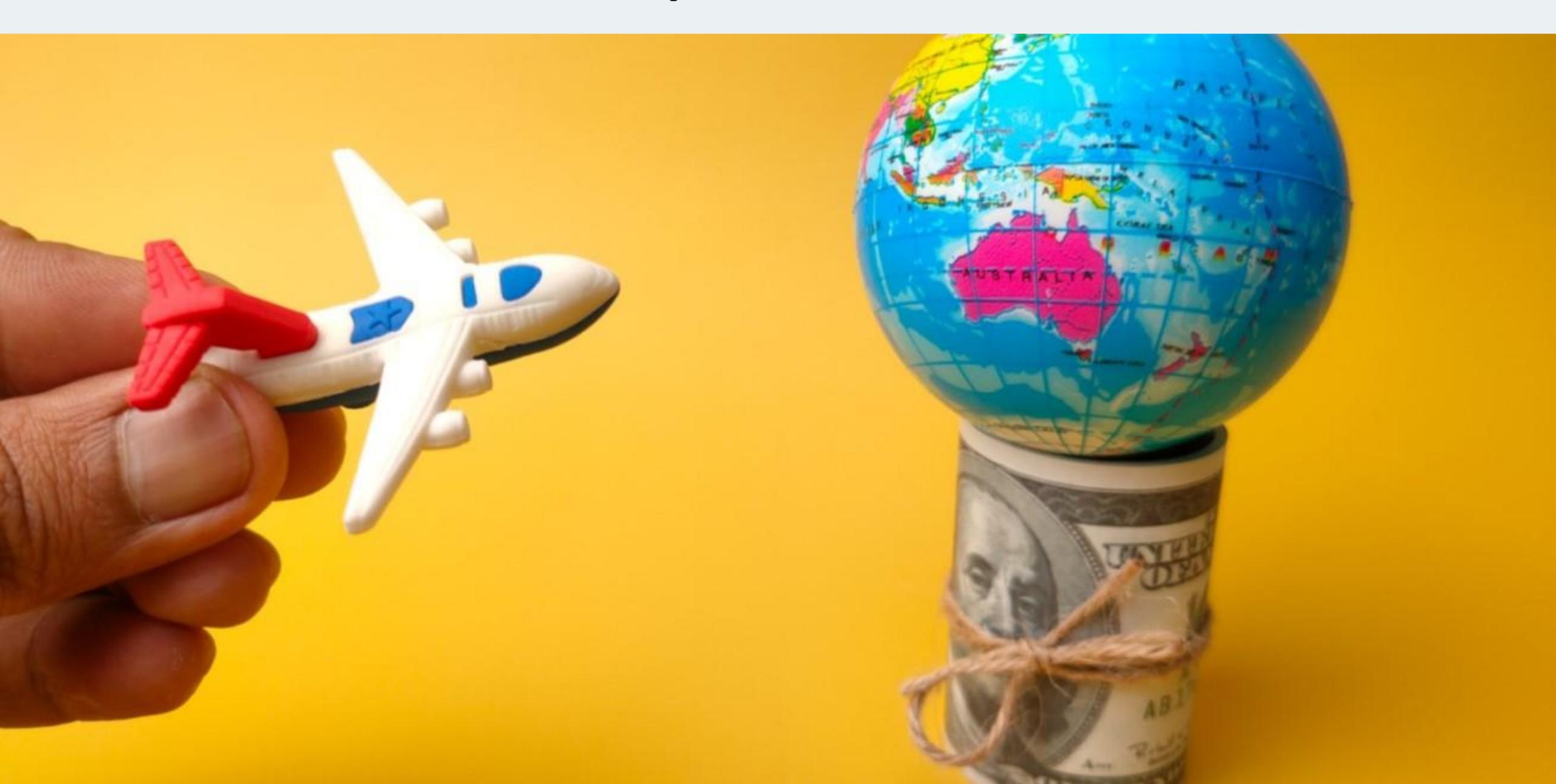
Closing down of operational bases/stations

