



Welcome to the 2023 IOM Aviation Conference!

Registration coffee & breakfast baps 8:30 – 9:00

Kindly sponsored by:



&



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Welcome to conference delegates!

Presented by

Dave Edwards, Chief Executive at Royal Aeronautical Society

Simon Williams, Director of Civil Aviation at Isle of Man Aircraft Registry

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Changing legislation to protect the public & support the industry

Presented by
Colin Gill

Deputy Director of Civil Aviation at the Isle of Man Aircraft Registry

Question....

How do you enable appropriate payment of costs by private / corporate aviation whilst protecting the public from illegal charter?

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Illegal Charter

- Non compliance with international standards for commercial air transport
- Inadequate public safety protection – tragic outcomes
- The IOM Aircraft Registry takes a robust stance



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International Civil Aviation Organisation:

“commercial air transport” means an aircraft operation involving the transport of passengers, cargo or mail for hire, remuneration

Commercial Air Transport

- ‘M’ registered aircraft - prohibited from undertaking commercial air transport



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But....

... that prohibits reasonable payments that private / corporate aviation need to make as part of running their operation and which have no impact on public safety

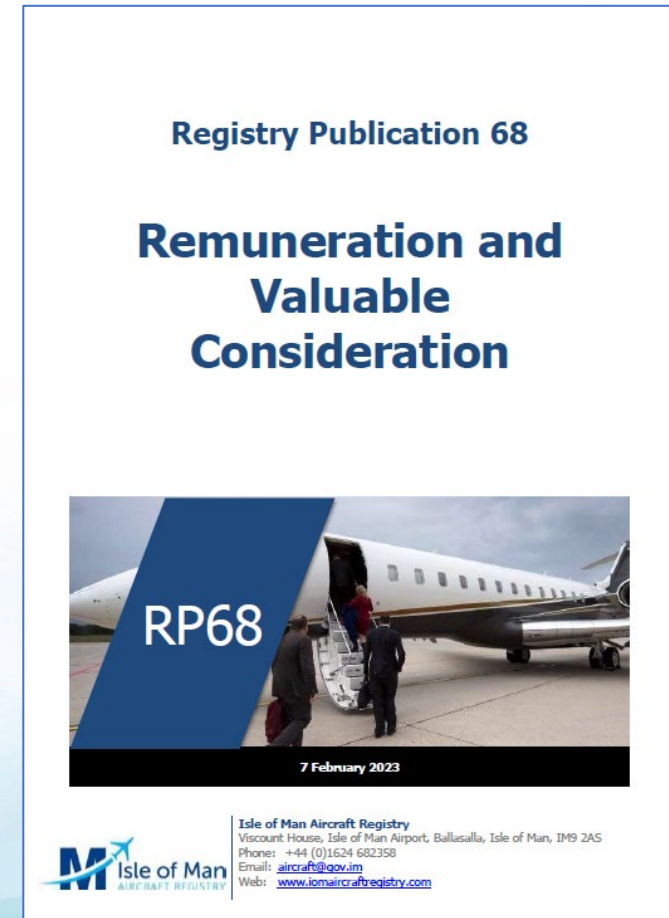


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Registry Publication 68

- Updated Isle of Man legislation took effect for aircraft registered from 1 August 2022
- Explicit enablement provided for specific acceptable aspects
- RP68 provides the legislation and guidance material
- Copies here to take away



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Self Fly Hire

- Allowed.....
- self fly hire of an aircraft by the pilot...
- but - pilot may not operate the aircraft for commercial air transport



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Flying Training

- Allowed.....
- Valuable consideration or remuneration for flights undertaken solely for the purpose of flying training, examination or testing



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Charity Flights

- Allowed.....
- remuneration or valuable consideration given or promised to a registered charity
- subject to constraints conditions and our permission



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Groups of Companies

- Allowed.....
- remuneration or valuable consideration given between groups of companies:
 - ✓ its holding company;
 - ✓ its subsidiary; or
 - ✓ another subsidiary of the same holding company.



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Demonstration / Delivery Flights

- Allowed.....
- the direct costs of:
 - ✓ demonstration or pre-purchase inspection flight
 - ✓ delivery flight
- subject to constraints and conditions

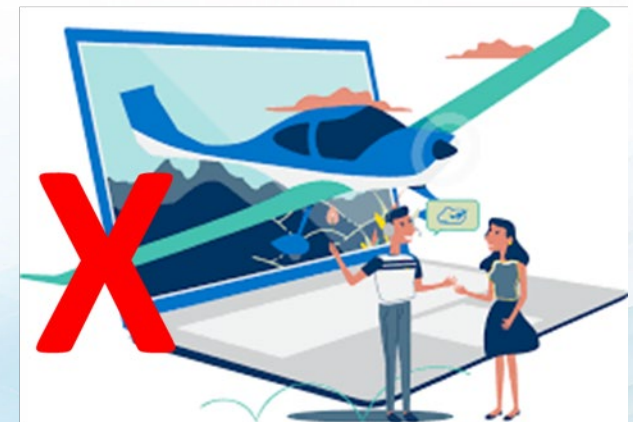


Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



Sharing of Direct Costs

- Allowed.....
- 'cost sharing' for light aircraft
 - subject to constraints and conditions
- Not cost sharing flights arranged through online platforms available to the general public



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Joint Ownership

- Allowed.....
- Joint ownership - not less than a 20% share of ownership



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Private Dry Leases

- Allowed.....
- private dry leasing arrangement subject to:
 - the lessor is not the operator of the aircraft
 - the lessee has a right to possess the specific aircraft; and
 - the lessee has control of the aircraft operator
 - no more than 5 lessees
 - no provision of flight crew or ground staff
- Expectations of:
 - an operating agreement / contract
 - lessee obligations for indirect costs



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Private Dry Leases

- Not allowed:
 - ‘day leasing’
 - ‘wet leasing’
 - ‘flat fees’ per trip
 - ‘jet cards’
 - ‘fractional ownership’:
 - *(but see allowed shared ownership or private dry leases)*



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Payment of Operating Costs

- Allowed.....
- remuneration or valuable consideration given or promised by:
 - ✓ a person who holds not less than a 20% share of ownership of the aircraft
 - ✓ a person who holds not less than a 20% share of ownership of the body corporate that owns the aircraft;
 - ✓ the aircraft's registered owner
 - ✓ the aircraft operator
 - ✓ a person contracted by the aircraft operator to deliver services for the operation, management and control of the aircraft on their behalf



Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



Answer....

How do you enable appropriate payment of costs by private / corporate aviation whilst appropriately protecting the public?

By making the definition of CAT black and white

By clearly defining what exceptions are allowed with clear conditions

If it meets the definition of CAT and there is no exception - it's not allowed!

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.




Thank You

- Any questions
- See us at our stall
- Pick up a copy of RP68

Registry Publication 68

**Remuneration and
Valuable
Consideration**



RP68

7 February 2023

Isle of Man Aircraft Registry
Viscount House, Isle of Man Airport, Ballasalla, Isle of Man, IM9 2AS
Phone: +44 (0)1624 682358
Email: aircraft@iom.gov.im
Web: www.iomaircraftregistry.com

Got a question? **Ask us on Slido!** Enter the code **#iomac2023** to join.





A view from the US - what should we expect over the next 5 years

Presented by

David M. Hernandez, Shareholder, Vedder Price

Business Aviation & Regulations Sub-Practice Group Chair

dhernandez@vedderprice.com, M: +1.202.403.1678

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.

Steady Growth In All Segments

- Acceleration of wealth accumulation among high-net-worth individuals
 - Investments; capital gains
 - Low energy costs & low taxes
 - Relatively low interest rates, low inflation
 - Manufacturing is return to the U.S. (because China is too risky: Covid and Communism)
- Lots of transactions and new entrants

eVTOL, electrification, infrastructure explosion

- Will materially change transportation industry, transform the world
- Federal government is doing a good job, and trying to be proactive, but it must be focused on safety
- Trigger billions of dollars of investments
- Revitalized investment in infrastructure, create millions of jobs
- Significant bi-partisan political support
- Pilot training is being addressed; FAA published 164-page NPRM
- Will create many eVTOL billionaires
- We will be the primary law firm handling the financings

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Increased Foreign Investment in U.S. Aviation

- Invest in the largest market, limited geo-political risks
- Improve poorly run operation
- Consolidation is likely to increase
- Part 135 operations are the widely popular
- Increased interest in MRO
- Regulators seem to ignore foreign ownership and citizenship restrictions
- U.S. air carriers welcome foreign partnership
- Brokerage is lucrative and talented firms do very well

Increase private equity investment

- Private equity and banks are increasingly securitizing assets
- More companies will go public
- Large appetite of business aviation assets
- Supply chain opportunities, spare parts market
- Niche segments, air ambulance, fire fighting, special mission will all see significant growth and investment
- Private equity is beginning to understand business aviation
- Increased funding for consolidation, but results are mixed

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The Biggest risks over the next 5 years

- Political turmoil U.S., dysfunctional government; very divided country
- The most diverse democracy in the history of the world.
- Geo-political risks are big concerns
 - Russia's war against Ukraine
 - China-U.S. tensions; Taiwan concerns (2027)

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Thank you & Questions

David M. Hernandez, Shareholder

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State of the industry - where are we & how is it changing

Presented by

Andrew Blundell, Managing Director at Close Brothers Aviation & Marine

Aoife O'Sullivan, Partner at The Air Law Firm LLP

Tim Barber, Aircraft Sales & Acquisitions at Duncan Aviation

Robert Baltus, COO at EBAA

Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



Morning networking break:

10:30 – 11:30

Coffee & pastries kindly sponsored by:



Close Brothers

Aviation and Marine

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Global aviation update

Presented by
Richard Koe, Managing Director

WINGX

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.

WINGX update

- WINGX has been acquired....

- Worldwide flight activity
- Operator and Tail analysis
- Live, daily, deep archive
- Big data warehouse
- Dashboard visualization
- Performance insights
- European hub, global projection



...by JETNET...

- Worldwide fleet tracking
- Ownership & Contact data
- Serial number profiles
- Lifecycle archive
- Transactions and deliveries
- Market sentiment
- Forecast deliveries

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Market update

Considerations

Macroeconomy

- Will inflation recede? Higher energy costs?
- Interest rate peaking? US-Sino tech decoupling?
- Political risk
- Financial crisis contagion?
 - Decline in M&A?
 - Next phase of Ukraine war?
 - Rise in extremism? Taiwan crisis? Another pandemic?

Supply side

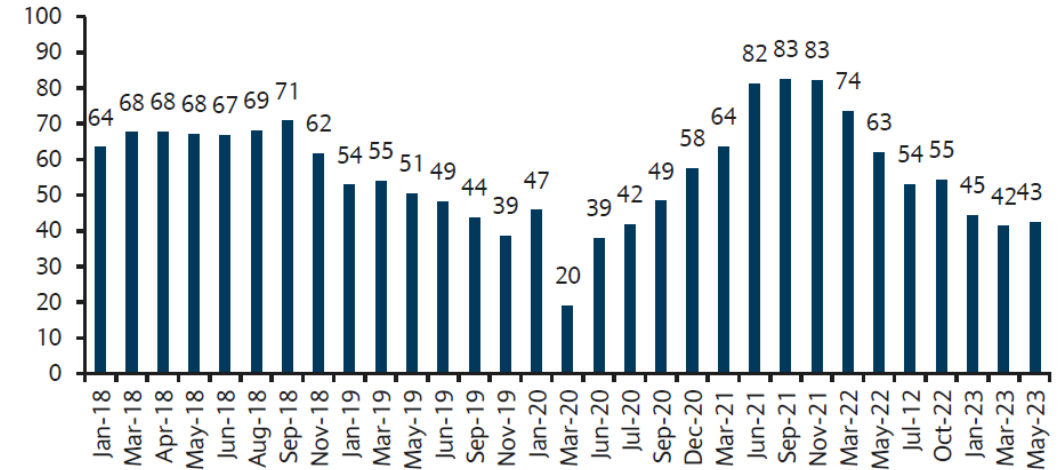
- OEM production pick-up? Higher fuel costs?
- Operators over-extending?
- Continued erosion in airlines? Higher wealth taxation?
- Shortage of pilots
- OEM order book resilience
- Kinks in the supply chain

Demand side

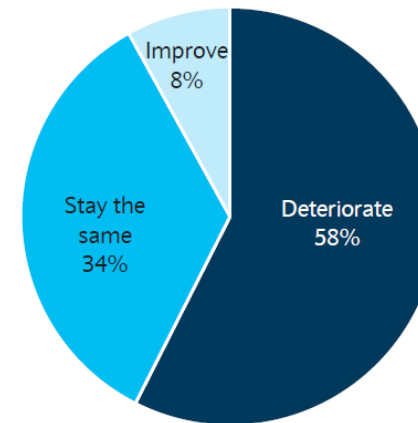
- Will first time users stick?
- Corporate appetite for bizav
- Is there upgrade or downgrade
- Next gen attitudes?
- Has airline alternative improved
- Sustainability optics
- Charter vs ownership
- Availability of new aircraft and products

Barclays Business Jet Indicator

Barclays Business Jet Indicator (BBJI)



Barclays Next 12m Industry Influencer Outlook (May-23)



3 months ago:

- Deteriorate = 63%
- Stay same = 26%
- Improve = 11%

Reference is Barclays Aerospace sector coverage with bi-monthly surveys of industry professionals

WINGX : focus on flight activity

Macro

Economy	➡	Weak growth but soft landing
Inflation	➡	Persistent (rest of decade?)
Interest rates	➡	Higher (are repercussions yet evident?)
Geopolitics	⬇	Disruptive and deteriorating
Politics	⬇	Likely to re-emerge as constraint
Climate / ESG	⬇	Big threat for industry
Wealth creation	⬆	Lots more upside to come
Corporate profits/M&A/spend	➡	Hesitant, but AI?
GLOBAL	⬇	More headwind than tailwind

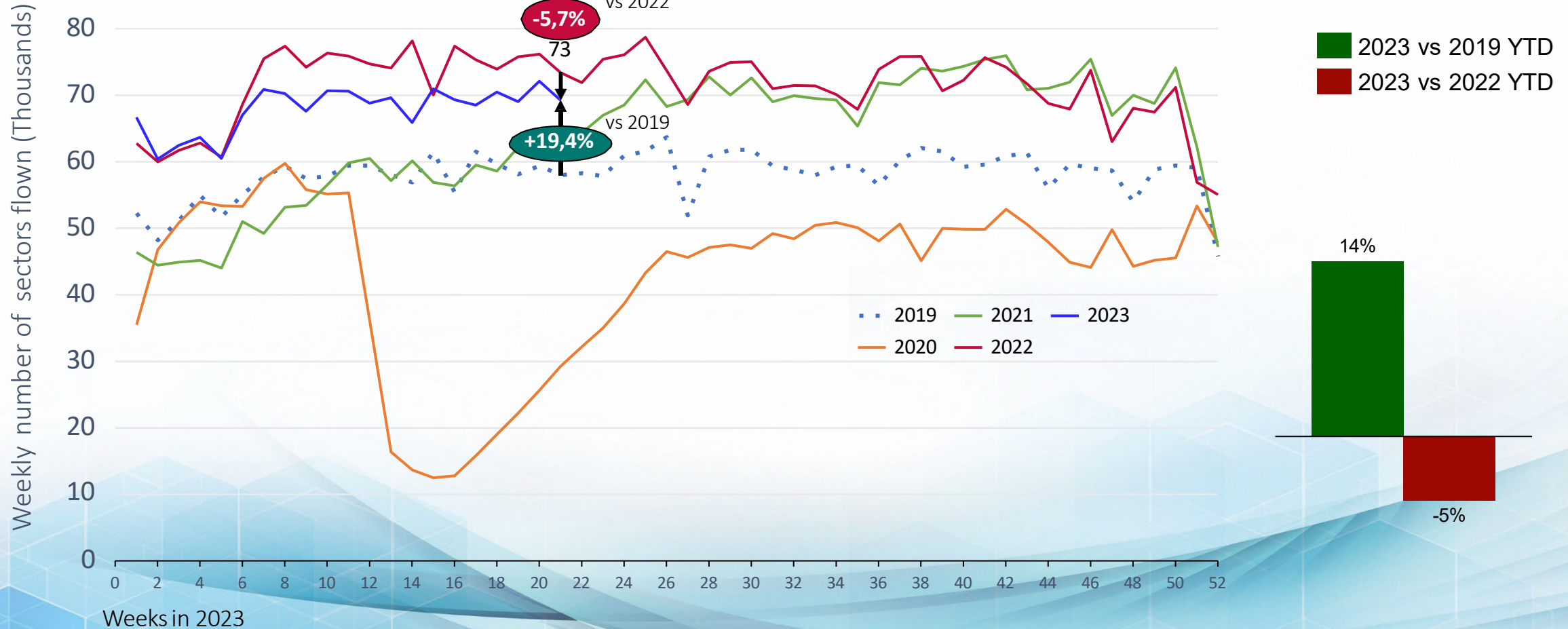
Industry

Transactions	➡	Record activity abating
Pricing	➡	Off-peak but robust
New Aircraft	⬆	Stimulus for upper-end
Flight Activity	➡	Still 20% up on pre-Pandemic
Regulation	⬇	Becoming more burdensome
Deliveries trend	⬆	But not stellar (still <2019)
Supply side	➡	Still an issue (note pilots)
Financing	⬇	Deteriorating (rates still low)
GLOBAL	➡	Still more tailwind than headwind

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What are we seeing in bizjet demand so far in 2023

- Coming into summer 23 (W21), 6% below same week 2022, 19% >'19. YTD -5% vs 22, still +14% vs '19 YTD.



