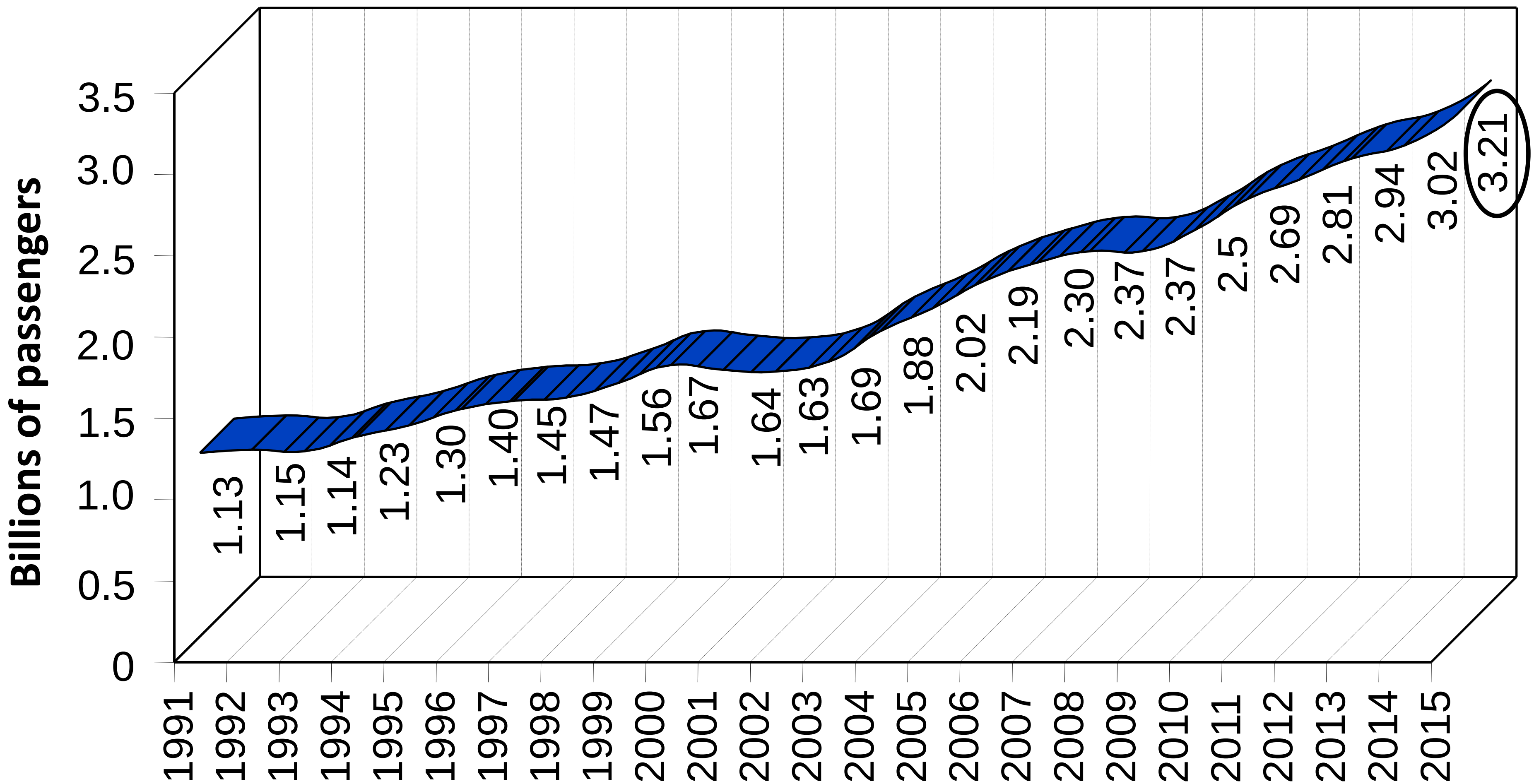
The Changing Trends in the International Airline Industry

Dr Frankie O'Connell

Annual Tourism Policy Workshop

Dromoland, 2016

Number of passengers carried worldwide (1991 – 2015)



Source: O'Connell, IATA, ICAO, AEA, AAPA, ATA, AACO

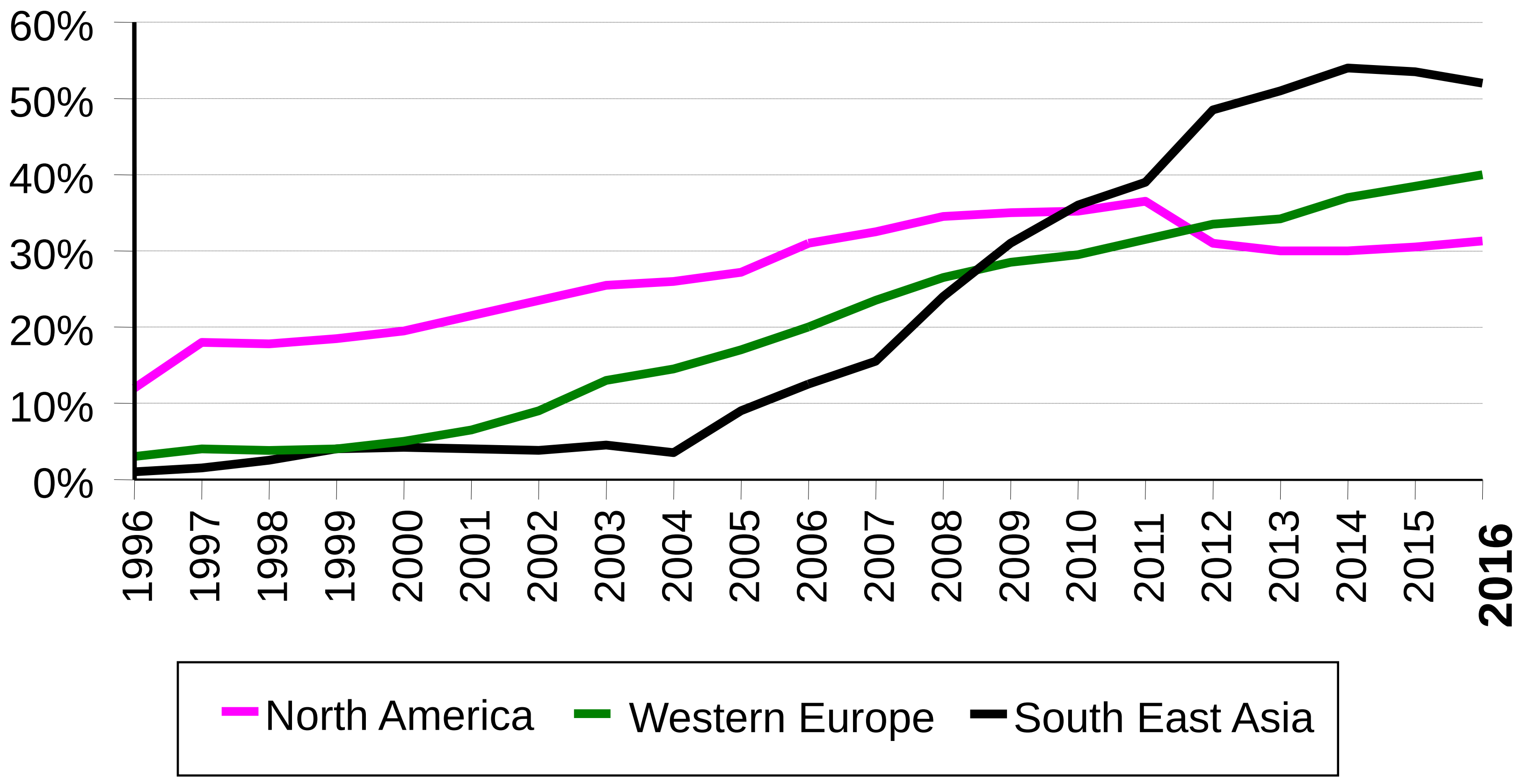
Passenger Traffic transported by different airline* business models 2003 - 2015

	2003	2015	% change
Full Service Airlines	1.3 billion	2.17 billion	67%
Low Cost Carriers	178 million	862 million	384%
Regional Airlines	147 million	107 million	-27%
Charter Airlines	83 million	78 million	-6%
Total	1.7 billion	3.21 billion	89%

* Share by top 200 world airlines

Source: O’Connell, ICAO, AEA, ATA, AAPA, AACO

LCC Penetration in N. America, W. Europe and S.E. Asia
1996 - 2016



Source: O'Connell Analysis from OAG, 2016

Geographical Distribution of Passenger Traffic*

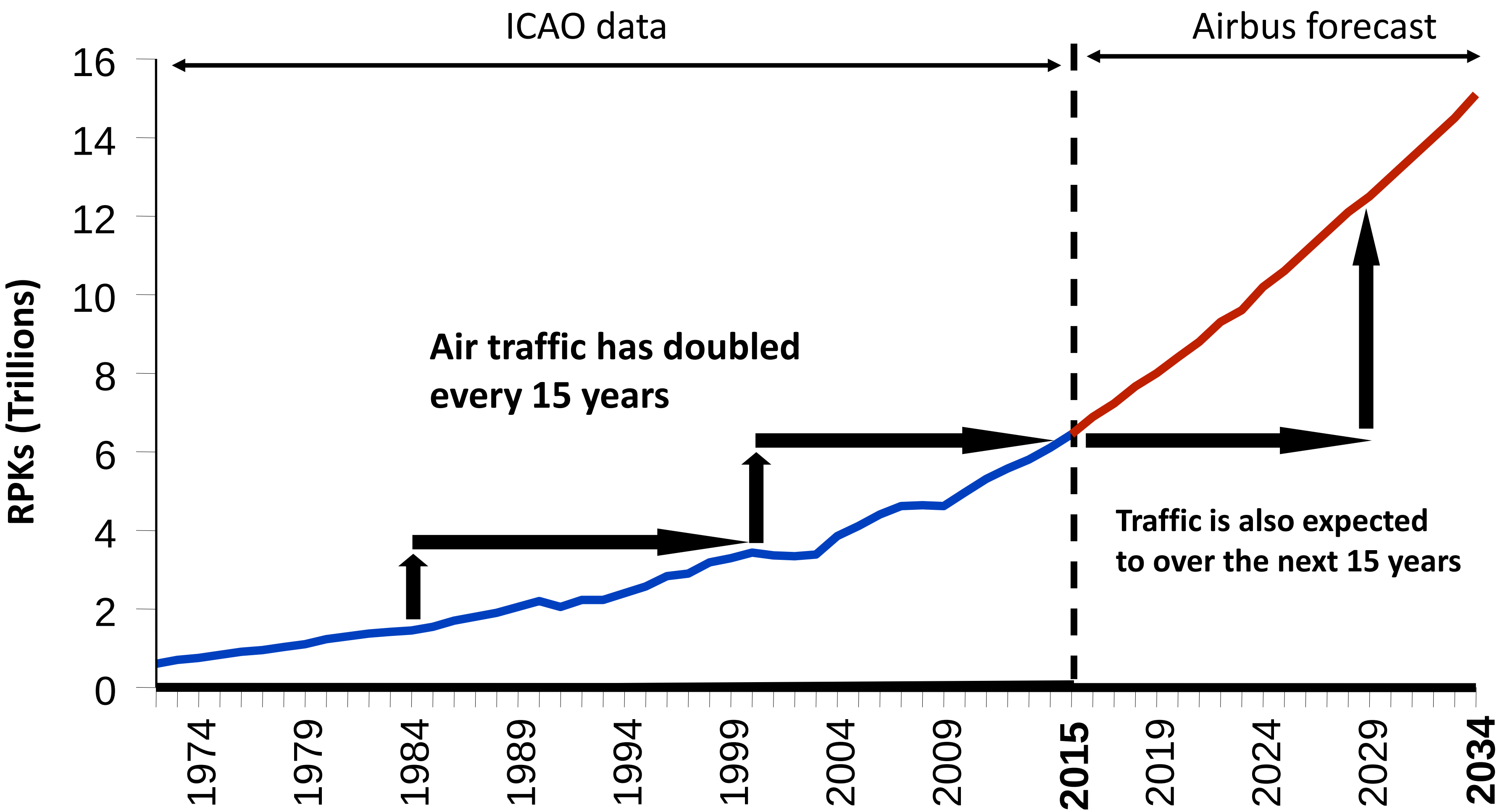
2000 - 2015

	Passengers 2000 (millions)	Passengers 2015 (millions)	% Change
North America	726	924	27%
Europe	420	868	107%
Asia-Pacific	378	1,035	174%
Central/South America	82	181	120%
Middle East	**44**	**173**	**293%**
Africa	29	34	17%
Total	1.67 billion	3.21 billion	92%

* Share by top 200 world airlines

Source: O'Connell, ICAO, AEA, ATA, AAPA, AACO

World Traffic Forecast (measured in RPKs)
1972 - 2034



What is driving this traffic?

Source: ICAO and Airbus GMF 2015

Main Drivers for Traffic Growth

People exploring – Tourism (e.g. Egypt)

More economic prosperity – growing middle class (now at 2.7 billion people)

Dynamic growth in emerging markets (China, India, Asia Pacific, Latin America)

Continued growth of Low Cost Carriers (particularly in Asia)

Greater and continued market liberalisation worldwide

More demand for overseas holidays and for short-breaks

Wealthier people buying second homes overseas

Businesses Travel is strongly connected to International Trade and Commerce

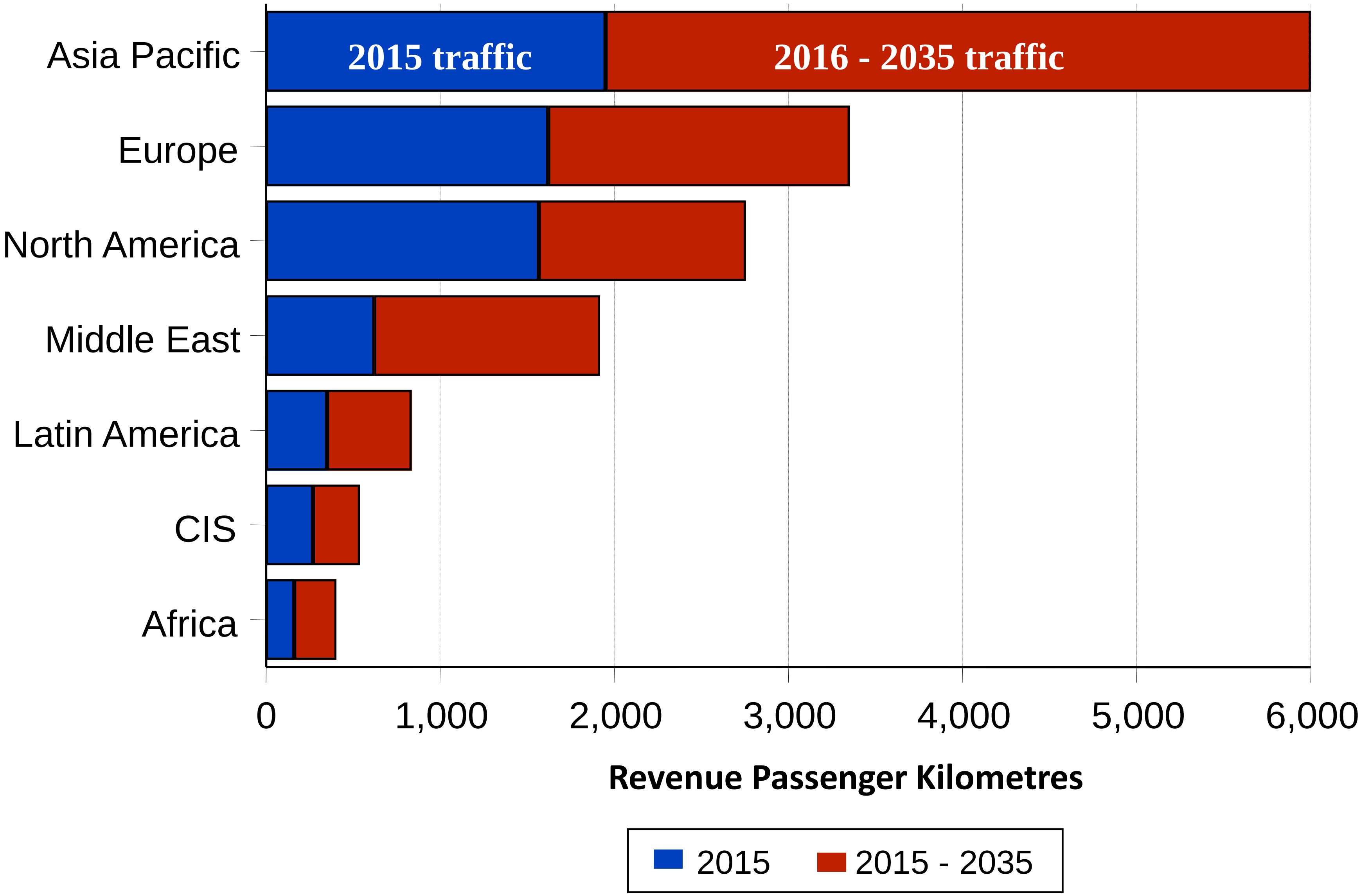
Strong correlation between Economic Prosperity and growth in Traffic

