



**Network  
and traffic  
forecast**

- The network is **constantly evolving**
- More routes, bigger existing routes, more connectivity
- By 2034, **70% of network growth and 84% of total RPKs** will be centred on today's routes/network
- Aviation Mega-Cities (AMCs) big today, bigger tomorrow
- More than **90% of international long-haul flying centred on just 47 cities**
- **22% of global GDP focused on the AMCs**, helping drive the share of higher yield passenger up from these cities
- As traffic grows and O&D between the "big points" concentrates, congestion is an issue at many key airports
- The **trend to larger aircraft** helping, more larger aircraft to come
- The **A380** for example, already **proven** it helps increase pax, reduce airline costs, and free up slots at congested airports

### **DESPITE A MAJOR CRISIS IN 2008, AIRLINES HAVE OFFERED MORE SERVICES\* TO THEIR CUSTOMERS**

Notes: as of September

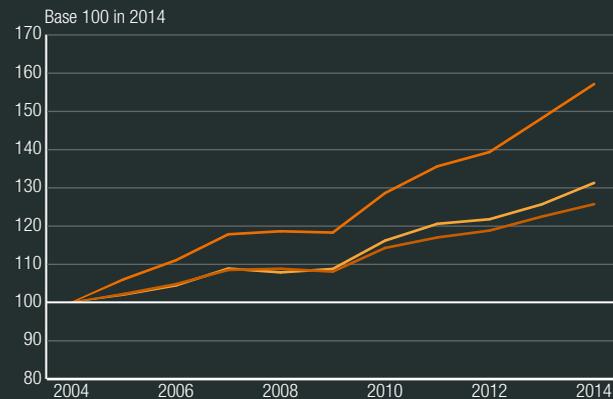
\*Service is defined as a new airport pair or a new airline operating an existing airport pair

