



# ITF Transport Outlook 2015

International passenger aviation  
scenarios

---

# Introduction

- ▶ Add passenger air to the transport modes of the ITF Outlook
- ▶ Analyse policies on a global scale
- ▶ Build in-house modelling capabilities for more detailed scenario analysis



---

# Modelling approach

## Air transport demand

Income  
Trade  
Cultural proximity  
Supply



## Air passenger volumes

## Route choice



Between 310 world  
regions

Scenarios for air  
liberalisation



# Air liberalisation

**Air liberalisation**

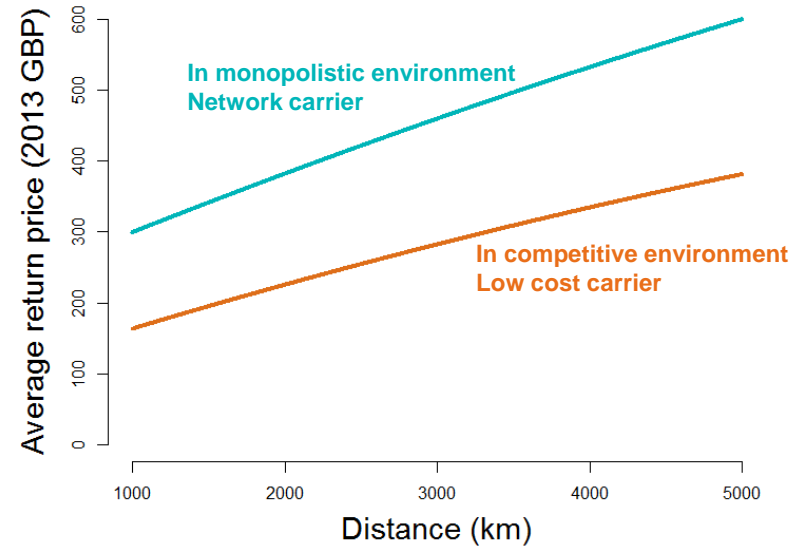


**Decrease in price**

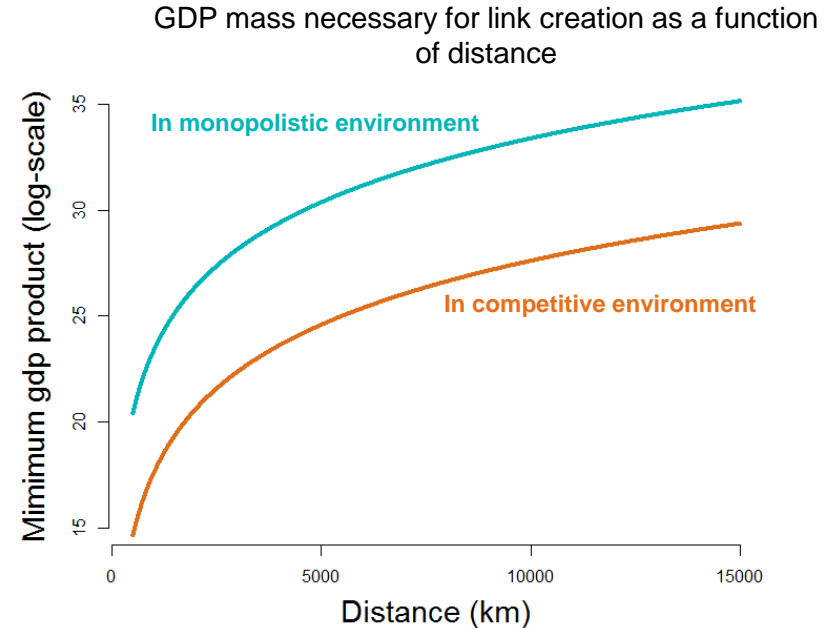
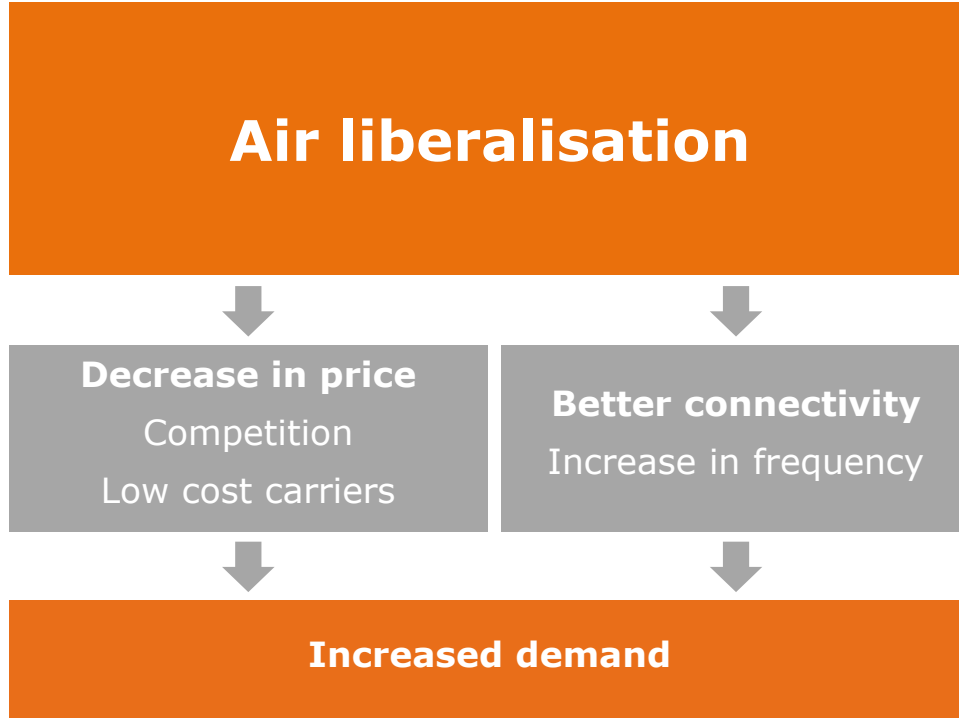
Competition