215 million people live outside their country of birth (many family and friends will visit)

700,000 foreign students study in the US for example (many family and friends will visit)

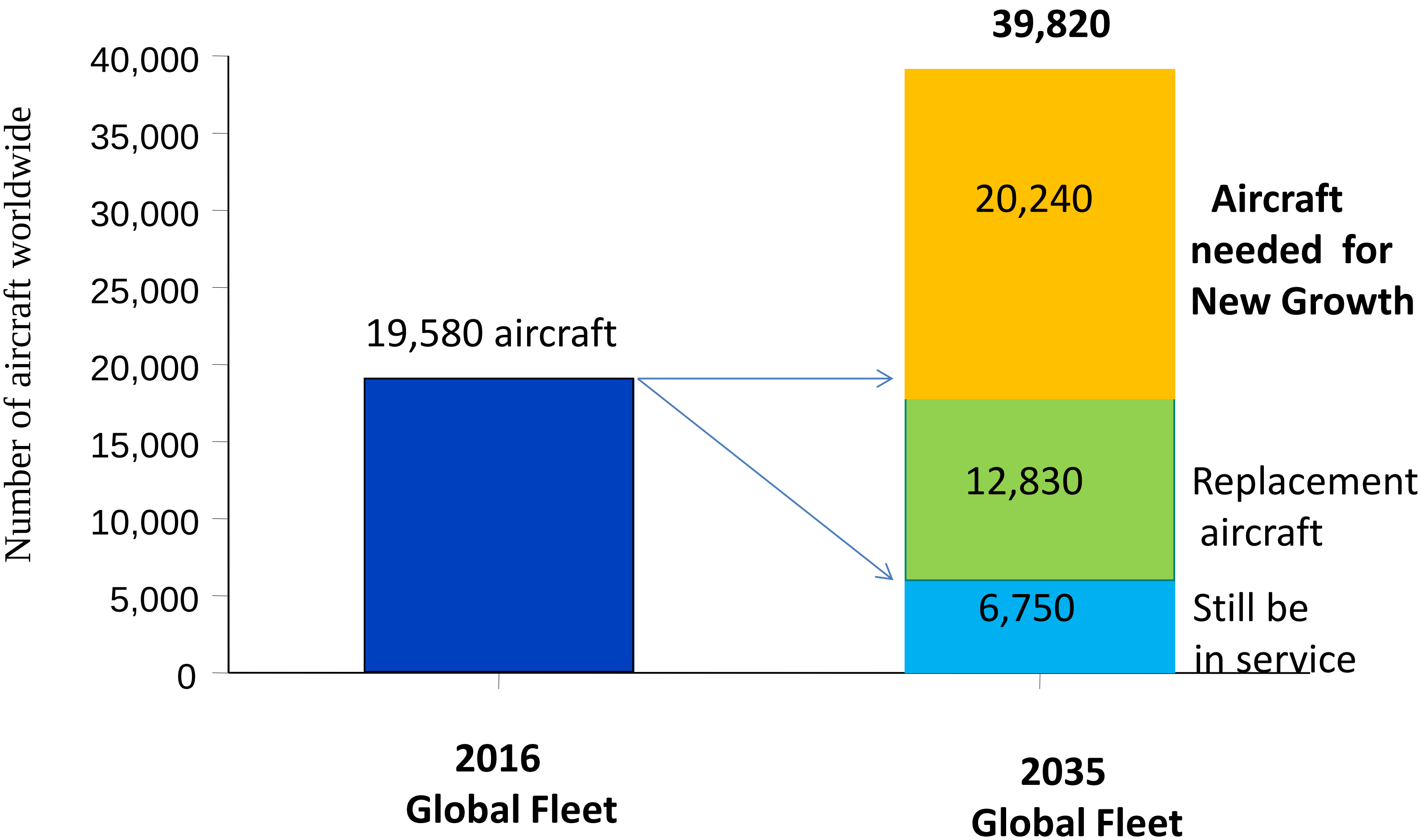
Long term growth prospects of air traffic (2015- 2035)

In terms of Revenue Passenger Kilometres (demand)



Source: Airbus General Market Forecast 2016

Fleet evolution
2016 - 2035



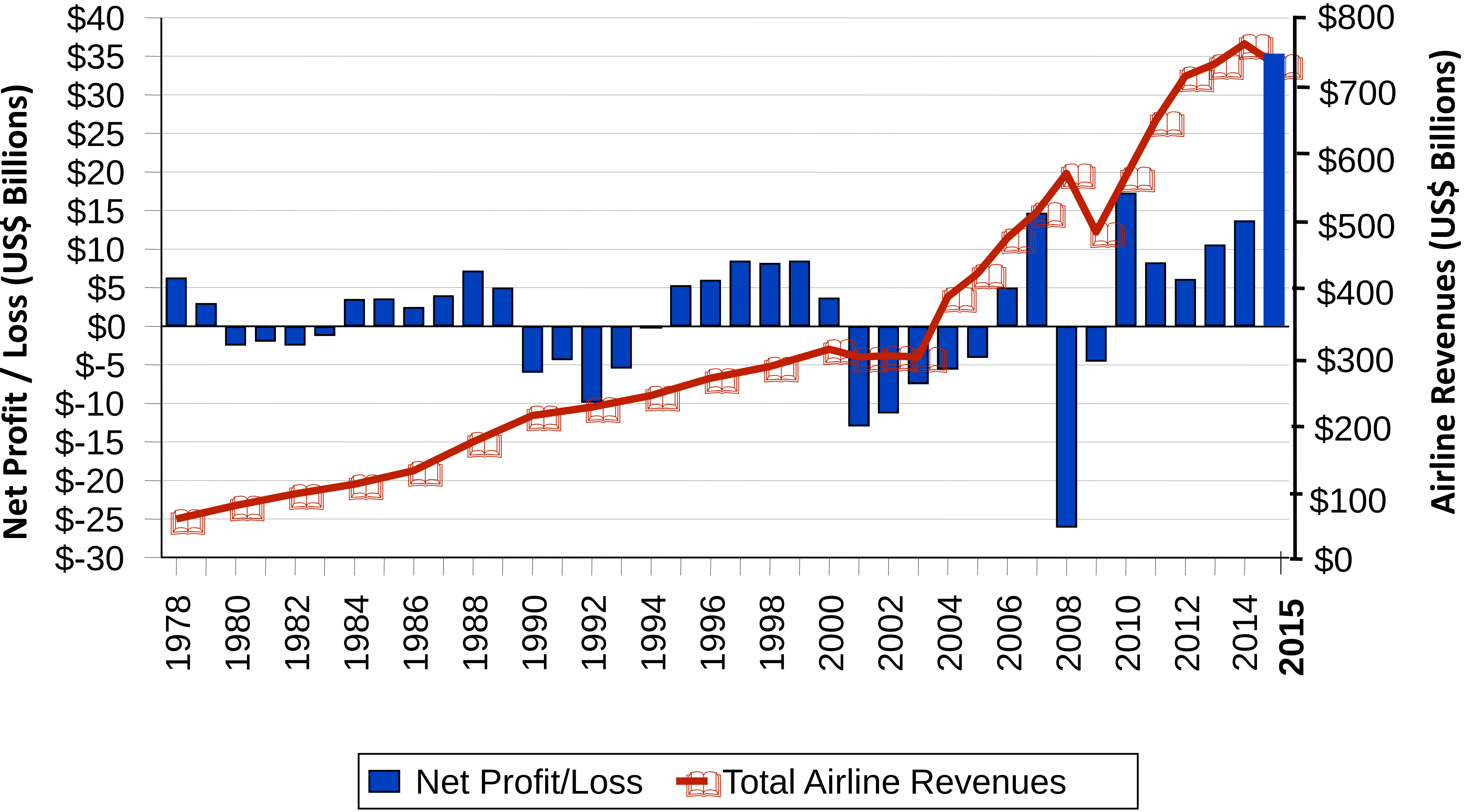
33,070 New Aircraft by 2035

These 33,000 new planes will be worth around US$5 trillion over the next 20 years

Source: Airbus General Market Forecasts 2016

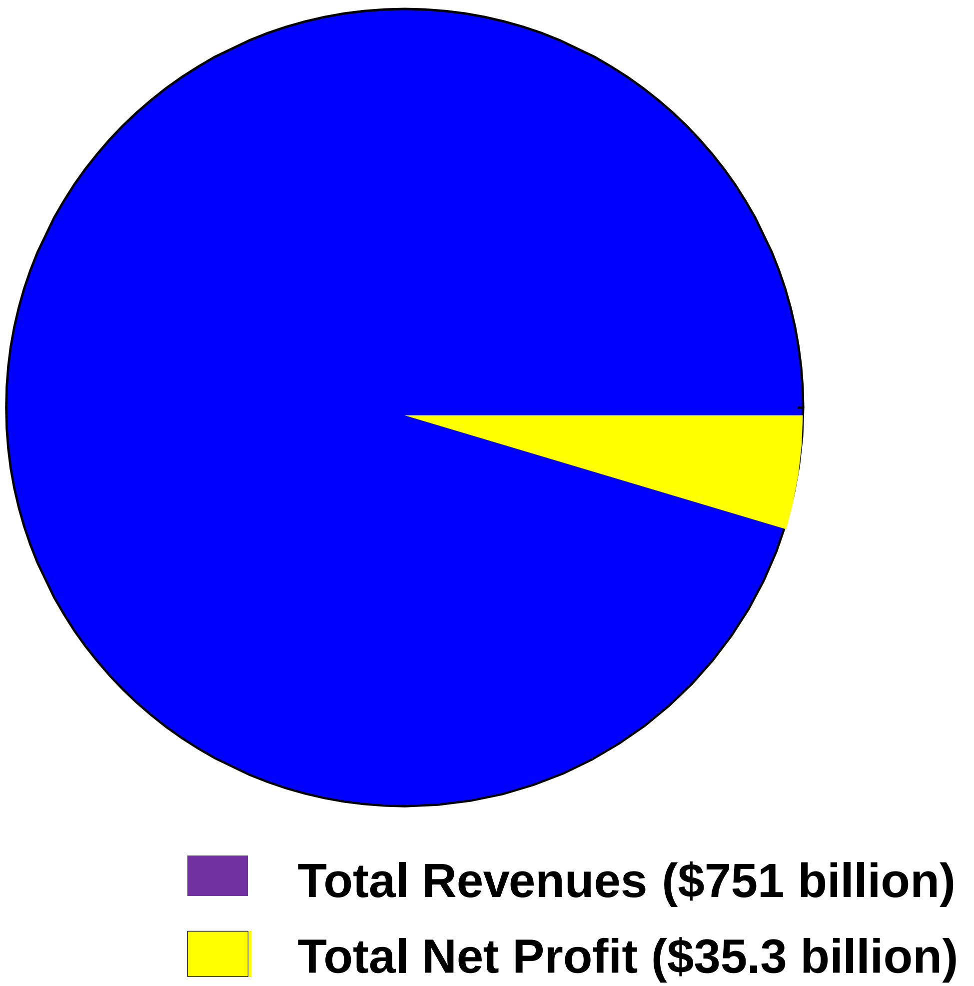
Net Profit/Loss and Revenues for World Commercial Airlines

1978 - 2015



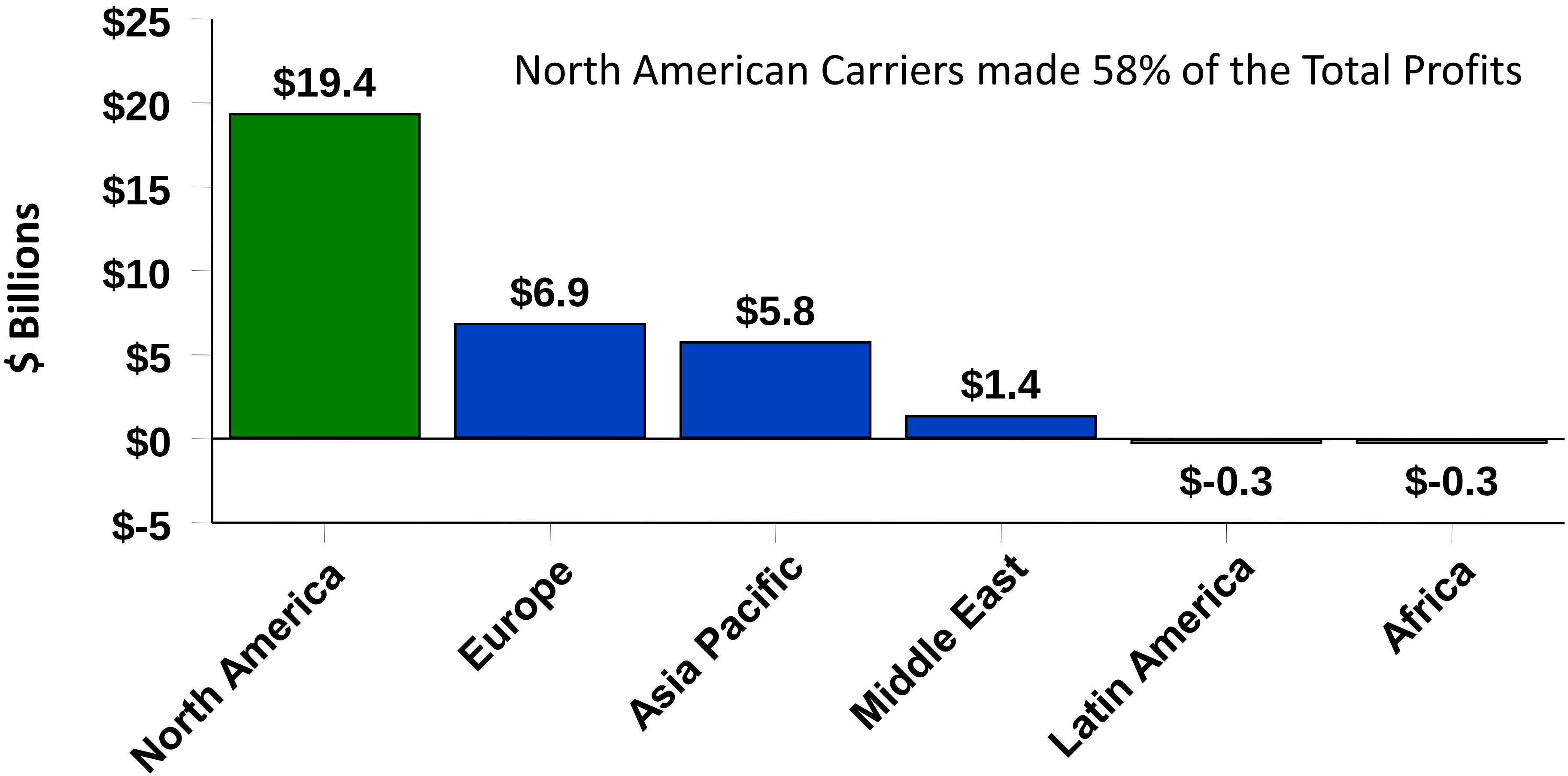
Source: O'Connell analysis from ICAO and IATA

