

ICAO AIR TRANSPORT SYMPOSIUM

18 - 20 APRIL 2012



Strategies and Tools for Sustainable Air Transport



Forecasting in a cyclical industry

Mario Formica, Vice President Strategic Marketing & Airline Studies

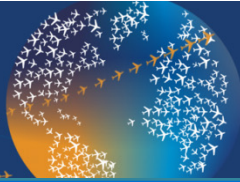


An Airbus Aircraft and EADS joint venture **ATR**
PROPELLING TOMORROW'S WORLD



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Strategies and Tools for Sustainable Air Transport



- ATR at a glance



- The role of regional air transport towards sustainability



- Forecasting in a cyclical industry



- Conclusion



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Strategies and Tools for Sustainable Air Transport

EADS

~ 50bn€ revenues

FINMECCANICA

~ 20bn€ revenues



AIRBUS

EUROCOPTER

ASTRIUM

CASSIDIAN



EADS ATR



ATR



AgustaWestland

AleniaAermacchi

A Finmeccanica Company

Eurofighter Typhoon

superjet INTERNATIONAL

An Alenia, Aeritalia and Sukhoi Company



TELESPAZIO

A Finmeccanica / Thales Company

ThalesAlenia Space

M.B.D.A. MISSILE SYSTEMS

ELEX



AleniaAermacchi

A Finmeccanica Company

50 %

~ 1.4bn\$ revenues

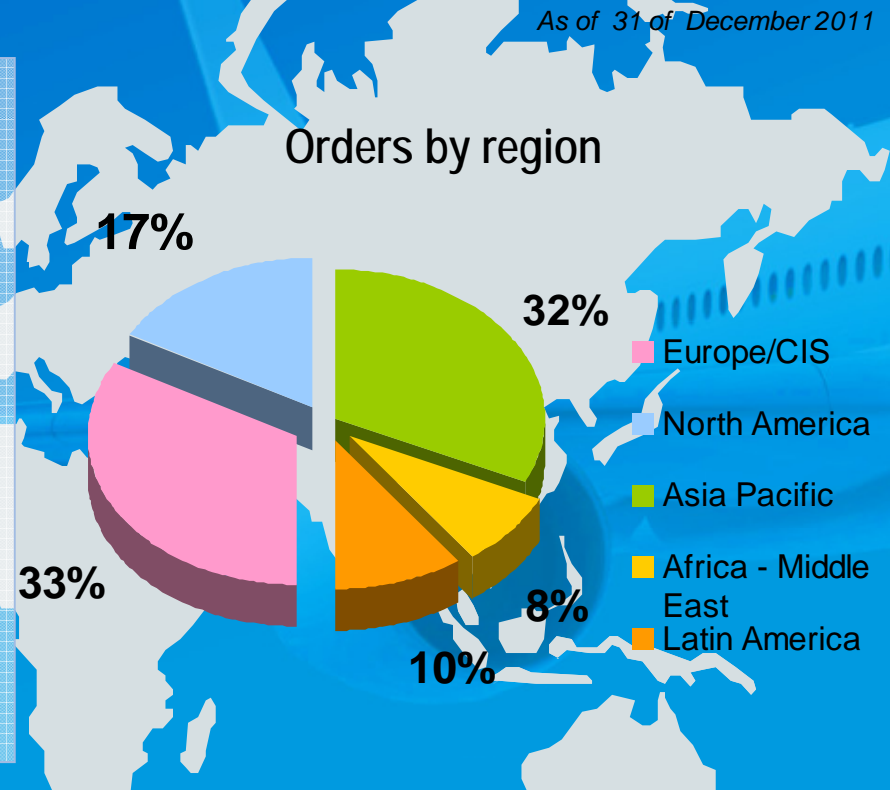
50 %



Leadership

- **1,200+** firm orders
- **22 Million** cycles
- **180** operators in **95** countries
- Production ramp-up to **72 aircraft per year in 2012**
- Backlog valued at **5.0 Bn US\$**

585 new ATR orders in the last 7 years; **70%** from *emerging economies*
157 new orders in 2011 (+79 options)



