



ROOPE KEKÄLÄINEN
LYGG CEO
Co-Founder

REIMAGINING REGIONAL TRAVEL

PLATFORM'S UNLOCKING UNTAPPED TRAVEL NEEDS
AND FUTURE TECHNOLOGIES

Education:

- + Flight Instructor FI(A)
- + Commercial airline pilot CPL(A), ATPL(A)

Background:

- + Founder Private Skies Oy 2014-2020
- + Founded an Airline Europe's second SE-IMC AOC certificate 2016
- + Co-Founder and CEO of the worlds first regional air-travel platform LYGG



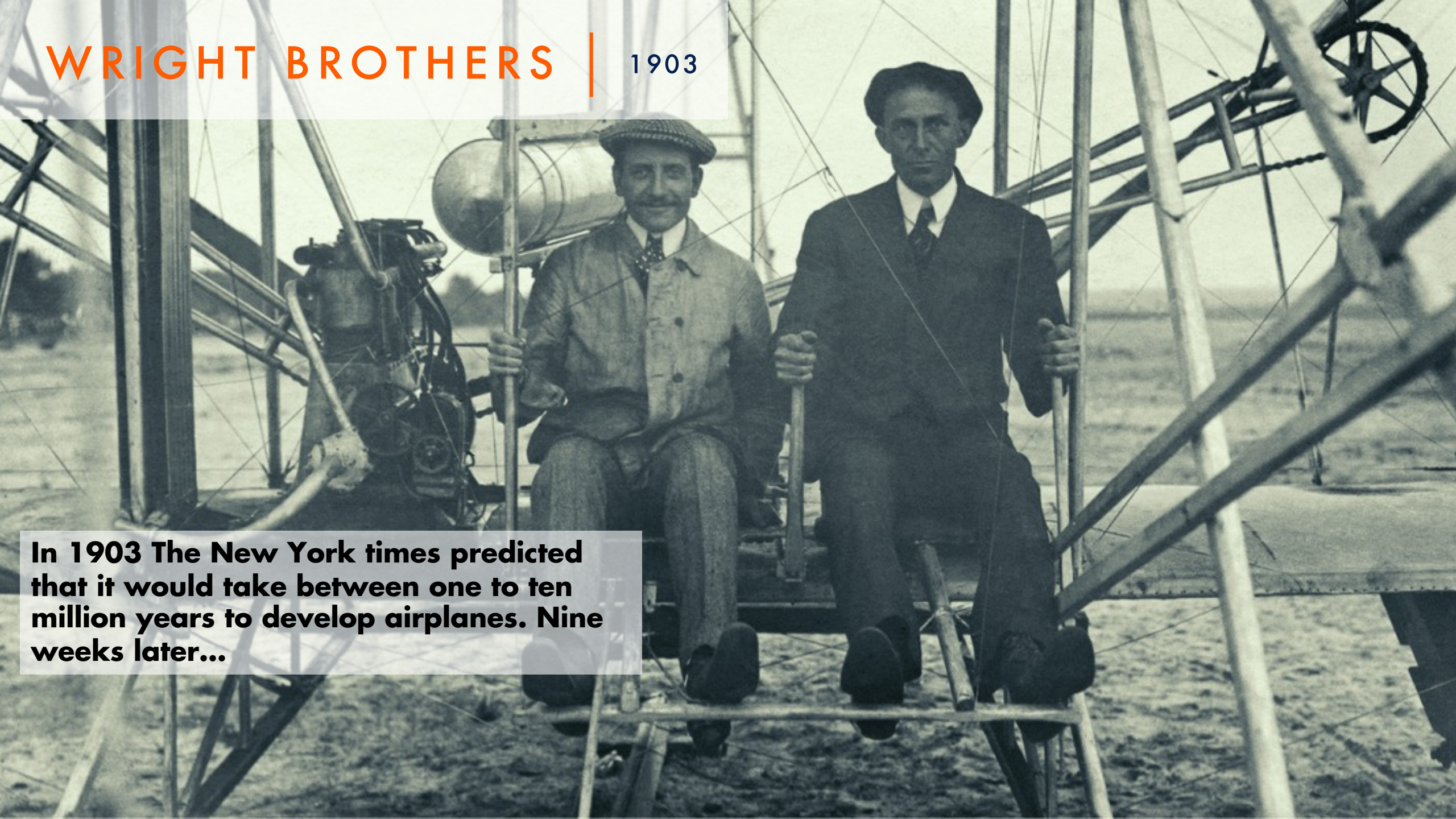
ROOPE KEKÄLÄINEN
CEO, CO-FOUNDER

Mission: "Changing aviation to a force for good"

WRIGHT BROTHERS

1903

In 1903 The New York times predicted that it would take between one to ten million years to develop airplanes. Nine weeks later...