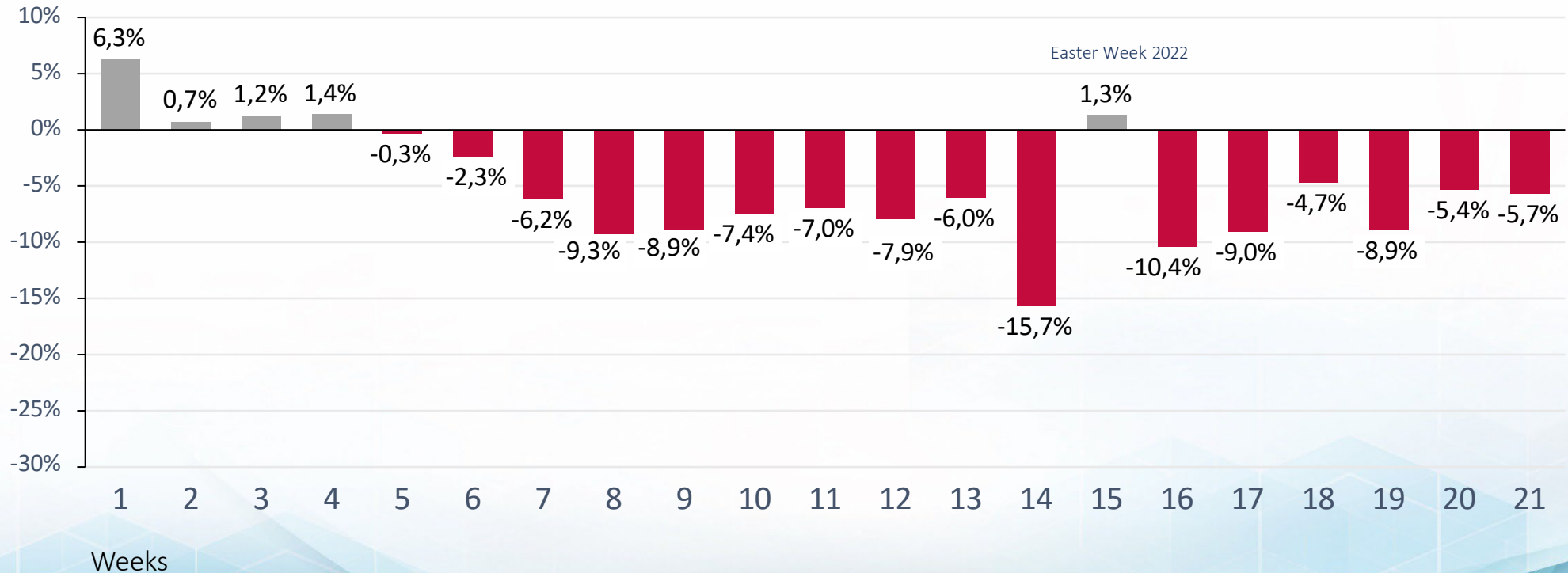
Source: WINGX, ATC, ADSB

Business Jets only

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Month-month difference vs 2022

- Particularly large declines in March - reflects super-spike post-lockdown in Q1 2022



Source: WINGX, ATC, ADSB

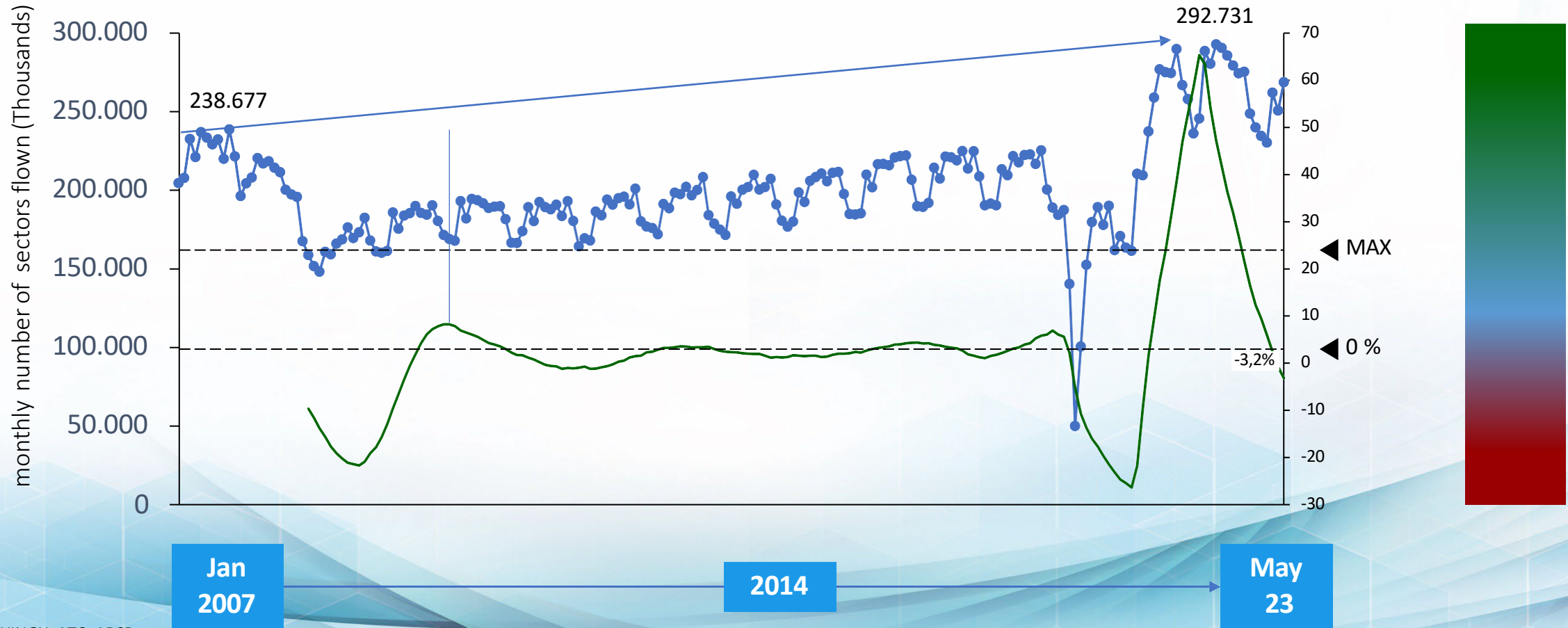
YTD = Jan-May

Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.

Long term view for context

- Rollercoaster is over and gains appear to be in region of 10-15%

— Bizjets departures
— Last 12 Month Trend



Source: WINGX, ATC, ADSB

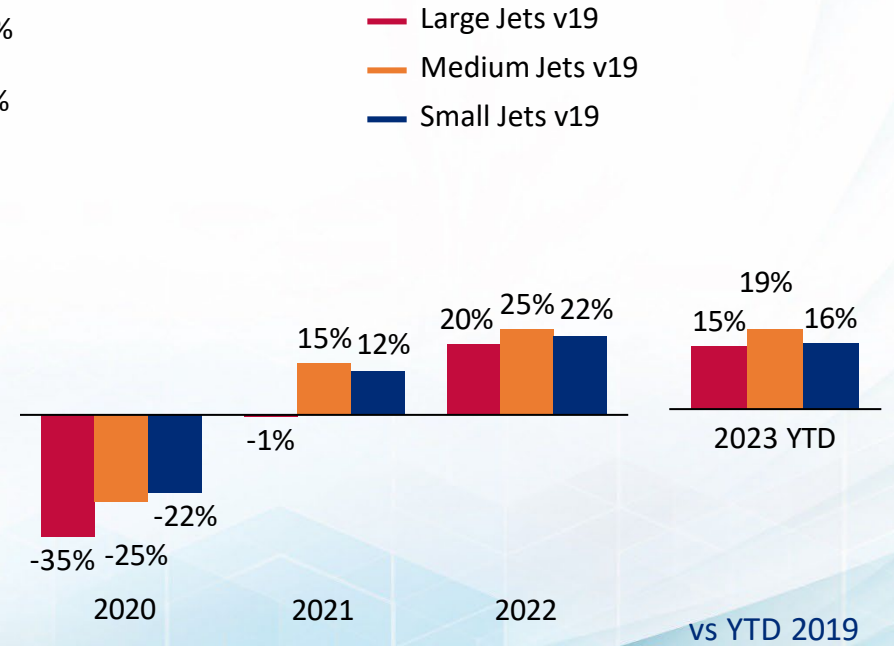
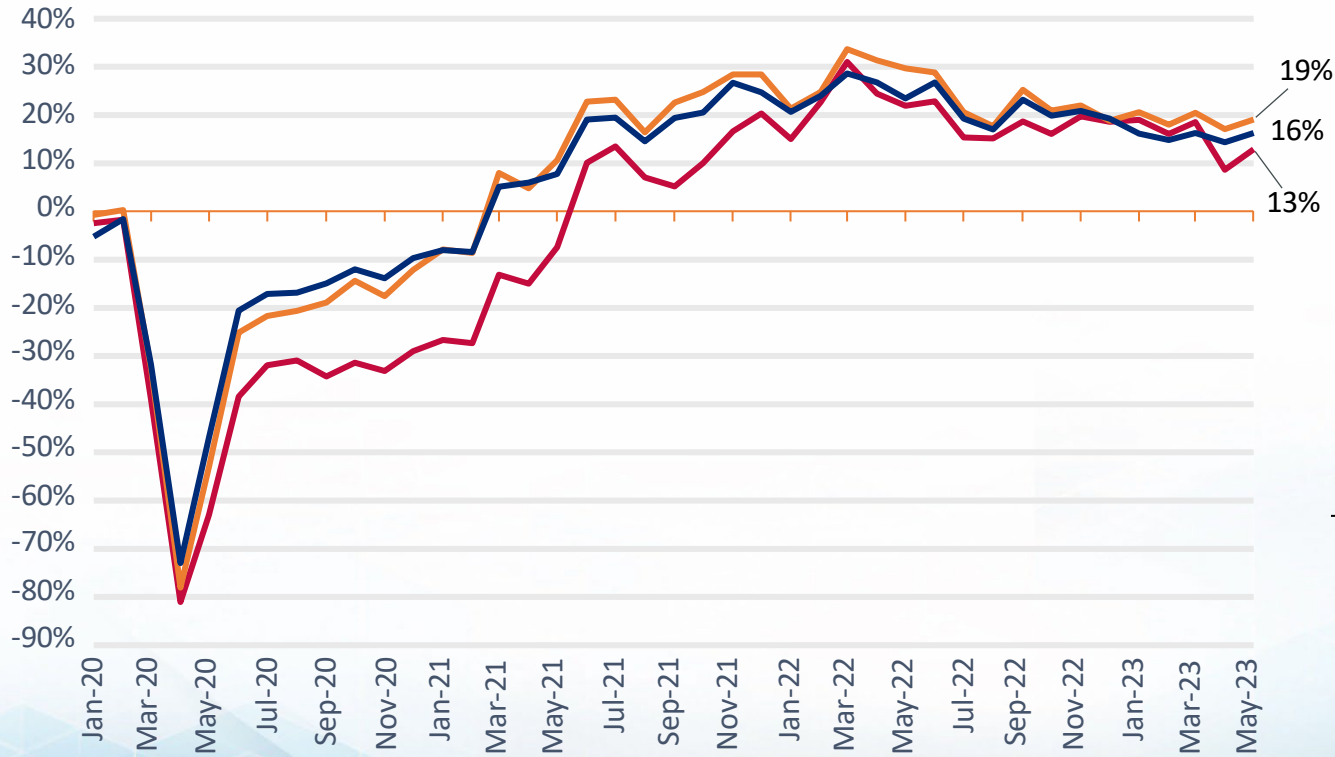
YTD = Jan-May

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Activity by cabin size

- Medium jet activity has largest gains vs 2019

Departures vs 2019



Departures vs FY 2019

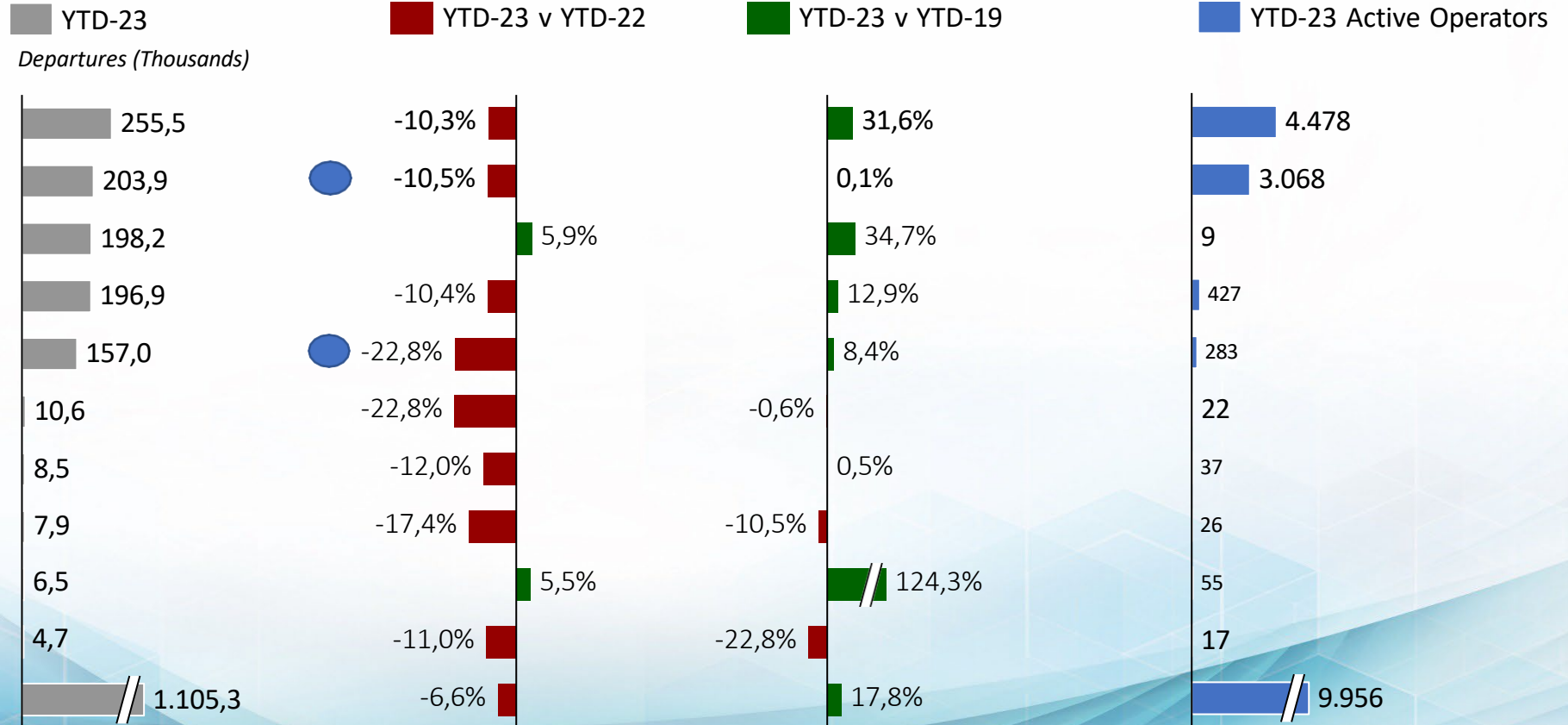
Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code #iomac2023 to join.

Divergence by Operator Type

- Charter demand is well down. Corporate flight departments are less busy.



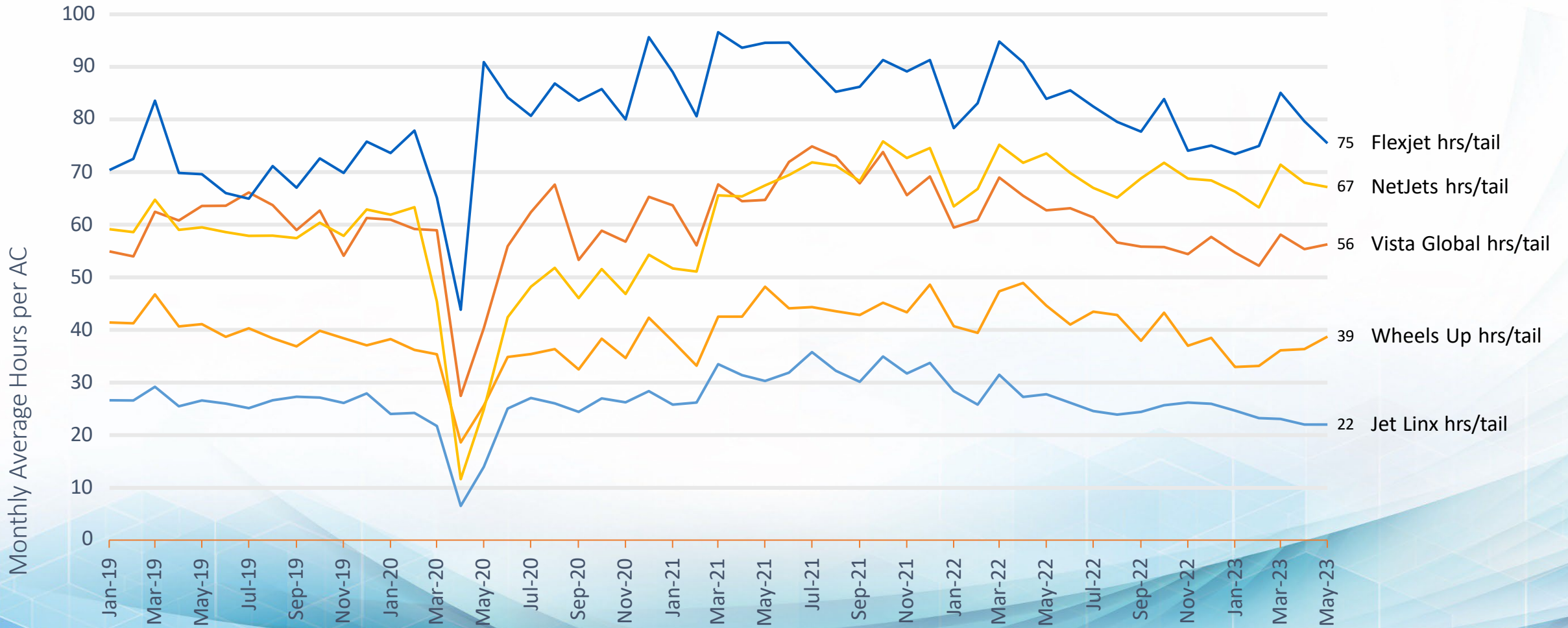
Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code #iomac2023 to join.