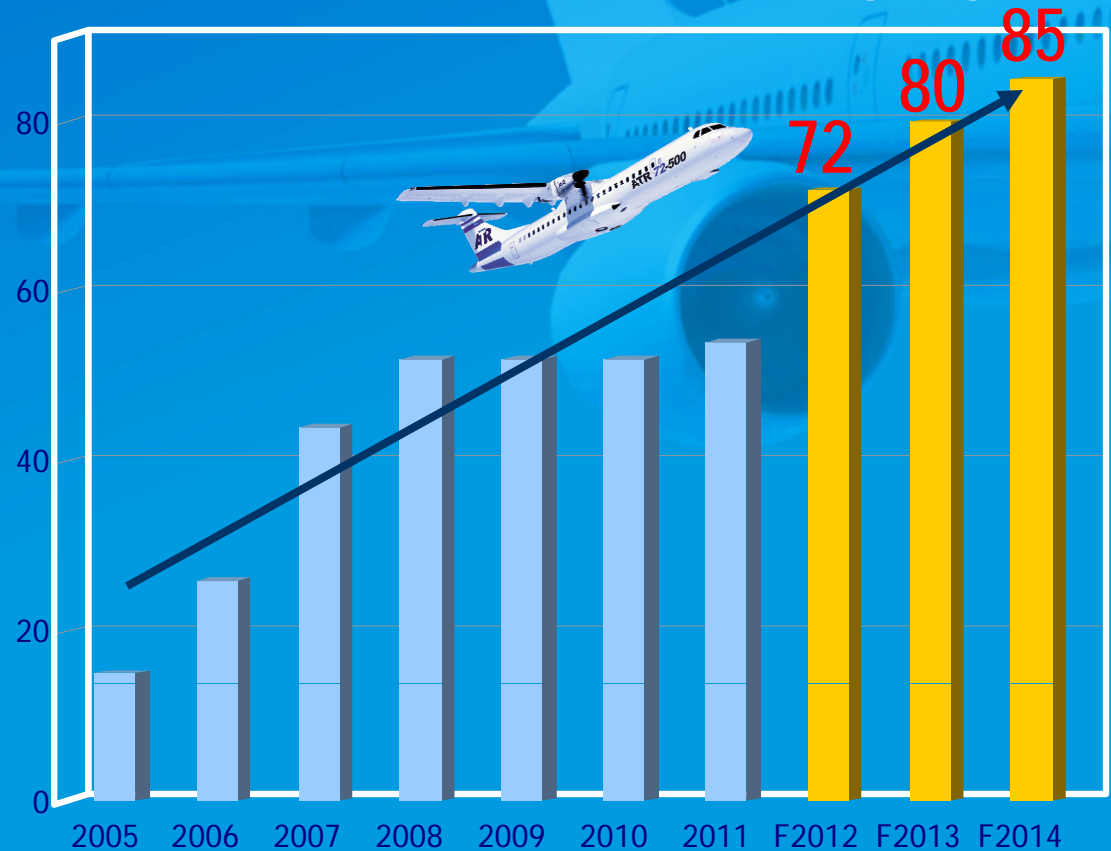
Milestone 2011: ATR -600 Series Certification, first deliveries & EIS
Milestone 2012: 1000th ATR delivery