New entrant or replacement of an employer with a cheaper one from the same group

Reduction of overtime and variable compensation, pay freeze



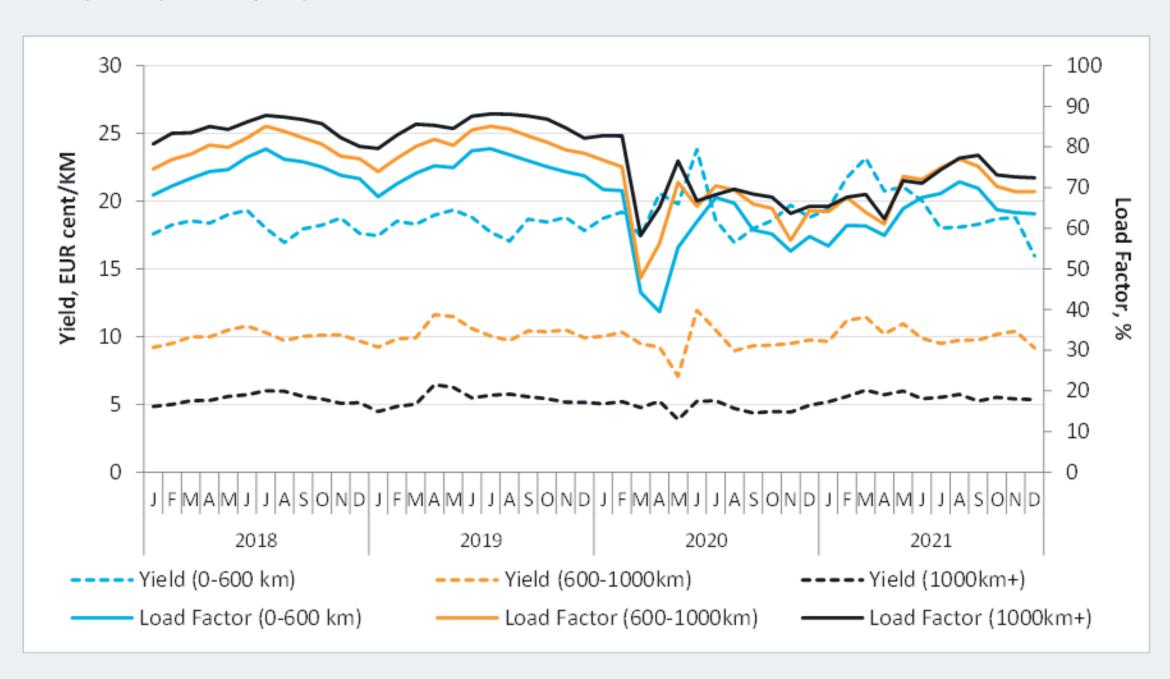
Economic and financial impacts



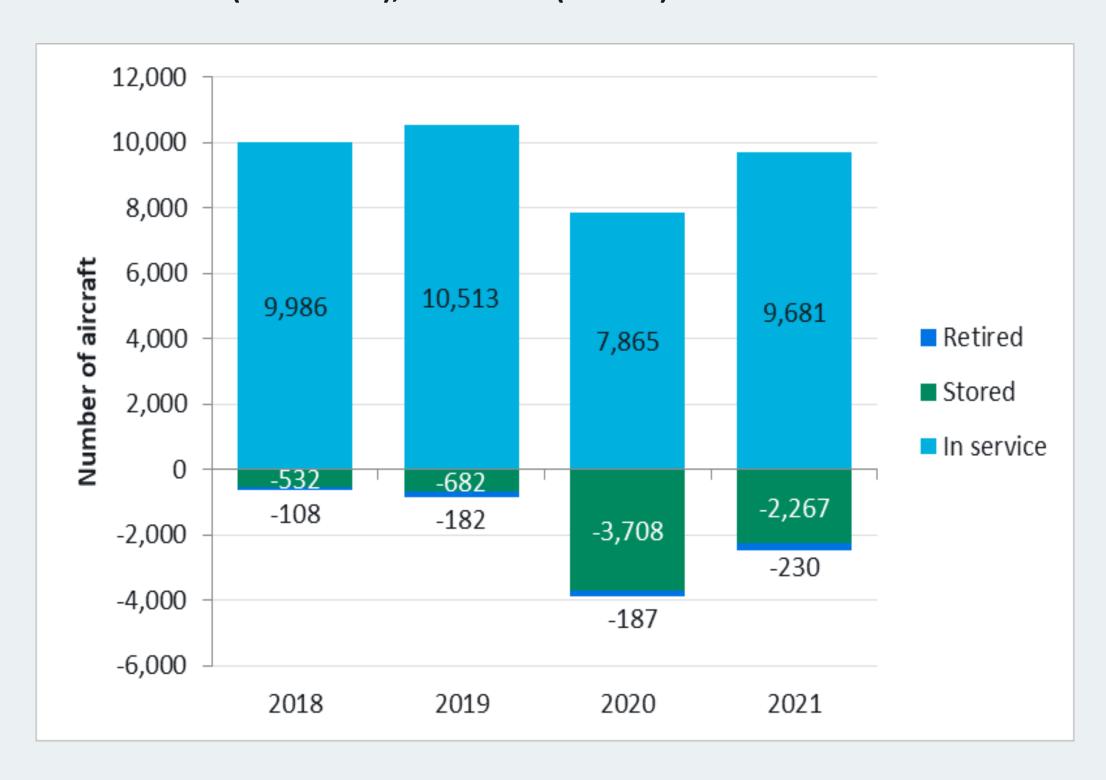
Economic and financial impacts of COVID-19 (1)

