



ICAO

ECONOMIC DEVELOPMENT

NO COUNTRY LEFT BEHIND



# CIVIL AVIATION MANAGEMENT PROGRAM UNDER NGAP





## Air Traffic forecasts

→ Air traffic will double by 2034

Forecasted Passenger Traffic in 2034



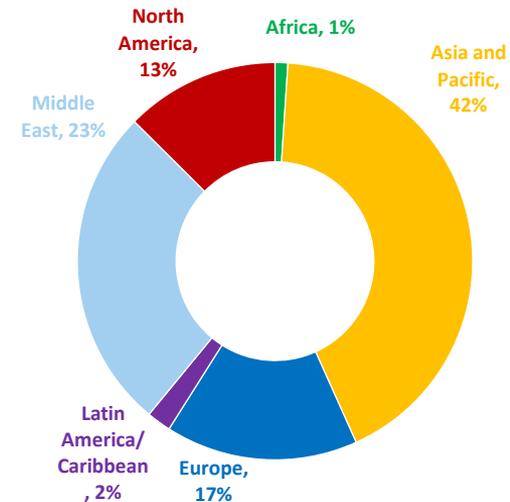
Forecasted Freight Traffic in 2034



Projected Top 10 Routes 2040

Rank 2040	Rank 2015	Long Term Forecast Route Group	Share 2040	Share 2015
1	4	Central Southwest Asia - Pacific South East Asia	11.9%	5.4%
2	1	Intra Europe	11.5%	15.8%
3	8	Central Southwest Asia - Middle East	11.3%	3.9%
4	2	Europe - North America	9.0%	11.8%
5	3	Central Southwest Asia - Europe	7.3%	5.8%
6	5	Intra Pacific South East Asia	6.1%	4.5%
7	7	Central Southwest Asia - North America	5.9%	4.1%
8	18	Central Southwest Asia- North Asia	4.6%	1.9%
9	6	Europe - Middle East	3.6%	4.5%
10	9	Europe - Pacific South East Asia	3.5%	3.6%

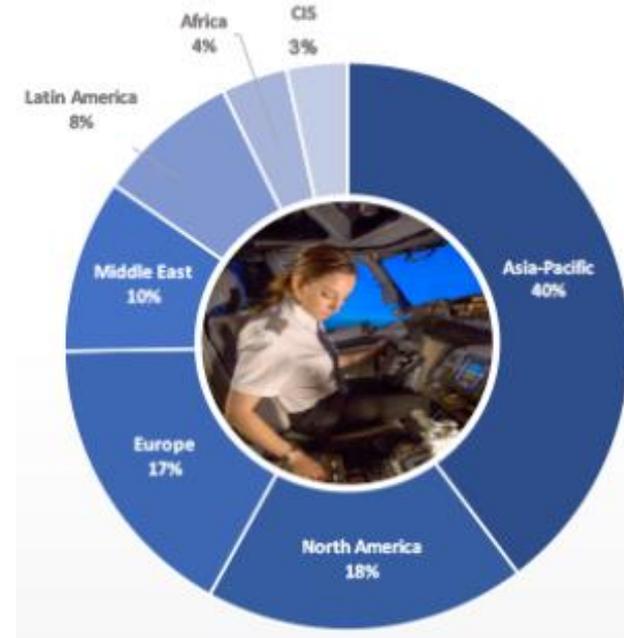
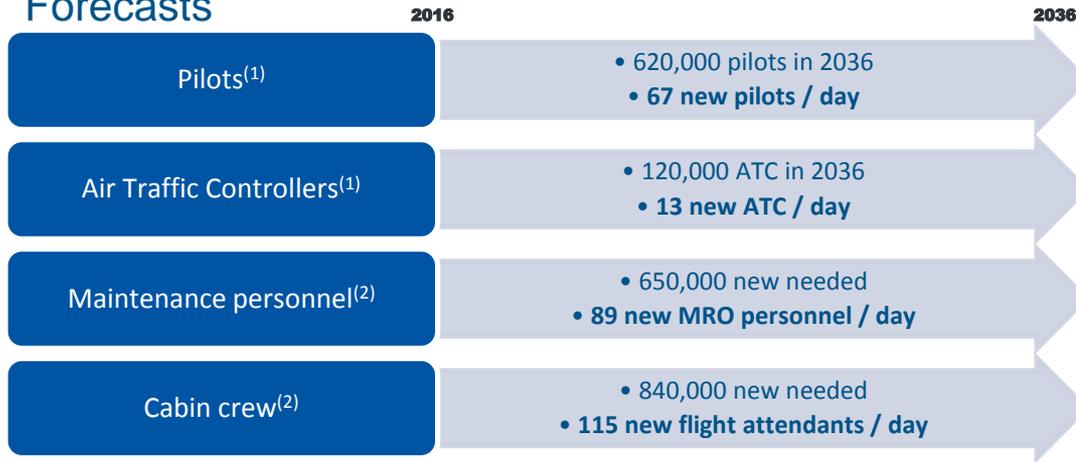
Projected International Freight Traffic Breakdown by AOC 2040





## Education requirements

### Forecasts



→ How to keep pace with those requirements ?