11 YEARS LATER

1914 FIRST COMMERCIAL FLIGHT



33 YEARS LATER

1936 PLANE THAT CHANGED THE WORLD DC-3



48 YEARS LATER

REVOLUTION OF COMMERCIAL JET AIRLINERS
1951



67 YEARS LATER

1970 BOEING 747 ENTERED SERVICE



REVOLUTION

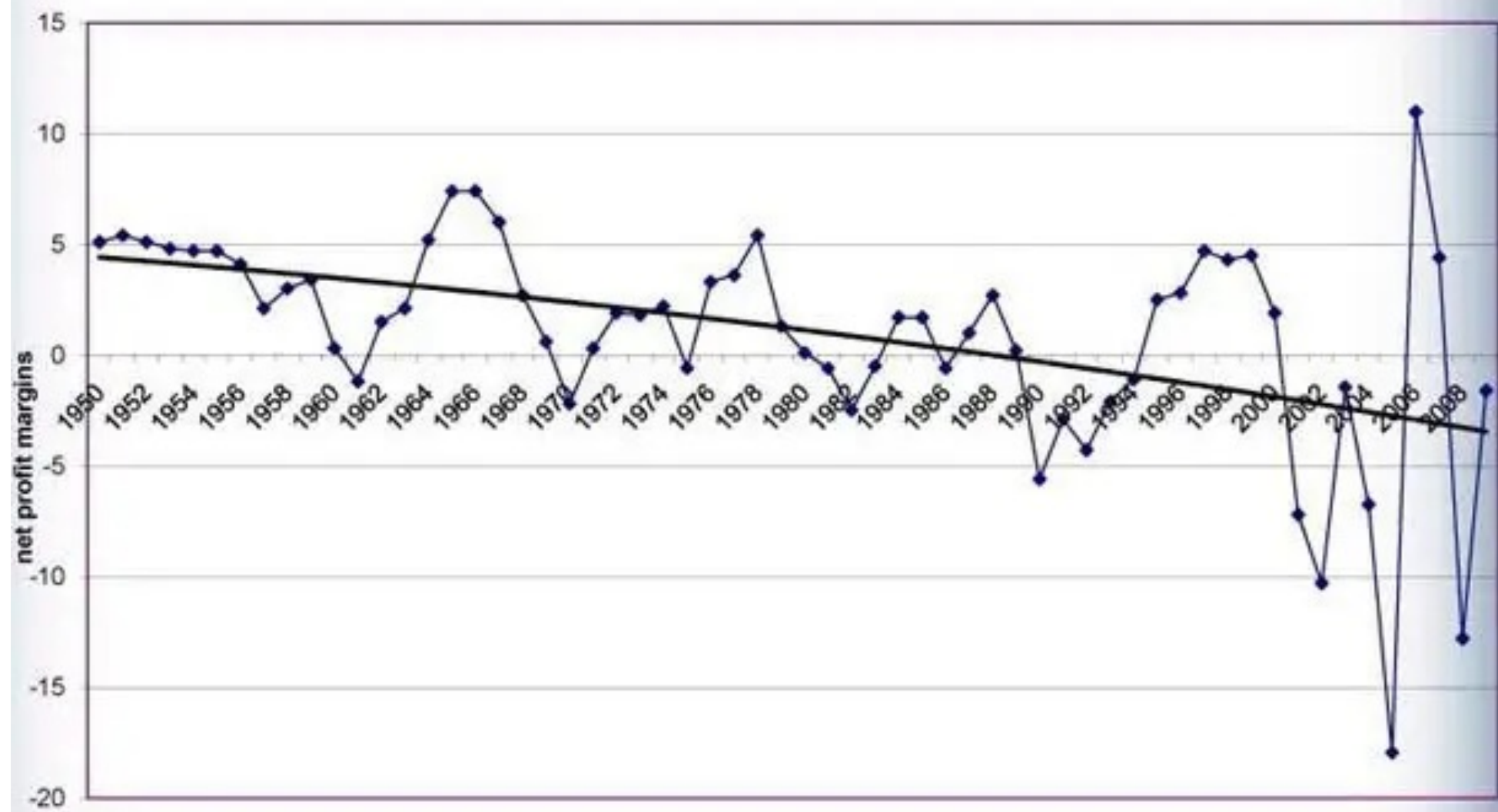
LOW-COST CARRIERS 1973



Average Round-Trip U.S. Domestic Airfares Inflation-Adjusted 2011 Dollars, 1979 to 2011