- Preparing next step of ATR's growth
- More than 3 years of full production



Production/Deliveries Ramp-Up



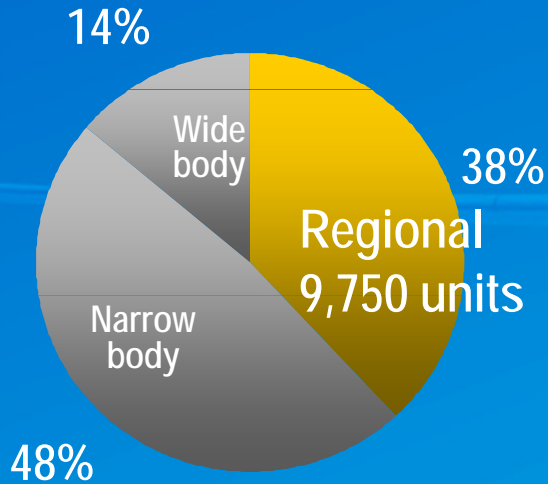


The role of regional air transport
towards sustainability

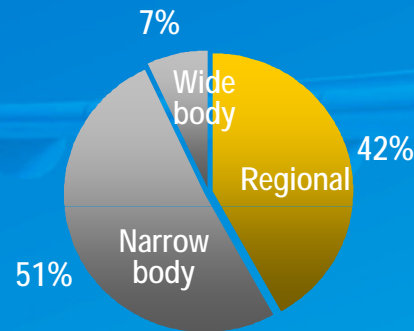


Regional Aircraft Relevance in the Air Transport System

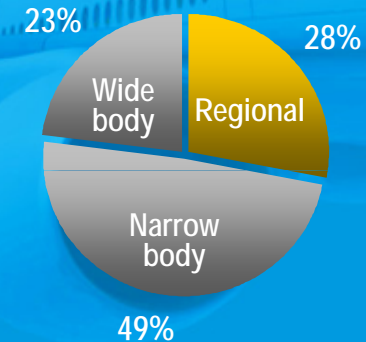
Fleet



Departures



Flown Hours



Correlated with gaseous emissions

Total World Passenger Fleet – 25,600 units

Worldwide - Year 2011

- ▶ Regional aircraft fleet account for about 40% of total world regional fleet.
- ▶ Fully 60% of airports with scheduled service are served by regional aircraft.
- ▶ More than 40% of new routes in the last 5 years are operated by regional aircraft only.