Sources: OAG, Airbus

ASKs: +57%

Services: +31%

City pairs: +26%

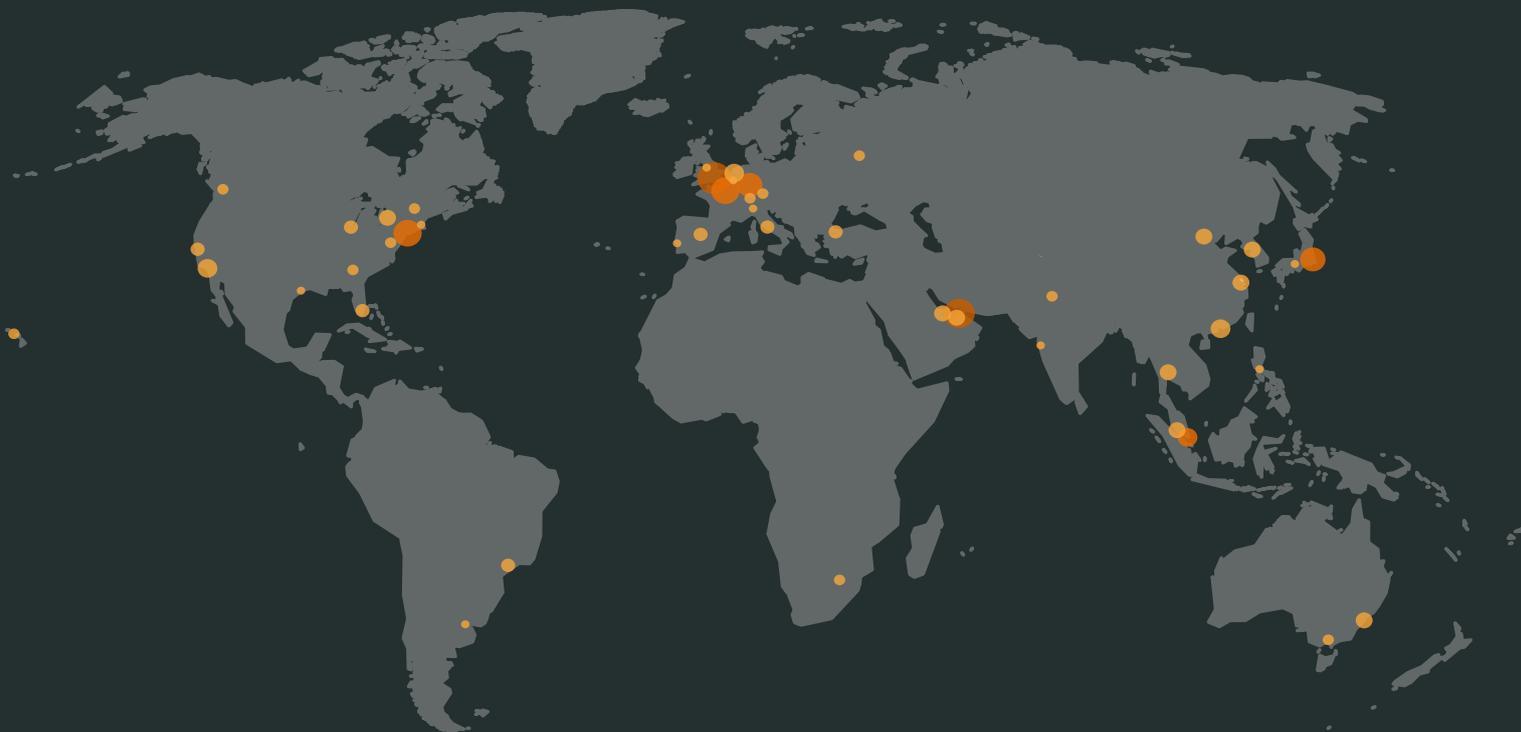


More services

SINCE 2004

**+31%**

## 2014 Aviation Mega-Cities

**47 AVIATION MEGA-CITIES IN 2014**

Sources: McKinsey, UNPD, Airbus GMF 2015

10,000

230,000



AVIATION  
MEGA-CITIES

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**47**  
—

**0.9M**

DAILY  
PASSENGERS:  
LONG-HAUL  
TRAFFIC TO/ FROM/  
VIA MEGA-CITIES  
—

**+90%**

OF LONG-HAUL  
TRAFFIC ON  
ROUTES TO/FROM/  
VIA 47 CITIES  
—

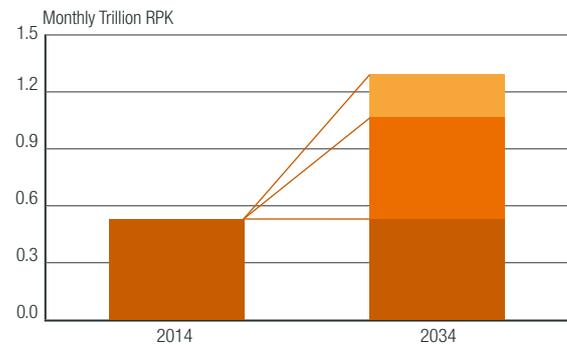
**22%**

OF WORLD  
GDP IN  
**2014**  
—