US AIRLINE INDUSTRY NET PROFIT MARGINS 1950-2009



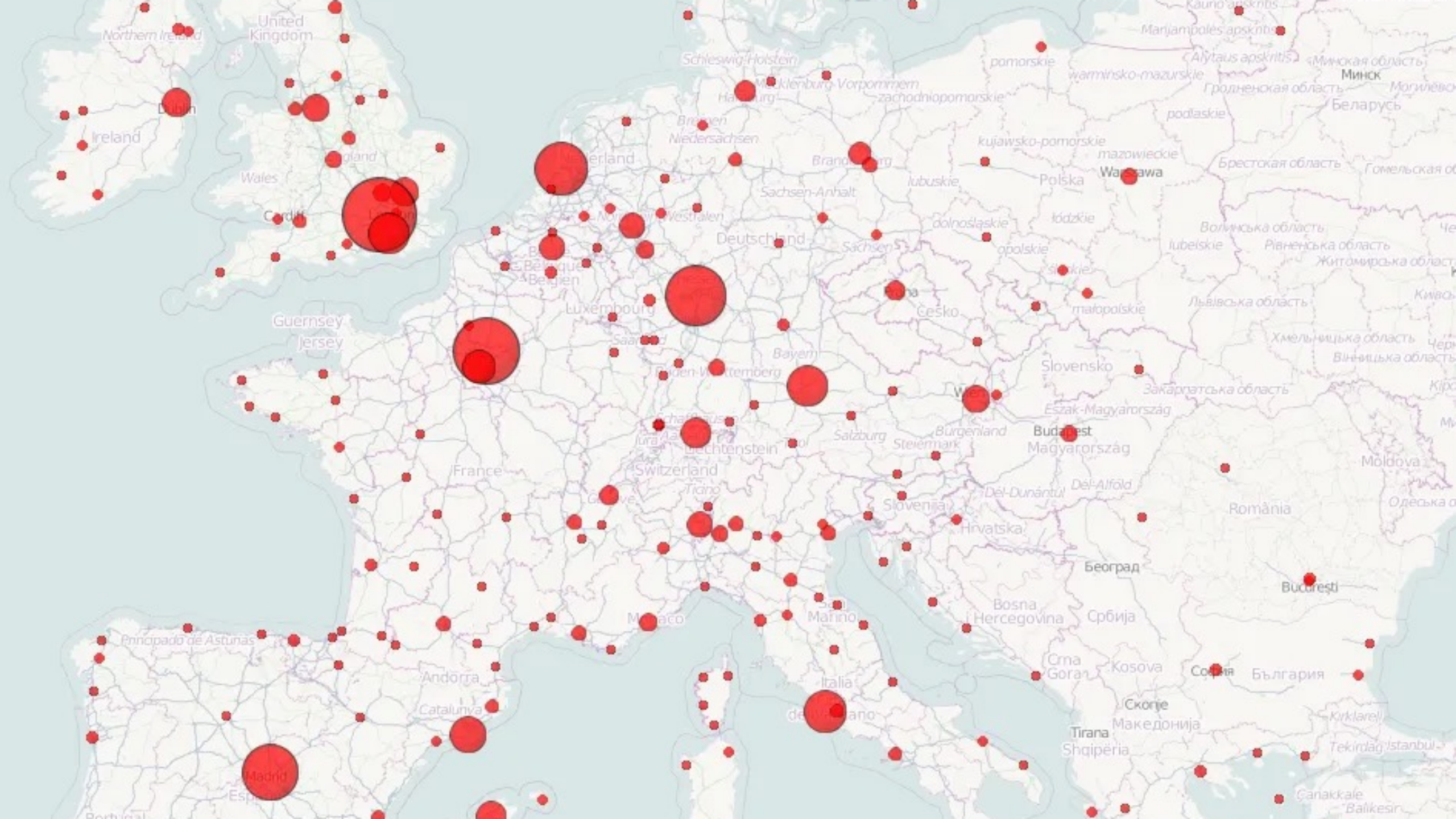


Lufthansa

Airbus A380-800
東京 Tokyo





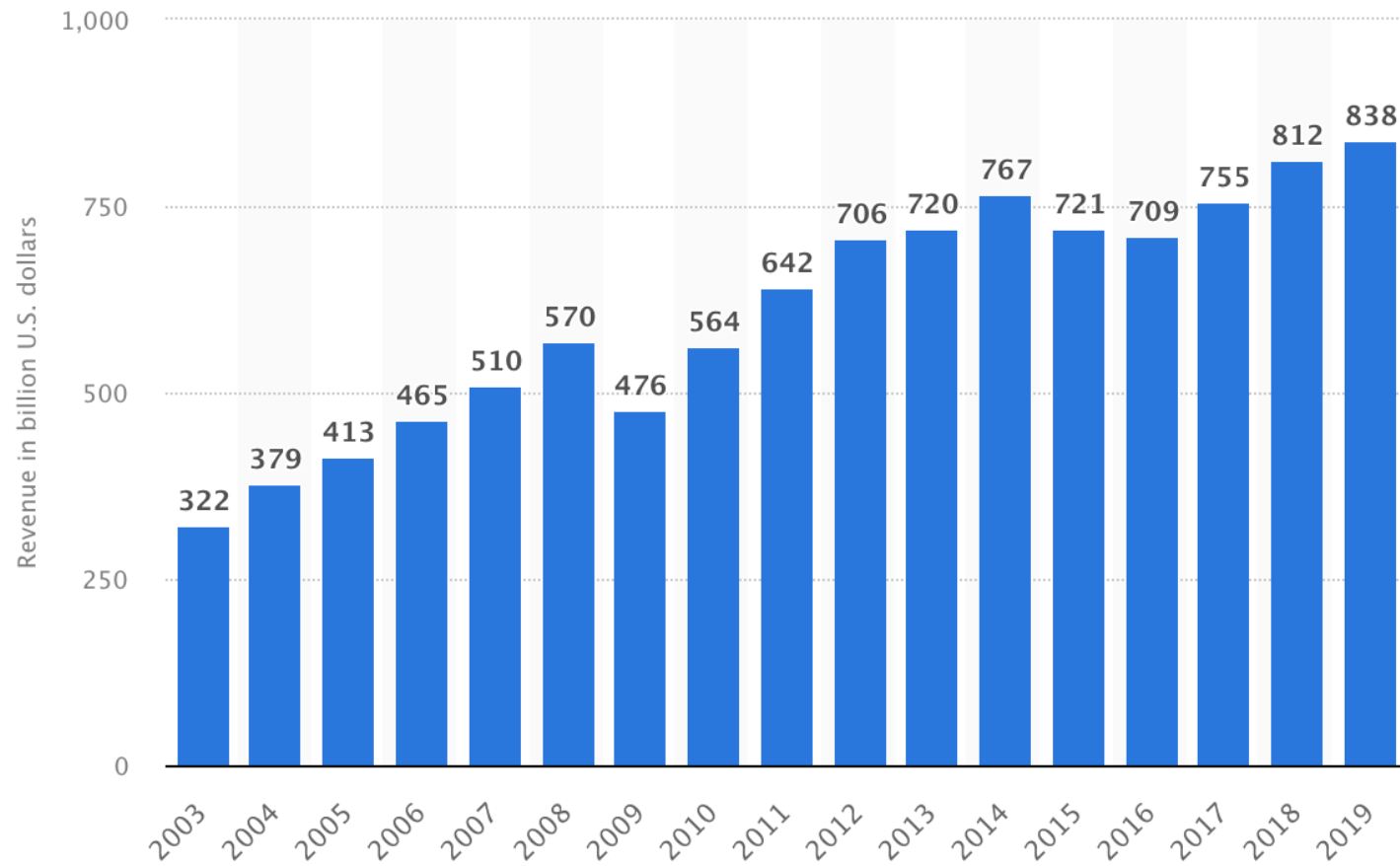




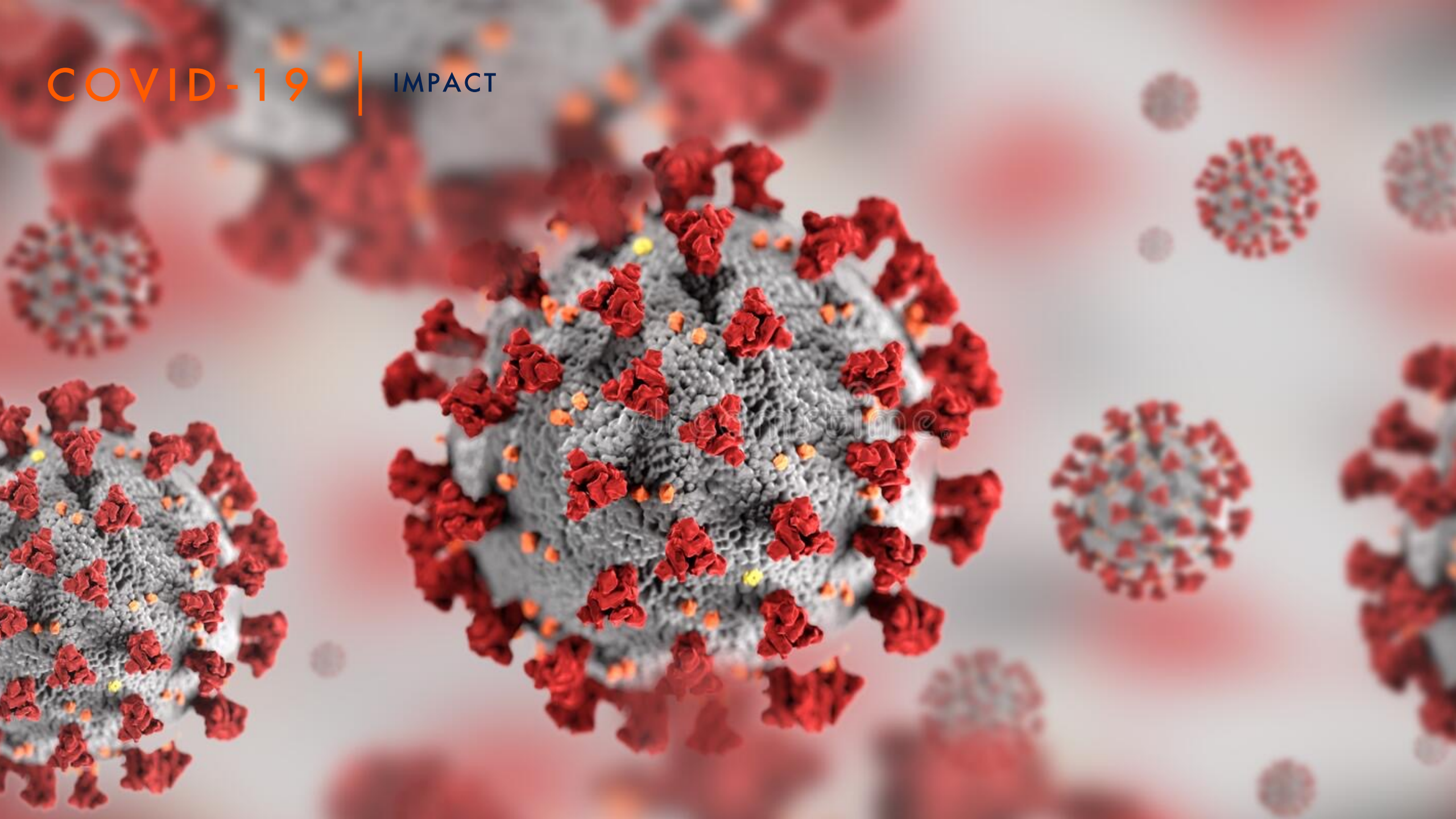