Short-haul is a big market

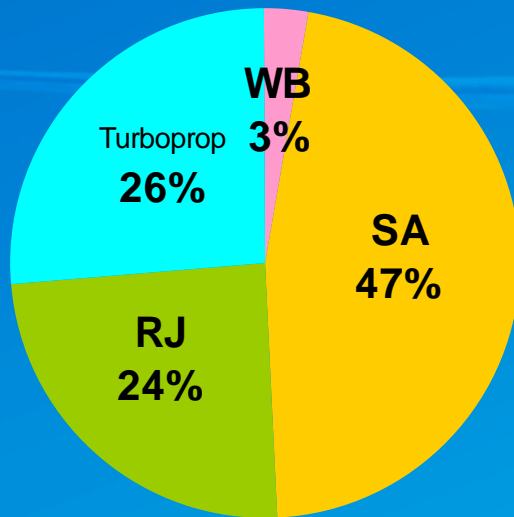


Source: OAG

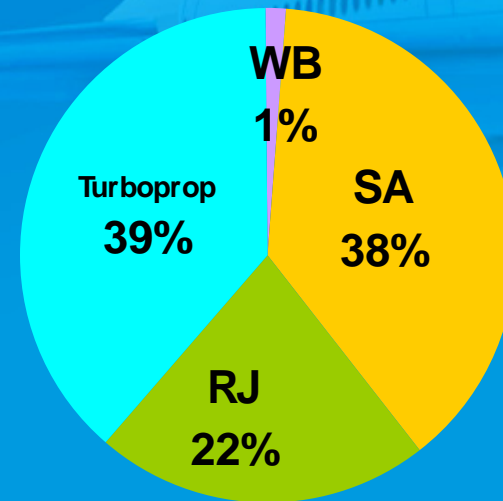


Regional aircraft operate half of *short-haul* flights

0-500 NM
55% of OAG frequencies



0-300 NM
39% of OAG frequencies



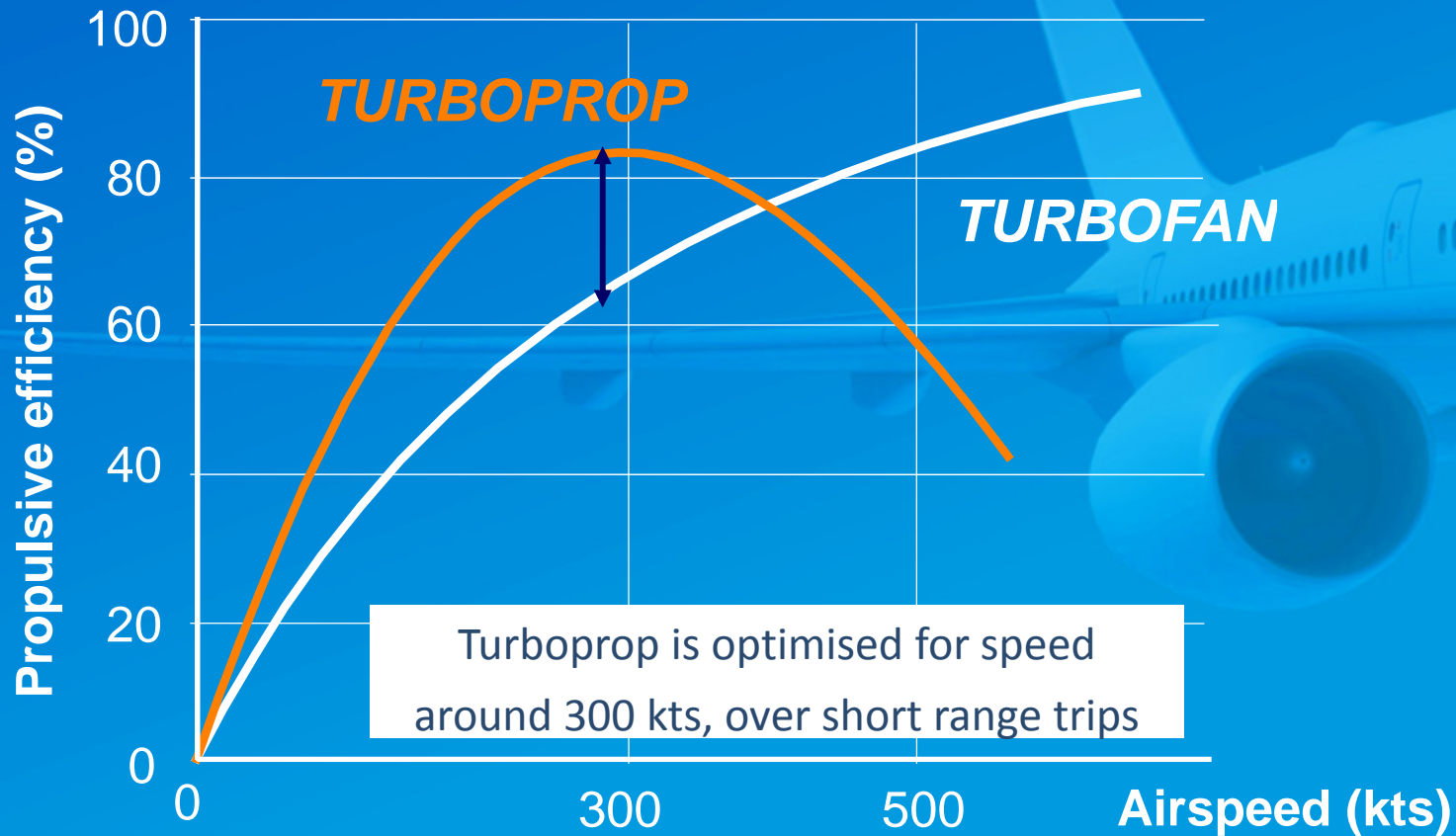
Source: OAG scheduled flights database
TP = Turboprop
RJ = Regional Jet
SA = Single-aisle (above 120 seats)
WB = Widebody

Source: OAG - January, 2012

Turboprops are the preferred choice for airlines on short-haul, thin sectors and this is expected to be reinforced in the next years