**70% OF TRAFFIC GROWTH UNTIL 2034 WILL COME FROM THE EXISTING NETWORK**

Source: Airbus GMF 2015



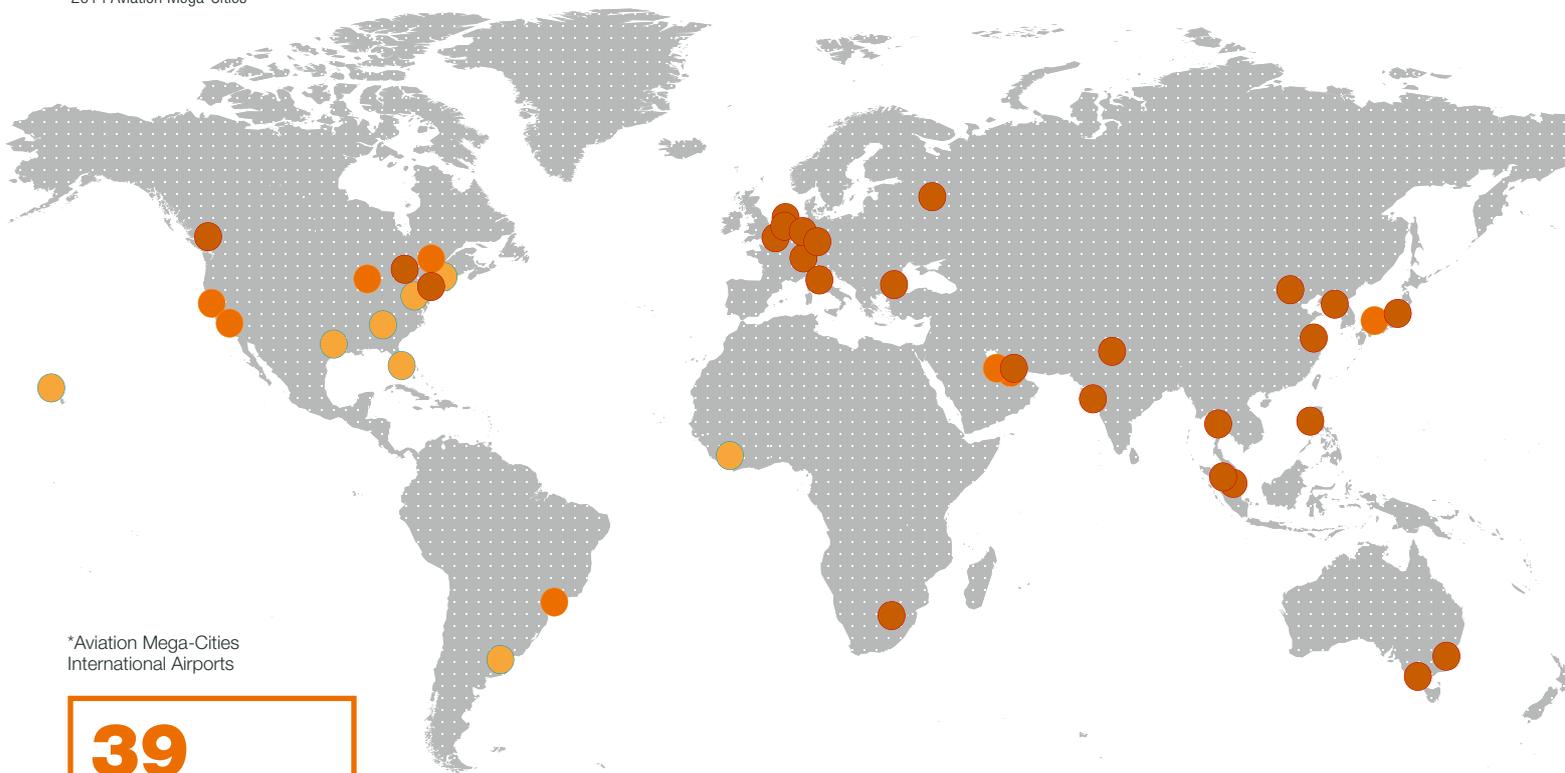
**2014-2034 NEW SERVICES**

Source: Airbus

## THESE AIRPORTS ARE ALREADY LARGELY CONGESTED

Sources: IATA WSG database, Airbus GMF

2014 Aviation Mega-Cities



\*Aviation Mega-Cities  
International Airports

# 39

OUT OF THE

# 47

AVIATION MEGA  
CITIES ARE  
SCHEDULE-  
CONSTRAINED  
TODAY



IATA WSG level 1: airport  
infrastructure is adequate

IATA WSG level 2: airports  
with potential for congestion

IATA WSG level 3: airports  
where conditions make it  
impossible to meet demand