REVENUE

COMMERCIAL AIRLINES WORLDWIDE 2003-2019



COVID-19 | IMPACT



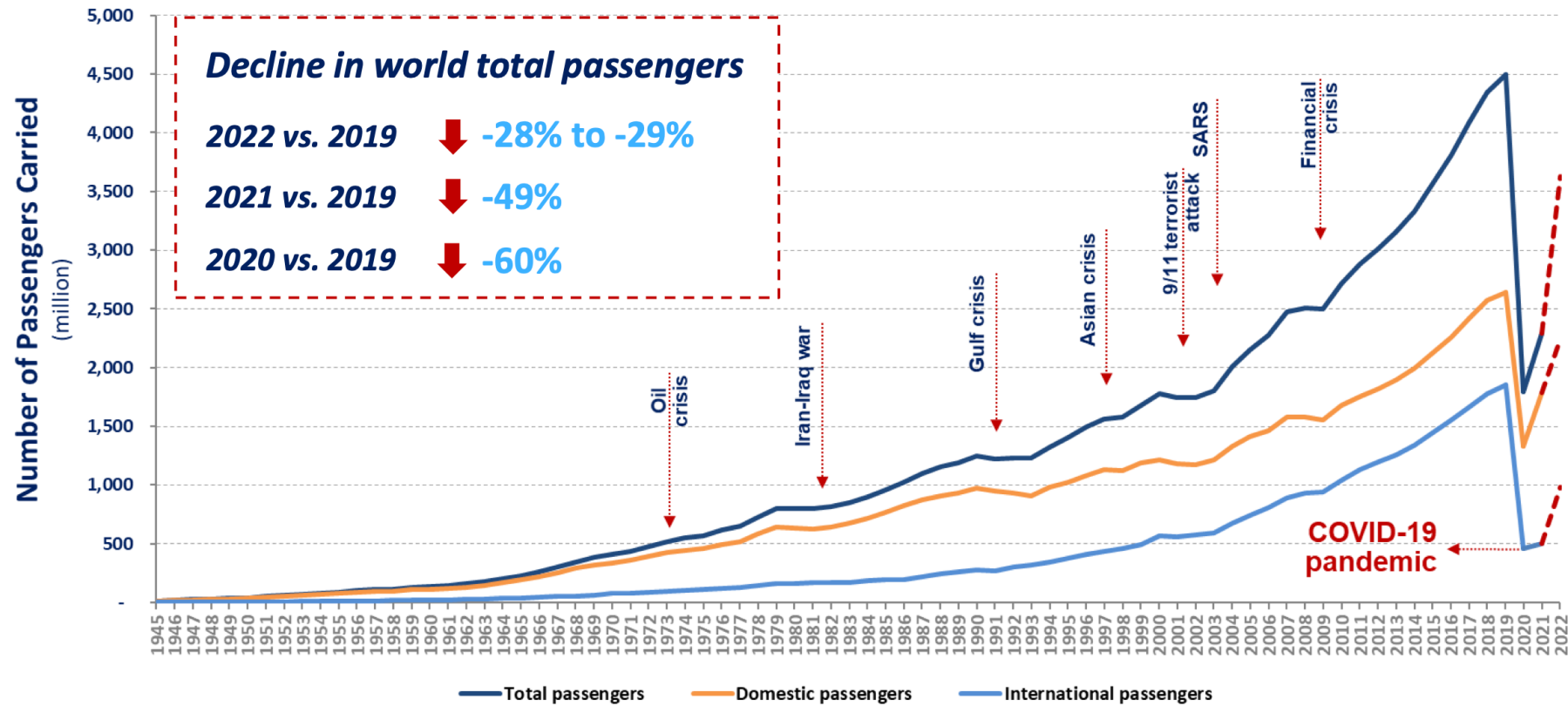
Air travel down 60 per cent, as airline industry losses top \$370 billion: ICAO