Turboprop advantage: Propulsive efficiency is the key



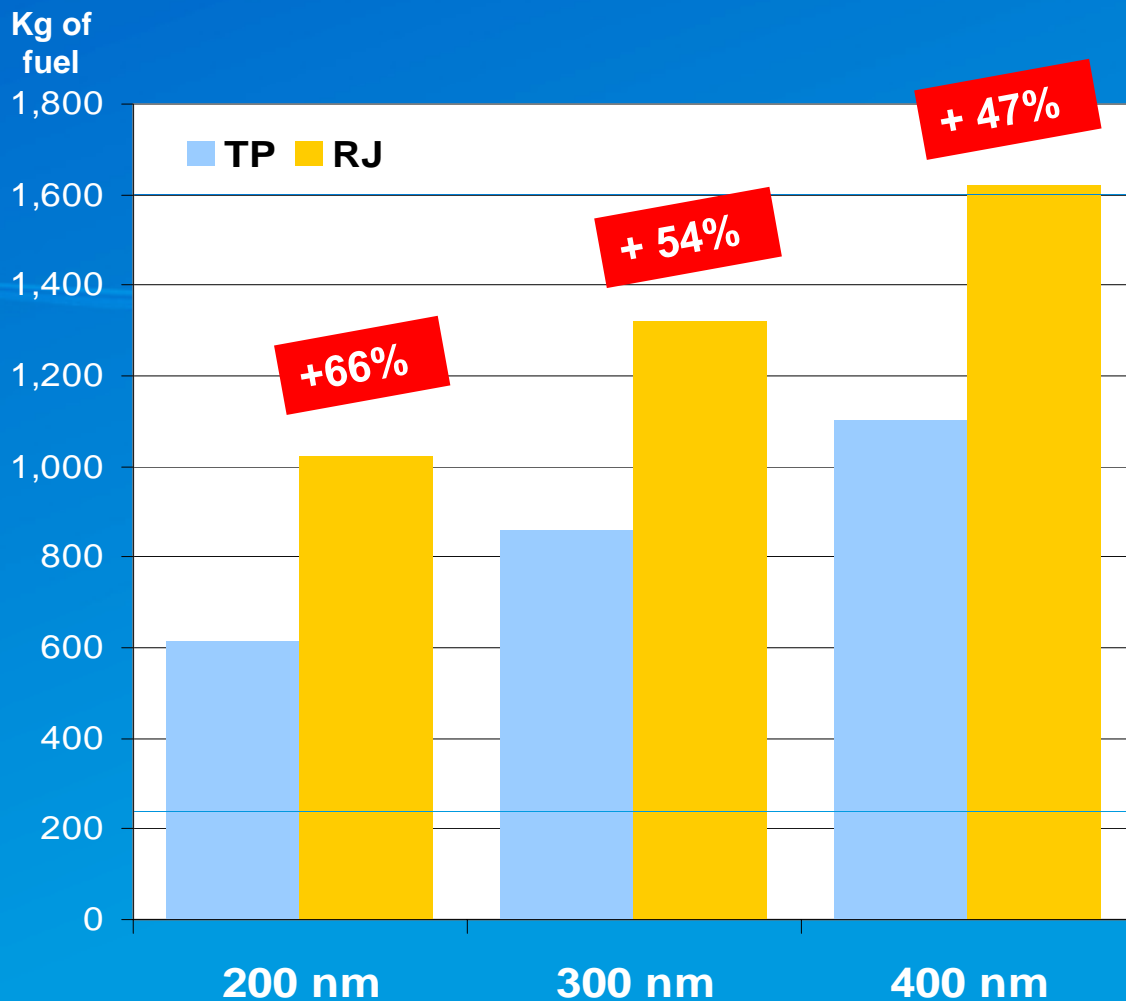
Turboprop is optimised for speed around 300 kts, over short range trips

Typical turboprop speed

Typical regional jet speed



Fuel efficiency is a must for regional airlines operating on short-haul sectors



Turboprop low fuel consumption is an hedge against rocketing fuel prices



Winds of change in regional aviation

- Regional airline business model is evolving: the key driver of this change is economics, and this factor now *favors large capacity Turboprops and RJ.*
- High fuel prices, below-average yield, are pushing up dramatically the demand for modern turboprops, an hedge against high fuel prices
- TP market share: 77% in the 30-70-seat category.
- 65% in the 30-90-seat category.

2005-2011	
Total 30-70 seat net Orders	
Turboprop	Regional Jet
894 (77%)	270 (23%)

Over the last 7 years, turboprops have clearly dominated the 30- to 70-seat regional market.

Emerging markets, namely Asia and Latin America, are leading the global growth



Oil Price volatility expected to continue

- *Macroeconomic factors are driving this volatility*
 - Unfolding story in the Middle East
 - Libya is still restive
 - Iraqi production has not fully come back online
 - Iran's threat to prevent oil shipments through the straits of Hormuz.
- *Recovery at risks, as oil heads for \$176/barrel in 2013*
 - Inadequate investment in oil production and regional politics in the Middle East and North Africa is threatening to push prices as high as \$176/barrel in 2013
 - **At \$120 today, economic recovery "is in a danger zone" (5% of global GDP). An oil price rise towards \$176 "is a very risky scenario".**



« The small jet airplane era is over because the economics simply are not there »

- «By 2015, US airlines will have about 200 jets with 50 or fewer seats, down from about 1,200. More than 150 have been scrapped in the last 4 years »
- « With oil averaging 120\$ this year, up 45% from 2010, airlines favor new turboprops or regional jets that carry 90 or more people and fly less often »