## MORE SEATS , MORE SEATS FILLED, MORE MOVEMENTS & MORE CONNECTIVITY , BUT...

In the last 30 years:

- Airport movements up nearly 2.5 times
- Airport connectivity almost doubled
- Offered seats per aircraft have nearly doubled
- Worldwide average load factor ~80%, up 17 percentage points since 1980

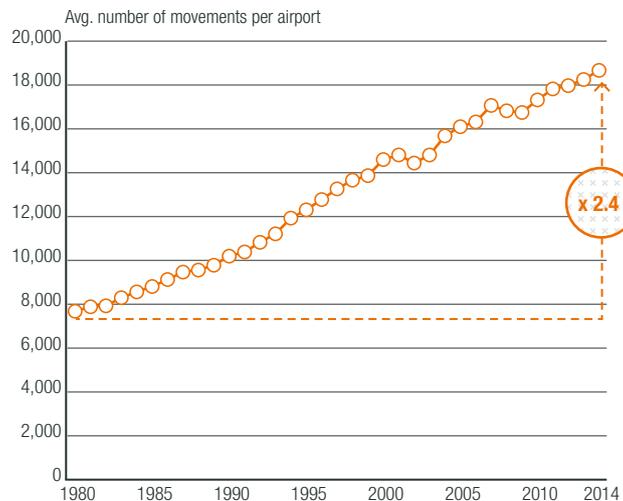
However since 2000:

- Average kilogrammes of fuel per passenger trip is down a third
- Therefore CO<sub>2</sub> per passenger trip is also down a third

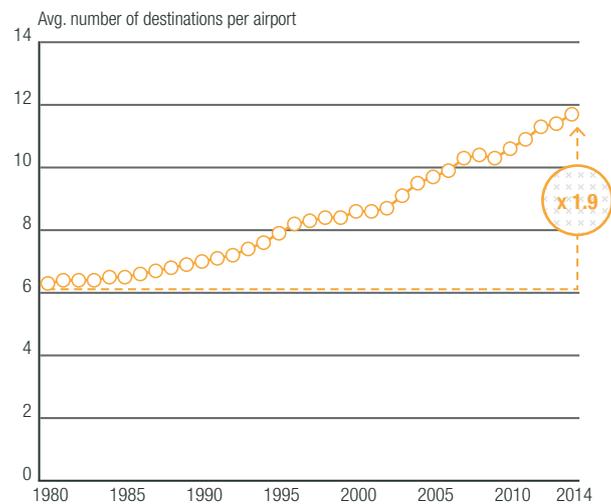
## MORE MOVEMENTS, MORE CONNECTIVITY

Sources: OAG, Airbus GMF 2015

### Airport movements

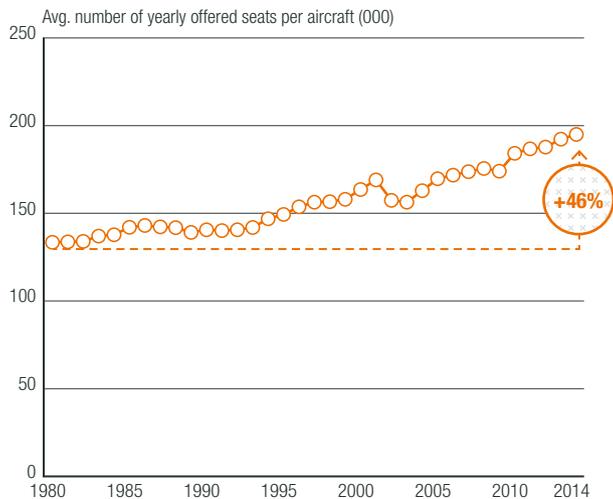
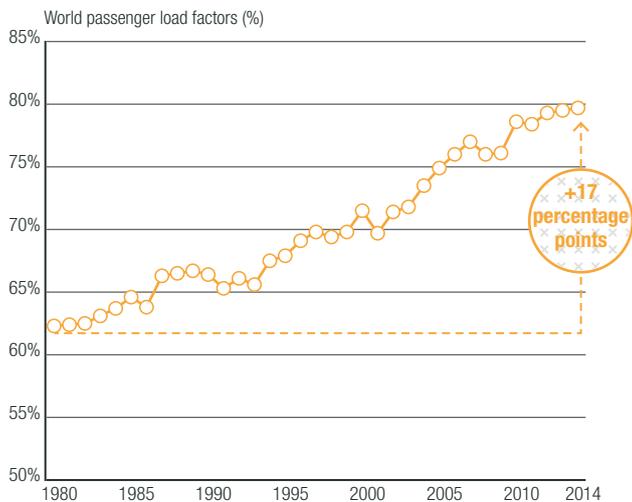