Load-factors remained below break-even levels. Coupled with fleet investments, return to airline profitability may be a long way off

European passenger yield and load factors, Intra-EU, 2018-2021



Airbus aircraft (worldwide), 2018-2021 (to date)

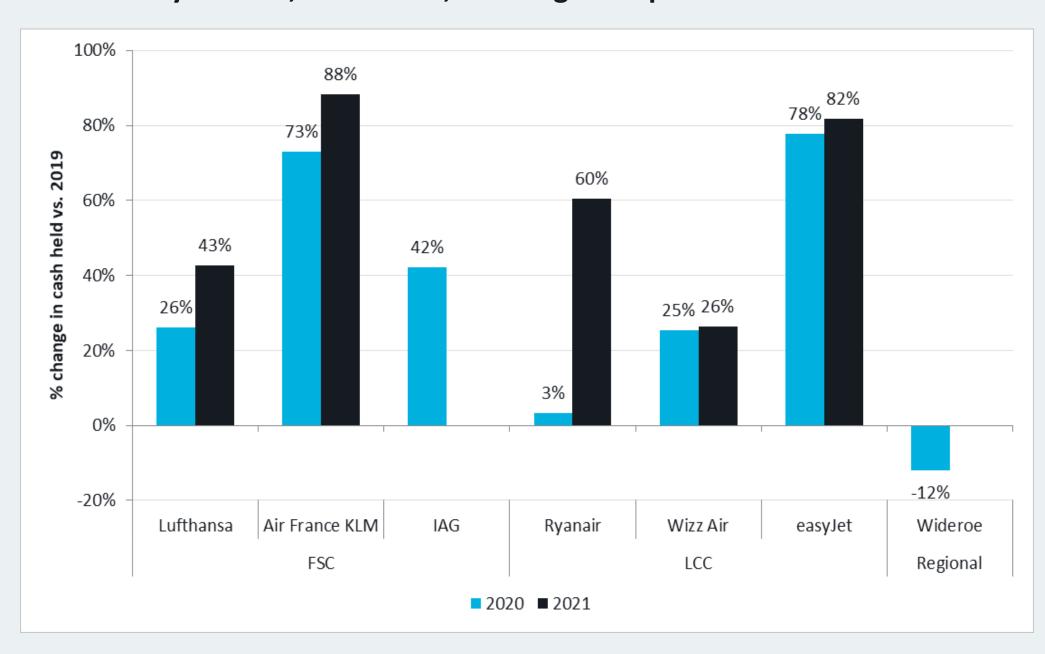




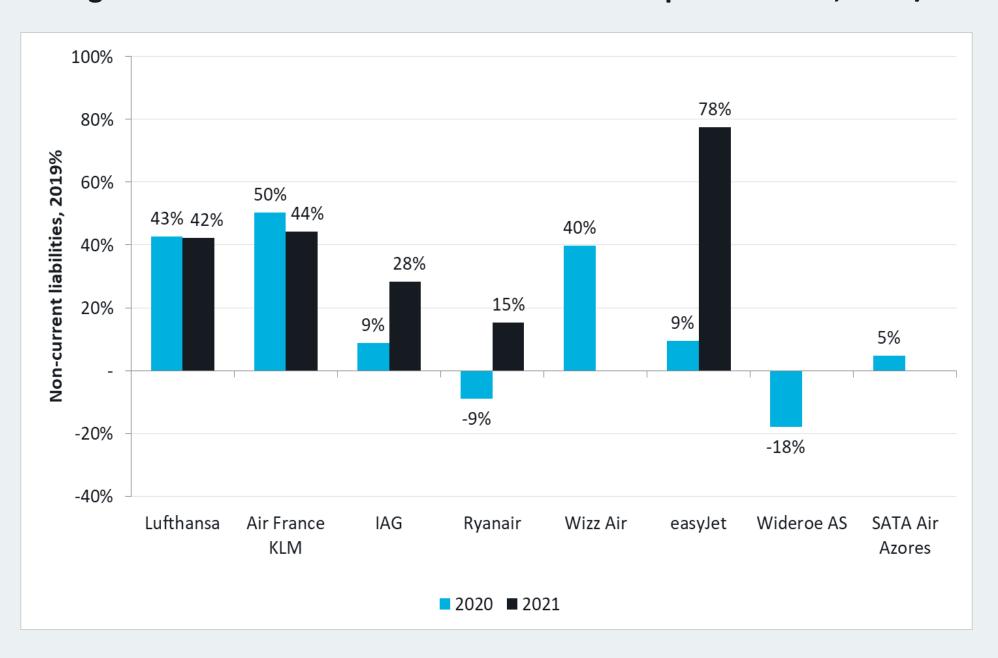
Economic and financial impacts of COVID-19 (2)

Cost-cutting measures and focus on cash held to ensure airline viability

Cash held by airlines, 2020-2021, % change compared to of 2019 levels



Change in non-current liabilities of selected European airlines, 2020/2021 vs. 2019