Proportion of Total Revenues to Total Net Profit (2015 data)



Source: IATA

2015 Net Profit by Region



- North American carriers made $22.48 profit per passenger
- European carriers made $7.55 profit per passenger
- Asian carriers made $4.89 profit per passenger

The US carriers …… Protectionism

The US carriers have made Net Profits of $56 billion in over the last 6.5 years

Domestic market

United, American Airlines, Delta and Southwest control 80% of the US Domestic marke

With multiple restructuring and Merging of the Business they have stripped away costs which was significantly aided by Chapter 11 bankruptcy

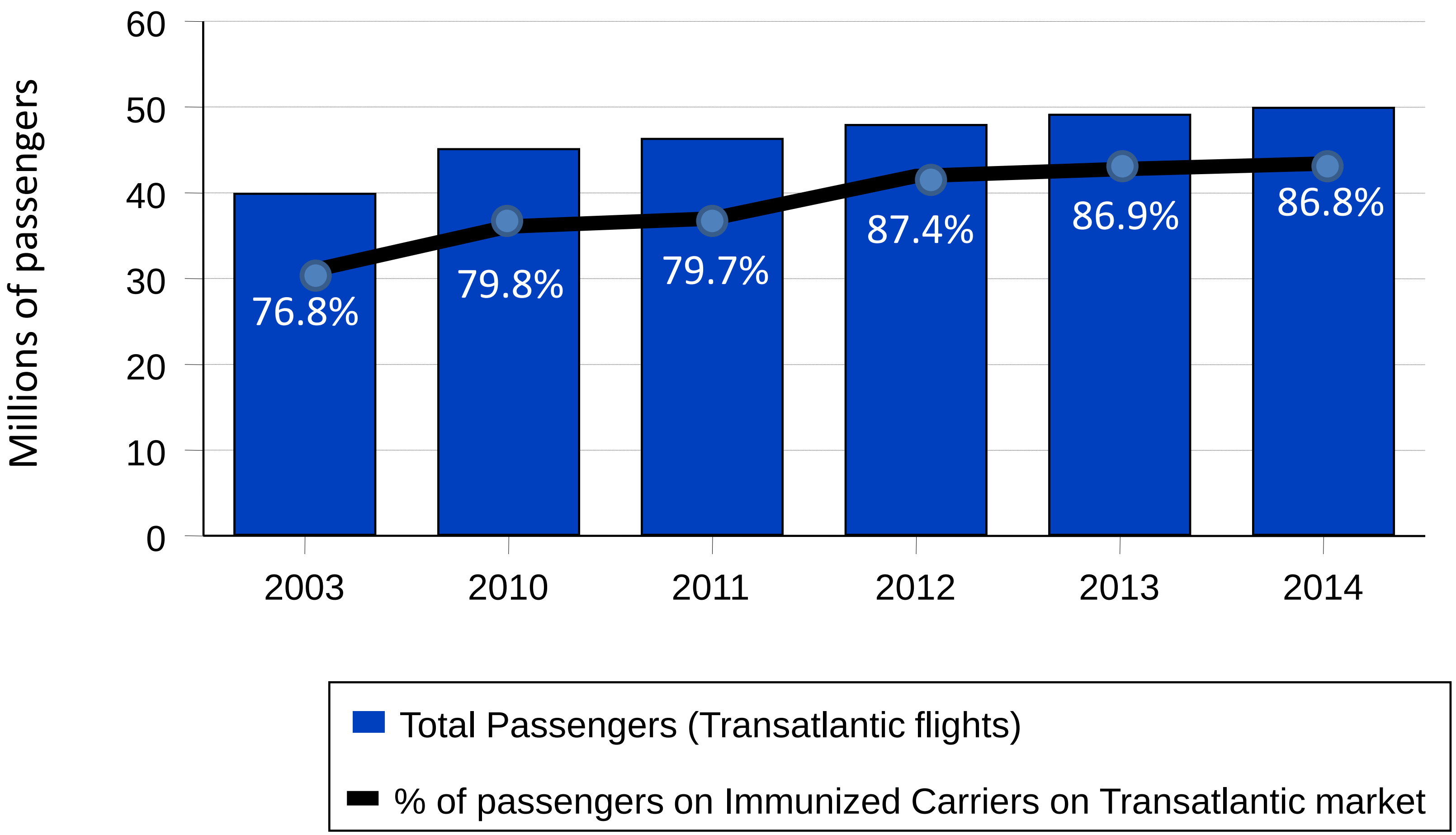
US Carriers are **Controlling Capacity**: They are only adding 1 to 2% seat capacity each year to the domestic market – consequently the **Load Factors are averaging 84**% with breakeven Load Factors of 74%

Limits foreign ownership to just 25% ... Serving as a Barrier to Entry

International market

- The Airline Alliances dominate the International markets
- Anti Trust Immunity allows the carriers to jointly fix fares, fix schedules & share revenues
- Norwegian has 2% market share across North Atlantic but has had to wait 3 years for its Irish Licence and 1 year for its UK Licence. This application falls within the EU-US' open skies' deal – it is usually concluded within 2 months. Multiple excuses rendered particularly around Labour staffing .... Protecting the Joint Ventures of ATI

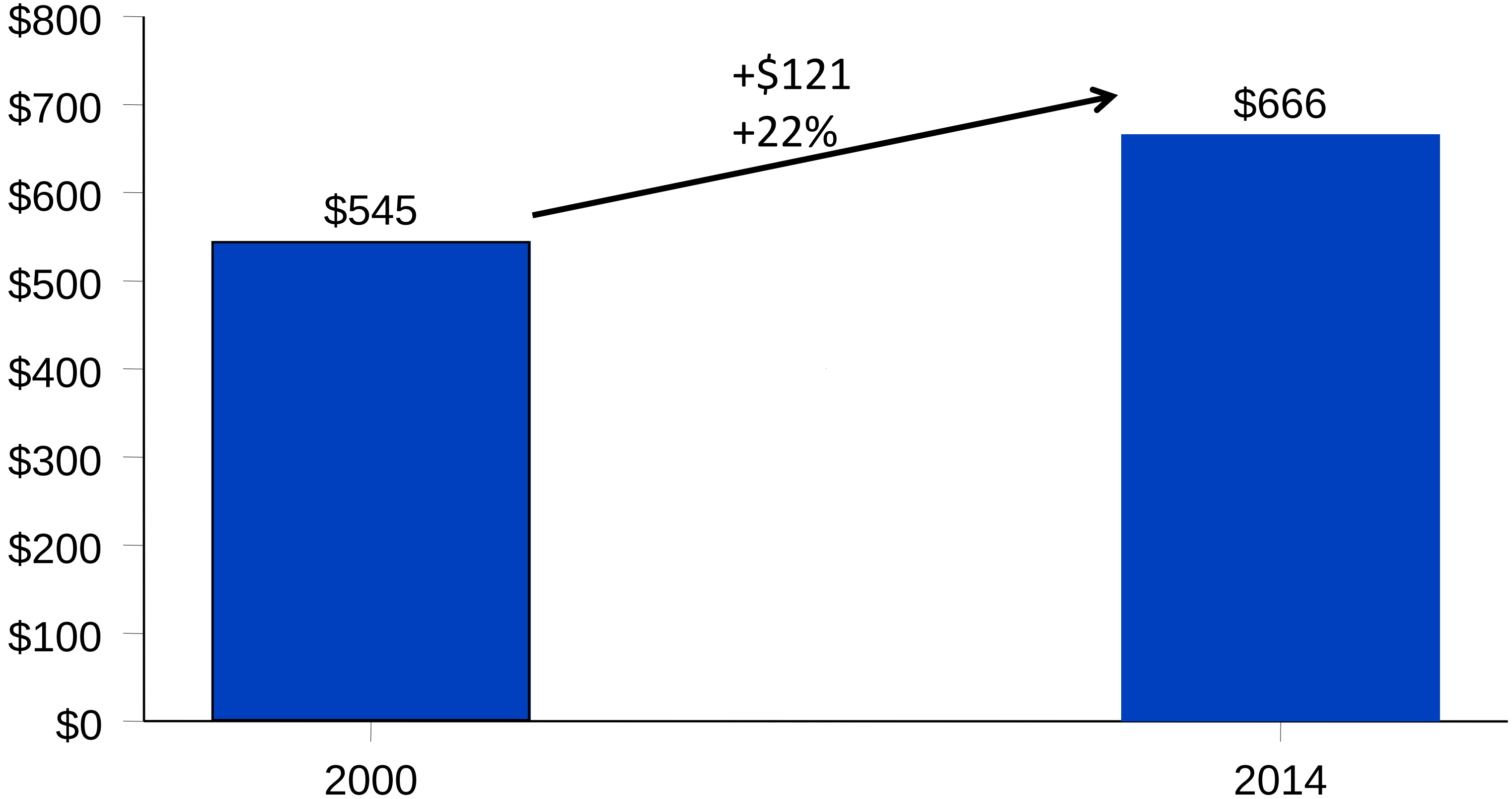
The Impact of Anti Trust Immunity on North Atlantic Traffic



Source: US DOT, 2015

- In 2014, the 3 big US legacy carriers generated around $3.4 billion in **operating profit**, from their International operations. $3.1 billion was generated from its N Atlantic operations
- A significant amount of traffic is increasingly concentrated into a few airlines