Top operator fleet utilisation

- Fractional operators have by far highest utilization



Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code #iomac2023 to join.

Divergence Europe vs North America

- Europe looks relatively weaker than North America



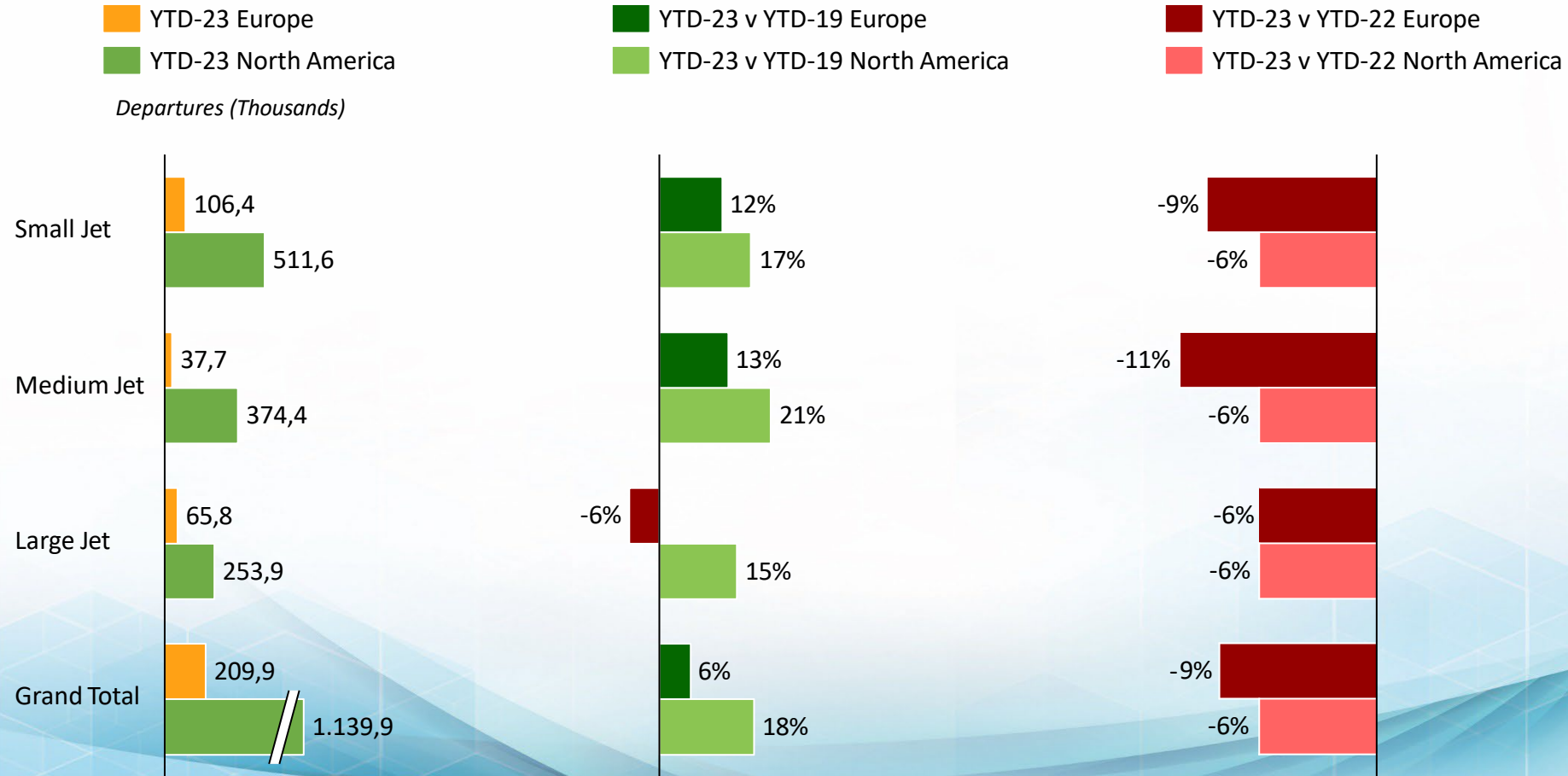
Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.

Compare by cabin segment

- Medium Jet huge market in the US



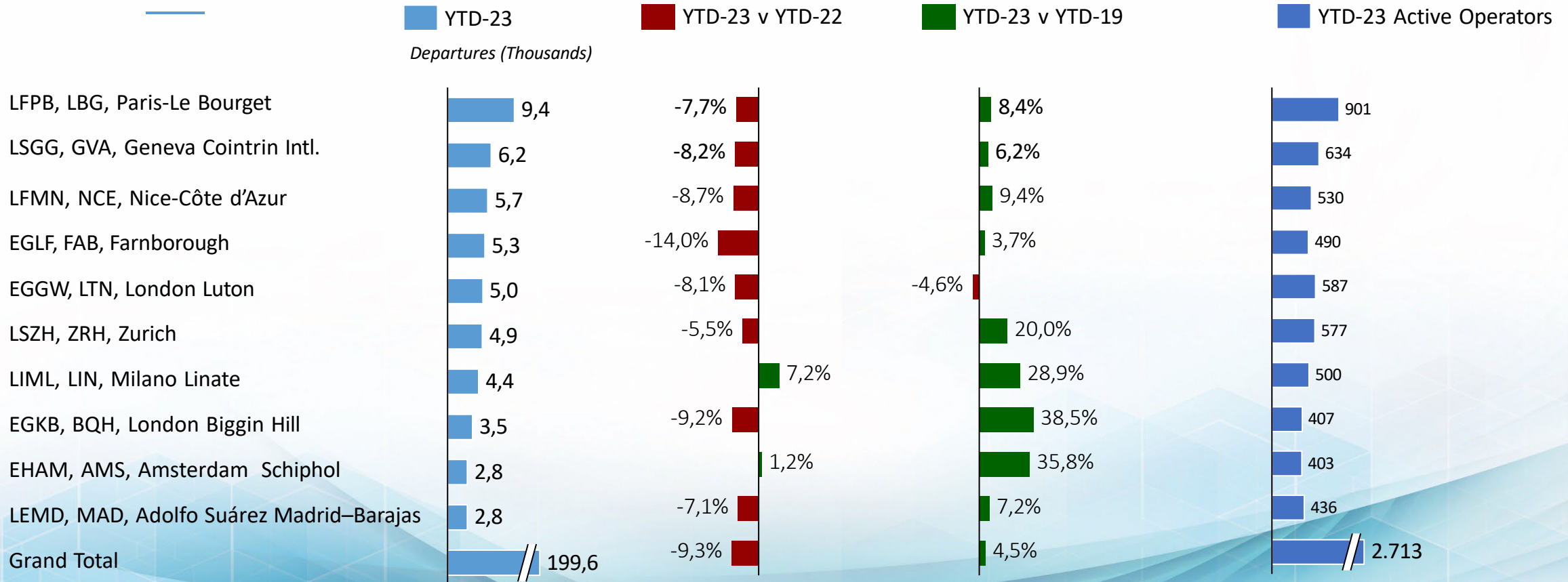
Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code #iomac2023 to join.

Leading airports for bizjet activity

- Luton hasn't recovered. Share gone to Biggin Hill?



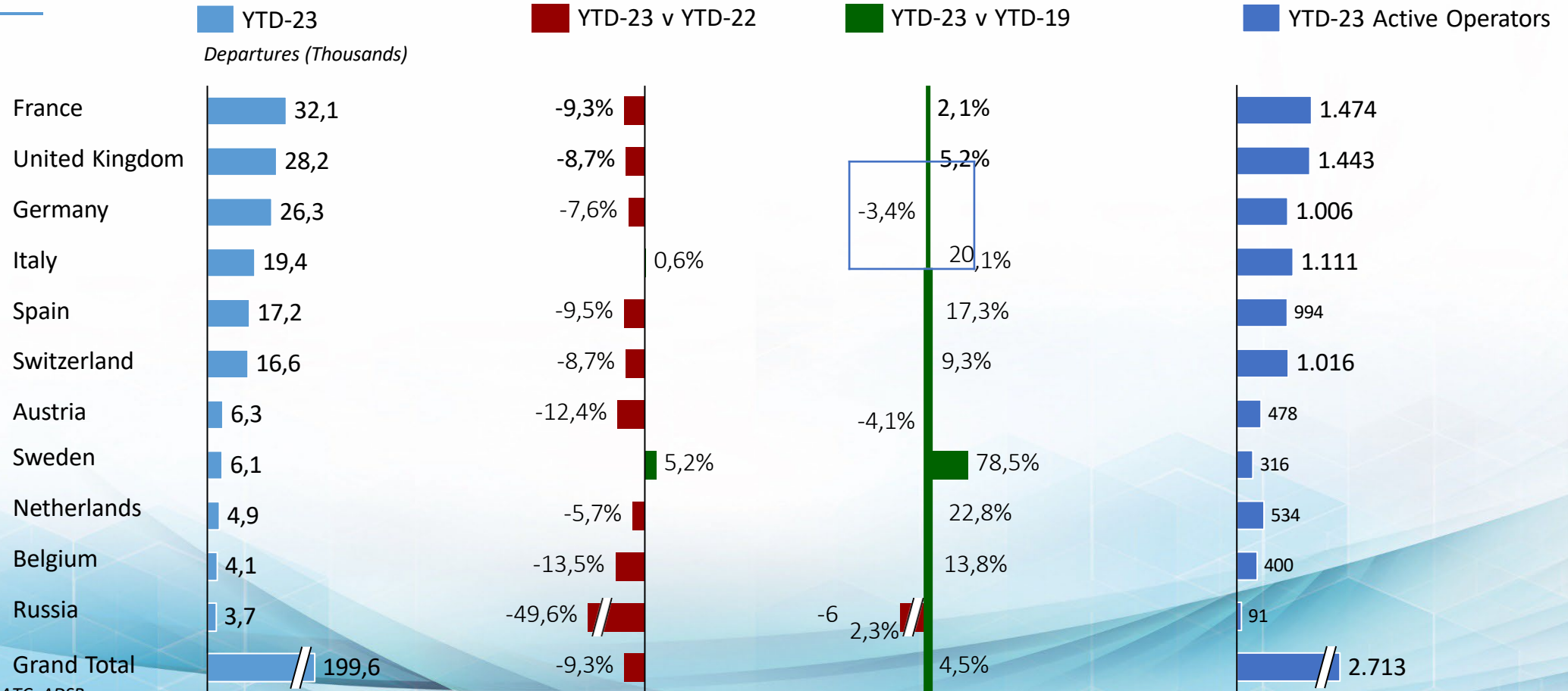
Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code #iomac2023 to join.

Varied trends by European country

- Note decline in Germany/Austria (economic recession) vs Spain/Italy (weak growth – but tourist hubs)



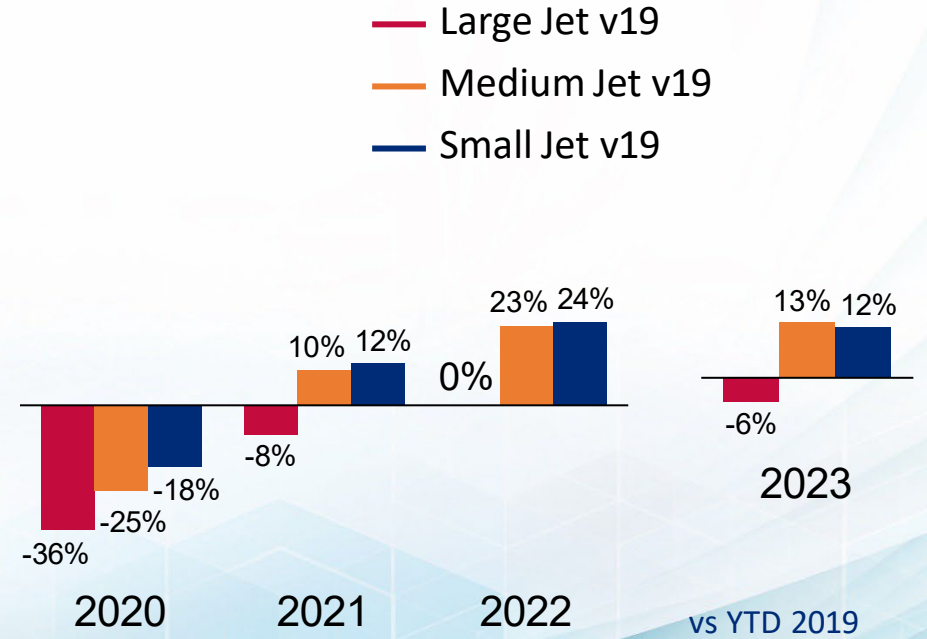
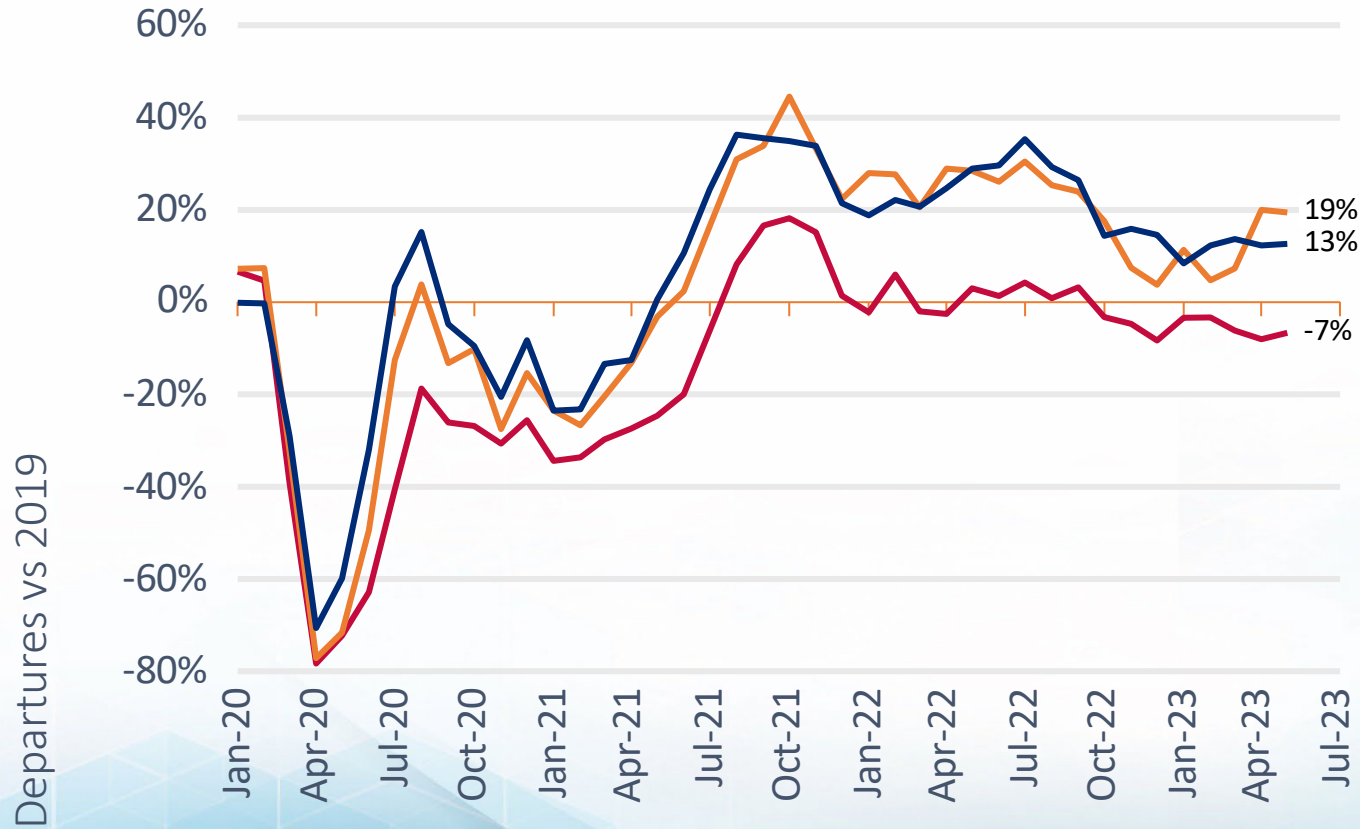
Source: WINGX, ATC, ADSB

YTD = Jan-May

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Weakness in Europe

- Large jet departures in Europe significantly slowing (Russia market)













Source: WINGX, ATC, ADSB

YTD = Jan-May

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Summary view – what matters most?