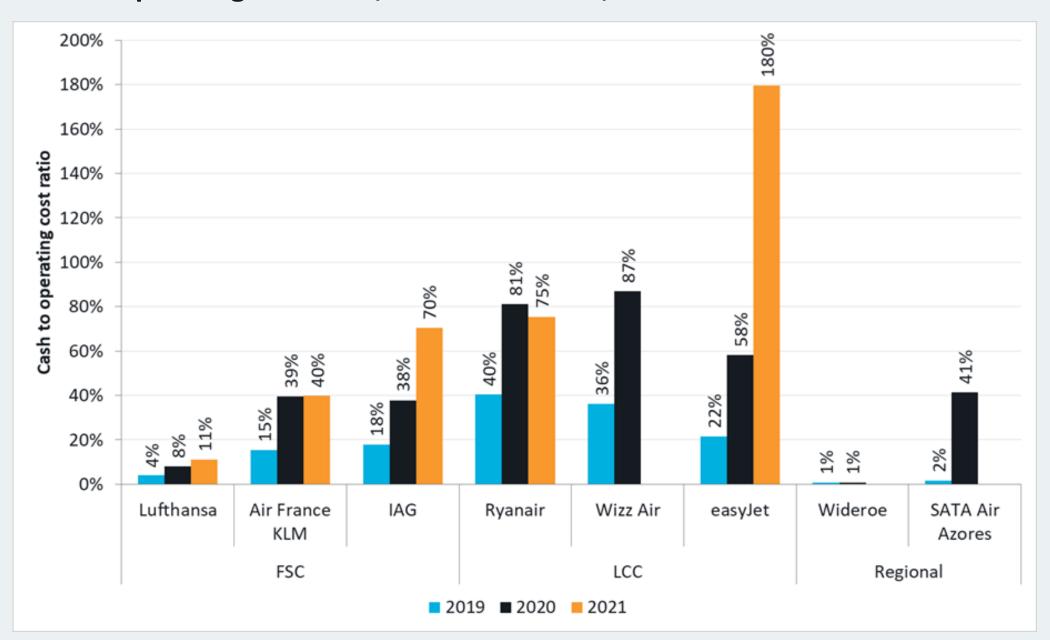




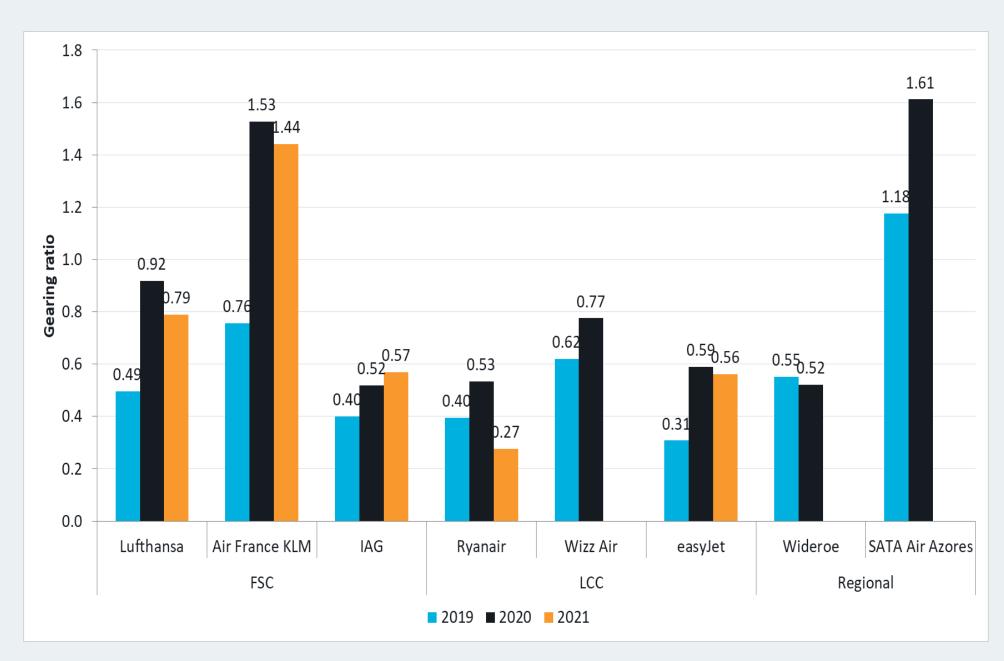
Economic and financial impacts of COVID-19 (3)

Airlines are now more highly leveraged than pre-pandemic. It may weigh on financial performance and increase costs