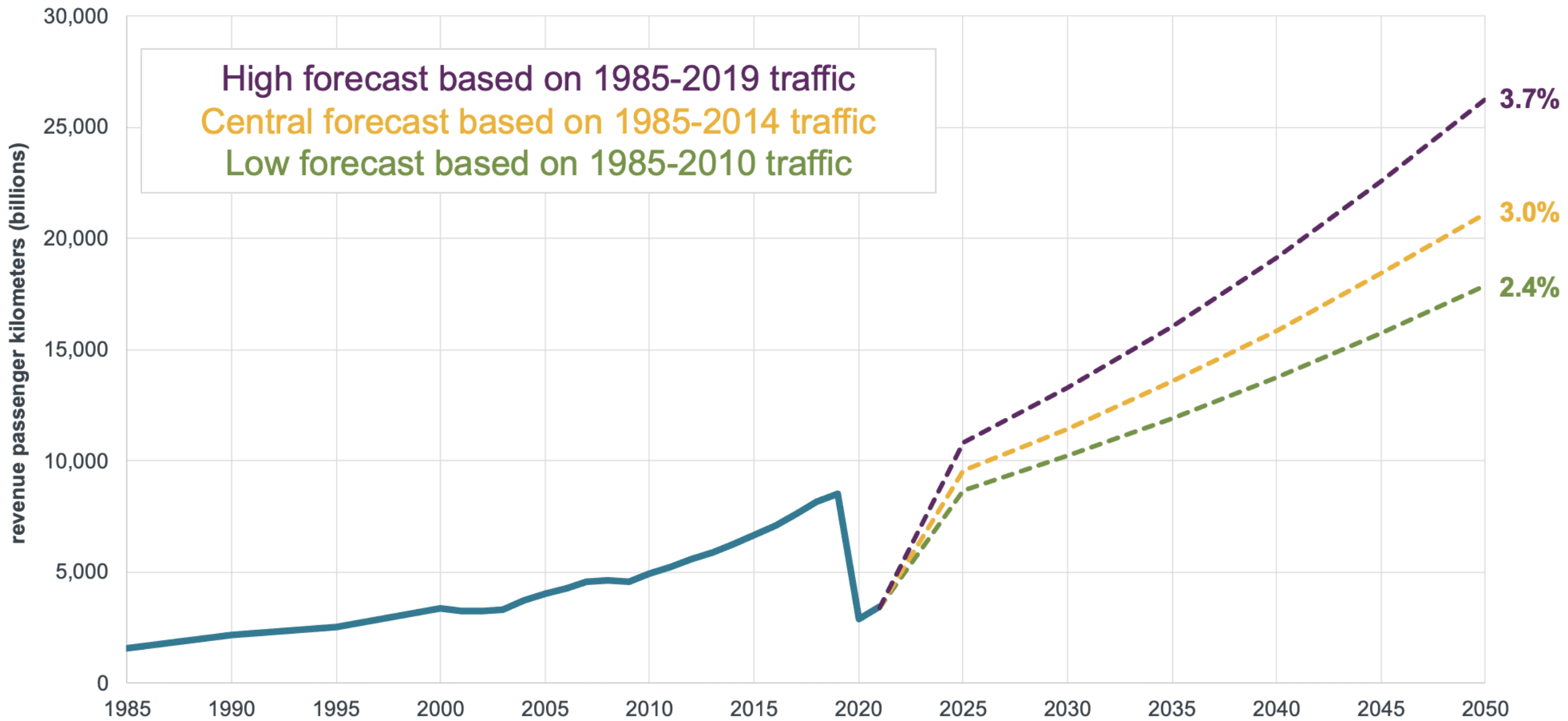
Covid-19: challenging time ahead for aviation

Smaller regional airports have recorded the greatest decline in direct flight connections, particularly in passenger flights. Treviso (Italy) lost 95% of its connections, Vaasa (Finland) 91%, Quimper (France) 87%, and Burgas (Bulgaria) 82%.

Regional airports are key for the economic recovery and territorial cohesion in the EU

World passenger traffic evolution 1945 – 2022



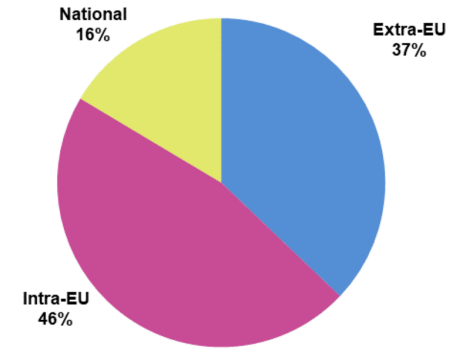


Source: International Council of clean transportation

REGIONAL TRAVEL

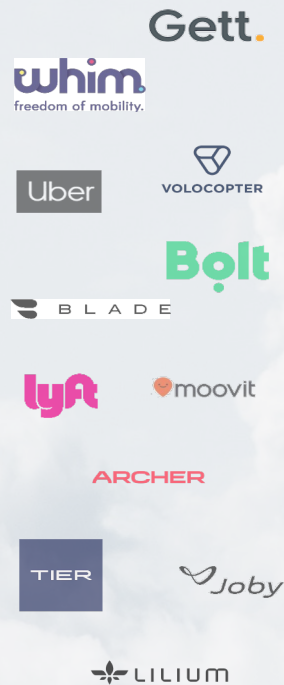
MODES OF TRAVEL

Overview of EU-28 air passenger transport in 2018



HOP!

INTRA-CITY TRAVEL <200KM



Social Factors

- ✓ CO2 min
- ✓ Local community benefits

FIX

- ✓ Big cities
- ✓ Fixed routing & schedules
- ✓ Large crowds
- ✓ Big infrastructure

REGIONAL TRAVEL 250-1000KM



Max wellbeing

- ✓ Corp. & Individual productivity
- ✓ Time savings
- ✓ Competitiveness
- ✓ Max comfort

FLEX

- ✓ Regional cities
- ✓ Flexible routes & schedules
- ✓ No crowds
- ✓ Less infrastructure