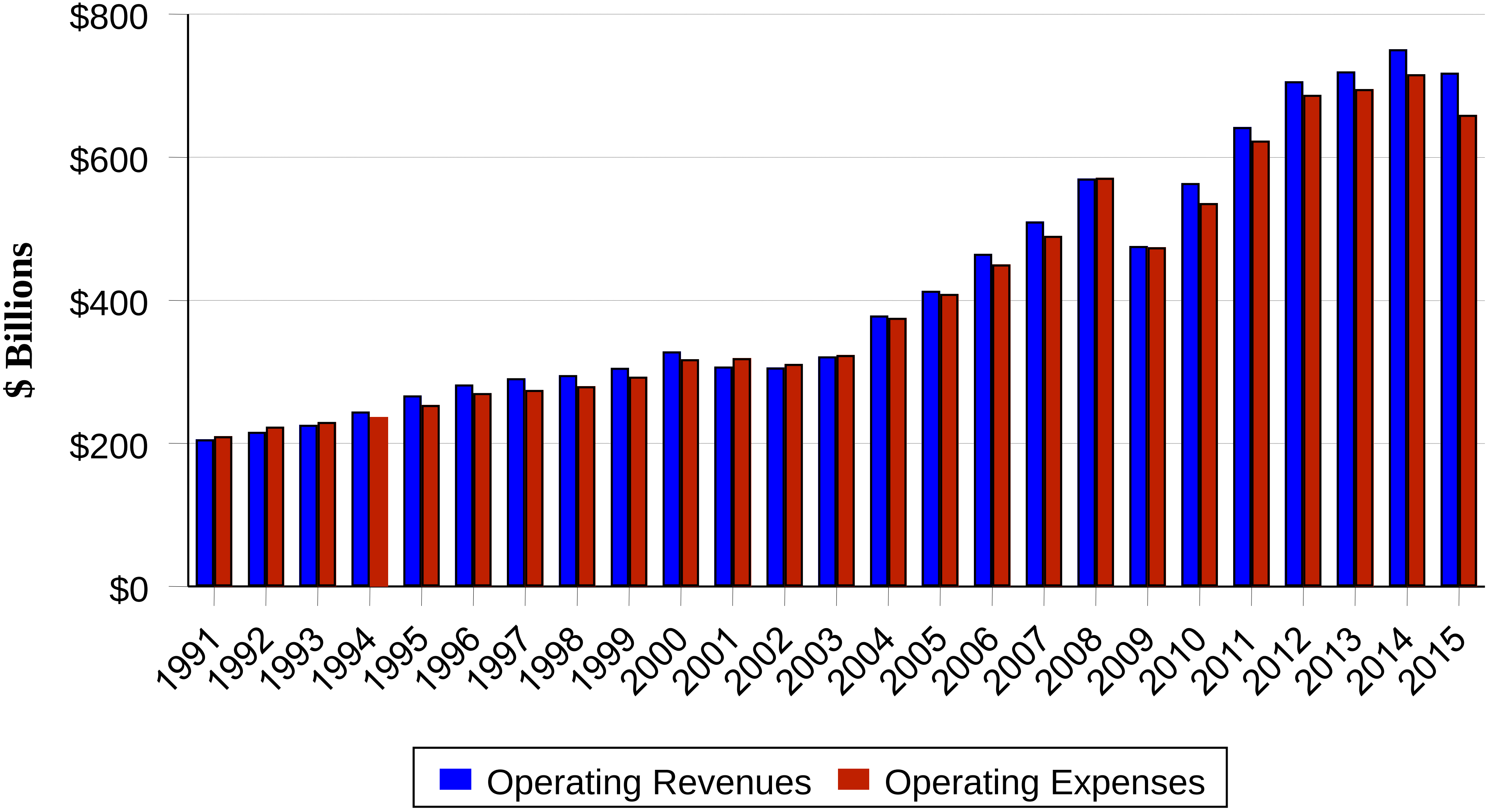
Average one-way transatlantic fare*



* After adjusting for inflation

Source: Hawaiian Airlines

World Airline Revenues and Expenses
1991 - 2015

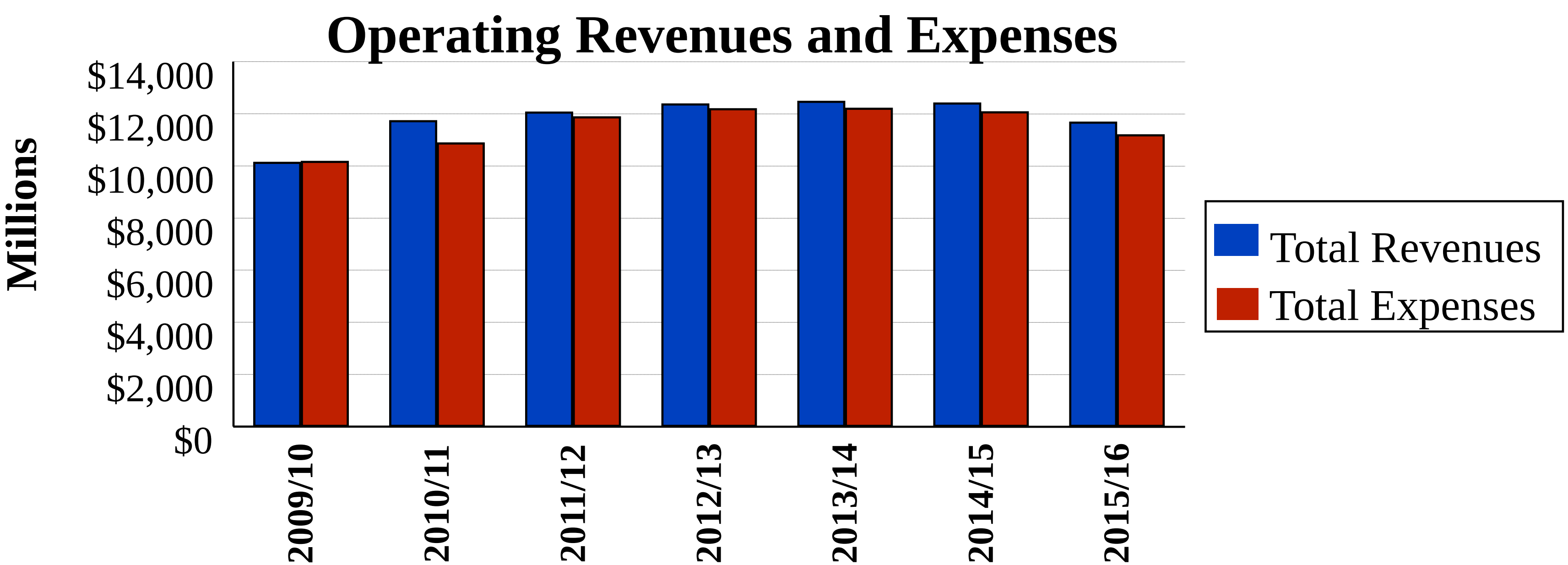


Source: ICAO and IATA

Singapore Airlines 2015/16 financials

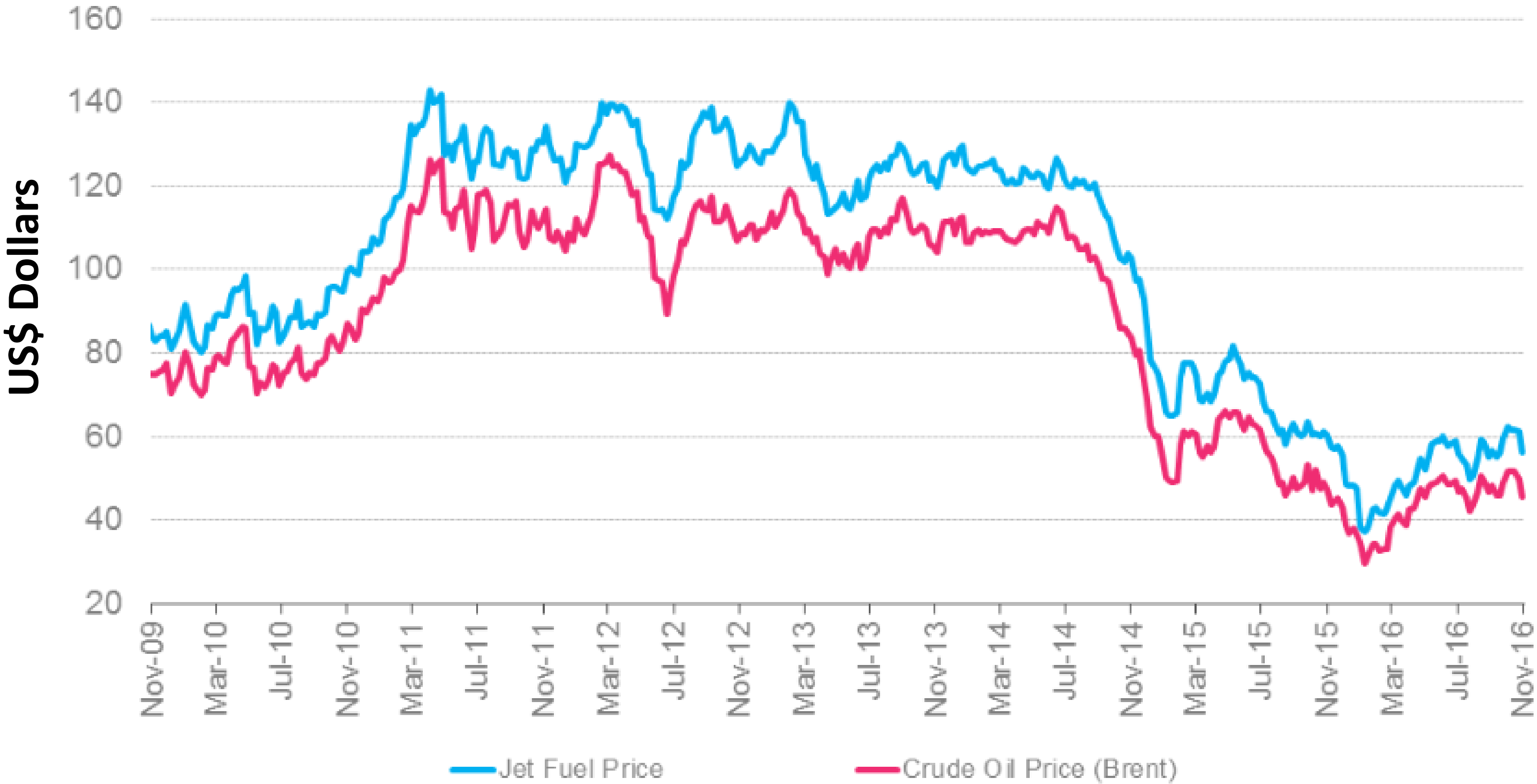
	SIN $ Million
Passenger Revenue	7,893.4
Cargo	999.4
Others	2,793.3
Total Operating Revenue	**11,686.1**
Total Operating Expenses	**11,210.0**
Operating Profit	**$476.1**

Source: Singapore Airlines



The volatility of Jet Fuel and Crude Oil Prices ($/barrel)

2008–2016



Source: Platts and IATA

In 2014 Airlines (worldwide) spent $Billions on Fuel? $226 Billion

In 2016 Airlines (worldwide) are estimated to spent? $127 Billion (44% less)

Cathay Pacific
Fuel Hedging Issues
2015 data

Fuel has fallen by 70% since 2014

2016: 62% of its Fuel at $85 per barrel

- For the **first 6 months** of 2016, Cathay posted fuel hedging losses of: $580 million
- For the second 6 months– it will incur the same losses

2017: 51% of its Fuel at $89 per barrel

2018: 44% of its Fuel at $81 per barrel

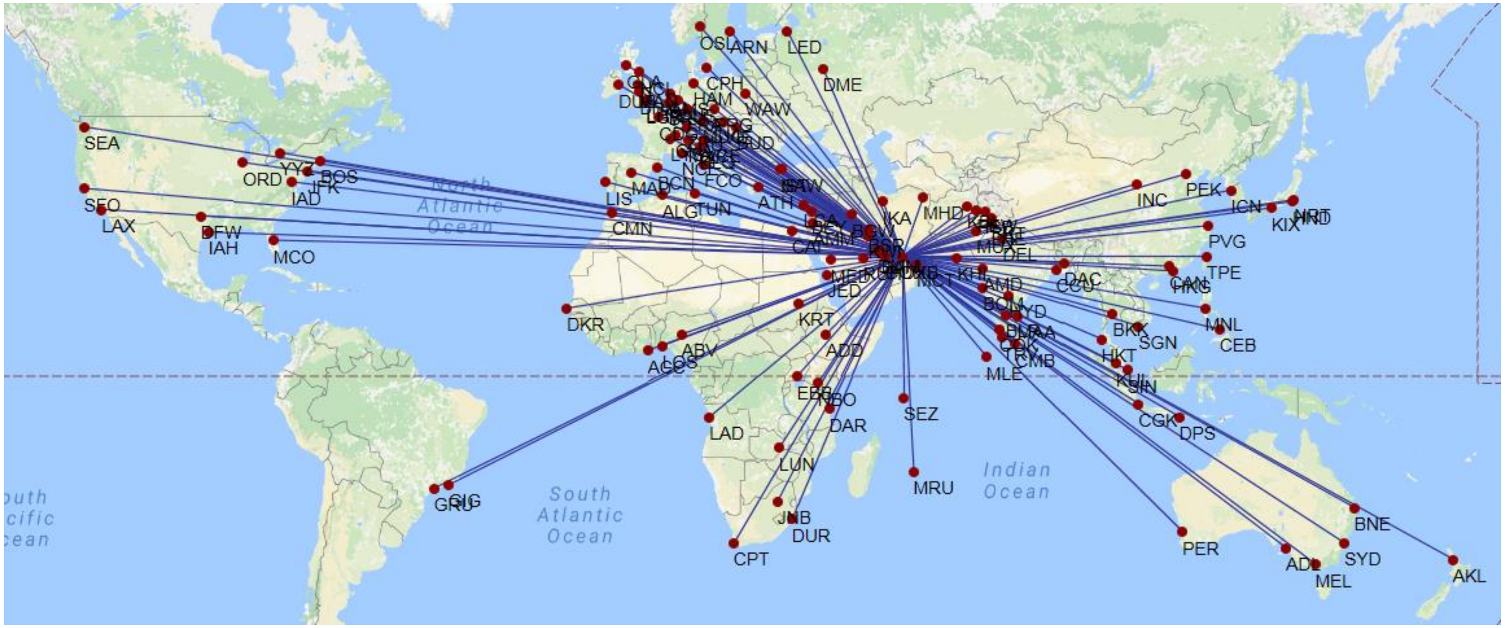
Newer Disruptive Competition impacting Global Aviation

Newer Competition

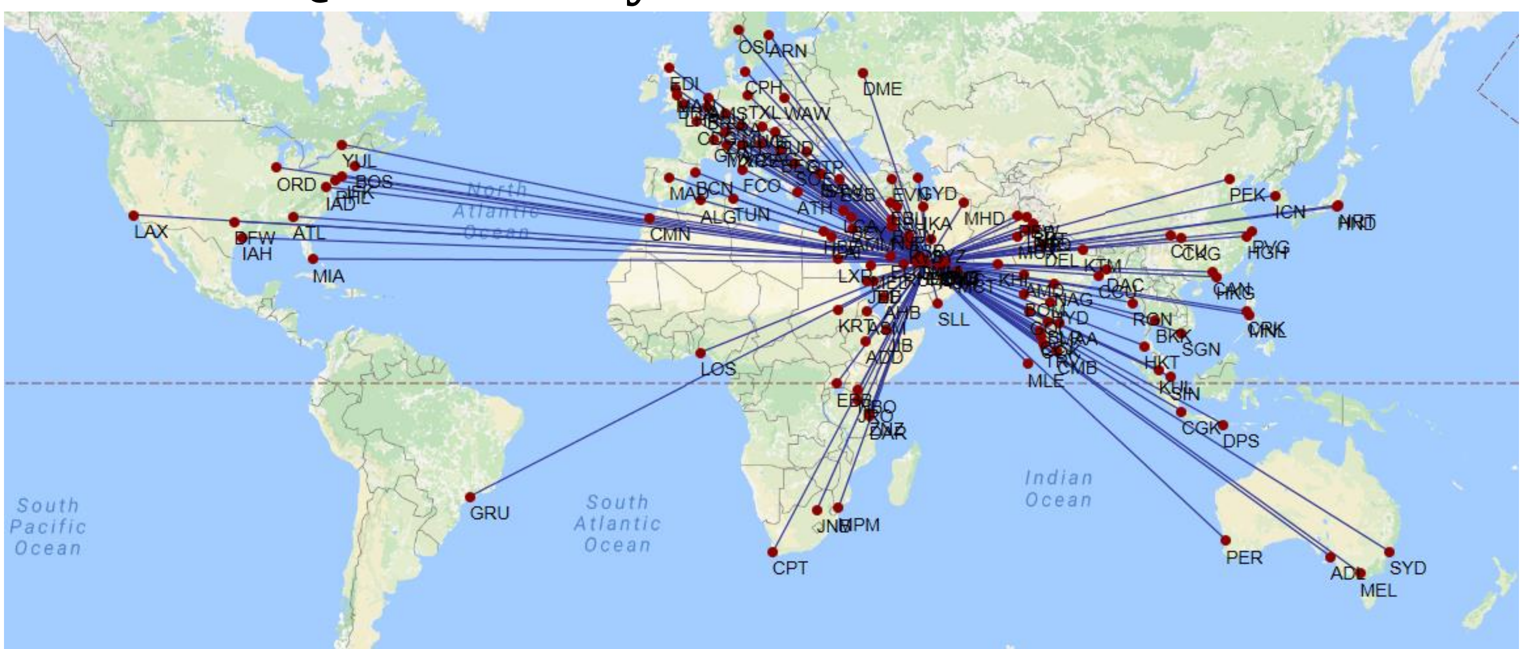
- Gulf Carrier Competition
- Turkish Airlines
- Long Haul Low Cost Carriers