Cash to operating cost ratio, airline selection, 2019-2021



Gearing ratio of selected European airlines, 2019-2021



Notches downgraded (SACP), pre/post-crisis

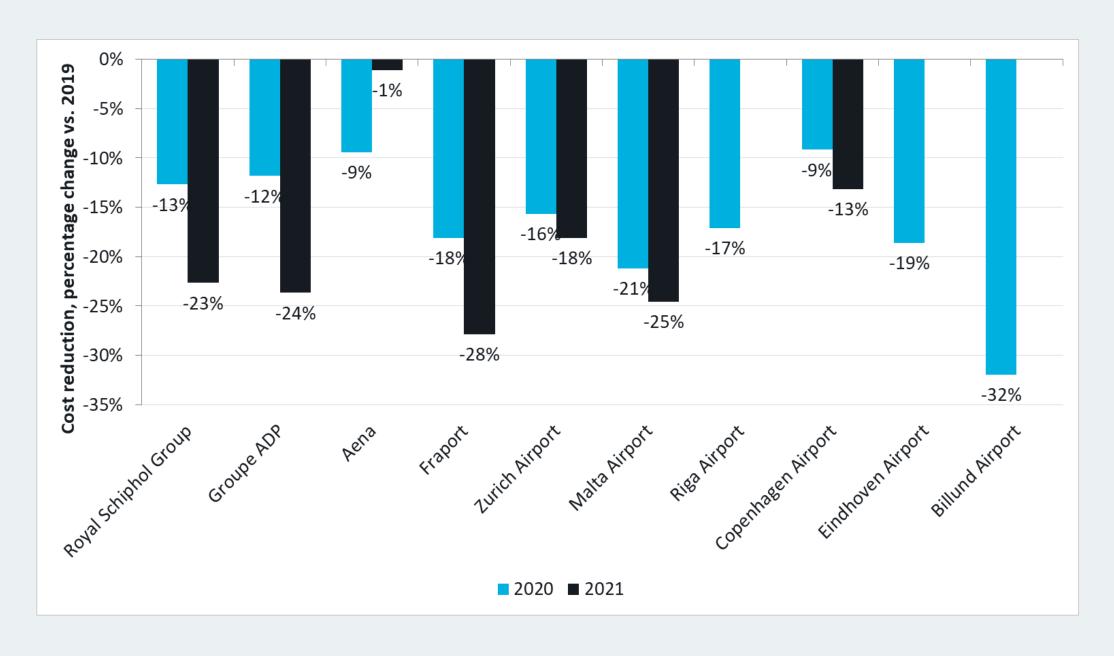
Airline	Lufthansa	ВА	IAG	Ryanair	easyJet	airBaltic	SAS	TAP
Notches downgraded	4	3	3	1	2	2	7	3