### Airport connectivity

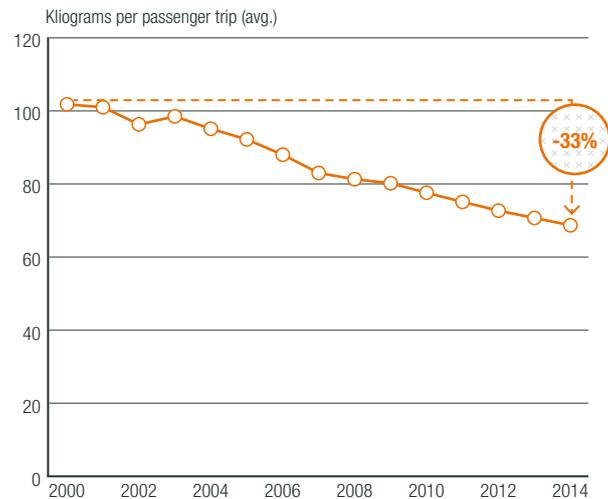
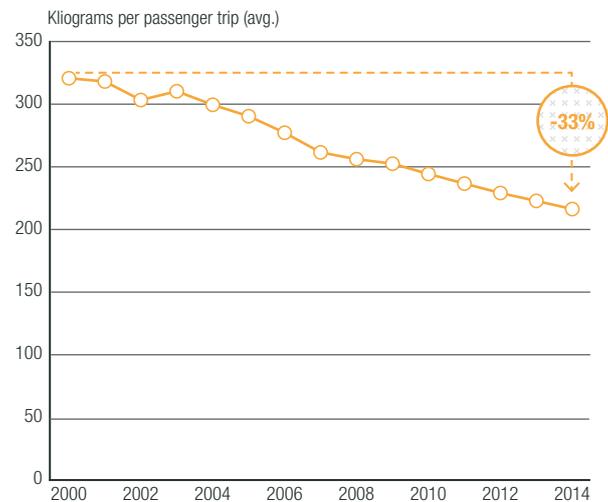


**MORE PRODUCTIVE SEATS**

Sources: OAG, Ascend, ICAO, Airbus GMF 2015

**Yearly offered seats per aircraft****Load factors****LESS FUEL AND LESS CO<sub>2</sub>!****LESS FUEL BURN, THEREFORE LESS EMISSIONS**

Sources: ICAO, IATA, Airbus GMF 2015

**Fuel consumption****CO<sub>2</sub> emissions**

**PASSENGER TRAFFIC FORECAST –  
4.6% PER ANNUM (2014-2034)**

- Aviation **remains resilient** to crises, **growing 85%** since 2001
- **Domestic China** will be the largest flow by 2034, forecast to grow nearly four times
- Half of the top 20 traffic flows will include Asia-Pacific
- Airlines in the **Asia-Pacific** will fly **36%** of total traffic, North American and European airlines forecast to fly 38% of RPKs combined
- **Middle Eastern** carriers will grow from an **9% share to 13% of traffic** in the next 20 years
- Despite perturbations Airbus' historical traffic forecasts continue to track the long term trend