Key Factors	Evidence & Insights	Next 12M outlook	Significance	Direction
Health hazard & shared spaces	Pandemic experience hugely increased health and hygiene concerns	Covid risk fading with tailwind benefits for travel demand		
Macro & political Instability	Weakest economic outlook in 20Y with persistent inflation and high rates	Probable recession although may be short-lived. Also impact on supply chains.		
Airlines vs bizav	Scheduled airline networks were decimated during lockdown and slow to recover	Remains, especially in Regional networks, notably Europe		
Ultra Wealth Creation	Pandemic period accelerated ultra wealth creation, only modest slowdown since	Insulated from economic turbulence but threat of super tax, also political risk		
Bizav Usage Optics	Pandemic-era utility boosted profile but climate & austerity reasserting negative optics	Increasingly sensitive issues, with direct action and creeping legislation		

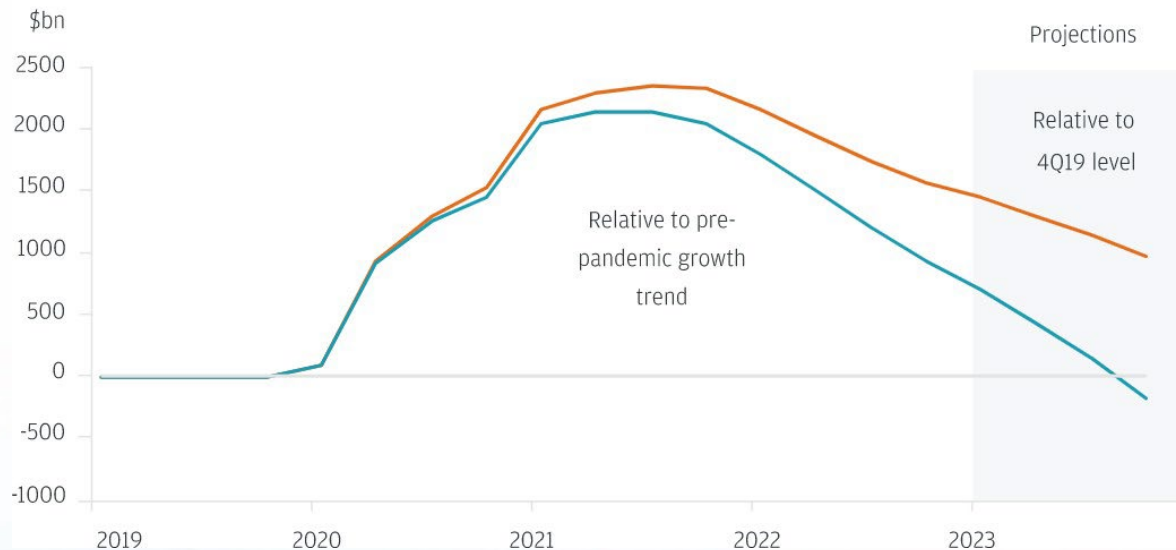
Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.

Economic headwinds starting to tell?

WINGX

- Bizjet users are not immune to deteriorating economy

U.S. consumers are depleting their excess savings



BEA, J.P. Morgan

Relative to the fourth quarter of 2019, the level of excess savings held by U.S. consumers peaked at almost \$2.4 trillion in mid-2021, declining to about \$1.7 trillion in the fourth quarter of 2022. It is projected to continue decreasing over time.

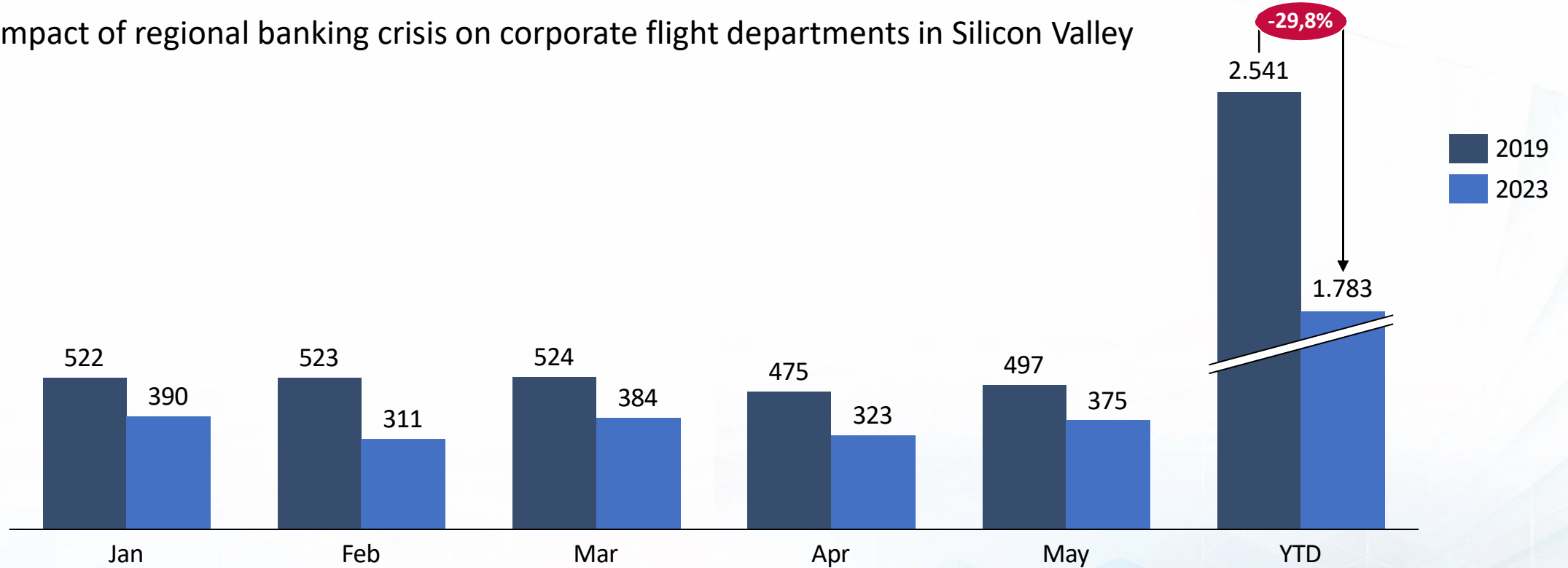
- \$2BN stimulus provided to US consumers during pandemic boosted savings and catalysed luxury spending
- Business aviation benefited with 40% of charter customers 1st time users; influx of investment and SPACs
- Credit stimulus has worn off with consumer and business facing persistent inflation and higher costs of borrowing
- Credit card data from Citi May-23: U.S. luxury spending in March declined to the lowest monthly rate in 3Y, -18% YOY
- Impact reflected in slower US luxury spending in Q1 2023 LVMH results
- Cut-through to business aviation with charter softest market, Wheels Up evidence, also SPAC-pulls (Flexjet,

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Direct impact of Regional Banking Crises

- Direct impact of regional banking crisis on corporate flight departments in Silicon Valley



Airports:

Norman Y. Mineta San Jose International Airport (KSJC)
San Francisco International Airport (KSFO)
Oakland International Airport (KOAK)
Stockton Metropolitan Airport (KSCK)
Monterey Regional Airport (KMRY)
Sacramento International Airport (KSMF)

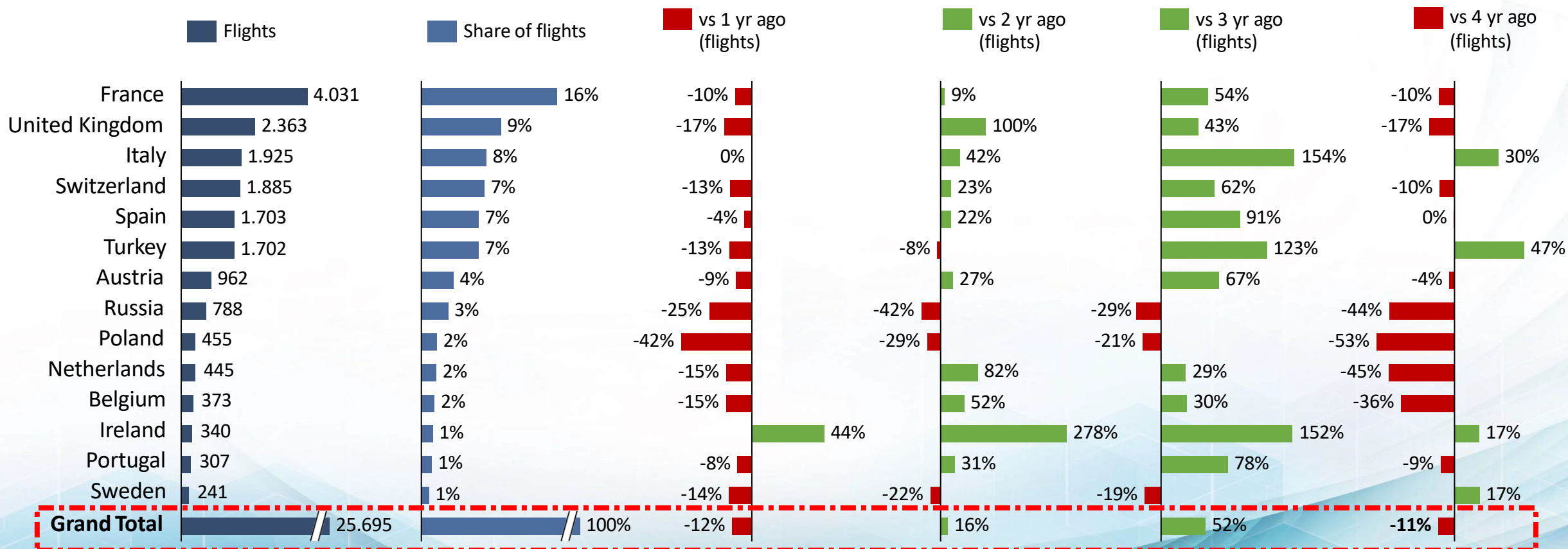
Source: WINGX, ATC, ADSB

YTD = Jan-May

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Direct impact of ESG in Europe?

- Corporate flight departments are flying less than in 2019



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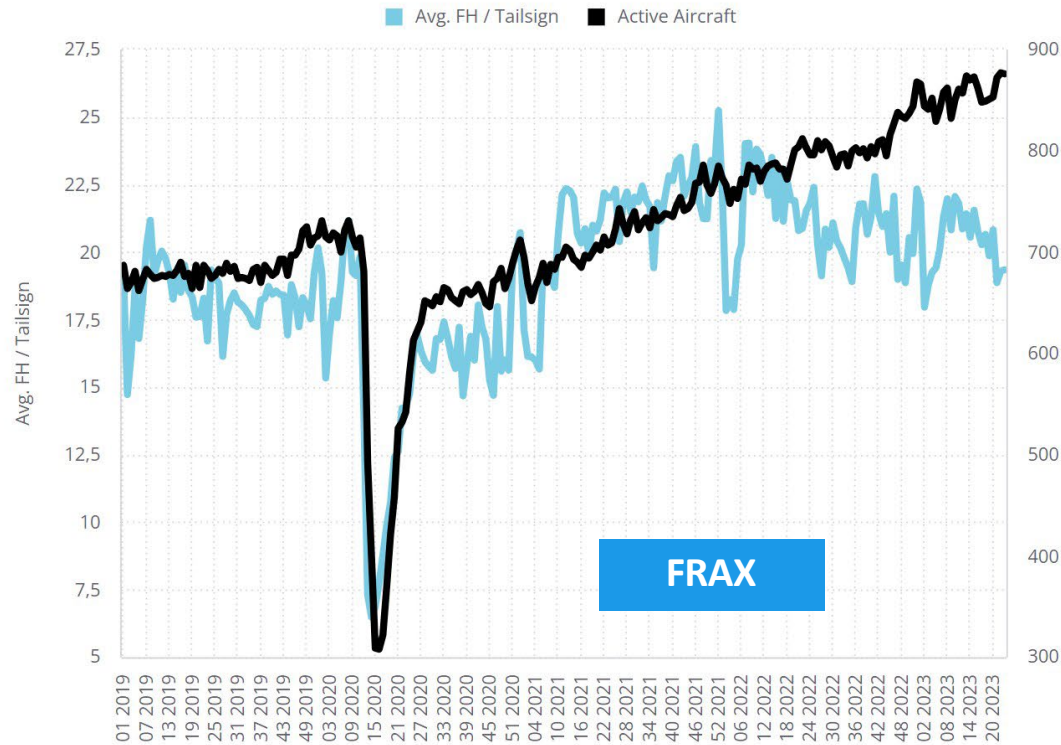


Warning signs of over-supply?

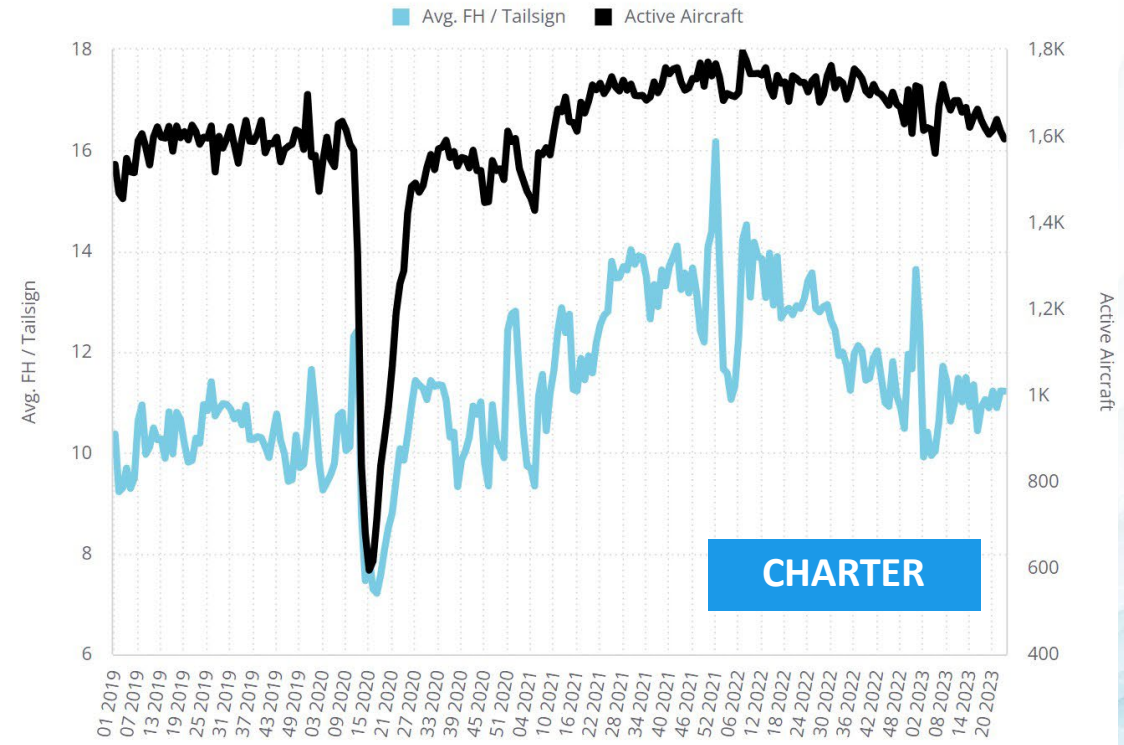
- Appears to be an over-supply emerging: Wheels Up profits; VistaJet speculation; Jet It grounding



Weekly: Fractional



Weekly: Branded Charter



≈ 1000 hours per year per aircraft

≈ 650 hours per year per aircraft

Source: WINGX, ATC, ADSB

YTD = Jan-May

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But consider the tailwind from Airline erosion...