*Michael Boyd, President of Consultant « Boyd Group Int'l Inc « in
Evergreen, Colorado – , Sep. 2011*

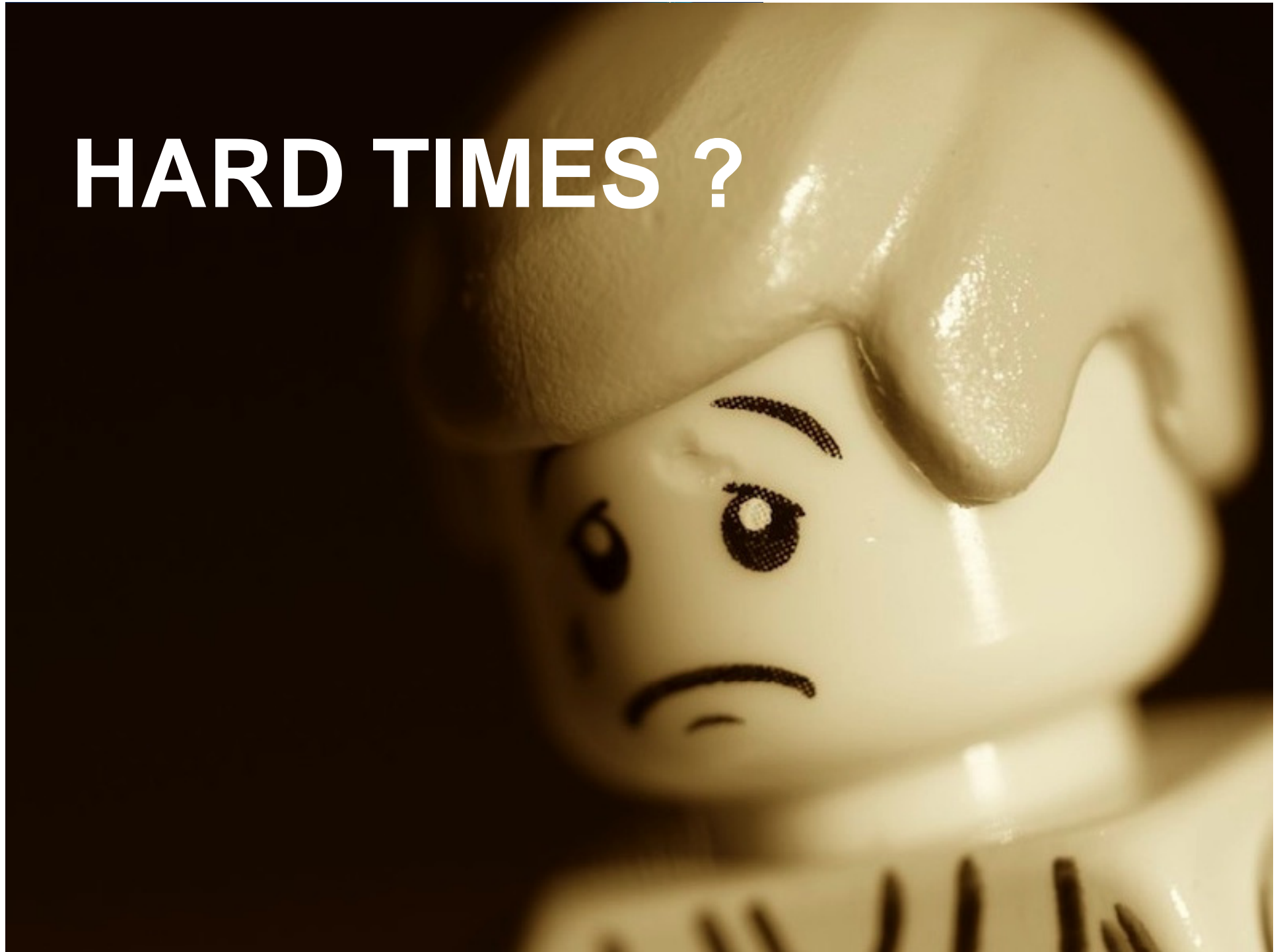


Reducing the DOC/seat/miles.....
...is a sustainable approach

Airlines are more & more
looking for cost cutting
and efficiencies!

By optimising fleet and capacity, and
selecting the right aircraft on the right sector

HARD TIMES ?