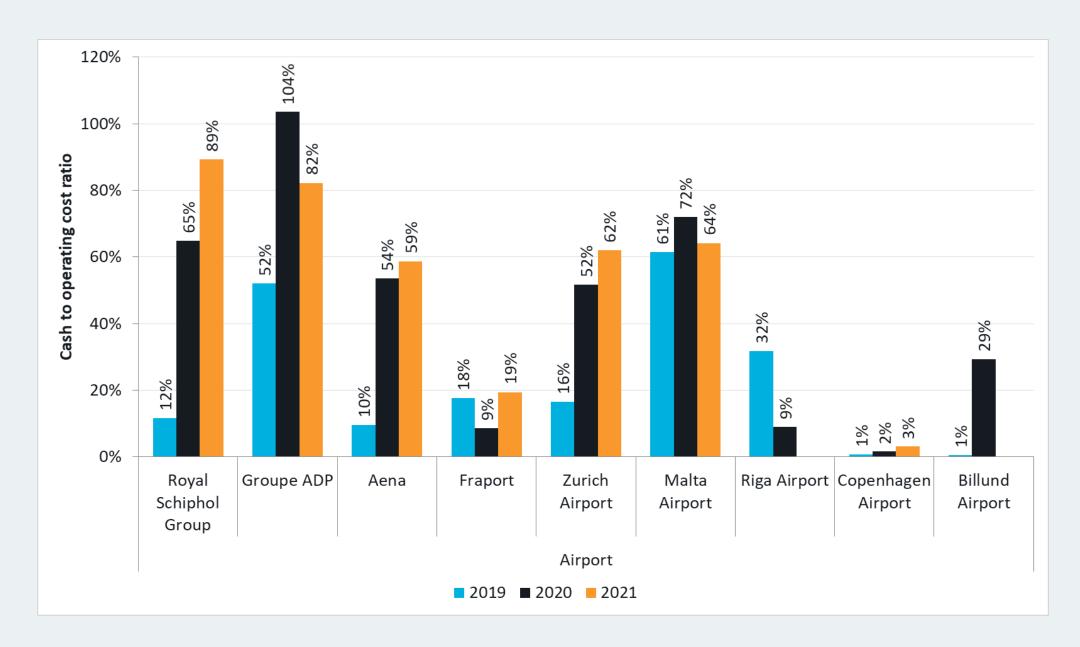
Economic and financial impacts of COVID-19 (4)