Gulf Carrier Competition

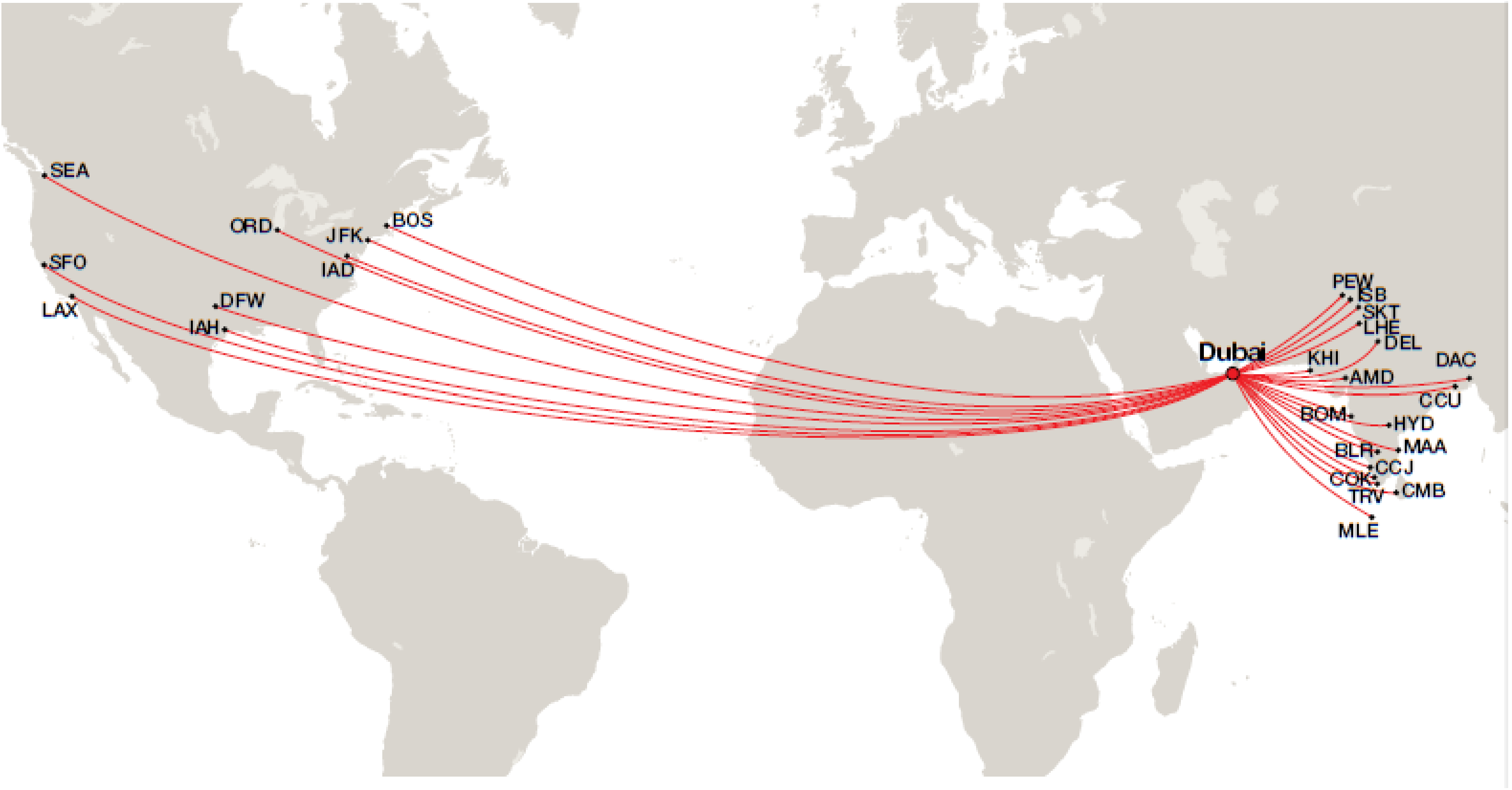
Emirates Network Summer 2016



Qatar Airways Network Summer 2016

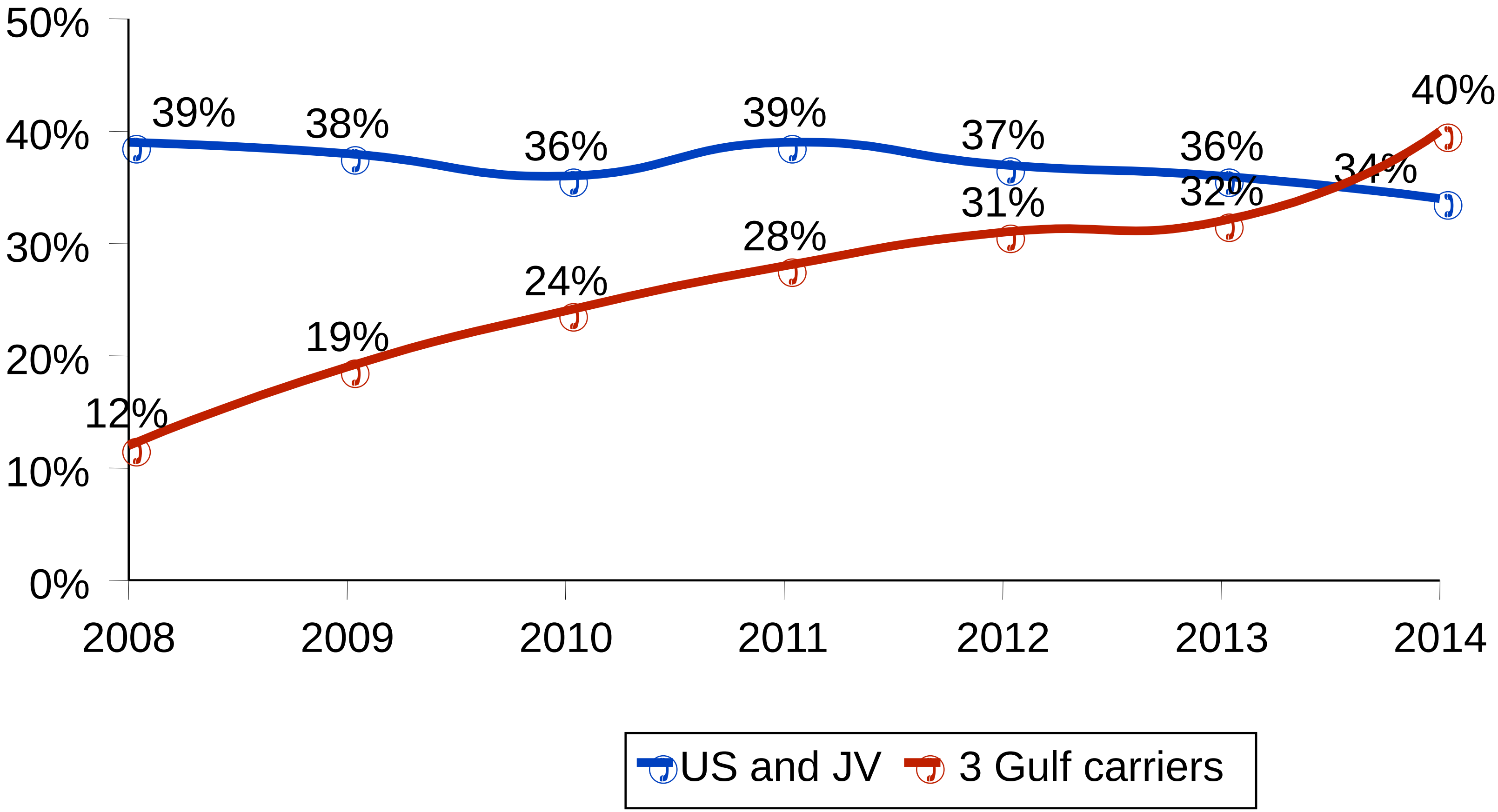


Indian Subcontinent to USA – dynamics have changed



Almost 25% of the world's population lives in the Indian subcontinent

Share of U.S. to Indian Subcontinent bookings

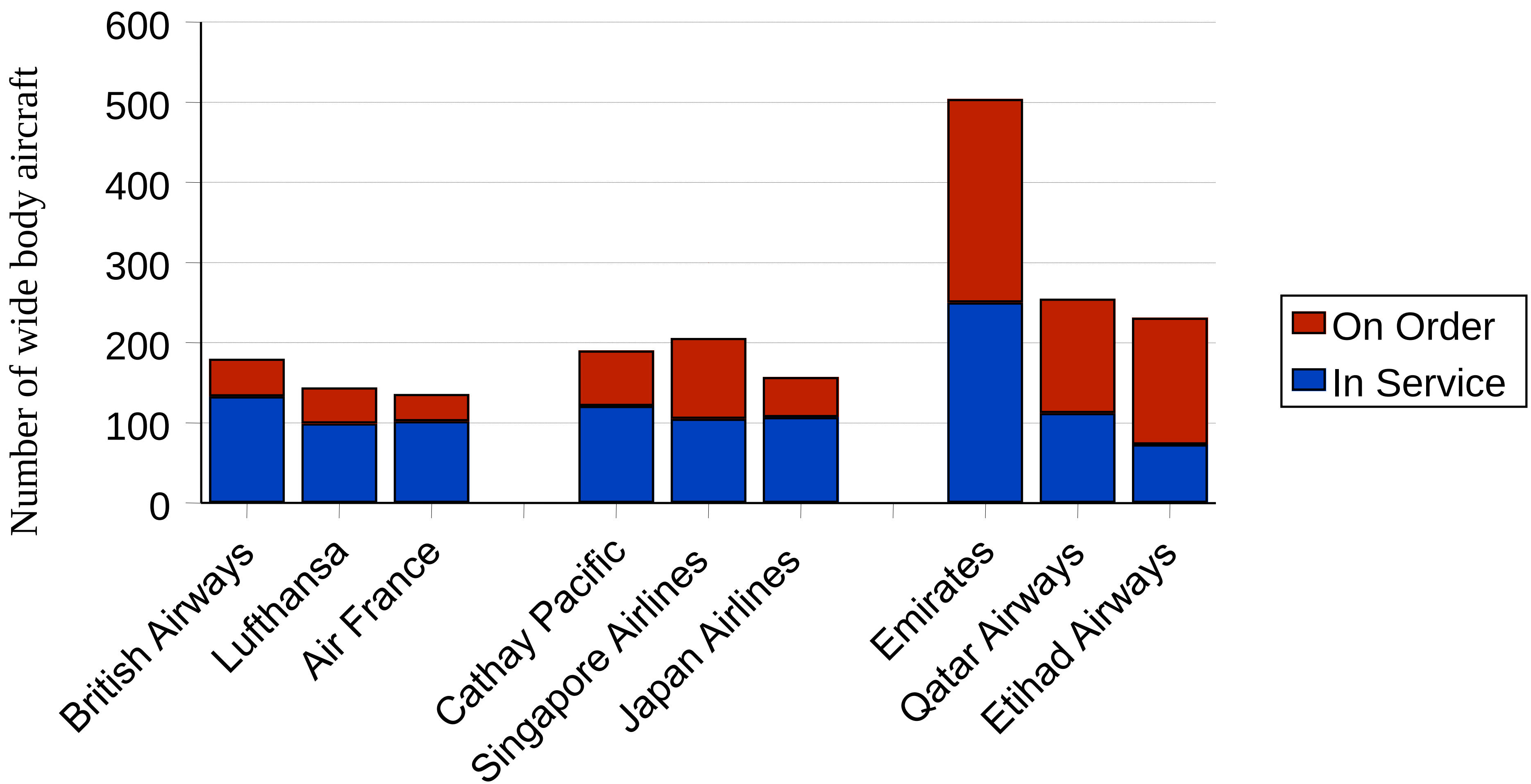


JV partners include: **Delta** (Air France/KLM, V Australia, Alitalia, Virgin Atlantic); **American Airlines** (British Airways/Iberia, Qantas, JAL); **United Airlines** (Lufthansa, Swiss, Brussels, Austrian , Air Canada, ANA)

Indian Subcontinent includes: India, Pakistan, Bangladesh, Nepal, Sri Lanka and Maldives

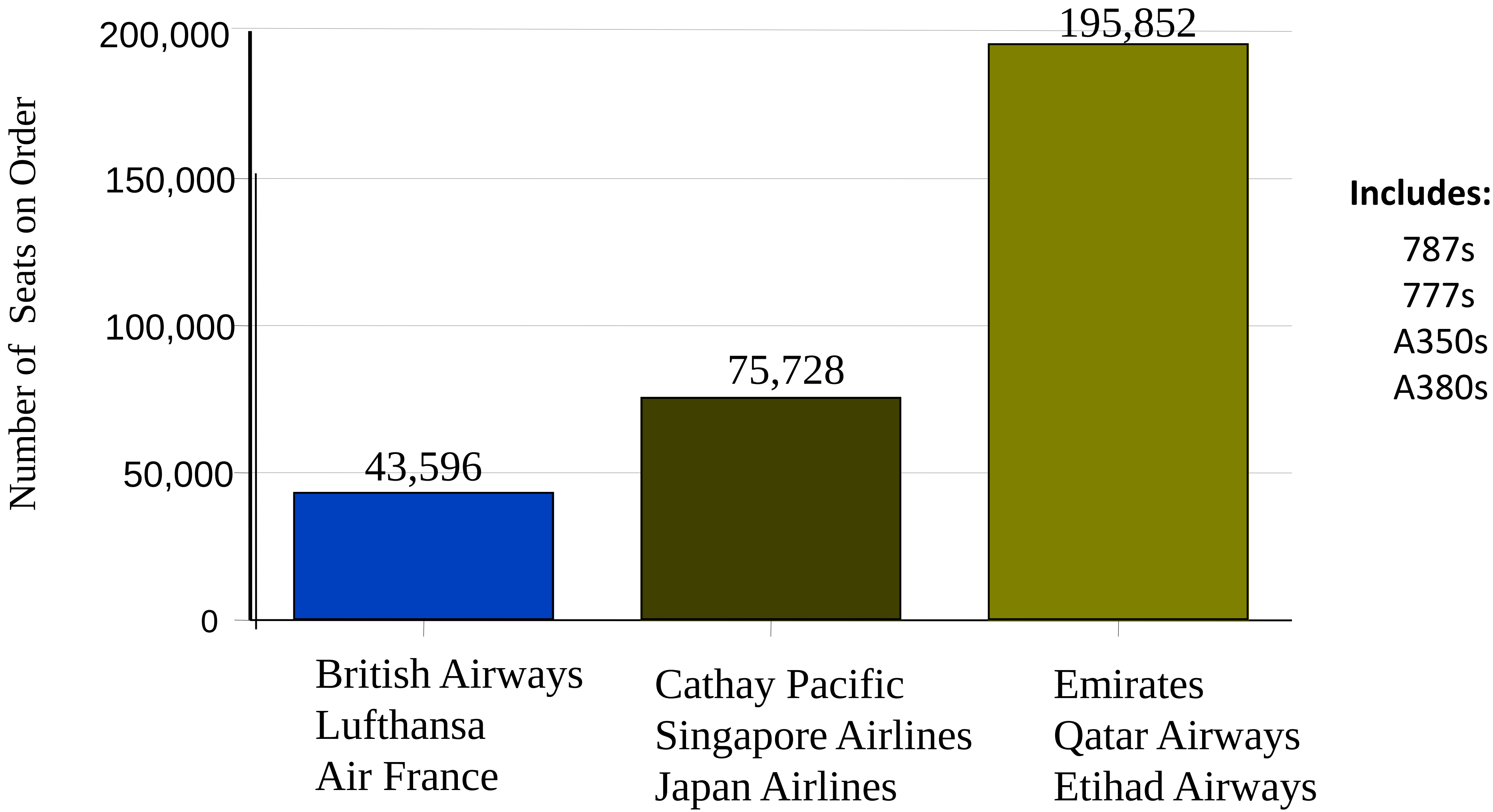
Source: Restoring Open Skies

The number of wide body passenger aircraft in service & on order for the big 3 European, Asia and Gulf carriers (March 2016 data)



Source: O'Connell analysis from Airline annual report and Flightglobal 2016

The number of wide body Seats on order for the Big 3 European, Asian and Gulf carriers (March 2016 data)



Source: O'Connell analysis from Airline annual report and Flightglobal 2016

Airports in the Gulf and Development Plans 2015 **($68 billion)**

Sources: ACI & O'Connell

	Cost (US$)	Passengers in 2015 (millions)	Planned Passengers (2020)	Details
Dubai (Expansion)	**$5.4 billion**	**78**	80	T3, Concourse, runway, cargo
Dubai (New)	**$8.2 billion**	0.5	**160**	Will be the world's largest airport
Doha (New)	**$12 billion**	31	50	Phase 2 will accommodate 70 m pax
Abu Dhabi (Expansion)	**$6.8 billion**	**23.3**	55	Runway renovation, Midfield T, Cargo, Maint
Jeddah (Expansion)	$7.2 billion	29	32	2 new Ts + upgrade Hajj Terminal
Saudi Arabia (Domestic)	$ 10-15 billion	49.7	---	Upgrading 28 airports till 2020
Kuwait	$3.2 billion	10.4	12	New terminal
Erbil (Iraq)	$3.0 billion	1.2	---	New airport planned
Muscat & Salalah (Oman)	$2.6 billion	10.7	---	Major upgrade of Oman's 2 airports
Madinah (Saudi)	$2.4 billion	4.4	---	New airport built with private investment
Baghdad (Iraq)	$2.0 billion	1.5	---	3 new Terminals and upgrades
Sohar (Oman)	$1.5 billion	---	---	New airport under construction
Bahrain	$815 million	8.6	---	Development and upgrade
Ajman (UAE)	$800 million	---	---	New International airport
Amman (Queen Alia)	$750 million	7.1	---	New terminal for 9 million pax
Beirut	$600 million	7.3	7	Upgrade and expansion
Sana'a (Yemen)	$500 million	1.8	8	New T, upgrade taxiway & runway

Long Haul Low Cost Carriers

Air Asia X long-haul fleet (2016)