**World traffic**

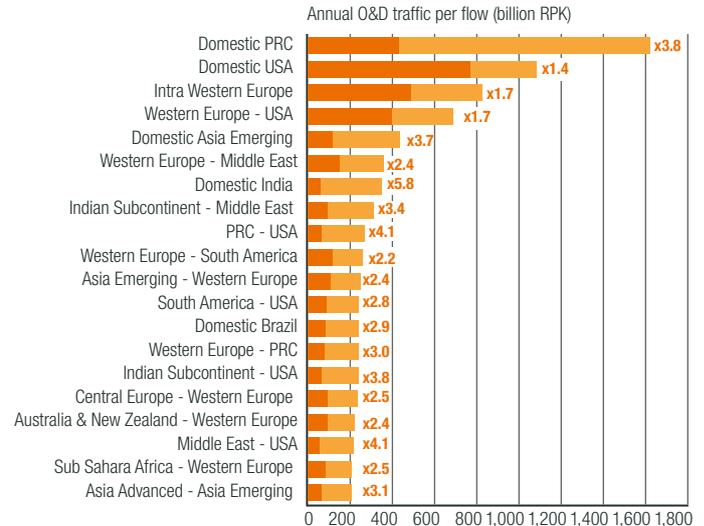
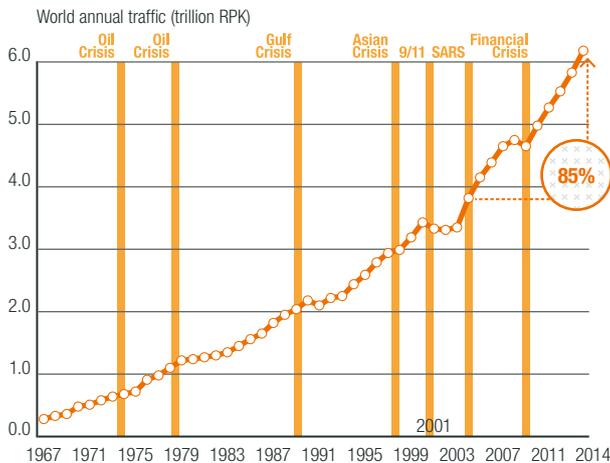
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**85%**

**GROWTH SINCE 9/11**



**AIR TRAVEL HAS PROVED TO BE  
RESILIENT TO EXTERNAL SHOCKS**  
Sources: ICAO, Airbus GMF 2015  
RPK = Revenue Passenger Kilometer