- Group of the top 16 Airline (A4E + Wizz) holdings in Europe. Representing 45% of all departures from Europe YTD

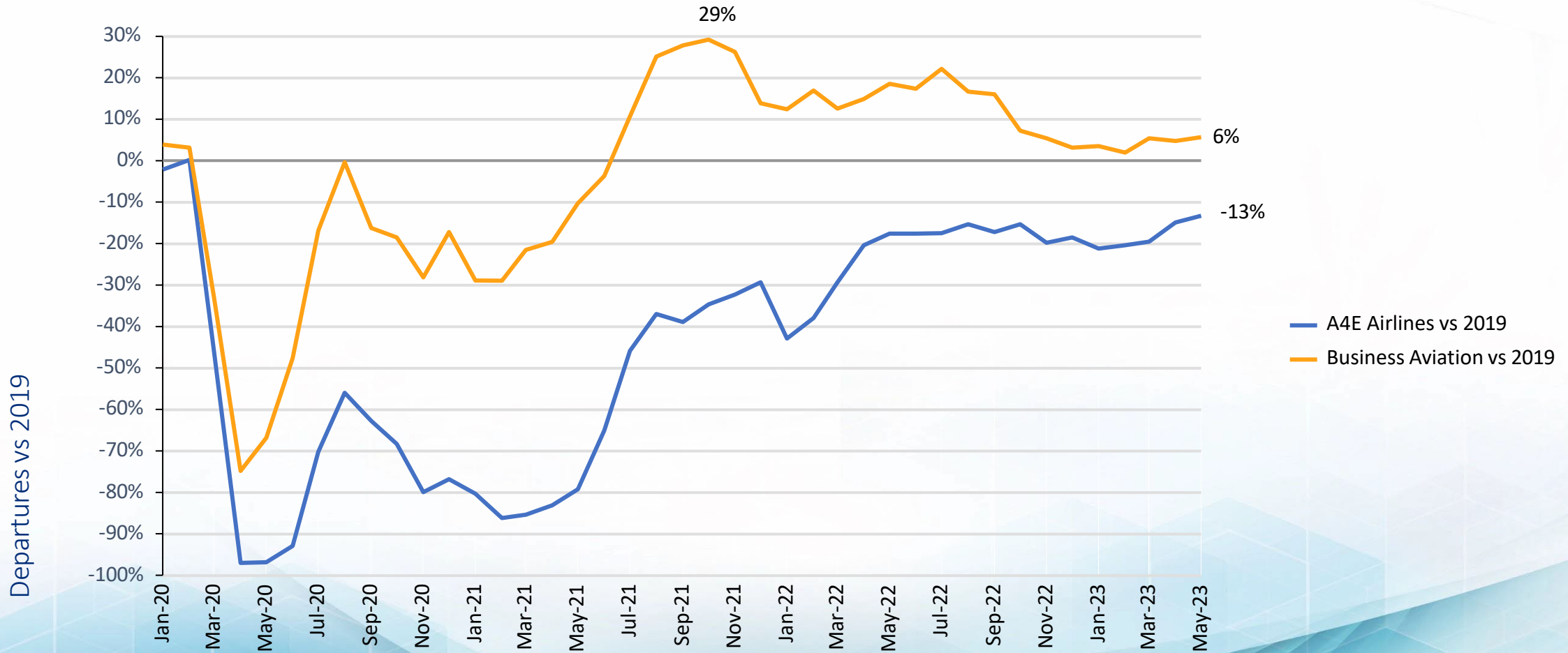


Got a question? Ask us on Slido! Enter the code #iomac2023 to join.



Bizav vs Airline advantage

- Bizav in Europe – airline erosion has been best friend of sustained attraction of flying private



Source: WINGX, ATC, ADSB

YTD = Jan-May

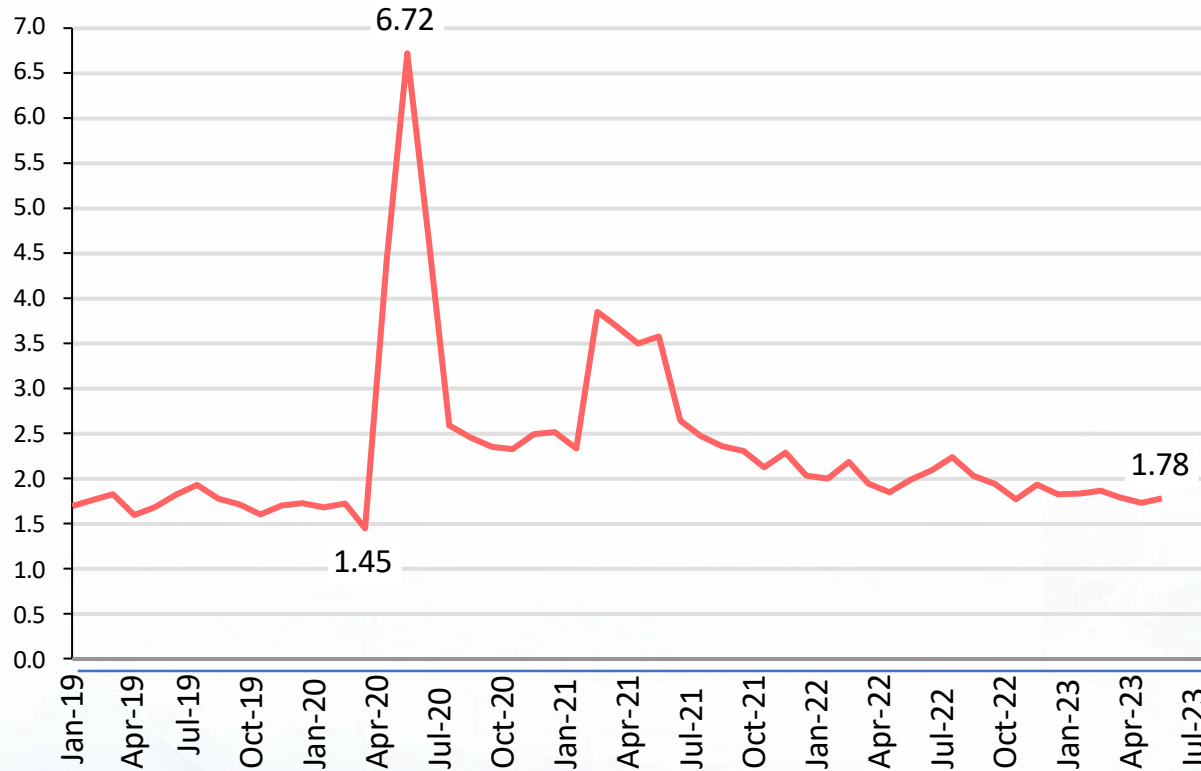
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What happens when airlines recover?

- Bizav slowly getting back to its original connection ratio against Scheduled (1.7 City pairs for every Sched pair)

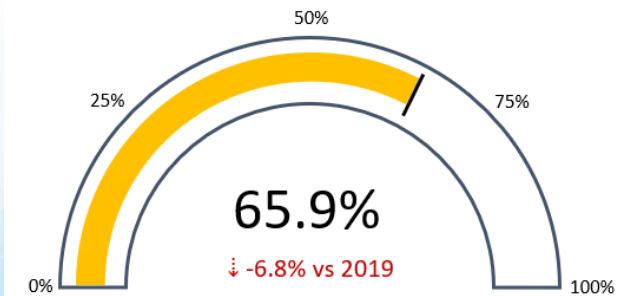
Bizjets / Sched Ratio for City-pairs



**But not just availability,
also service levels:**

- Strikes
- Delays
- Congestion
- Short-staff

Departure punctuality (01/01 to 30/12)



Source: WINGX, ATC, ADSB

YTD = Jan-May

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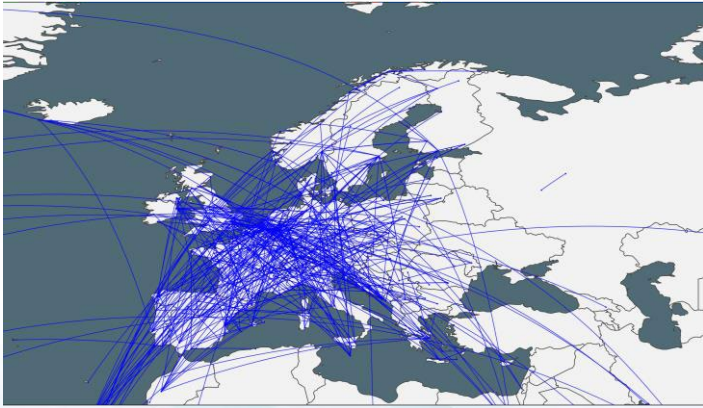
Bizav has been filling the A4E airline gaps

- **Business jet pairs within “disappeared” A4E network**

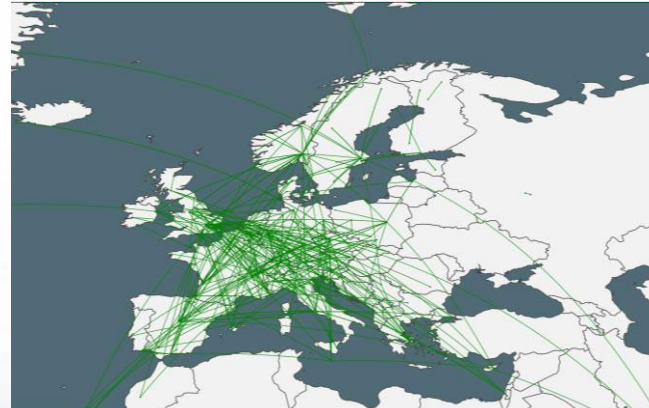
Amongst the 1491 pairs that are no longer served in 2023 – YTD by A4E

- All of them are now (YTD 2023) connected by Business Jets
- 508 were not served by bizjets back in 2019

Business Jets Pairs (2023 YTD vs 2019 YTD)



508 New Pairs



416 Growing Pairs



327 Shrinking Pairs

Source: WINGX, ATC, ADSB

YTD = Jan-May

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Where the pain point matters most: Regional Airlines

- Typical bizav sector is <400NM, targets connections which were amply provided by regional airlines pre-Covid

Leading10 Regional Airlines in Europe.



***flybe**

- Ceased operations on 5th Mar 2020
- Recommencing operations on 19th Oct 2020
- Ceased operations as of 28th Jan 2023

Source: WINGX, ATC, ADSB

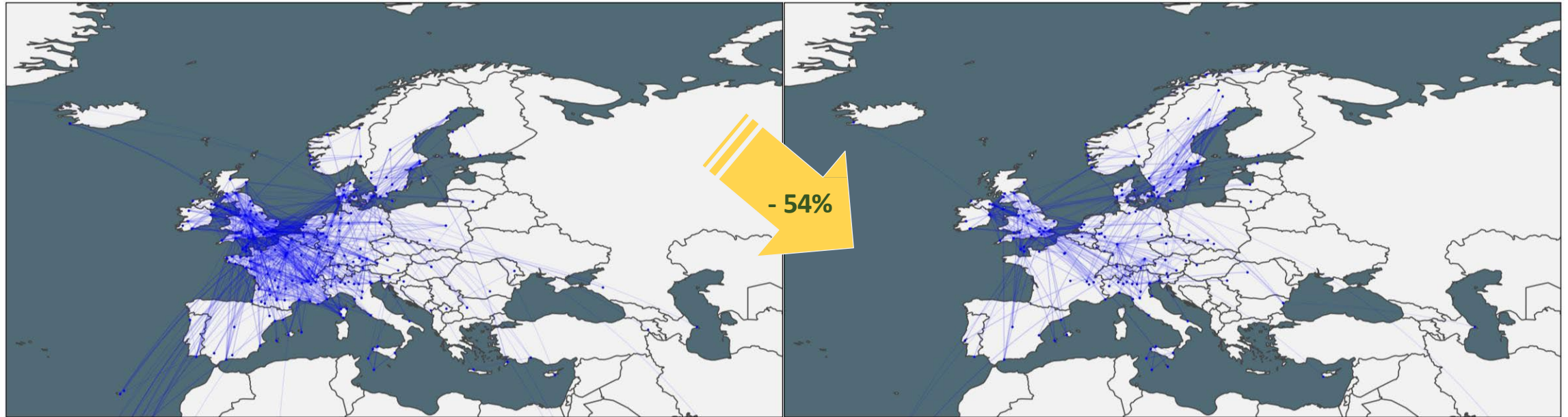
YTD = Jan-May

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Acute at Regional level

- >50% reduction in connectivity provided back in 2019



Regional Airlines in 2019-YTD (1,474 connections)

Regional Airlines in 2023-YTD (681 connections)

Source: WINGX, ATC, ADSB

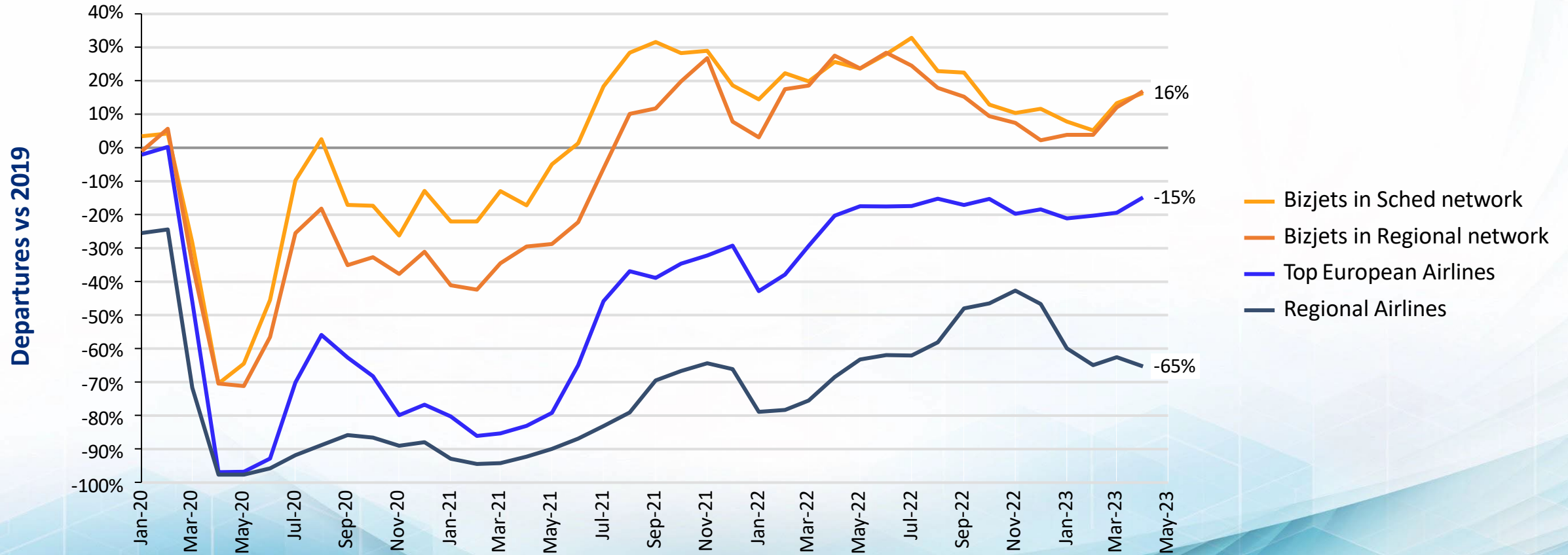
YTD = Jan-May

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Compare trends – on the same pairs

- Within the airline networks, bizjet activity is up 16% vs 2019



Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code #iomac2023 to join.



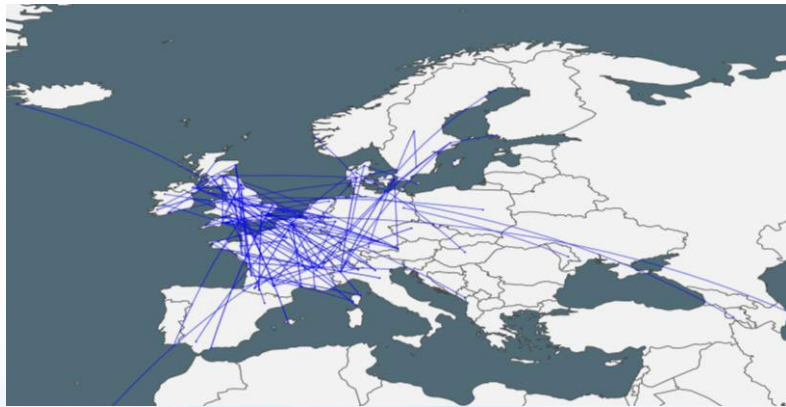
Bizav filling the regional gaps

- **Business jet pairs within “disappeared” Regional Airline network**

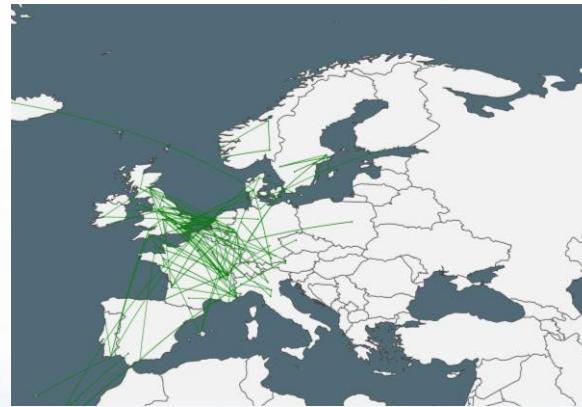
Amongst the 793 pairs that are no longer served in 2023 – YTD by Regional Airlines:

- 71% (563) of them are now (YTD 2023) connected by Business Jets
- Of these 566 pairs, 162 had no business jet connections back in same period 2019

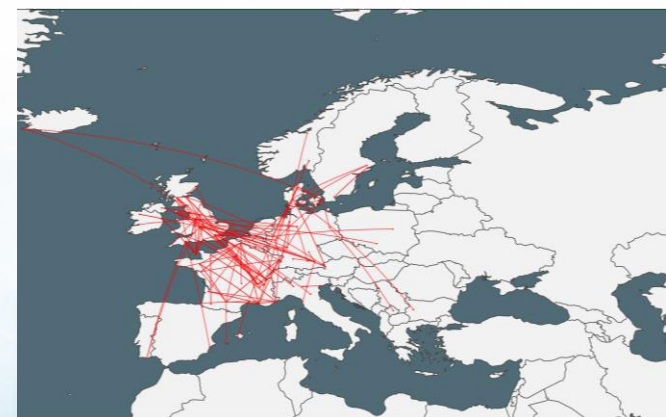
Business Jets Pairs (2023 YTD vs 2019 YTD)



162 New Pairs



149 Growing Pairs



162 Shrinking Pairs

Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Same in the US?