Low cost carriers

Estimated average return price as a function of distance in Asia



# Air liberalisation



---

# Air liberalisation

**Air liberalisation**



**Decrease in price**

Competition  
Low cost carriers



**Better connectivity**

Increase in frequency



**Increased demand**



---

# Alternative scenarios

## Static network

No evolution of price

No new link created

## Dynamic network

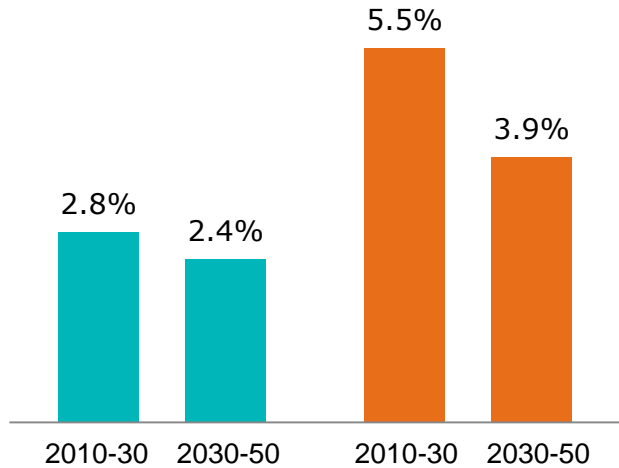
Competition  
Strong penetration of  
low-cost carriers