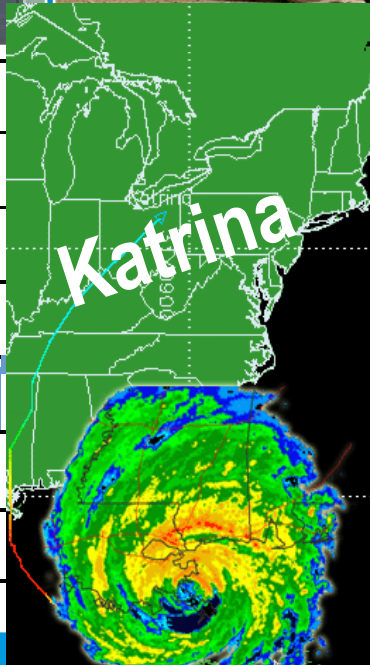
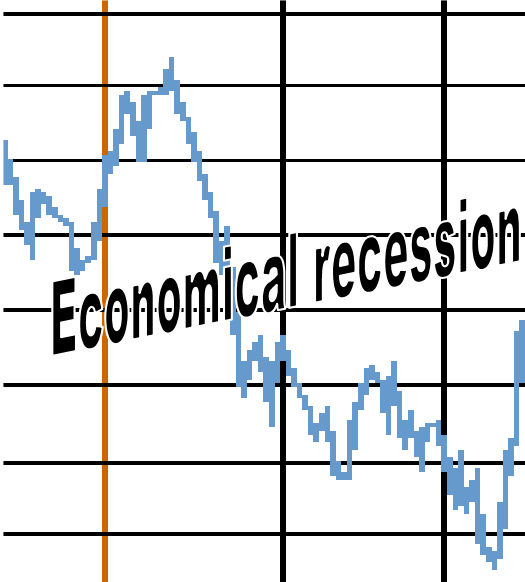
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...”surviving the four horsemen of the apocalypse”




Credit Crunch & Financial Market Turmoil

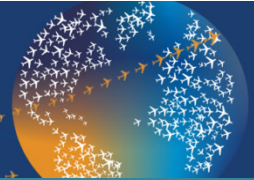


Volcano's exuberance: the Eyjafjallajökull eruption in April 2010

The Future

NEXT EXIT 





Why a Market Forecast ?