- Group of the top 15 US airlines

American Airlines 

 DELTA *Alaska*

Southwest 

FRONTIER
AIRLINES

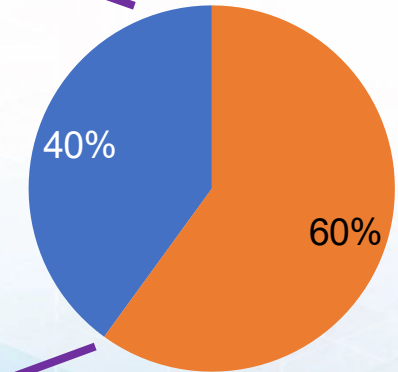

HAWAIIAN
AIRLINES.

UNITED 


allegiant®

spirit® jetBlue

 sun country airlines

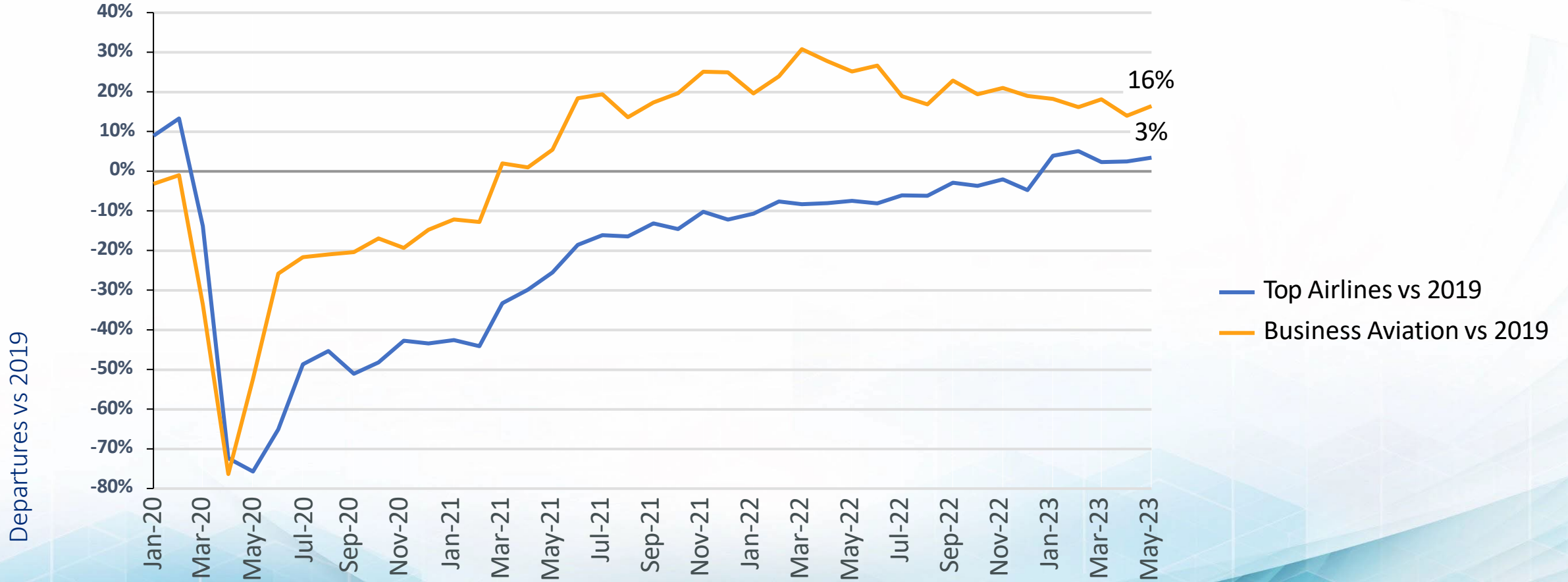


Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Less erosion evident

- Bizjet activity has had much stronger recovery; airlines barely back to pre-2019



Source: WINGX, ATC, ADSB

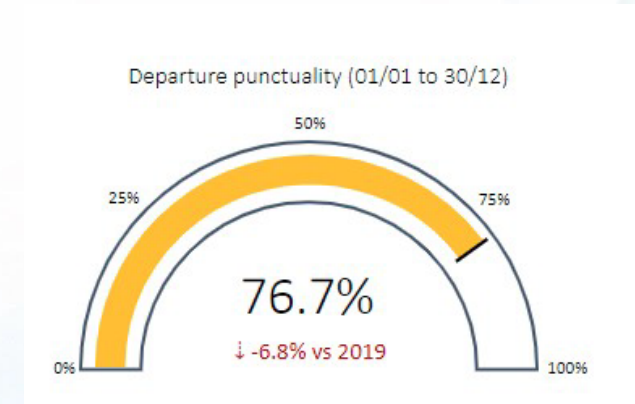
YTD = Jan-May

Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



But connectivity advantage is huge

- Bizjet activity has had much stronger recovery; airlines barely back to pre-2019



Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code #iomac2023 to join.



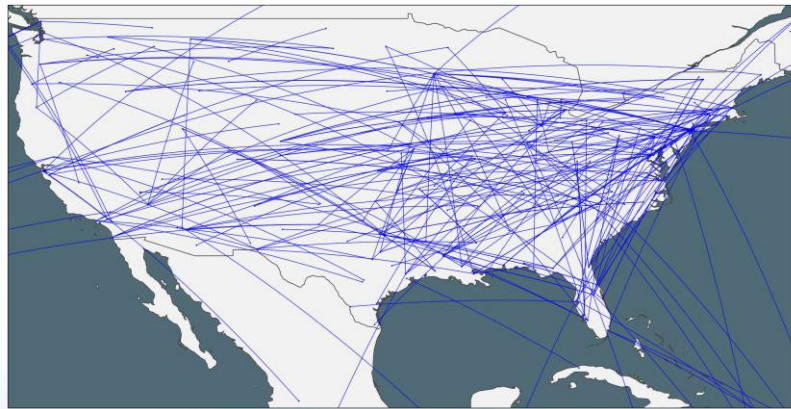
Bizav filling the North American airline network gaps

- Business jet pairs within “disappeared” US Airlines’ network

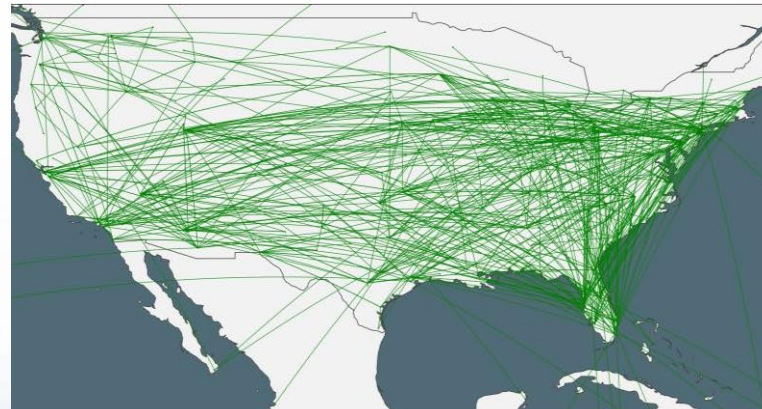
Amongst the 1912 pairs that are no longer served in 2023 – YTD by US Airlines

- All of them are now (YTD 2023) connected by Business Jets
- 278 were not served by bizjets back in 2019

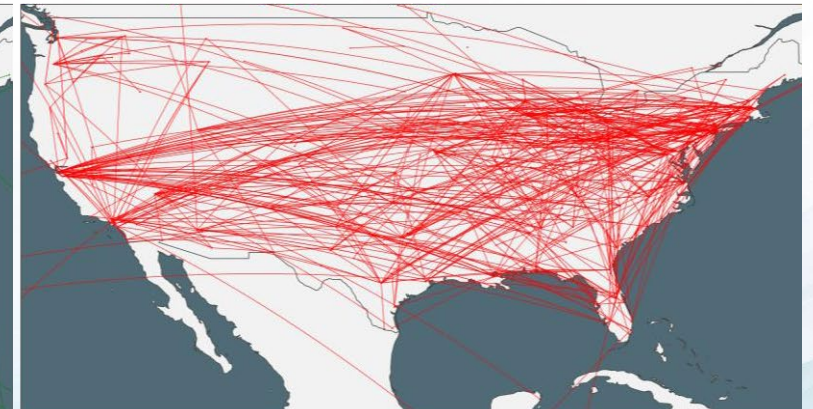
Business Jets Pairs (2023 YTD vs 2019 YTD)



278 New Pairs



746 Growing Pairs



638 Shrinking Pairs

Source: WINGX, ATC, ADSB

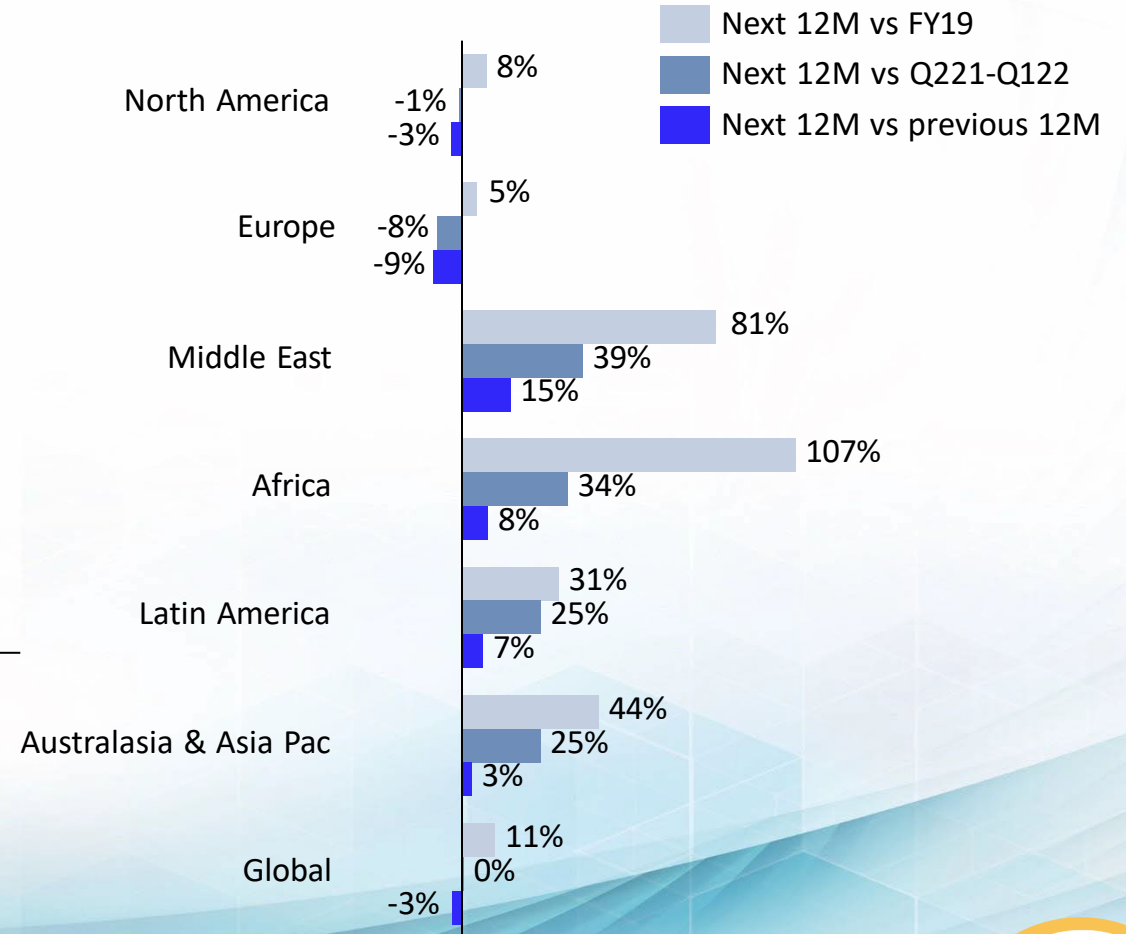
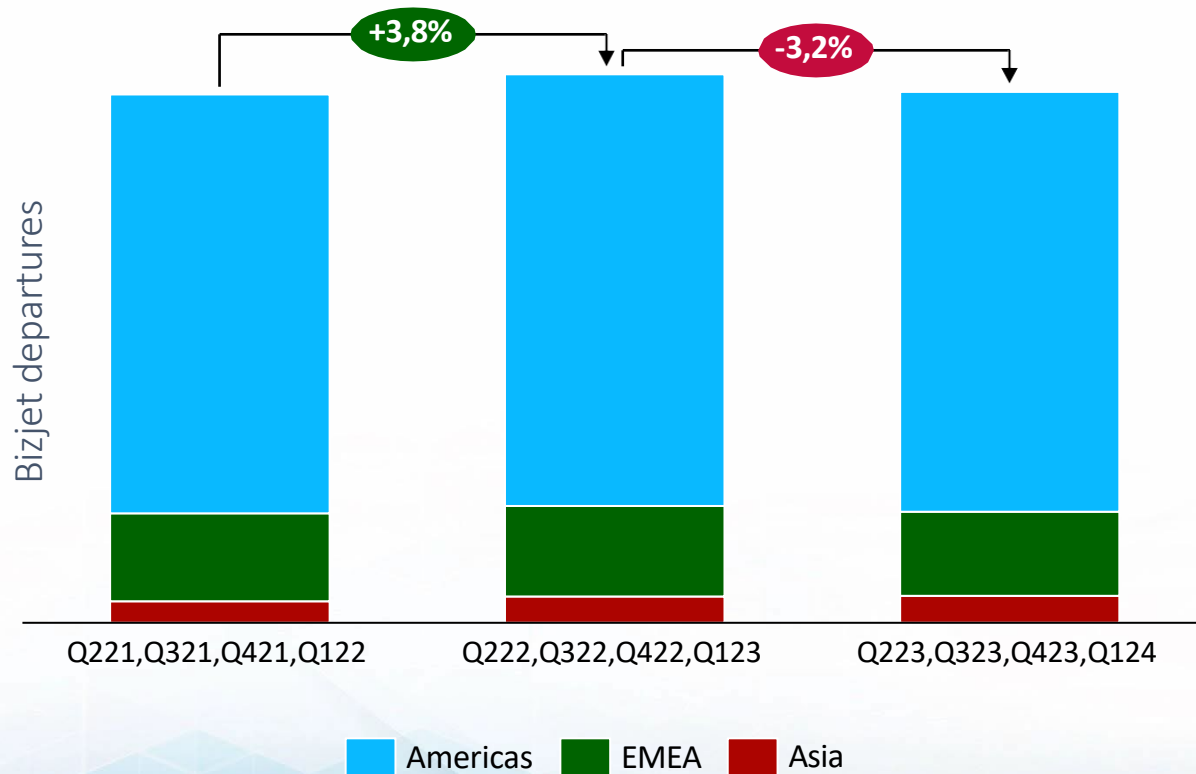
YTD = Jan-May

Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Back to 50,000 ft: What's our outlook for next 12M activity

- We expect >10% gains retained but 3-5% drop from last year (more in Europe)



Source: WINGX, ATC, ADSB

YTD = Jan-May

Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.





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www.WINGX-advance.com

MAKING AEROSPACE INFORMATION INTELLIGENT





Sustainability: the Talent Question

Presented by

Heather Gordon, Legal Director at Martyn Fiddler Aviation

Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs”

United Nations Brundtland Commission (1987)

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Sustainability: the Talent Question

THERE ARE MANY UNDERSTANDINGS OF BIZAV



HOW THE SOCIETY SEES BIZAV



HOW USERS SEE BIZAV



HOW ECOLOGISTS SEE BIZAV



HOW BIZAV PRO SEE BIZAV



HOW REGULATORS SEE BIZAV



HOW EBAA SEES BIZAV

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Sustainability: the Talent Question



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“We need to do a better job of putting ourselves higher on our own ‘to do’ list”

Michelle Obama

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Generation Z (Gen Z)

[ˌje-nə-ˈrā-shən ˈzē]

The generation of people
born from 1997 to 2012.

 Investopedia

Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



“Today’s youth is rotten, evil, godless and lazy. It will never be what youth used to be and it will never be able to preserve our culture.”

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Sustainability: the Talent Question

2013



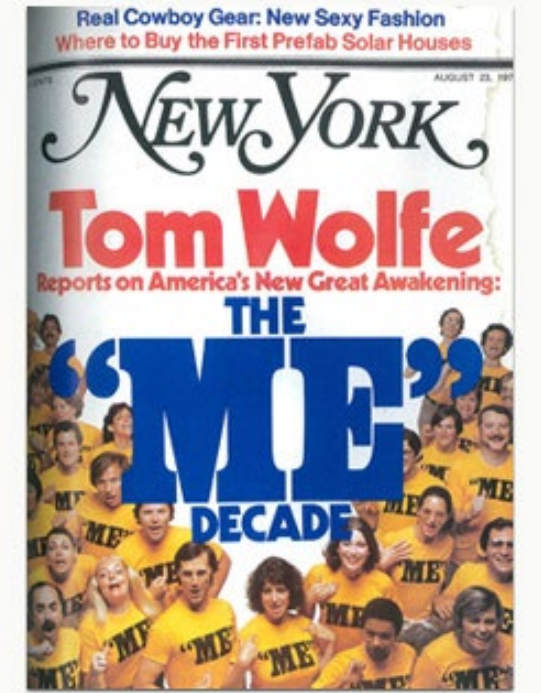
1990



1985



1976



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Sustainability: the Talent Question



Got a question? Ask us on Slido! Enter the code #iomac2023 to join.