2014

2034

**DOMESTIC PRC WILL BE THE LARGEST  
O&D TRAFFIC FLOW IN 2034**  
Source: Airbus GMF 2015

**Asia-Pacific  
leading growth**

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**50%**

**OF THE TOP  
TWENTY TRAFFIC  
FLOWS WILL  
INVOLVE  
ASIA-PACIFIC**

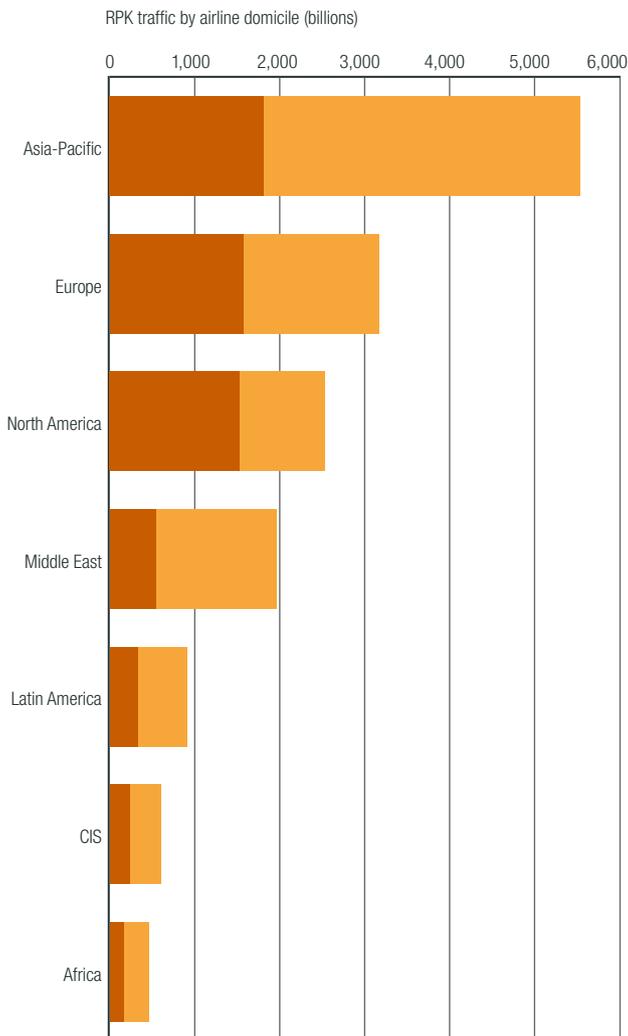


**ASIA-PACIFIC TO LEAD IN WORLD TRAFFIC BY 2034**

Source: Airbus GMF 2015

2014 traffic

2015-2034 traffic

**20-YEAR WORLD ANNUAL TRAFFIC GROWTH****4.6%**

% of 2014 world RPK

20-year growth

% of 2034 world RPK

29%

5.7%

36%

25%

3.6%

21%

25%

2.5%

17%

9%

6.7%

13%

5%

5.2%

6%

4%

4.9%

4%

3%

5.3%

3%

## GMF long term validity

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**GMF 2000  
 LONG TERM  
 FORECAST IS STILL  
 IN LINE WITH OUR  
 LATEST FORECAST**

### DESPITE "UPS AND DOWNS" GMF TRAFFIC FORECASTS TRACK THE LONG TERM TREND

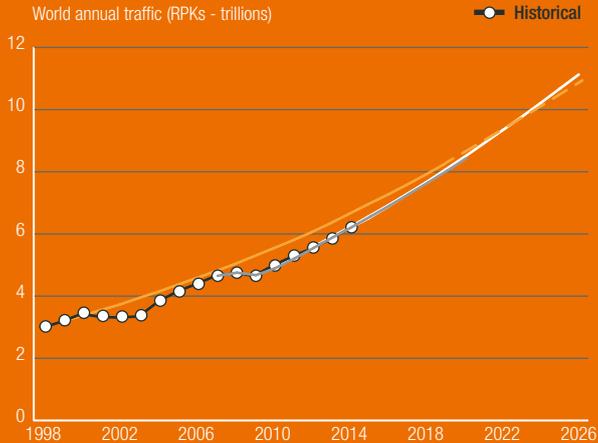
Sources: ICAO, Airbus GMF 2015

GMF 2000

GMF 2015

GMF 2008

● Historical



## PASSENGER TRAFFIC FORECAST

- Traffic between emerging markets **forecast to grow the fastest at 6.6% AAGR**. They will also have the largest share of RPKs with 36%
- **Advanced to Emerging traffic flows will also grow strongly at 5.0% AAGR** between 2014 and 2034
- Traffic to and from the **emerging regions will account for 70% of World RPKs** by 2034
- International long haul traffic will continue to represent about 45% of the World RPKs in the next 20 years, and will **grow most strongly at 4.7% AAGR to 2034**

**EMERGING REGIONS  
WILL DRIVE WORLD  
TRAFFIC GROWTH**

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**TRAFFIC  
FROM/TO/WITHIN  
EMERGING REGIONS  
WILL ACCOUNT FOR  
70%  
OF WORLD RPKs**