New pilots by region 2017 – 2036<sup>(2)</sup>

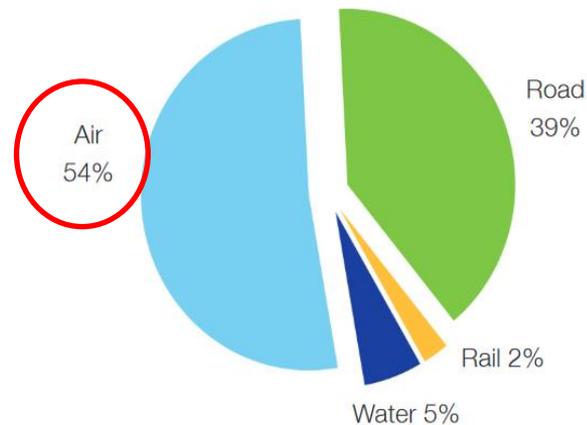
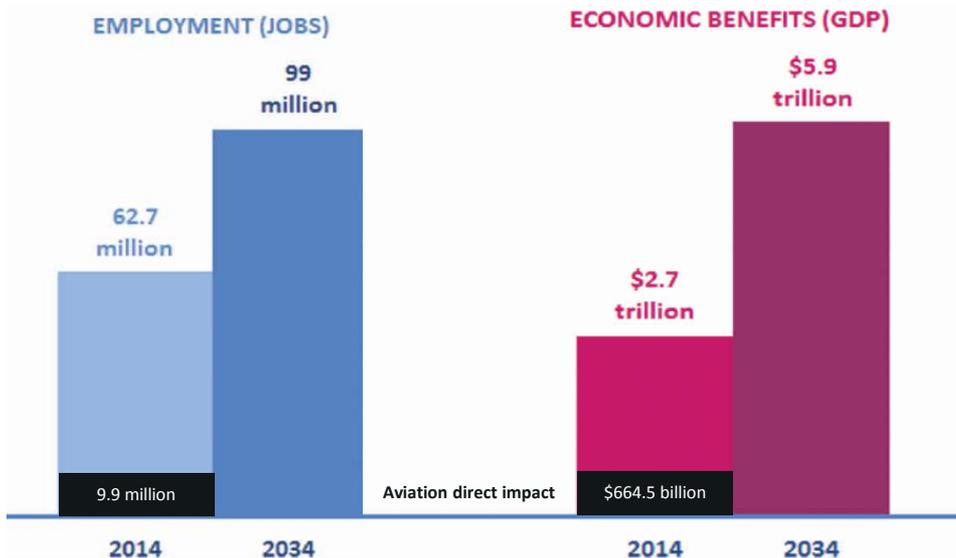
(1) ICAO Long Term Traffic forecasts (aircraft above 100 seats)

(2) Boeing, 2017, Pilot and technicians outlook



## Economic contribution of Civil Aviation

Air transport = **3.5%** of the world's GDP in 2016  
 \$1 output = **\$3.25** demand in other industries  
 1 job = **6.1 job** in other industries



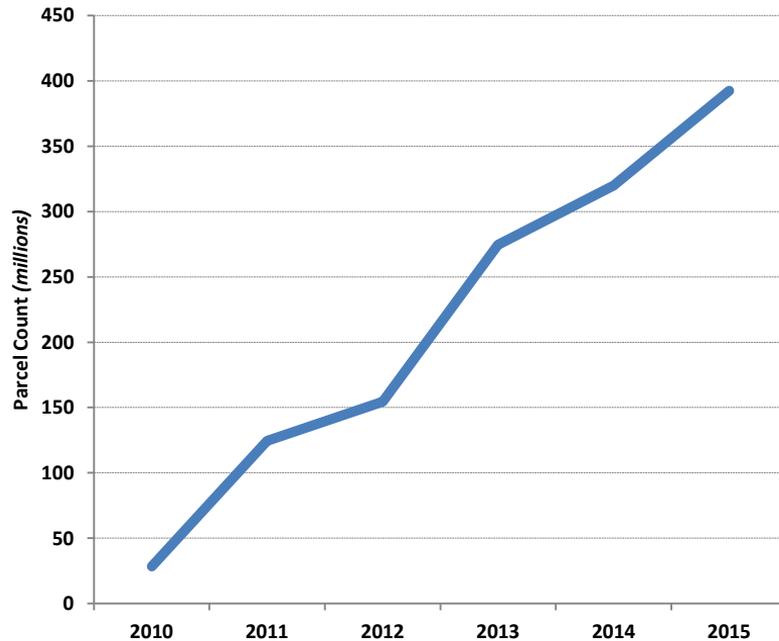
**Inbound tourism by mode of transport in 2016**