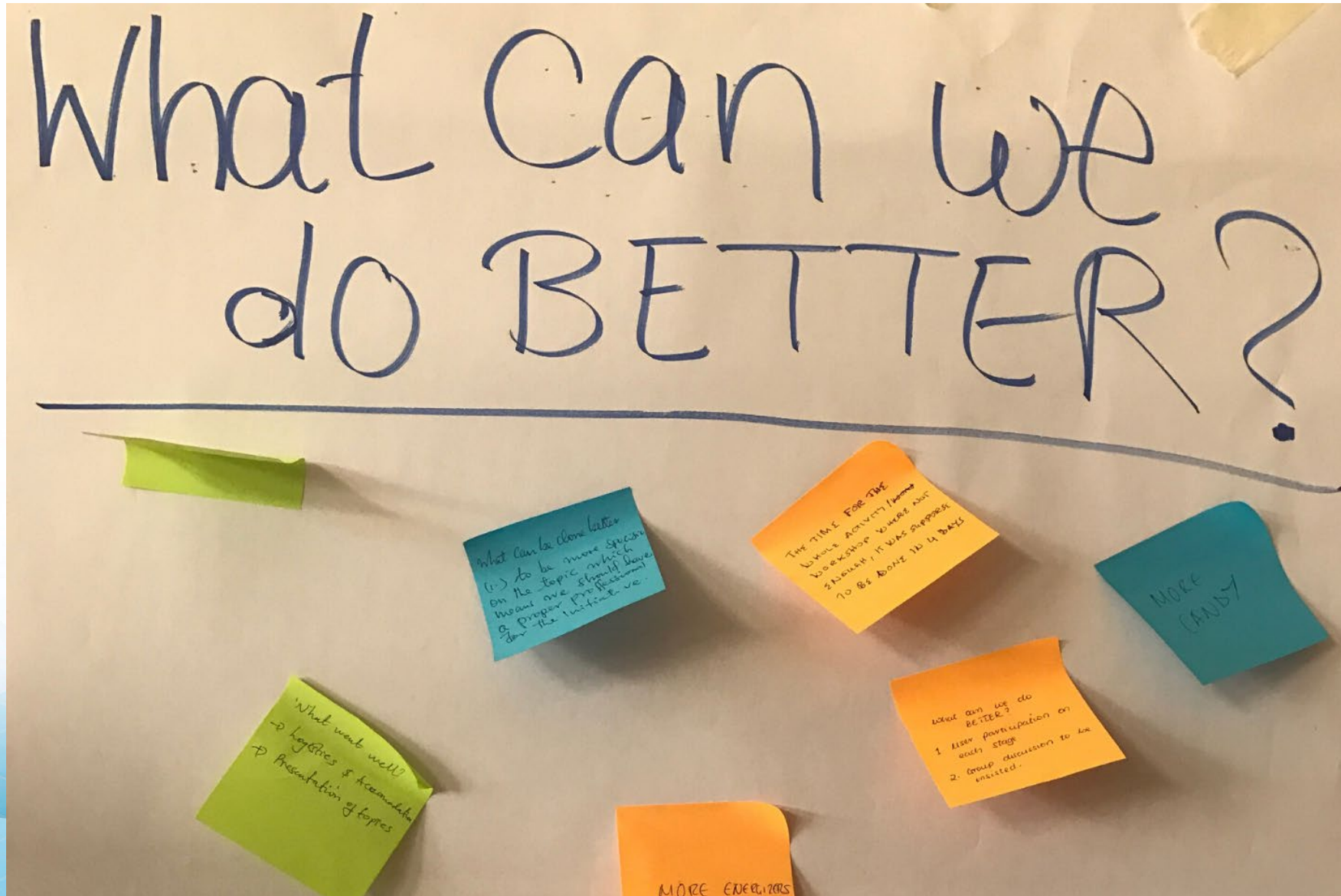
Sustainability: the Talent Question



Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



Sustainability: the Talent Question



Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Thank you!

(And thank you Nicole and Matty!)

Got a question? **Ask us on Slido!** Enter the code **#iomac2023** to join.





Talent - generational growing pains & routes into aviation

Presented by

Heather Gordon, Legal Director at Martyn Fiddler Aviation

Dave Edwards, Chief Executive at Royal Aeronautical Society

Gemma Downs, Corporate Counsel at Jetcraft

Katie Bancroft, Superyacht & Aviation Senior Associate at Jaffa & Co

Simon Davies, VP Sales - UK, Middle East & India at Global Jet Capital

Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



Lunch by Wild & Thyme:

12:30 – 14:00

kindly sponsored by:



DIEGO GARRIGUES
AVIATION LAW

Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



Sustainability and Social Licence

Presented by

Patrick Edmond, Managing Director at Altair Advisory

Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



“The sustainability challenge is, bar none, the biggest that we will face as leaders of the aviation industry. This will be difficult and take time.

As pioneers building the net zero emissions age for aviation, **scrutiny of our efforts will be extreme. We must welcome it** as a means of telling the impressive story of aviation’s decarbonization and its contributions to society.”

Climate concerns are real

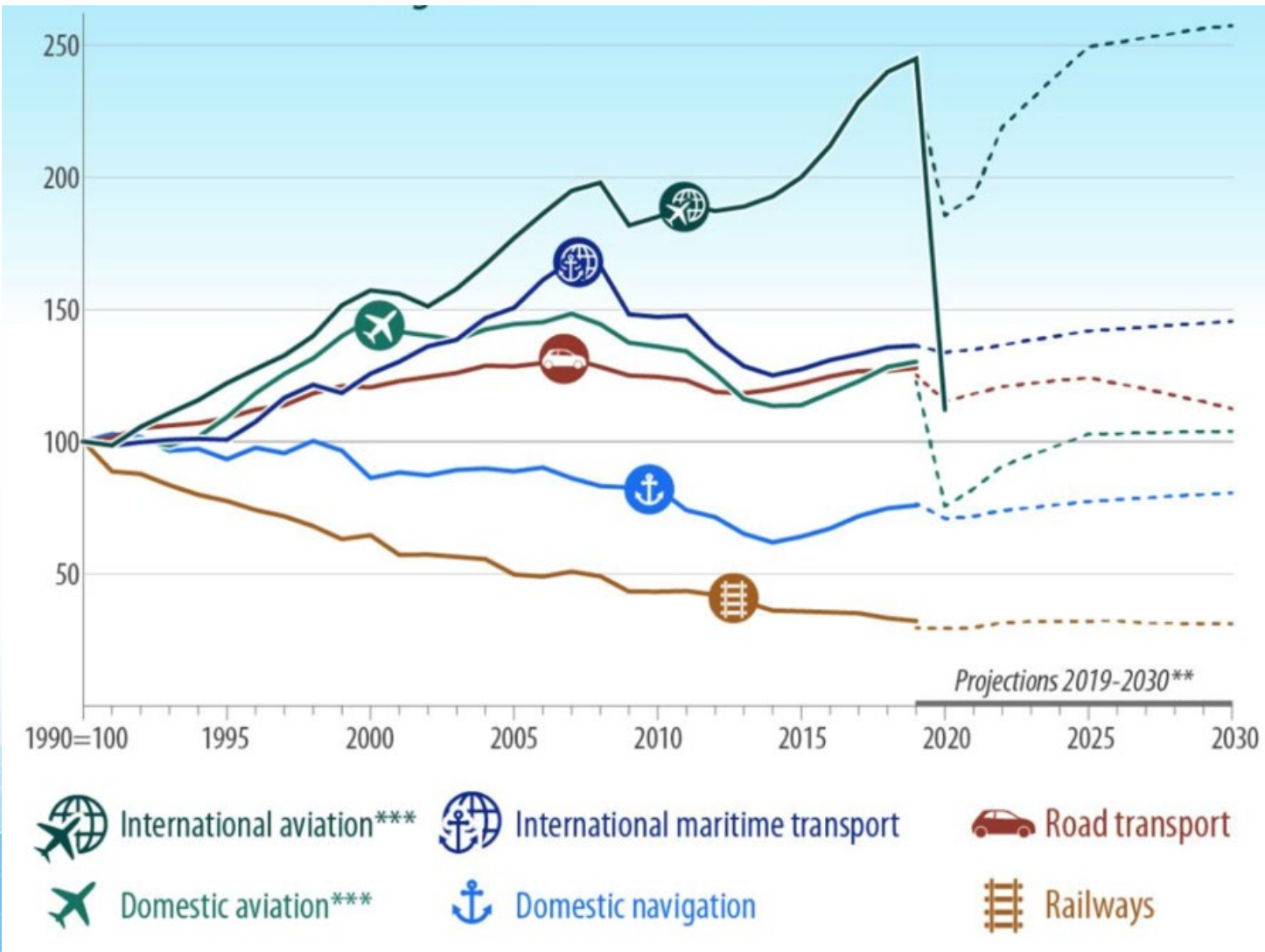
- Climate change is a concern for more and more people, especially (but not only) for younger generations
- This concern about the future is legitimate
- All industries including aviation acknowledge the need to respond to these concerns
- The aviation industry, as a high-emitting industry, is under pressure from a wide range of environmental groups
 - Only 20% of the world's population have ever flown in a plane
 - Aviation can be portrayed as an activity of the “global elite”

Got a question? **Ask us on Slido!** Enter the code **#iomac2023** to join.



Aviation emissions are climbing

Emissions by transport mode, EU (indexed, 1990=100)




Even though aircraft are getting more efficient, air traffic is growing faster than the emissions reductions due to new technology

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Airlines are regularly accused of greenwashing

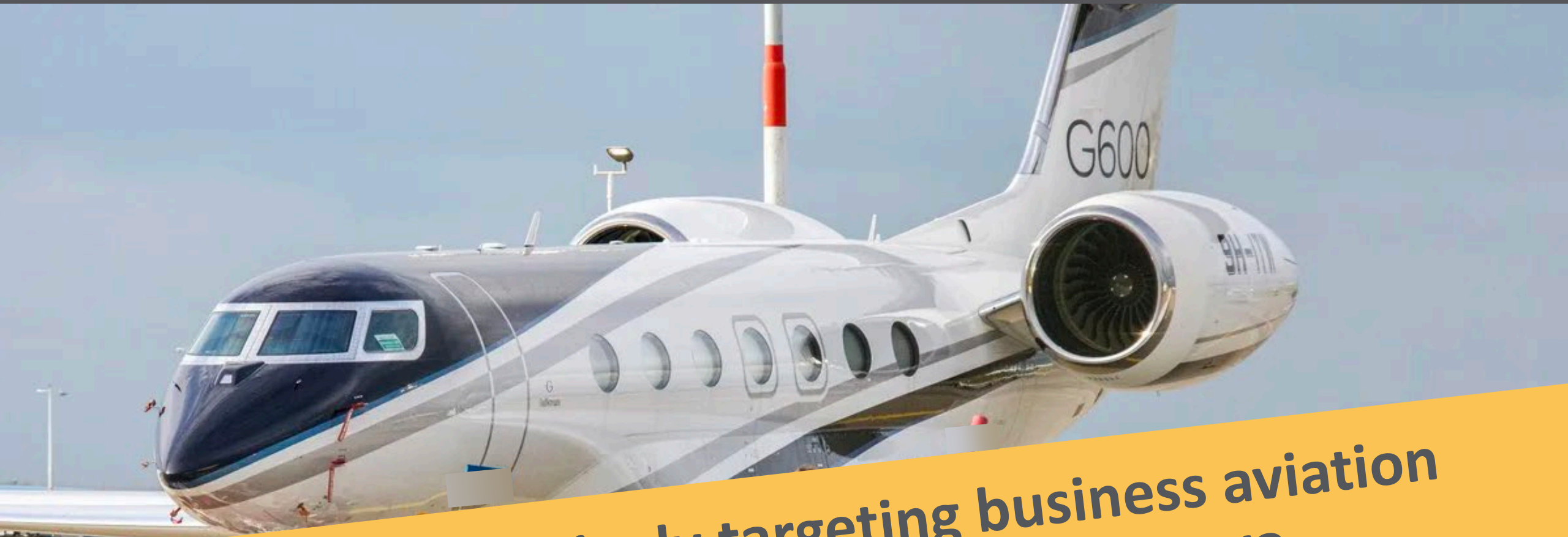
- Airlines have not helped their own case by overpromising on sustainability
- A favourite approach is to talk about CO₂ emissions intensity rather than total CO₂ emissions
- Airline-industry promises and targets are therefore open to question

A white thobe and ghutra are shown on the left side of the slide, set against a blue background with a geometric pattern. A large white speech bubble with a black outline is positioned in the center, containing text.

What we are trying to do is for a PR exercise saying that it will happen. Let us not fool ourselves. We will not even reach the targets we have for 2030, I assure you.

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.





**Activists are increasingly targeting business aviation
– why, and how, should the industry respond?**

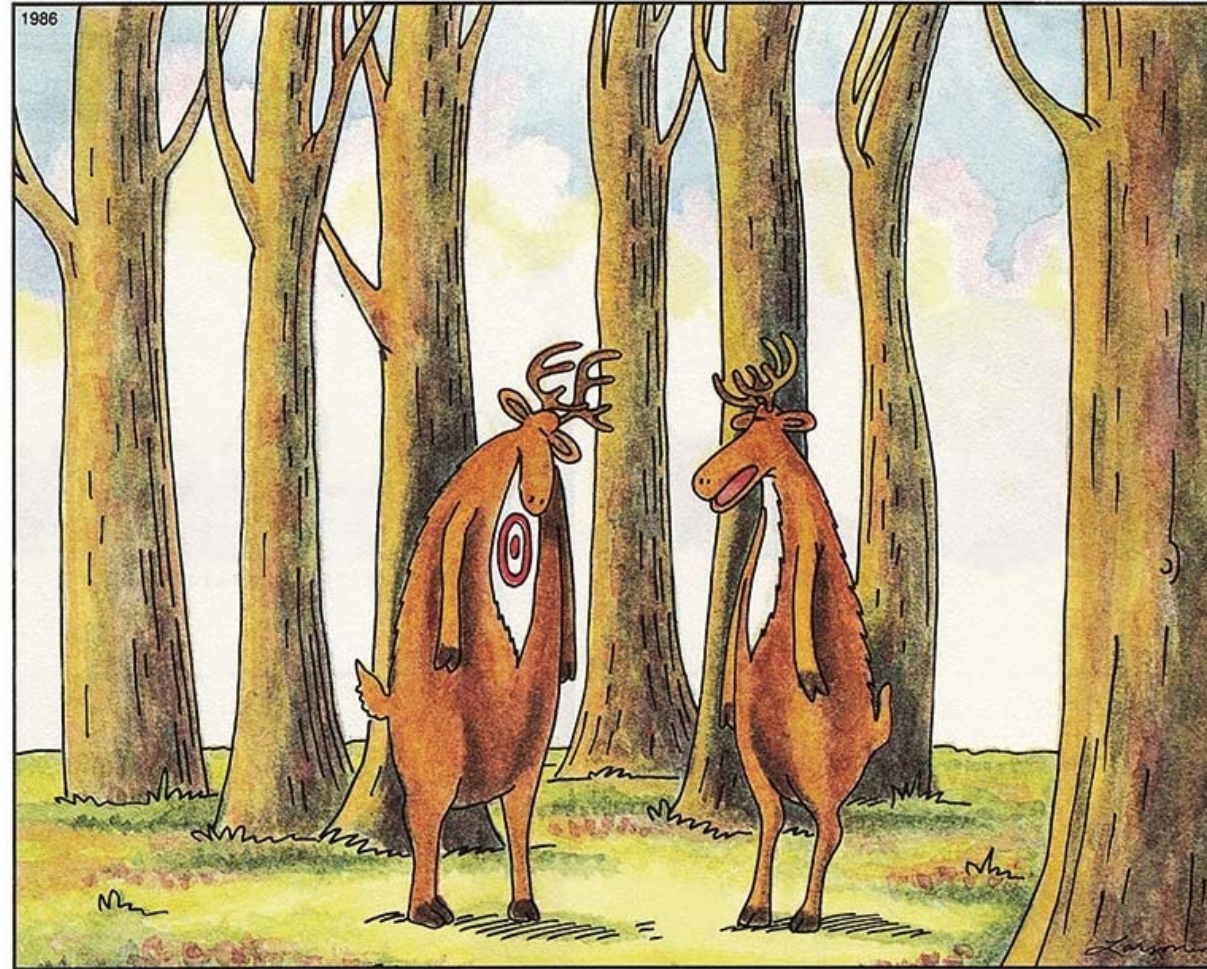
Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Business aviation accounts for a small share of total emissions

EBAA points out that business aviation accounts for only 2% of aviation emissions...

...so why is it targeted?



"Bummer of a birthmark, Hal!"

Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Why is the business aviation industry targeted?

- **Because it's a perfect target**
- It is the most emissions-intensive part of an emissions-intensive industry
- For the vast majority of people, it's something they will never be involved in
 - Doesn't affect their ability to fly away on their annual holiday
- Whether we like it or not, it is easy to highlight issues with business aviation, especially in a social media world
 - Emissions per passenger
 - Short flights
- Climate campaigners can use business aviation to generate outrage which can move the dial on their wider goals



Moving the dial

- Two or three years ago we would not have expected these headlines...