Currently operates 21 A330s

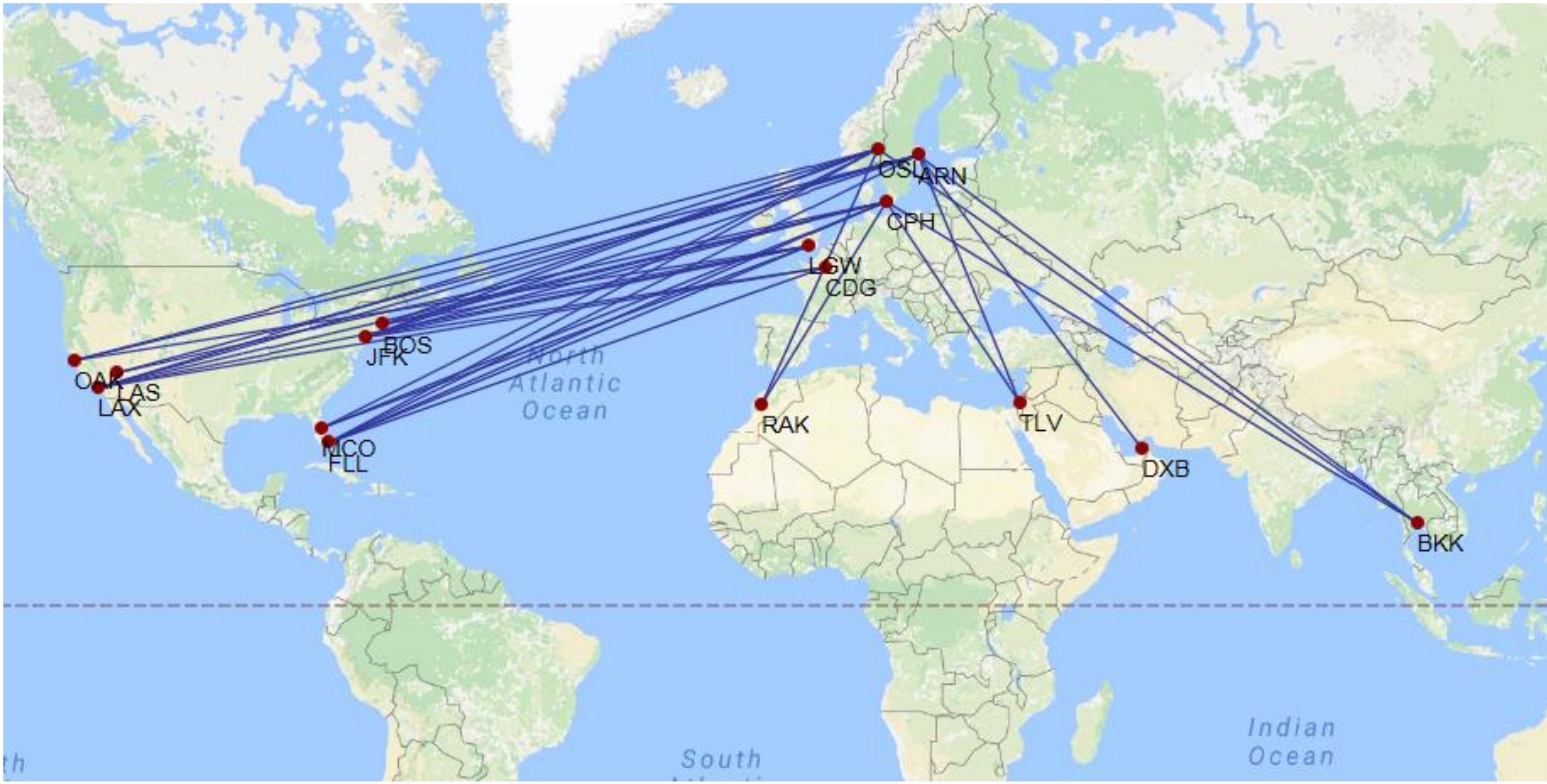
Aircraft on order
- 66 A330-900neo
- 10 A350-900XWB

Norwegian long-haul fleet (2016)

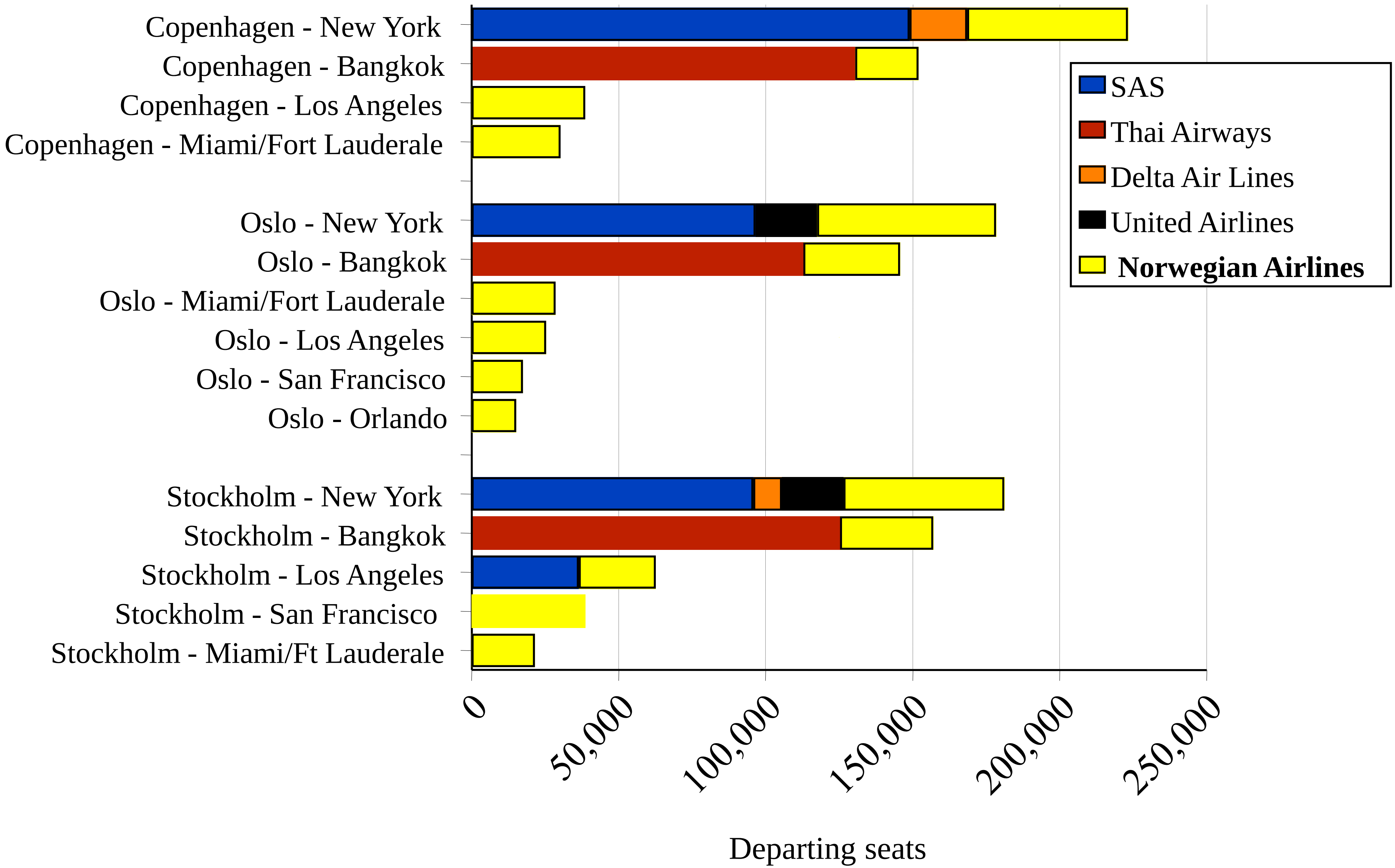
Currently operates 10 787s

25 more 787-9 on order

Norwegian Long Haul network – October 2016



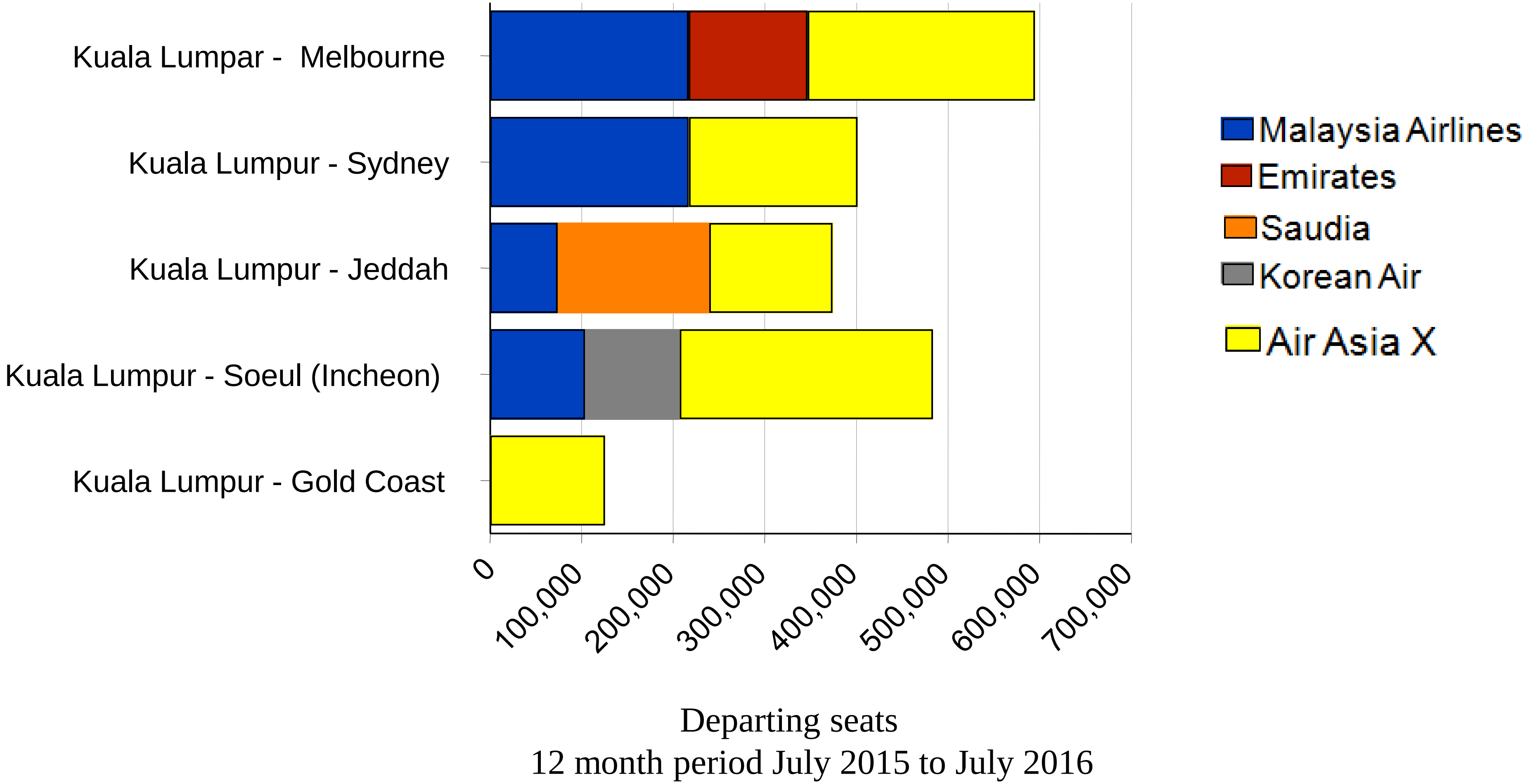
From Scandinavia – Norwegian is Strong 2015 - 2016 data



Source: O'Connell, OAG analysis November 2016

AirAsia X is strong out of Malaysia

July 2015 to July 2016 data

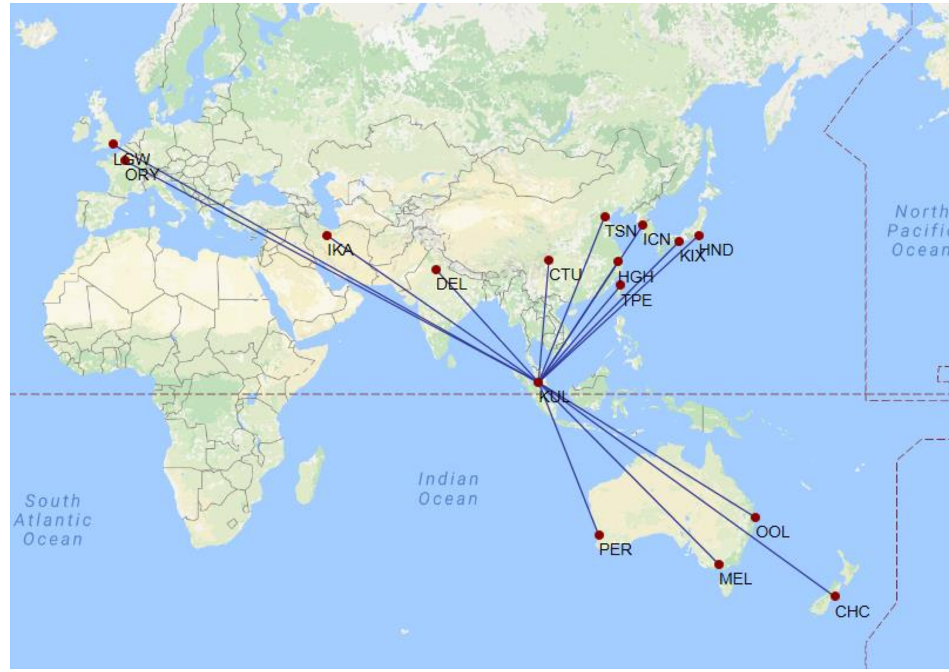


Source: O'Connell, OAG analysis November 2016

Air Asia X Network 2012 and 2016

AirAsia X from KL – 2016

AirAsia X from KL – 2012



Will Air Asia X return to Europe again?

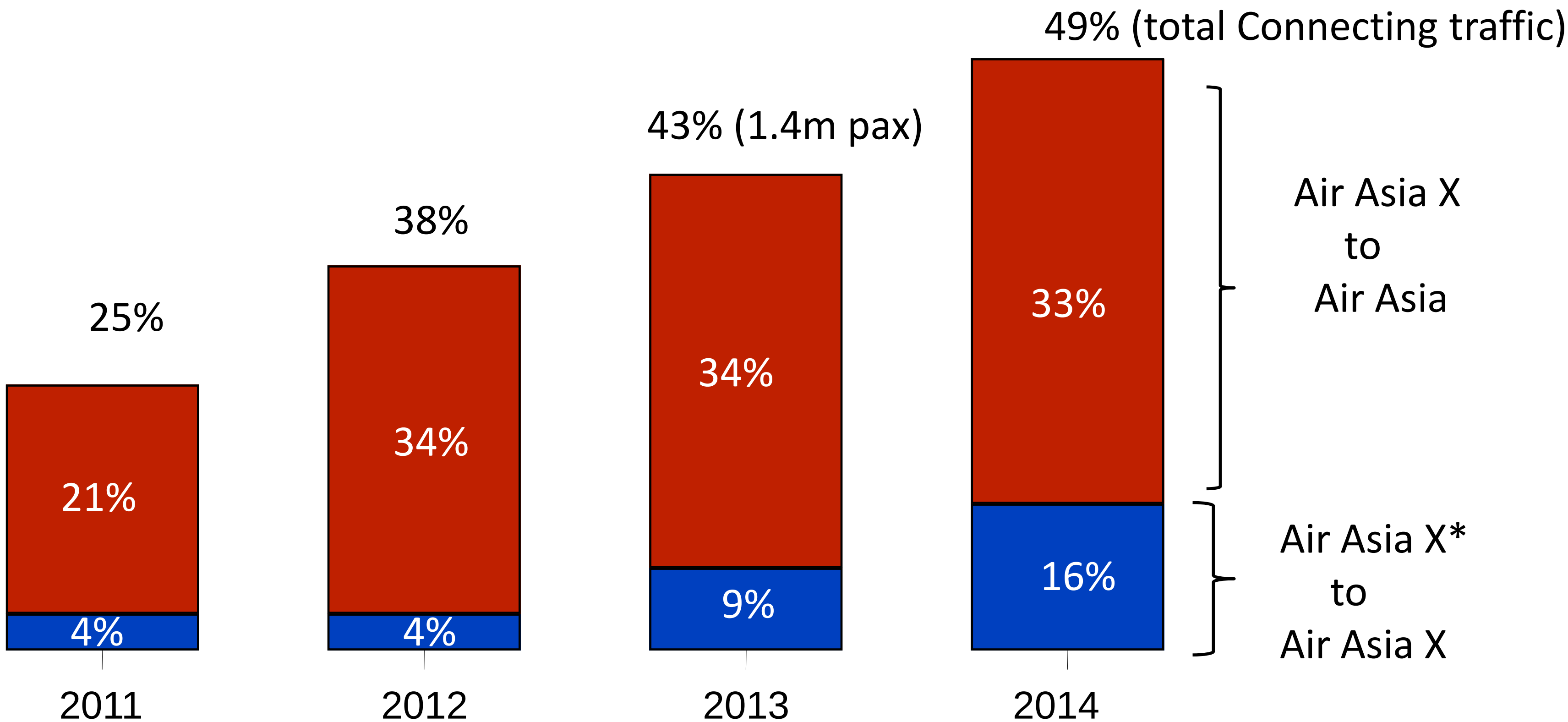
Air Asia X will return to Europe this October 2016

- Istanbul
- Barcelona
- More to come!!