- Employment
- Economic benefits
- Global trade, imports/exports and e-commerce
- Tourism
- Social benefits

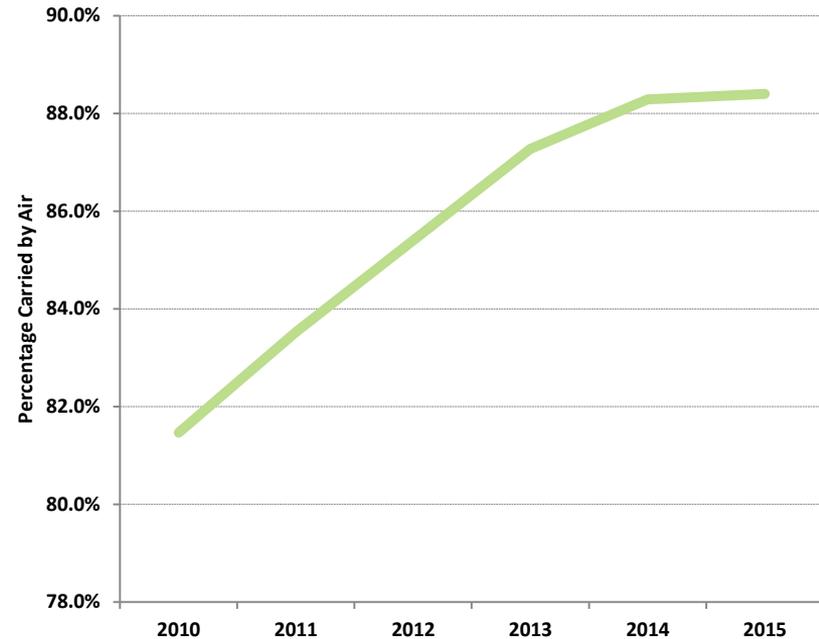


## Global Air B2C E-Commerce Activity Growth

### Global Air E-Commerce Activity (Two Ways, Parcel Count)



### Percentage of E-Commerce Parcels Carried by Air (Two Ways, Percentage Carried by Air)

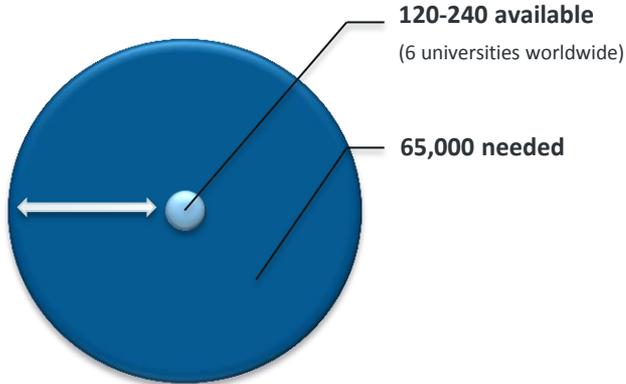


\* Air E-Commerce is estimated assuming parcels traveling a distance of above 1000 kilometres are delivered by air



## CAMP : Civil Aviation Management Program

Capacity for graduate CAMP in 2016 (in number of persons)



→ Each year, 5% of technical workforce move to management (study soon published on ICADS)

Less skills  
Less efficiency  
More costs



### Particularities of civil aviation

- very competitive industry
- volatile returns
- massive financing requirements
- managing risks is paramount
- **efficient management is key**

### Adverse effects on the growth of aviation

Impact on:

- Economic development
- Financing of the sector
- Tourism
- Trade and imports/exports
- E-Commerce
- Infrastructure development



## Qualifying and accredited degree for senior management

Coordination under NGAP Framework

→ CAMP

- Creation of a qualifying degree for Civil Aviation Management
- Network of partner universities worldwide
- Accredited program

Very positive first feedback from universities

**Further announcements at NGAP 2018**