Amsterdam Schiphol to ban private jets from 2025



France to tax fuel on privately-operated jets

France plans 70% 'supertax' on fuel for private jets

France is set to dramatically increase taxes on fuel for private jets, as the government rejects a proposal from environmentalist and left-wing senators to ban short flights altogether.

Published: 7 April 2023 12:17 CEST



Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Coming soon...



- The EU Air Services Regulation EC1008/2008 will likely be revised in 2024
- Several European transport ministers are already sending signals about what they want the revised regulation to address (we could call these the “Naughty” and “Nice” lists)

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



So what can the industry do?

- Climate change is not going away (sadly)
- We are going to see more and more evidence of climate change, and public opinion will continue to demand that policymakers are seen to act
- Aviation is a central part of our modern economies, and the industry faces a huge challenge to change
- Being seen to make sincere efforts to change is essential for aviation to retain its “social licence”
- There has been a lot of greenwashing to date, so the aviation industry’s credibility is not as strong as it could be

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Two scenarios for business aviation



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- Business aviation has elements of a good narrative
 - It can afford to use more SAF (or even to invest in SAF production)
 - It can afford to target net-zero before 2050
 - New electric and electric-hybrid aircraft can be deployed in many business aviation applications
- Many operators and clients recognise the issue and want to get off the defensive
- (Some don't care)
- Here are two possible future scenarios for business aviation

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.





Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



A positive path

- The business aviation industry will create a voluntary sustainability initiative that goes beyond anything airlines or other stakeholders are proposing: “EcoJet”
 - 20% SAF by 2030, 50% by 2035, 100% by 2040
 - Uses book-and-claim, already pioneered by the industry
 - The industry will precommit to future SAF usage to allow fuel manufacturers to build new SAF production facilities
 - (or maybe the industry will collectively invest in SAF production?)
 - Airports and ANSPs are encouraged to offer discounts to EcoJet participants
- The industry will also work with electric aircraft OEMs to ensure that business-aviation versions are available as early as possible, and to showcase these
- What does this look like in 2030?

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



2023 Business Aviation News Headlines

2030 Business Aviation News Headlines

- **European Commissioner praises business aviation for “leading the way” on sustainability**
- **More than half of European business jets join “world-leading” emissions reduction programme**
- **From worst to first: a case study in how a sector pivoted to lead the way on sustainability**
- **“Why can’t airlines go green as fast as business aviation?” ask governments**
- **100th European airport joins programme to support sustainable business aviation**
- **Go clean or go home: Davos mandates only EcoJet-certified private aircraft next year**
- **Bizjet market booms as future looks brighter than ever**

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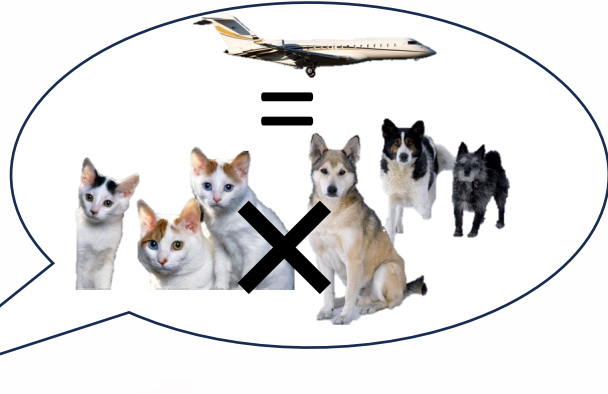
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A defensive path



- **The industry doesn't recognise that it's a pawn in a bigger game**
- Continues to focus on business aviation's small size ("only 2% of total aviation emissions")
- Sticks with similar decarbonisation goals to commercial aviation (2050 net zero)
- Makes questionable comparisons



Got a question? **Ask us on Slido!** Enter the code **#iomac2023** to join.



2025 Business Aviation News Updates

2030 Business Aviation News Headlines

- **New EU Aviation Policy: more tax on private jets**
- **Publicly-owned airports "should increase business jet landing fees" – Minister**
- **"Not aligned with our values" – major brand ends contract with film star citing "excessive private jet use"**
- **Airport withdraws planning application for private jet terminal, pointing to public opposition and sustainability concerns**
- **Drone sprays paint on business jets parked at Davos**
- **Used bizjet values hit 10-year low as demand slumps**

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Thank you

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Sustainability viewpoints

Presented by

Andy Hodgson, Managing Director at Altair Advisory

Lindsey Oliver, Managing Director at BBGA

Patrick Edmond, Managing Director at Altair Advisory

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.

Sustainability viewpoints



355 survey respondents for the Q1 2023 survey

IRO 58% of respondents were aviation professionals (i.e., chief pilot, pilot, director of aviation, head of maintenance, dispatcher, etc.)

42% were senior and general management (CEO, president, business owner, vice president, general manager, etc.)

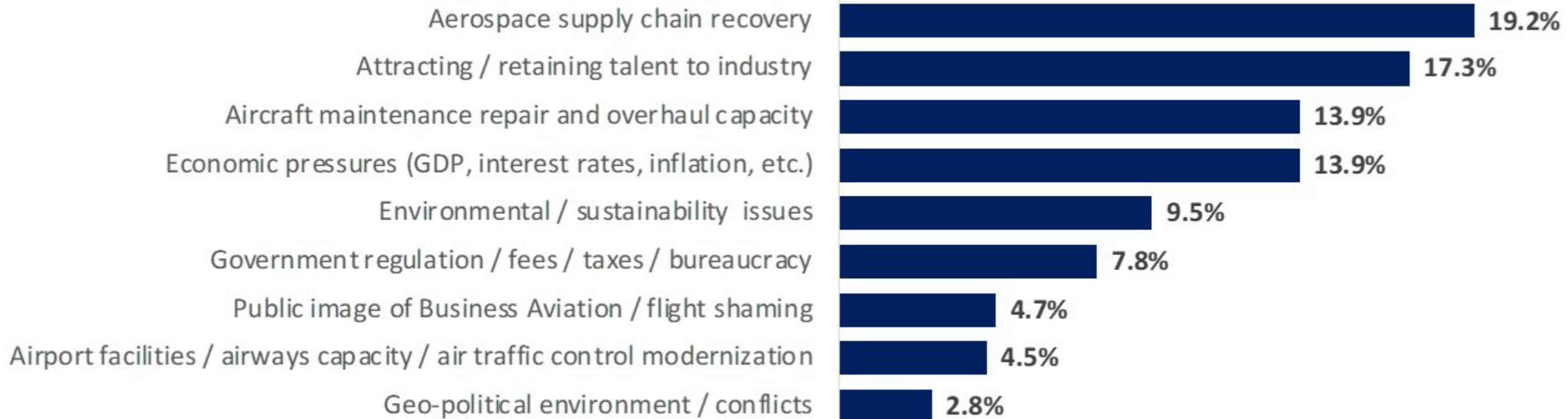
Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Sustainability viewpoints

Biggest challenges facing business aviation in next 5 years?

“Most Important” of Top 3 Mentions
Q1 2023 JETNET iQ Survey



Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Sustainability viewpoints

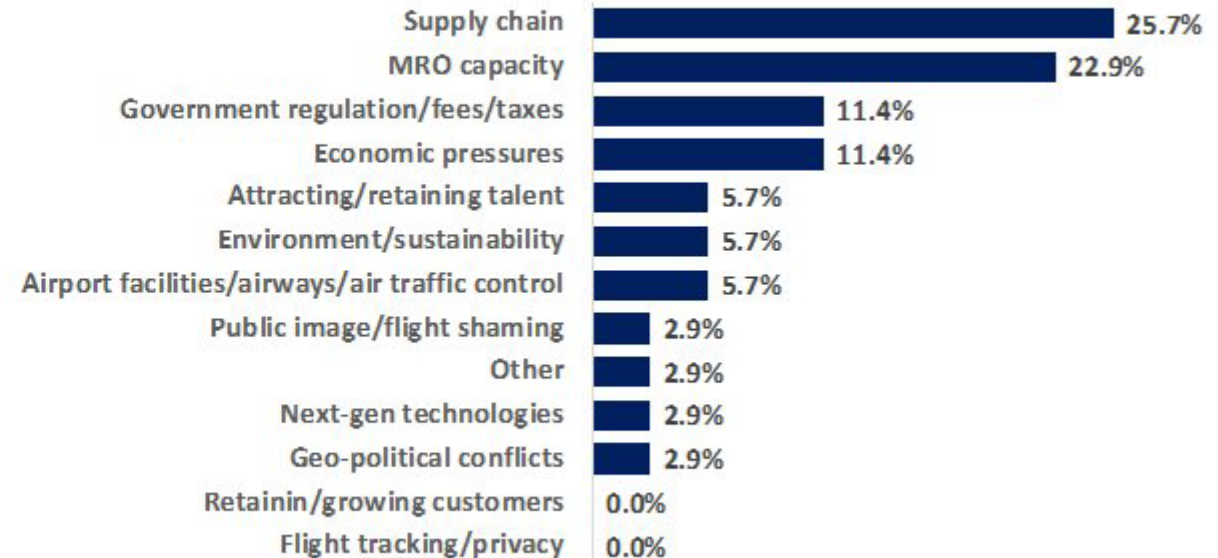
Biggest challenges facing business aviation in next 5 years?

"Most Important" of Top 3 Mentions Q1 2023 JETNET iQ Survey

Europe - Most Important Challenge



Rest of World - Most Important Challenge



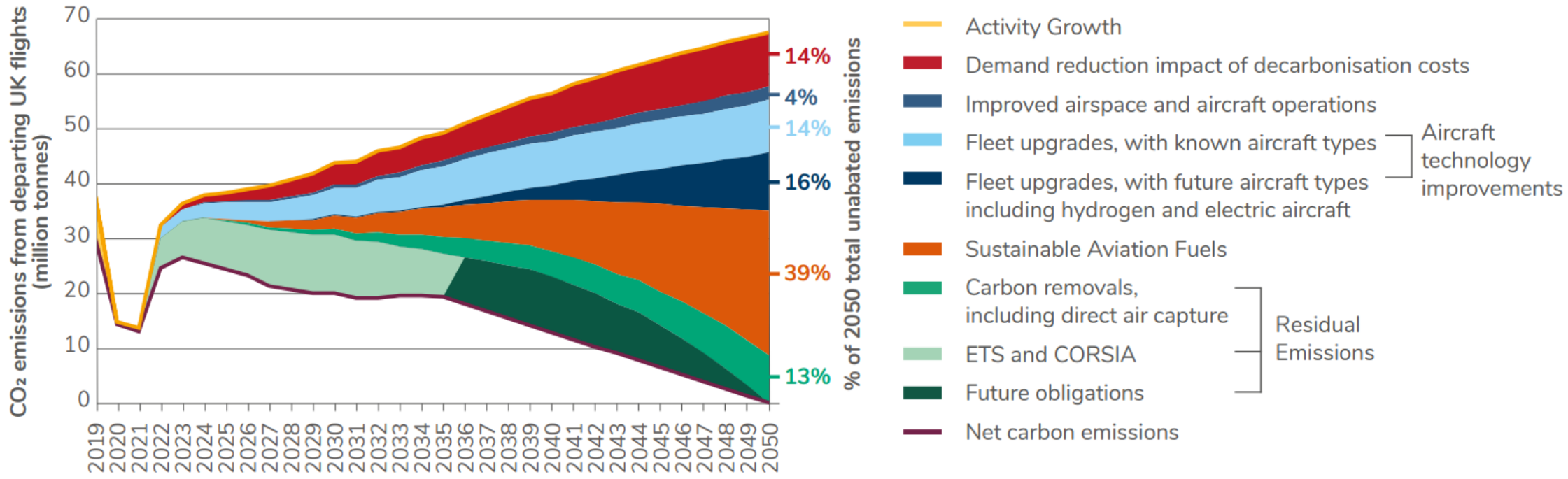
Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Sustainability viewpoints



Sustainable Aviation Net Zero Carbon Road-Map



Got a question? Ask us on Slido! Enter the code #iomac2023 to join.



Sustainability viewpoints

The Road-Map shows the three measures in the aviation sector that can get us three-quarters of the way to net zero:

- **The first 25% of the journey** will come from using more efficient aircraft and modernising airspace – both known solutions. It's always going to make sense to use less fuel.
- **10% will come from changing planes to zero emissions hydrogen planes** on shorter routes – earlier this year saw the first UK flight of a 20-seat ZeroAvia plane powered by hydrogen.
- **The biggest single contribution - 40% of the overall journey - will come from changing fuel to lower carbon Sustainable Aviation Fuel (SAF).** This is proven and has powered nearly half a million commercial flights globally.

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Sustainability viewpoints



Formula 1 Racing

Over its 70 year history, F1 (Biz Av) has pioneered numerous technologies and innovations that have positively contributed to society and helped to combat carbon emissions.

From ground-breaking aerodynamics to improved brake designs, the progress led by F1 teams (Biz Av) has benefitted millions of cars (Aircraft) on the road (in the sky) today. Few people know that the current hybrid power unit is the most efficient in the world, delivering more power using less fuel, and hence CO2 , than any other road car (aircraft)

We believe that F1 (Biz Av) can continue to be a pioneer for the auto (aviation) industry, working with the energy and automotive (transportation) sectors to deliver the world's first net-zero carbon power unit, driving down carbon emissions across the globe.

In launching F1s (Jet Zero 2050) first-ever sustainability strategy, with an ambitious target to be a net zero carbon sport (aviation) by 2030, (2050) we recognise the critical role that all organisations must play in tackling this global issue.

Leveraging the immense talent, passion and drive for innovation held by all members of the F1 (Biz Av) community, we hope to make a significant positive impact on the environment and communities in which we operate.

Got a question? Ask us on Slido! Enter the code #iomac2023 to join.





Afternoon networking break:

15:00 – 15:30

Davidson's ice-cream kindly sponsored by:



Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.



Realities of the future – can aviation transition?

Presented by

Chris Bigwood, Connectivity Sales Manager at Honeywell Aerospace

David Hernandez, Shareholder at Vedder Price

Melanie Daghish, Director at ITIC

Robert Baltus, COO at EBAA

Simon Williams, Director of Civil Aviation at Isle of Man Aircraft Registry

Got a question? [Ask us on Slido!](#) Enter the code [#iomac2023](#) to join.

The Jetsons are coming to town



Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



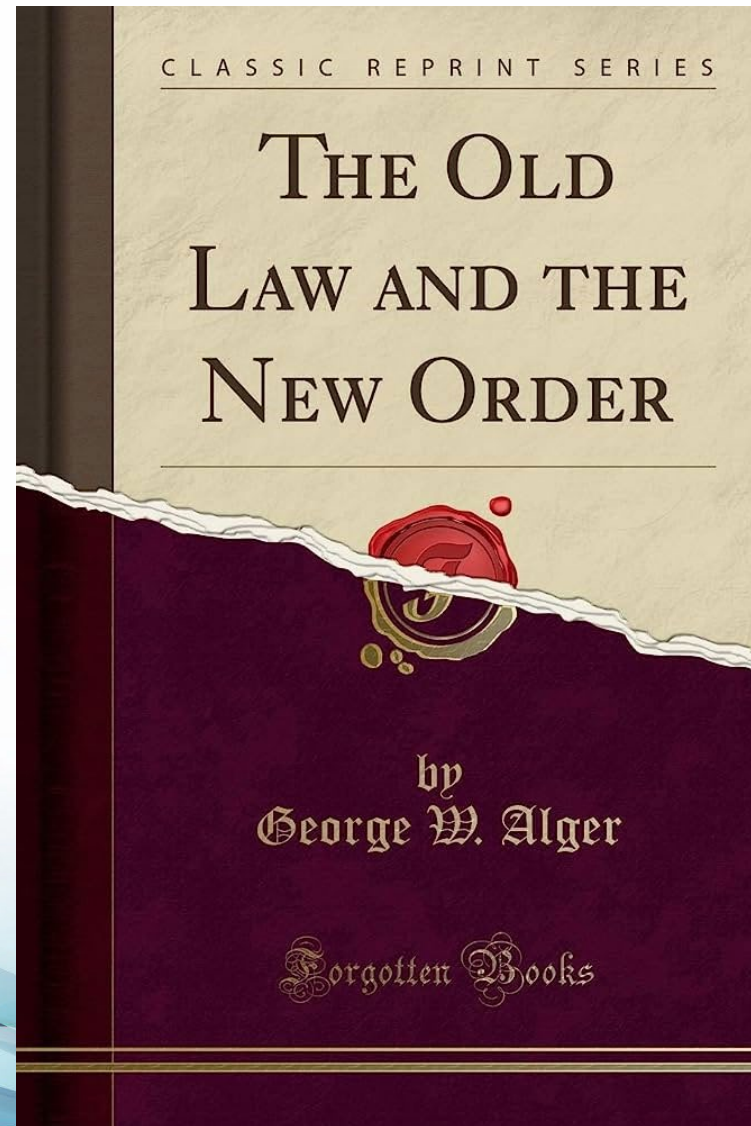
What are the Challenges?

Some key themes come to mind:

- Certification, safety regulation & insurance
- Nascent battery technology
- The nature of urban operations
- Recruitment
- Training
- Integration into a legacy, overcrowded & highly challenging environment

Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.





Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Urban Ops & Battery Tech



Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Recruitment



Got a question? Ask us on Slido! Enter the code **#iomac2023** to join.



Training



Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Integration



Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.



Summary & Panel Discussion



Got a question? [Ask us on Slido!](#) Enter the code **#iomac2023** to join.





Closing remarks

Presented by

Dave Edwards, Chief Executive at Royal Aeronautical Society

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