Air Asia X also has subsidiaries: Indonesia AirAsia X and Thai AirAsia X

Aspirations to add Air Asia X outposts in India & Japan and operate to the USA

Passenger Connectivity of Air Asia X



• Air Asia X carried 3.6 million passengers in 2015, with 56% connecting at KL

• About 800,000 connected through the group's **Fly-Thru product**, which offers passengers the option of **paying an <u>extra fee</u>** to through check bags & receive a boarding pass for the connecting flight, while 600,000 opted to self-connect.

Snapshot of the long haul routes operated by today's Long Haul LCCs

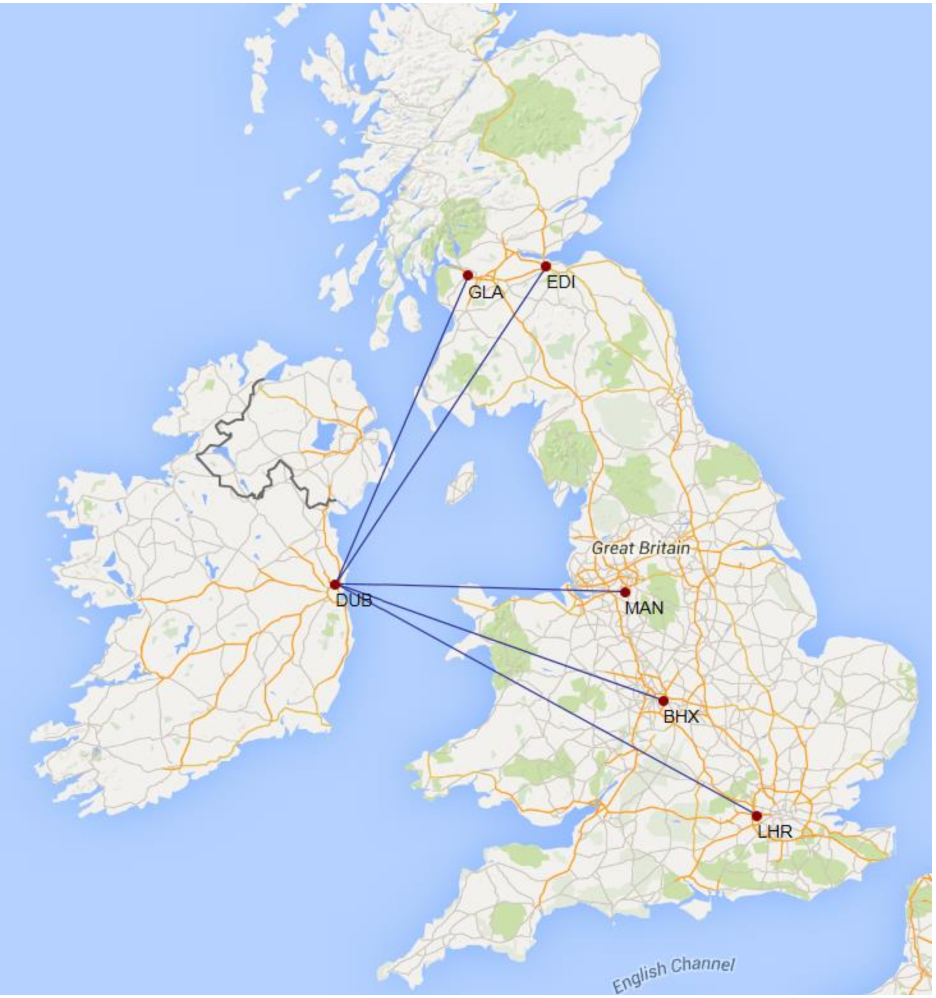
LCC / LCC Group	Longest Route	Flight Time	Aircraft Type	Seats	Seat Configuration
Eurowings	Cologne - Phuket	12 hours	A330-200	330	21B, 48 PE, 261E
Norwegian	Copenhagen - Los Angeles	10.5 hours	787-8	291	32PE, 259E
Jetstar Airways	Melbourne-Honolulu	10 hours	787-8	335	21PE, 314E
Air Canada rouge	Toronto - Athens	9.5 hours	767-300ER	280	24PE, 35E+, 221E
Azul	Sao Paulo - Lisbon	10 hours	A330-200	271	21B, 100E+, 151E
Cebu Pacific	Manila - Riyadh	10 hours	A330-300	436	436E with 30' pitch
WestJet	Vancouver - London	10 hours	767-300ER	262	24PE, 238E
Scoot	Singapore - Jeddah	9 hours	787-8	375	35B, 45E+, 295E
AirAsia X	Kuala Lumpur - Jeddah	9.5 hours	A330-300	377	12B, 365E

- Scoot will operate to Athens in 2017
- Talks circulating that JetStar may also operate flights to Europe

Aer Lingus's changing Business model

Short Haul Route Structure

March 2004



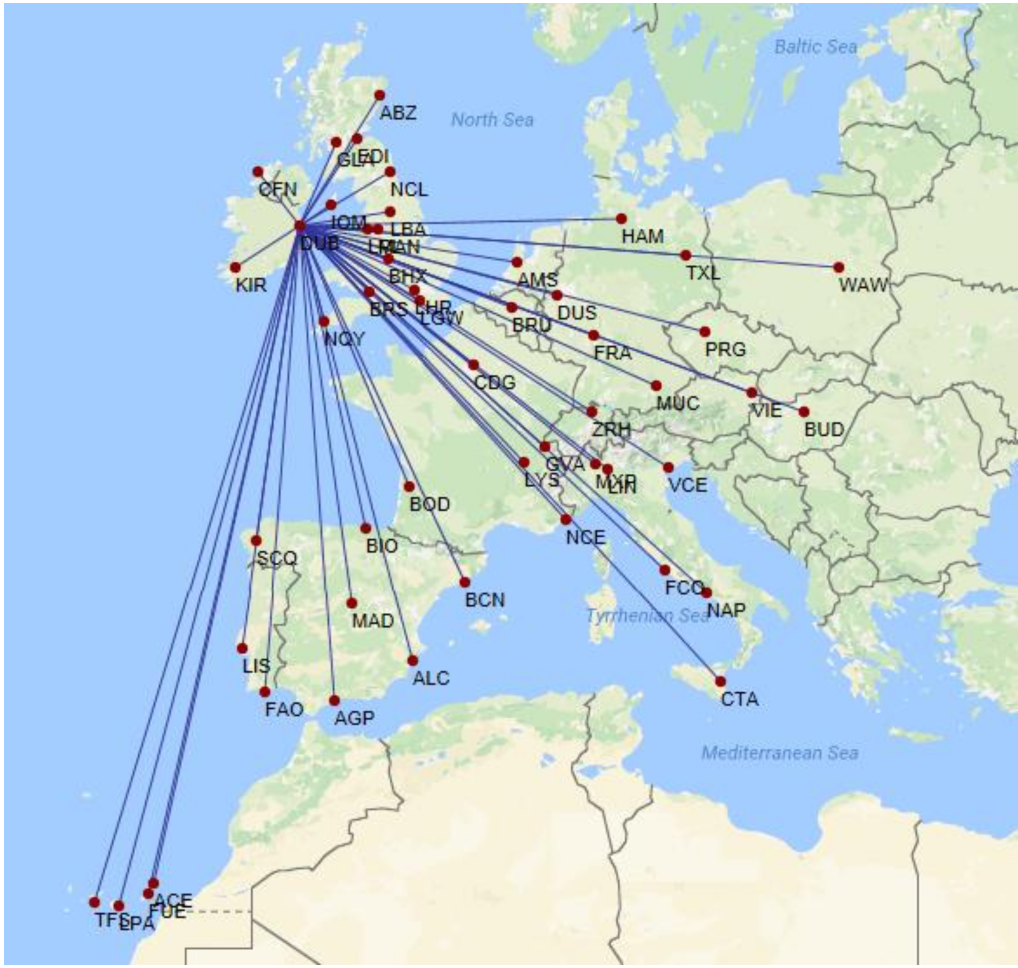
Summer 2016

Short Haul is Low Cost

Aer Lingus

European Route structure 2002

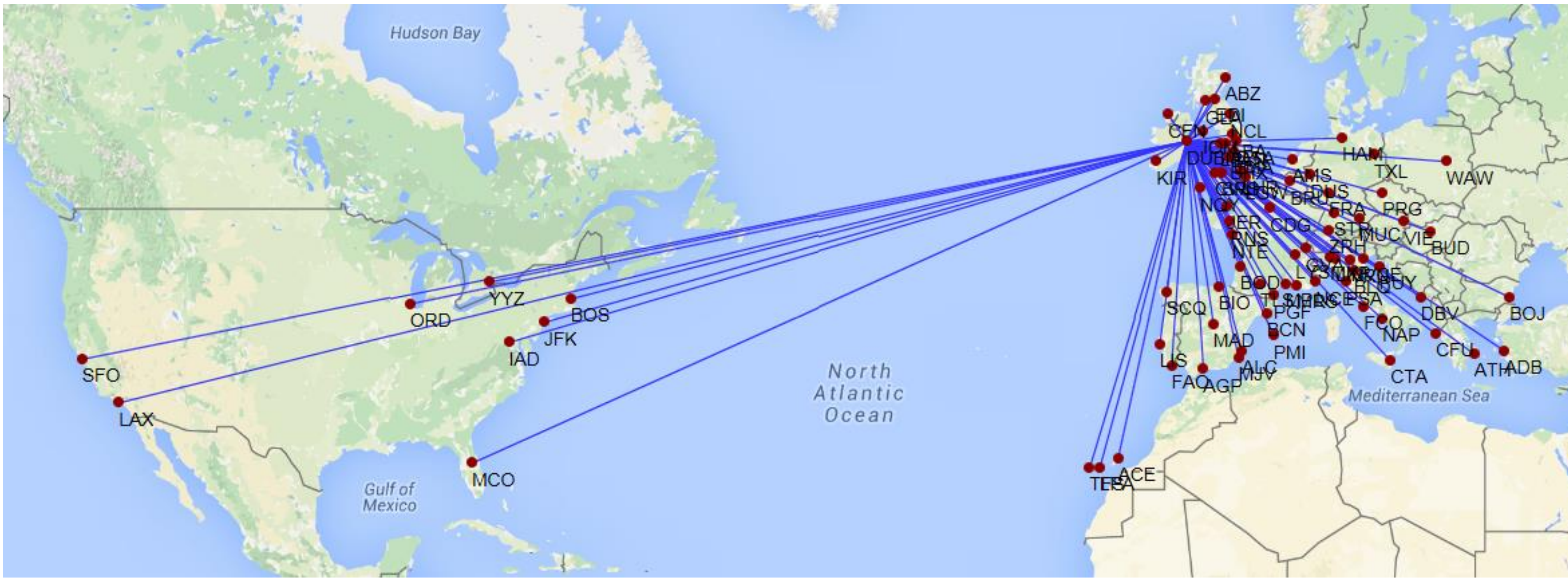
European Route structure 2016



Source: SRS Analyser

Aer Lingus Global Network

Summer network 2016



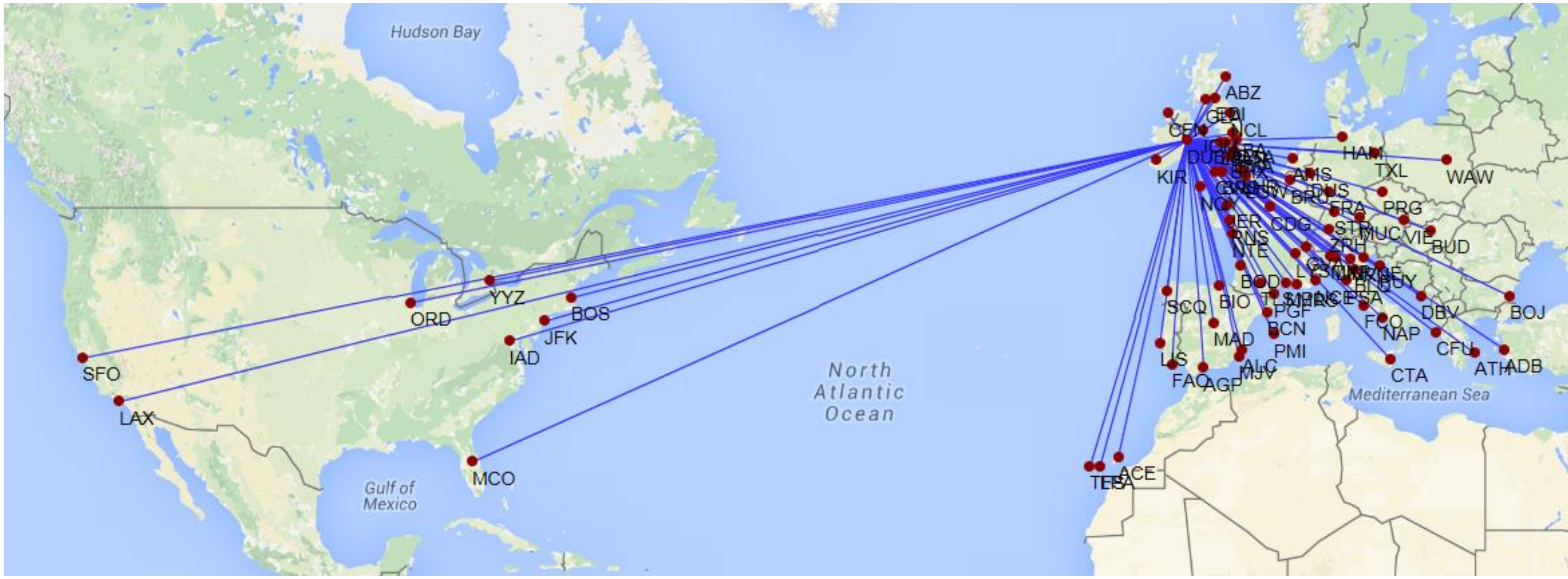
Weekly Flights between the US and Ireland

for July 2000 - 2016

	2000	2004	2008	2010	2013	2016
Aer Lingus	53	47	61	41	48	81
Delta	14	7	28	21	24	21
Continental/United	14	14	21	25	26	42
US Airways		14	12	7	21	Merged with AA
American Airlines			7	7	14	35
Others	6	0	0	0	0	2
Total	87	82	129	101	133	181

Source: OAG

Aer Lingus Transfer Traffic data for 2015



Sourced: PaxIS

- Aer Lingus carried 1.1 million pax from N. America to/from Ireland in 2015 .. $ **663m**
- **333,000** of those passengers transferred at Dublin to other points in Europe and to N. America worth $255 million

Of those **333,000** passengers who transferred on Aer Lingus

- **125,000** transferred at Dublin for other points in the UK worth $100 million
- 39,000 transferred at Dublin for other points in France worth $29 million
- 38,000 transferred at Dublin for other points in Italy worth $28 million
- 34,000 transferred at Dublin for other points in Germany worth $24 million
- Dublin airport advantages: US Pre-clearance Immigration and new Terminal