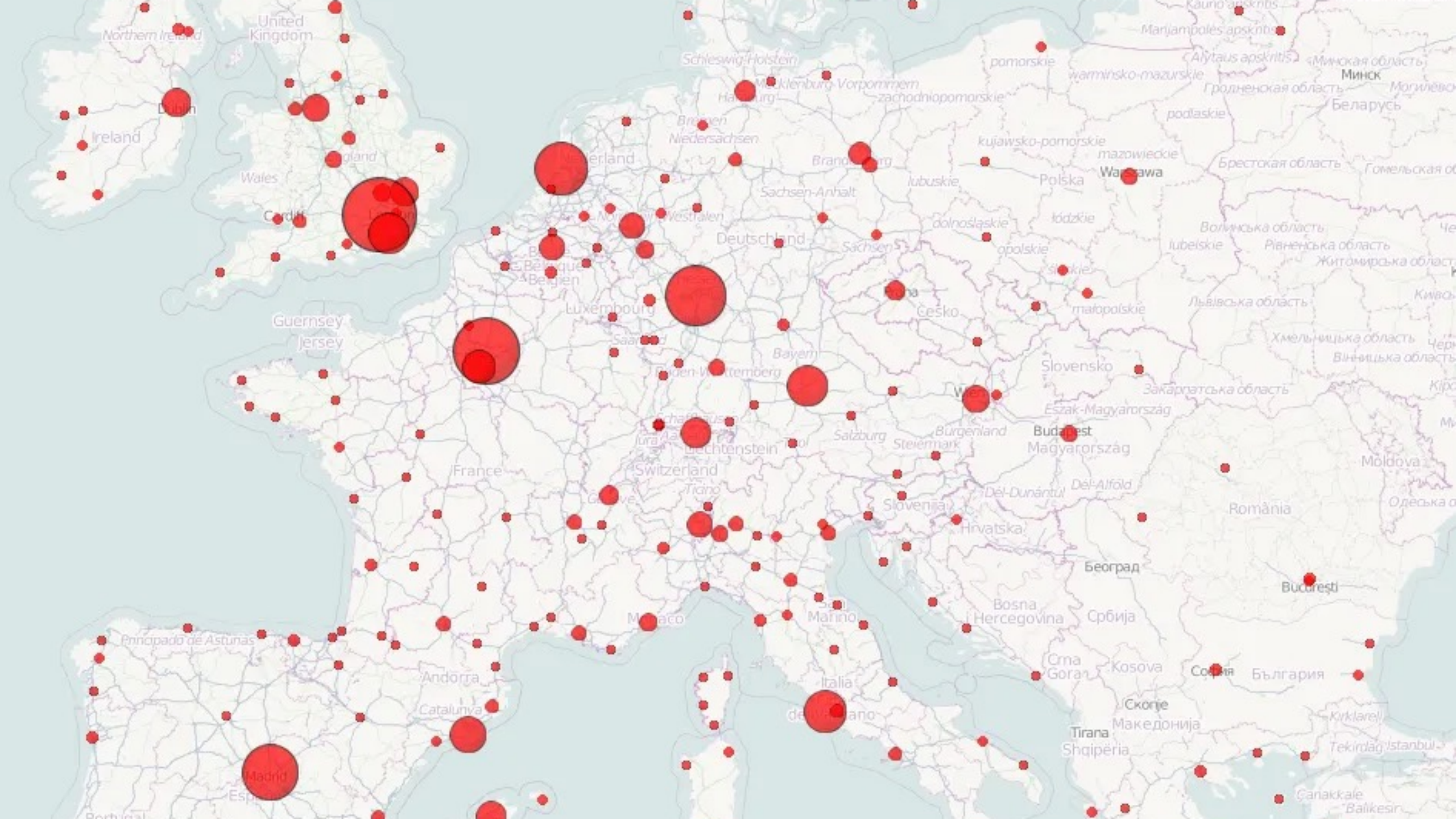
Personal factors

- ✓ Time savings
- ✓ Minimal number of modals and/or changes

LONG-HAUL TRAVEL >2000KM



Opportunity to revolutionise regional travel and improve well-being and productivity





SUSTAINABLE DEVELOPMENT



ROOM FOR A LOT TO CHANGE

- Better for the environment
 - New technology innovations
 - New business models
- Faster connections
 - New business model
- More flexible and tailored solutions for the regions
 - New business model

→ NEW WAY OF THINKING

NEARLY ANYTHING CAN FLY...





E-VTOLS 2029?

SOLUTION FOR SHORTER RANGE



VERTICAL TAKE-OFF
AND LANDING



ZERO OPERATING
EMISSIONS



ONE PILOT + FOUR
RIDERS



150 MILE MAX
RANGE



200 MPH TOP SPEED



10+ YEARS IN
DEVELOPMENT

HYDROGEN 2030?

SOLUTION FOR LONGER RANGE

TIME 2030

Hydrogen-Powered Planes Could be the Best
Bet For Greener Air Travel



?

2025

9-19 seats
300 NM range
First commercial
offering

FULL ELECTRIC 2035?

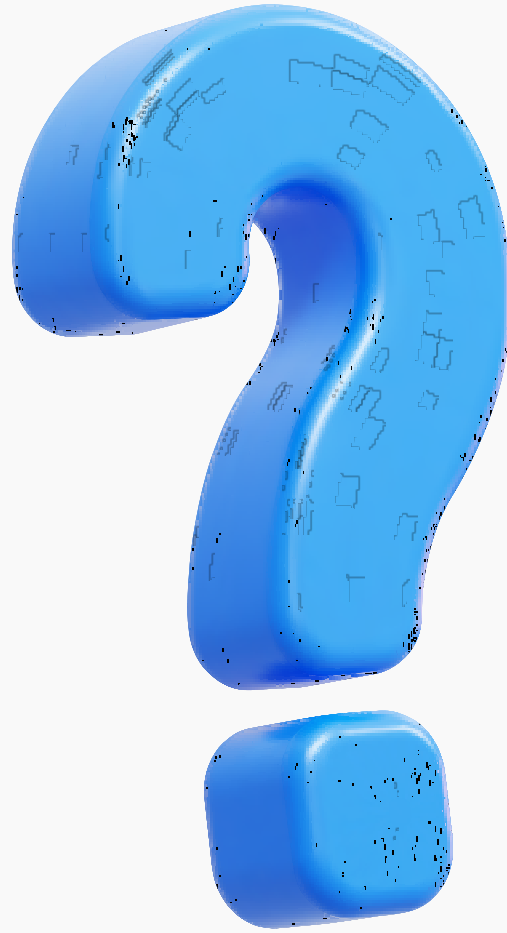
SOLUTION FOR MEDIUM RANGE



HYBRID 2027

SOLUTION FOR ADAPTION





TRADITIONAL AIRLINES

DON'T SOLVE THE PROBLEM



LOW-COST CARRIERS

DON'T SOLVE THE PROBLEM EITHER



NOVELTIES

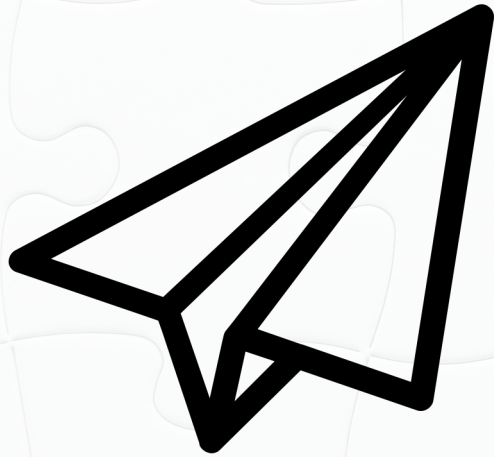
FOR THE WORLD'S 1%



HOW DO WE FIX IT



True need from companies



Suitable equipment available today
and future innovations around the corner.
Infrastructure ready in place.