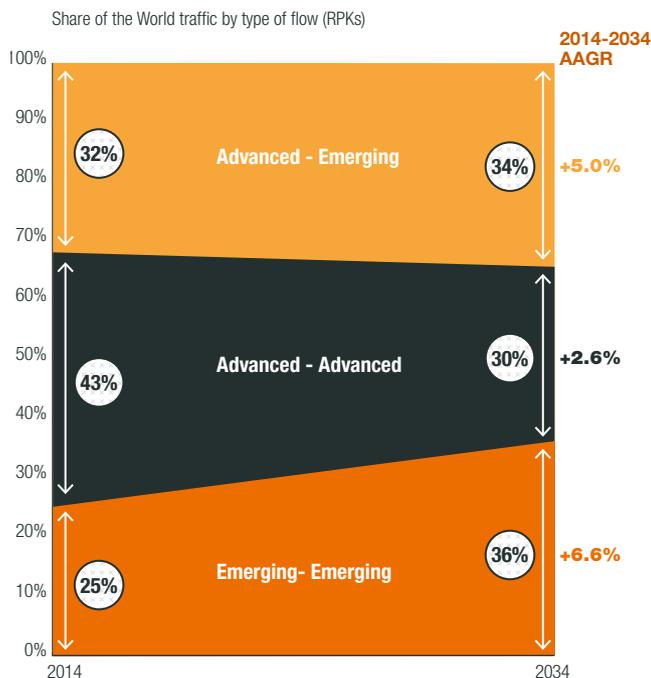
**2034**

**Long-Haul  
demand leads  
the market**

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**INTERNATIONAL  
LONG-HAUL TRAFFIC  
WILL CONTINUE  
TO REPRESENT  
ABOUT  
45%  
OF WORLD RPKs  
IN THE NEXT  
20 YEARS**

## EMERGING REGIONS WILL ACCOUNT FOR THE LARGEST SHARE OF ORIGIN AND DESTINATION TRAFFIC WORLDWIDE

Source: Airbus GMF 2015

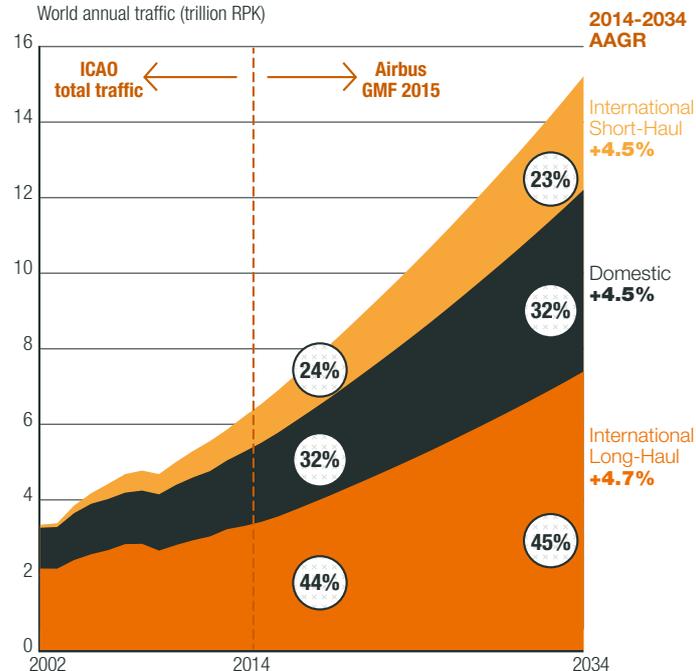


## INTERNATIONAL LONG-HAUL TRAFFIC WILL STILL REPRESENT THE LARGEST SHARE OF TRAFFIC WORLDWIDE

Sources: ICAO, Sabre GDD, Airbus GMF 2015

Long-haul: O&D distance >2000 NM

World annual traffic (trillion RPK)



## FREIGHT TRAFFIC FORECAST

- **Freight traffic** (main deck and belly hold) will grow on average **4.4% per annum** over the next **20 years**
- As for passenger traffic, **growth involving the emerging markets will be strong**, with 6.1% AAGR between emerging countries, and between advanced and emerging
- **80% of all freight traffic is linked to these emerging markets**

Annual growth rate 2014-2034

**4.4%**

**INCLUDES BELLY AND MAIN DECK**