Cost-cutting measures and focus on cash held to ensure airport viability

Airport operating cost reductions, 2020 and 2021 vs. 2019



Cash held by airports, percentage change vs. 2019





Airport capacity impacts of COVID-19

On changes to capex, individual circumstances drove airport decisions

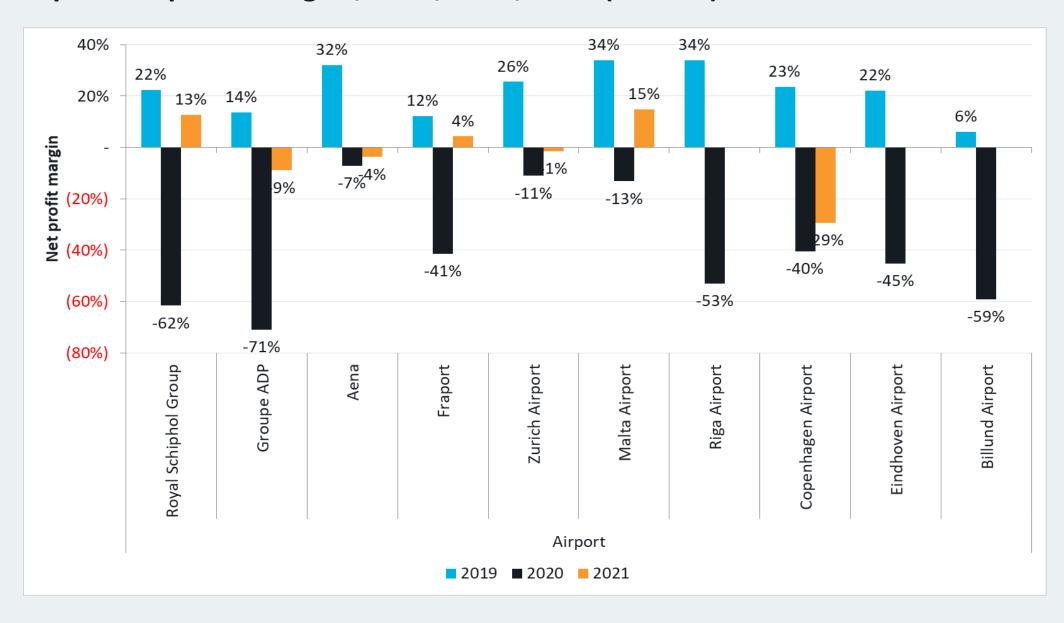
	Brought forward	Continued	Postponed	Cancelled	Overall
Runway investments		DUB	MUC CLJ		
Terminal investments		FRA: T3 extension MUC: T1 extension WAW	AMS - Pier A expansion ADR ARN - Pier G BER - BUD - BOD - CLJ - Cargo Terminal LIS - New airport, and T1 expansion STR - T3 VIE - T3	CDG (T4)	HAM: STR: Swedavia: ZRH
Maintenance	CDG, MUC, LYS, NCE, STR, ADR	FRA WAW	Hermes Swedavia		



Economic and financial impacts of COVID-19 (5)

Some airports are back to profit, but ability to invest compared to what it was pre-pandemic is a concern for some

Airport net profit margins, 2019, 2020, 2021 (interim)



Outlook to 2030 for airports

- Acute focus of airports on revenues.
- Increased burden of debt and higher costs of financing (especially at smaller airports).
- Concerns that current charge levels may not cover all investment costs.
- Regulated charges to increase.
- Unregulated charges to increase faster?

Notches downgraded (SACP), pre/post-crisis

Airport	AdP (FR)	DAA (IE)	AdR (IT)	Schiphol (NL)	Avinor (NO)	AENA (ES)	Zurich (CH)
Notches downgraded	1	1	1	1	1	1	1



Groundhandling impacts of COVID-19

Not much change on the structure of the industry, but significant issues remain which risk weakening further the European groundhandling industry

- Activity of groundhandling companies heavily correlated with traffic.
- Apart from a limited number of groundhandling bankruptcies/market exits, no significant changes to the level of competition or market structure at European airports.
- Groundhandling is a labour intensive activity -> staff have been the "adjustable variable"
- Only €90 million of aid has reached third-party groundhandling companies in Europe (excluding job support schemes).
- Prices appear to have increased, whilst quality of service decreased at times (stakeholder feedback).
- The groundhandling companies with better pandemic outcomes were those with either cash reserves, the generalists ones (especially where they had cargo services), or those with a network of stations to allow for cross-subsidisation.

Groundhandling outlook to 2030

- Continued increased airlines' pressure to minimise groundhandling costs.
- Consolidation of groundhandling companies.
- Concerns on ability to invest.
- Staff retention/recruitment concerns.
- Prices expected to increase.



Thank you

Clémence Routaboul

Associate Director clemence.routaboul@steergroup.com +44 (0) 20 7910 5702

Stephen Wainwright

Director
Stephen.wainwright@steergroup.com
+44 (0) 20 7910 6702

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