Innovative new business model

LARGE AIRLINES

STUCK WITH THEIR BUSINESS MODEL



Lufthansa CEO: "It is time to take it to the next level"

- New seats in all classes
- Upgrade catering and worldwide lounge network
- Boost digital services
- Improve ground services in Frankfurt

- Achieving this means €2.5bn investment and that is just until 2025
- Lufthansa Group: over 750 aircraft, smallest aircraft 100 seats

Source Monocle January 2023

Low-Cost carriers 2023-

- Will grow in primary airports
- Leisure travellers will be the driver in growth
- Average plane size 150 seats



“LYGG is the first in the World business travel platform that brings direct and customized connections to any desired area as a service

LYGG concept is a true disruptor in aviation opening a totally new market where time, costs and CO2 are saved”



IN THE NEWS

- ✓ "Aviation's new model flies from Tampere to Stockholm"
- ✓ "The World's first Air & Taxi service in one APP"
- ✓ "LYGG to build a commuter-belt through its smart mobility platform"
- ✓ "LYGG offers a comprehensive and fast travel experience"



LOVED BY CUSTOMERS

- ✓ "Using LYGG we can utilize Finnish work force in the Swedish market to grow faster and increase performance."
— **Kimmo Riihimäki** CEO Vesivek
LYGG route: Tampere – Stockholm
- ✓ "The chauffeur service and flight are designed in such a way that you can continue without delay"
— **Jacob Wert** Aviation reporter
LYGG route: Frankfurt – Luxembourg – Frankfurt
- ✓ "Ridiculously awesome service"
— **Rubert Hoffschmidt** Co-Founder The Axel Springer Consulting Group
LYGG route: Berlin – Prague – Berlin
- ✓ "A new era of travel has started"
— **Timo Dreissigacker** JW Marriott Group
LYGG route: Frankfurt – Paris – Frankfurt
- ✓ "Very efficient 'flow' at the airport, possibility of walking through without any kind of hold-up on the way, a very low risk of unexpected complications"
— **Travel Manager** Leading Pharmaceutical Company
LYGG route: Frankfurt – Oostende – Frankfurt

90% CO2 REDUCTION TODAY

EMISSION FREE TOMORROW

UP TO
90%
REDUCTION

UP TO
95%
REDUCTION

EMISSION **FREE**

2030

Emission Free Aircraft

2027

Hybrid Aircraft

2024

Direct Connection & SAF



Co2 Reduction

NESTE MY
Sustainable Aviation Fuel

SAFs can reduce
carbon emissions by
80%
in comparison to using
fossil-based fuels.

AMPAIRE



ELECTRA

**Heart
Aerospace**

ZERO AVIA

LILIUM

VOLOCOPTER



LYGG POTENTIAL

MAXIMIZING CO2
REDUCTION FOR CORPORATE
TRAVELLERS ALREADY TODAY

CREATES USECASE AND
DEMOCRATISE
THE FUTURE EMISSION FREE
INNOVATIONS

90% REDUCTION ON CO2

CASE TAMPERE – STOCKHOLM

1

Direct connection vs travel via Helsinki
reduces 43% of Co2 per traveler
171kg Co2 vs **93 kg Co2**

Direct flight
43%
saved

2

Sustainable Aviation Fuel reduces up to
80% of Co2 compared to traditional Jet
Fuel (ICAO) 171kg Co2 vs **18 kg Co2**

SAF
80%
saved

3

Direct connection reducing 43% and
SAF reducing 80% of the actual Co2
consumption reduces 89% of Co2
compared to travelling via Helsinki

TOTAL
89%
saved

LYGG TRAVELLER VISITING STOCKHOLM

18kg Co2

DRIVING A CAR FOR 330 km

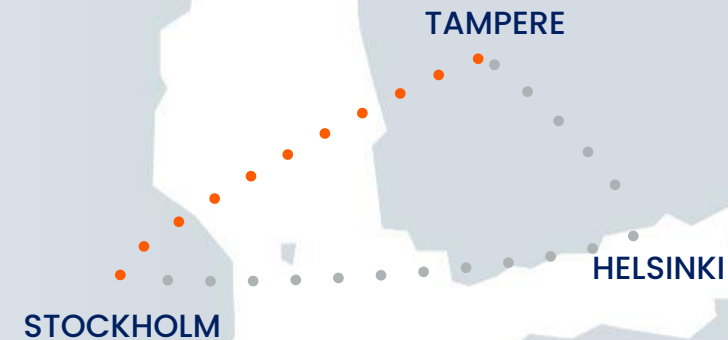
47kg Co2

SPENDING ONE NIGHT IN A HOTEL

26kg Co2

RETURN FLIGHT HEL – STO

98kg Co2



HYBRID 2027

SOLUTION FOR ADAPTION



- ✓ Low infrastructure requirements
- ✓ >70% lower operating cost than eVTOL
- ✓ Straightforward path to certification as a fixed-wing aircraft

CO2 reduction

-50%

Cost reduction

-25%

9 passengers
2,500 lbs + 1 Pilot

500 miles
plus 45 min reserve

200 MPH
Cruise speed

300FT x 100FT
Ground footprint
No charging infrastructure
required

75 dBA at 300FT
Quiet takeoff comparable to urban
ground traffic

EIC TRANSITION

Project HYBRID – Reducing Co2 up to 95% in Regional Airtravel



European
Innovation
Council



COMPANY
CONFIDENTIAL



The European Innovation Council Transition project HYBRID targets to showcase and scale up to 95% Co2 reduction in pan-European regional aviation