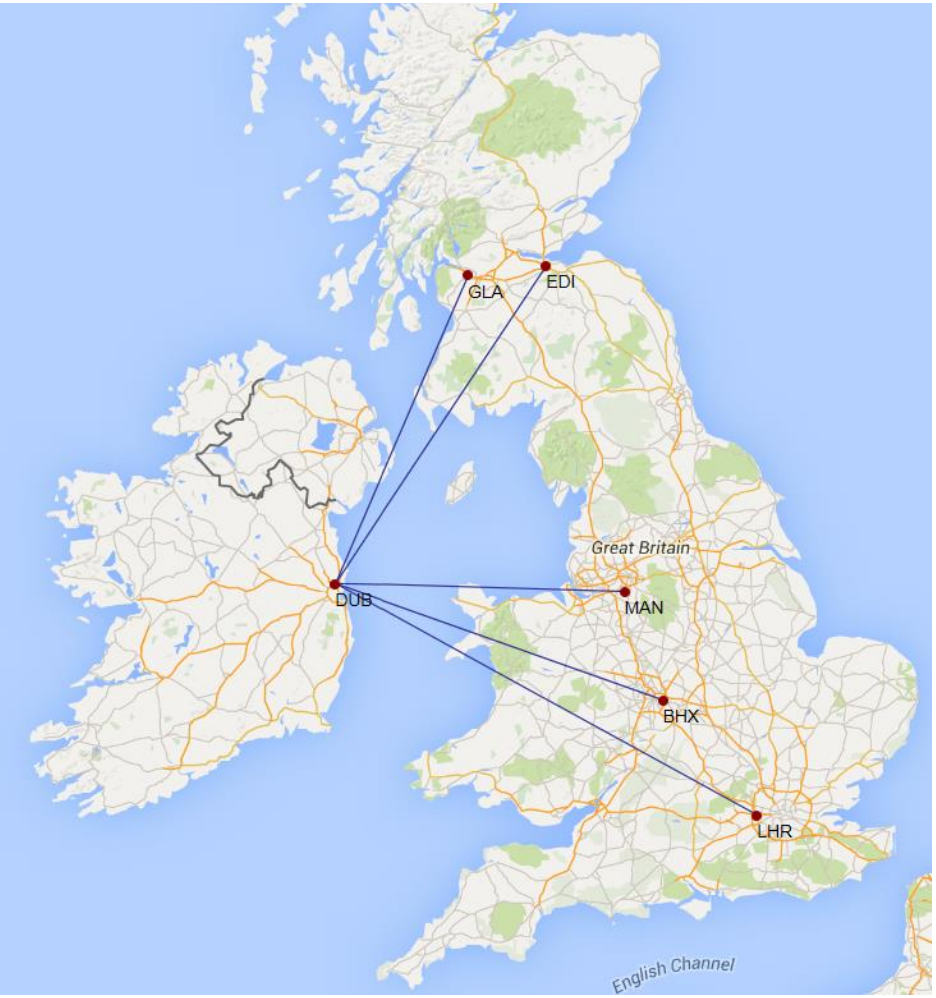
Conclusion

- Global Airline traffic will continue to grow by around 5% per year for decades to come
- A large part of this growth will come form Asia and from Emerging Markets
- A whopping 33,000 new aircraft will be delivered over the next 20 years worth around US$5 trillion – Huge opportunity for Irish Leasing
- The profit margins for the industry overall remains low – Ancillary Revenue will continue to gain **a lot** of traction
- The US carriers are generating the world's highest profits significantly helped by Protectionism
- Relatively new entrant Gulf Carriers with high-end in-flight products are changing the flows of International traffic.
- Meanwhile Turkish Airlines are growing exponentially
- Long Haul Low Cost carriers are just now beginning to make an impact

Thank you all very much

Short Haul Route Structure

March 2004

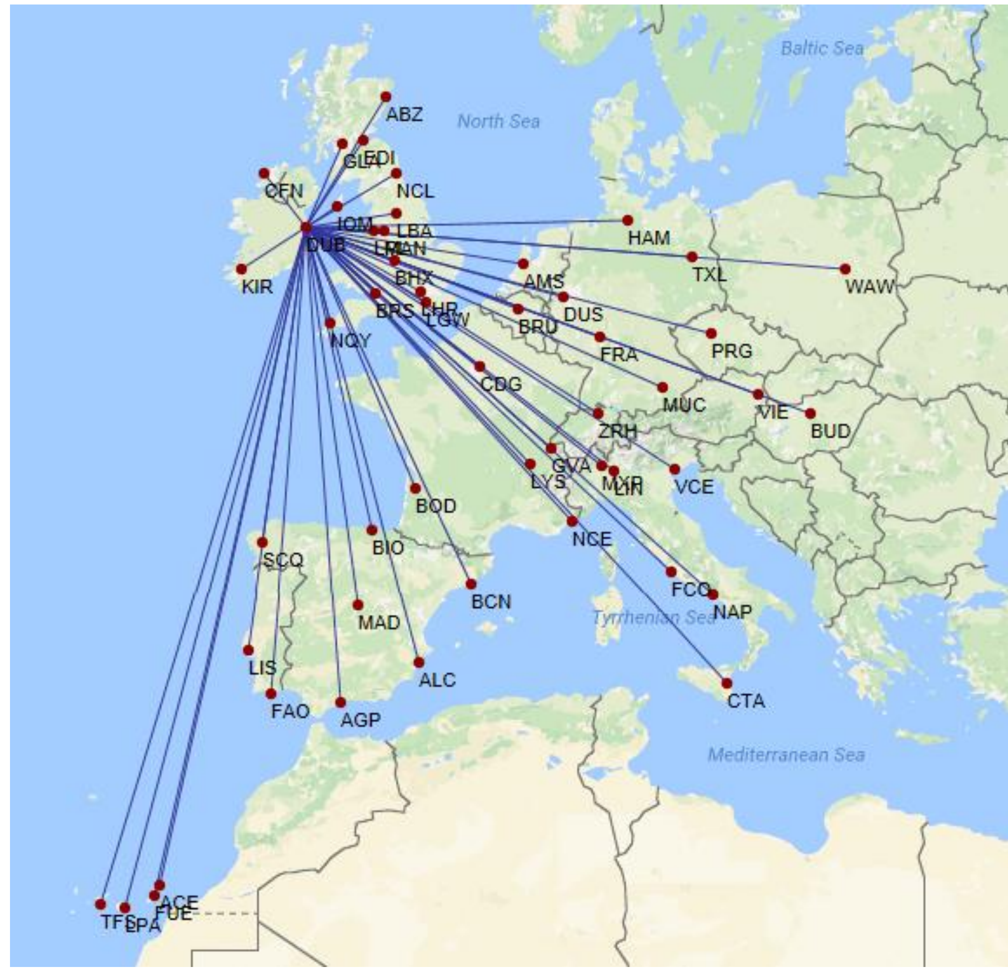


Summer 2016

Short Haul is Low Cost

European Route structure 2002

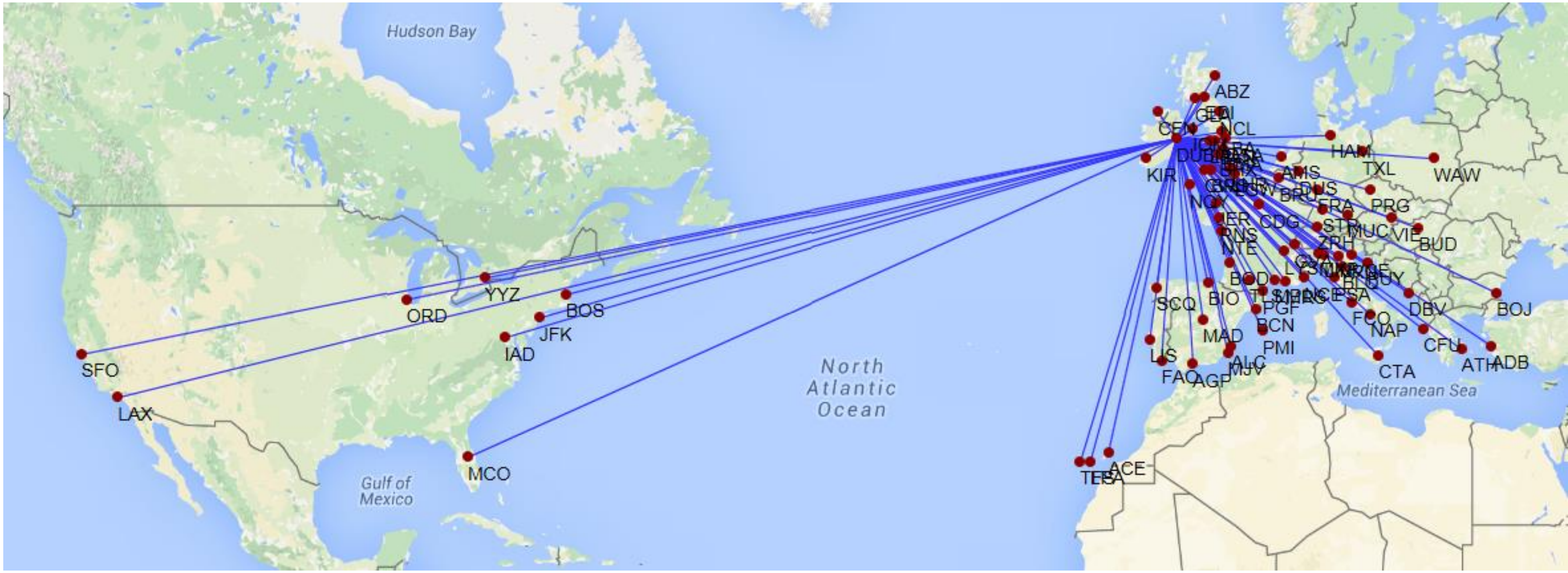
European Route structure 2016



Source: SRS Analyser

Aer Lingus Global Network

Summer network 2016



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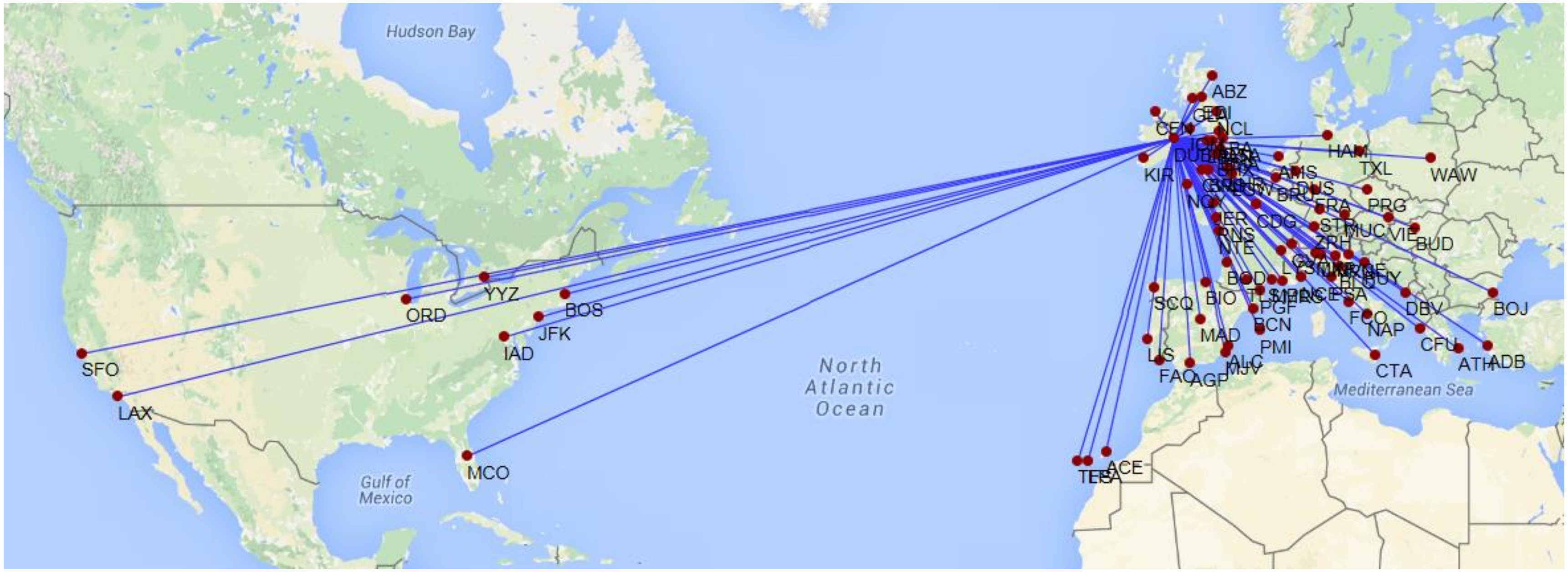

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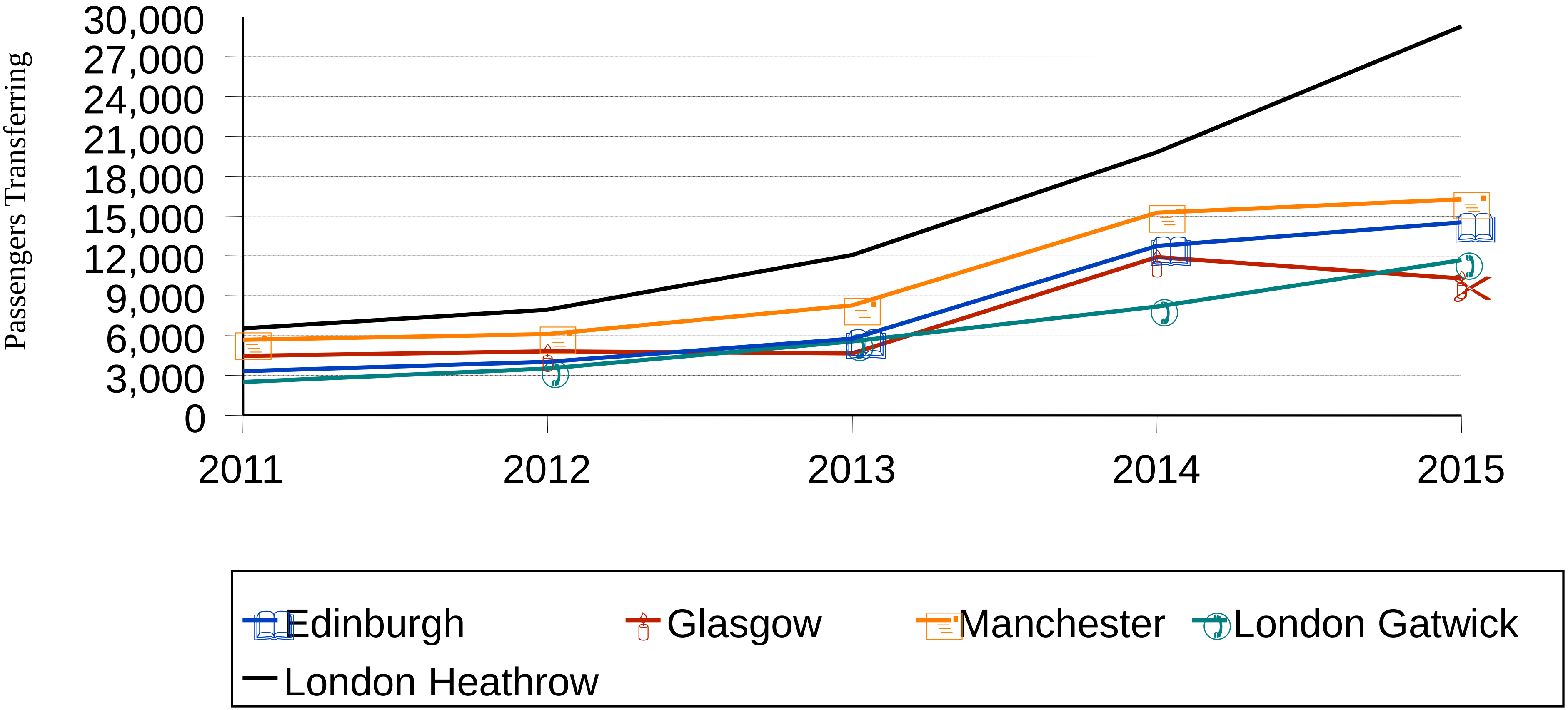
Number of passengers transferring at Dublin on Aer Lingus and Stobart Air to the USA from selected UK airports



Source: MIDT data