Free network  
evolution

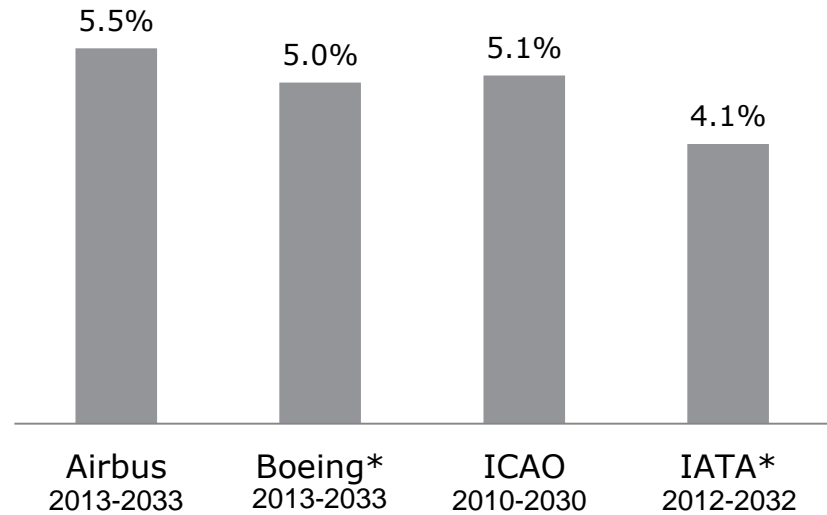


# Overview of global results

■ Static network  
■ Dynamic network



## Industry and international organisation forecasts

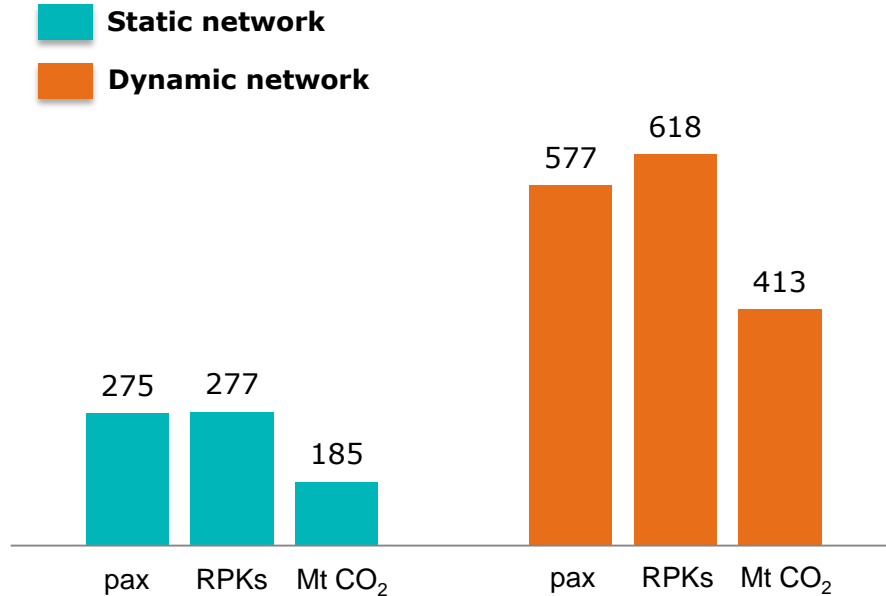


**International revenue passenger kilometres**  
 Annual growth rate (CAGR)

■ ■ ■  
 \* Includes domestic RPKs



# Overview of global results

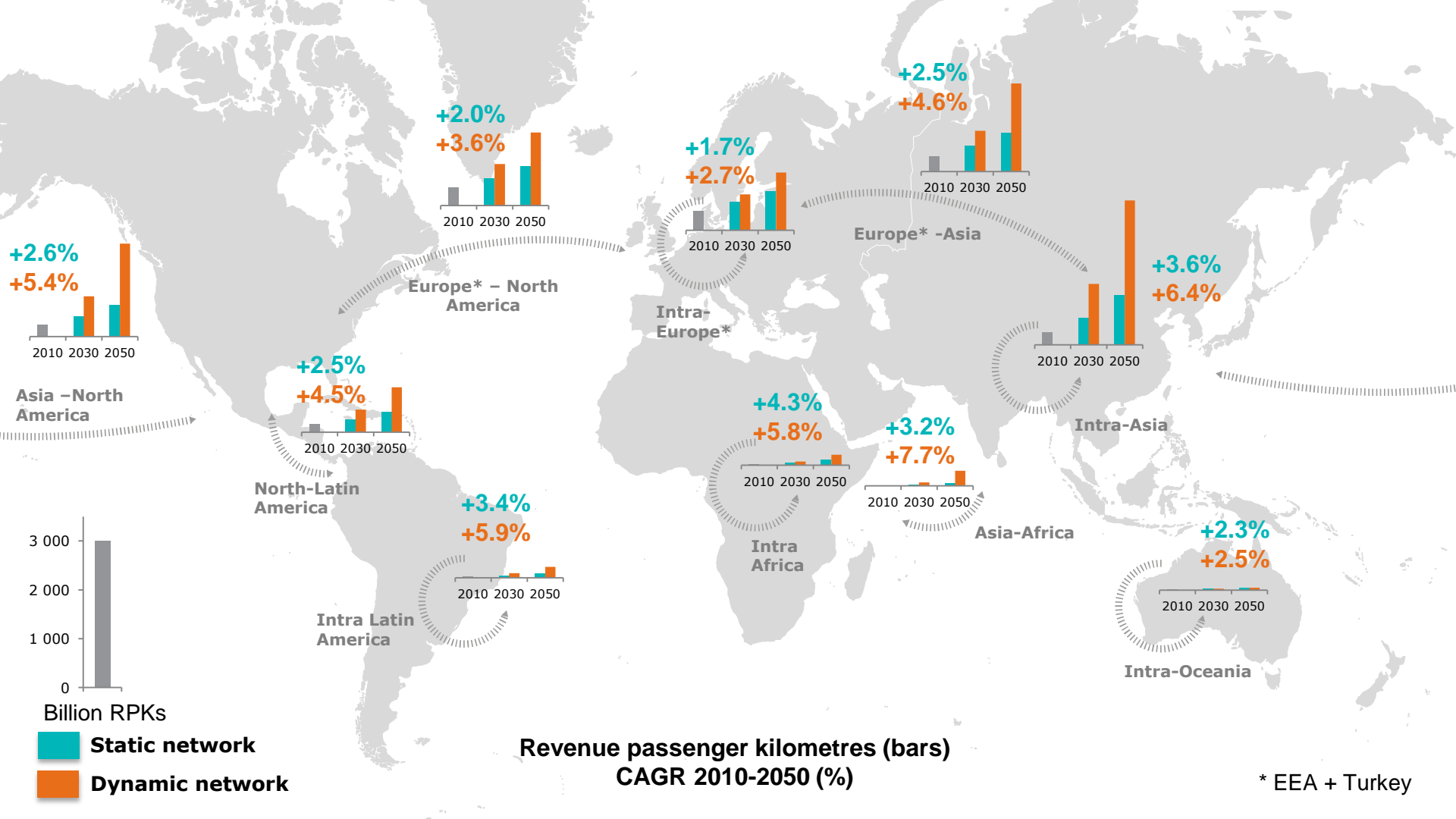


2010-2050 evolution (2010=100)

1% CO<sub>2</sub> efficiency  
improvement per year

CAEP 9  
Moderate Aircraft  
Technology





---

# Conclusions

## Findings

**Continued growth relies on network being able to grow with demand**

**Low cost carriers have greatest effect on demand for short haul**

**CO<sub>2</sub> emission could be multiplied by 4 by 2050**

## Emerging issues

**New network strategies**

**Long haul LCC**

**New business models**

**Evaluation of mitigation strategies**





Thank you for your  
attention