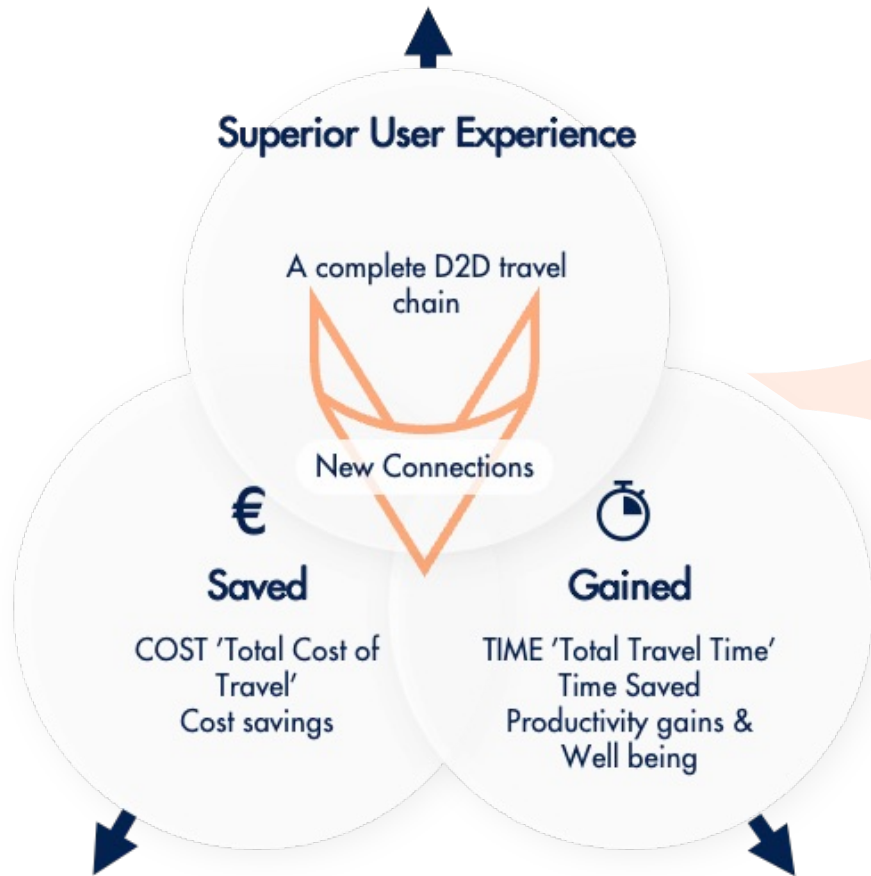
The project HYBRID's each selected consortium member and funding support from EIC Transition program have a pivotal role in changing regional aviation for better

The project HYBRID consists of four key phases:

- 1** Showcase up to 90% reduction within operations in Finland from Helsinki-East aerodrome. The focus on digital aerodrome services, the use of Sustainable Aviation Fuel, charging of hybrid aircraft, dynamic planning, and smart asset allocation
- 2** Scaling the concept to central Europe, enabling outcomes that benefit local communities, companies, and individuals at large
- 3** Scale, with funding support from EC and European Investment Fund to upgrade European aircraft with a new hybrid engines
- 4** Build on continuous transition towards electric aviation and STOL aircraft, including concepts for short takeoff and landing strips from central locations

BENEFITS

FOR EVERYONE



Individuals



Time savings



Reducing stress

Companies



Cost savings



Employee wellbeing

Regions



Economical growth



Connectivity

Environment



CO2 reduction



Sustainability effort

LYGG

Gross profit margins >60%

Possibility for exponential growth

TAM = €1,500bn (Aviation)

SAM = €600bn (Corporate Aviation)

SOM = €0,4bn (LYGG Share 2028)

Corporates as contract clients

Predictable and stable cashflow

EMPIRICAL EVIDENCE TAMPERE – STOCKHOLM

IMPACT STUDY USING ACTUAL DATA FROM CORPORATE CLIENT



1

Corporate makes agreements with LYGG, direct connections as a service starts **reducing travel overheads**

2

Unique service **saves time** and **improves productivity**

3

Direct connection, right sized assets and innovative use of 100% Sustainable Aviation Fuel **disrupt Corporate travel** for better and **reduce Co2**

SELECTED CLIENTS IN TAMPERE



360€ Serial seats average

One Person

Total Travel Costs



Total Travel Time



Total Emissions



TAMPERE

HELSINKI

STOCKHOLM

One Corporate



TOTAL GAINS

+1.1 M€



CASE TAMPERE – STOCKHOLM

SCHEDULE FOR BUSINESS TRAVELLERS, EASY PRICING

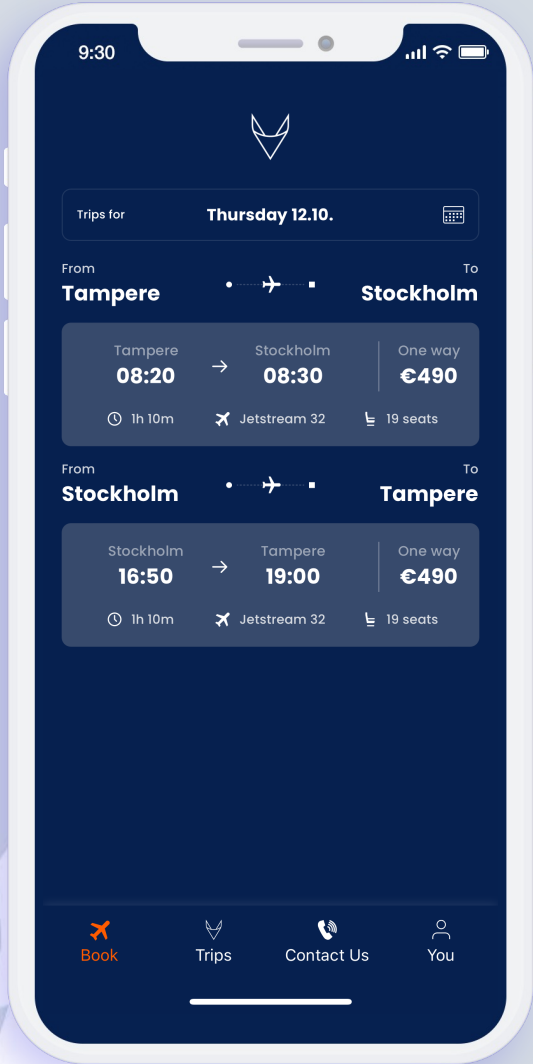
Tampere - Bromma	08:20	08:30	Ma – Pe
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Bromma - Tampere 16:50 19:00 Ma – Pe

Scheme	Price / Oneway Discount %	
Pay Go	490,00 €	
Serial Ticket: 2 oneway tickets / month	441,00 €	10 %
Serial Ticket: 4 oneway tickets / month	431,20 €	12 %
Serial Ticket: 6 oneway tickets / month	421,40 €	14 %
Serial Ticket: 8 oneway tickets / month	411,60 €	16 %
Serial Ticket: 10 oneway tickets / month	401,80 €	18 %
Serial Ticket: 20 oneway tickets / month	367,50 €	25 %
Serial Ticket: 30 oneway tickets / month	343,00 €	30 %
Serial Ticket: 40 oneway tickets / month	318,50 €	35 %
Serial Ticket: 50 oneway tickets / month	294,00 €	40 %

Changes and cancellations: free of charge up to 24 hours prior to departure.

No-show fee 150 € (fail to arrive 10 minutes prior to departure)



SMART ASSET ALLOCATION

6-9 SEATRES



SMART ASSET ALLOCATION

18-33 SEATRES





Lygg

THANK YOU!

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