TO IMPROVE THE SALES PROCESS

UNDERSTAND MARKET EVOLUTIONS

- Short- haul
- Medium- haul
- Long- haul

ANTICIPATE OPERATORS NEEDS

- Environment
- Regulations
- Costs

ANALYSE COMPETITIVENESS OF CURRENT PRODUCTS AGAINST COMPETITION

TO IMPROVE THE STRATEGIC DECISION MAKING PROCESS

ANALYSE OPERATORS ' FUTURE NEEDS

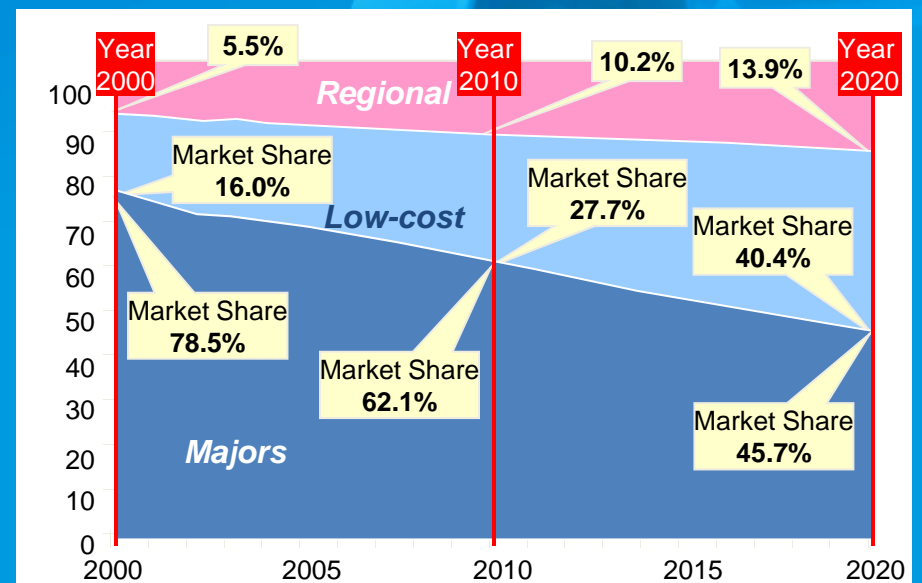
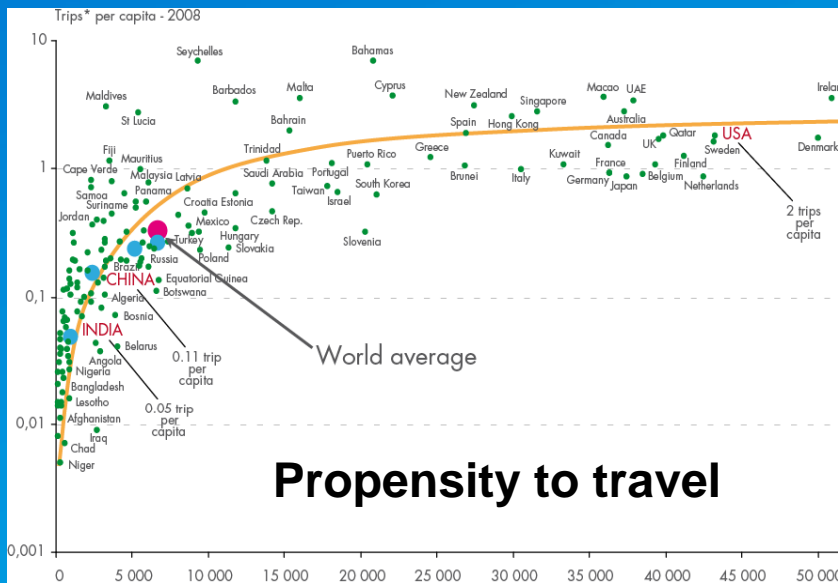
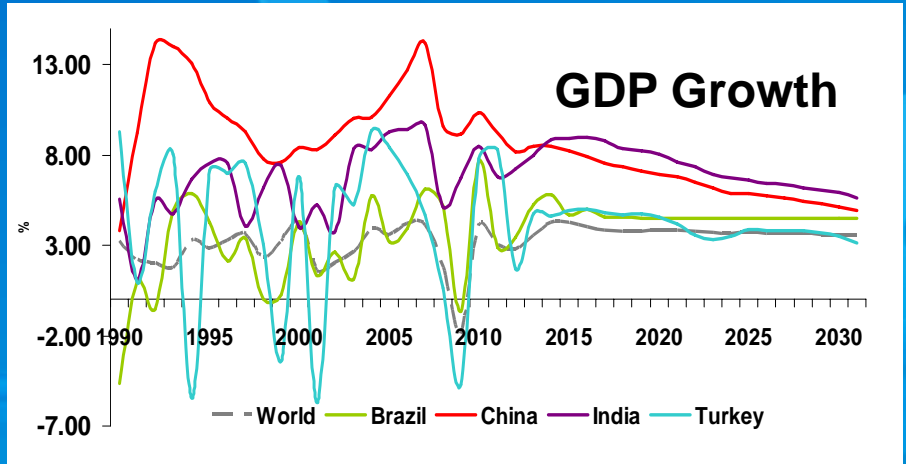
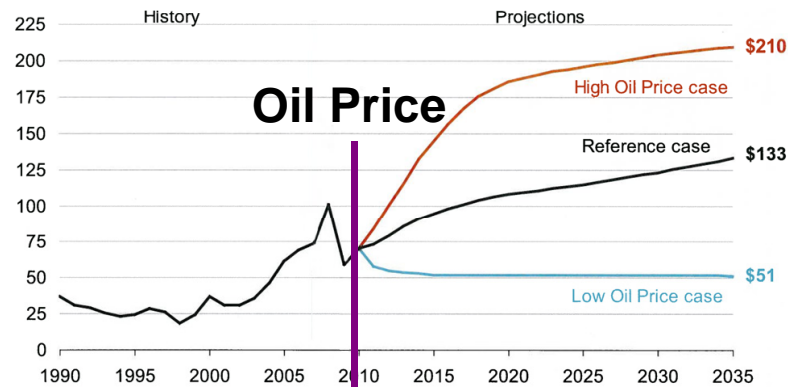
BE CLOSE TO MARKET REQUIREMENTS

DETERMINE FUTURE COMPETITIVE THREATS



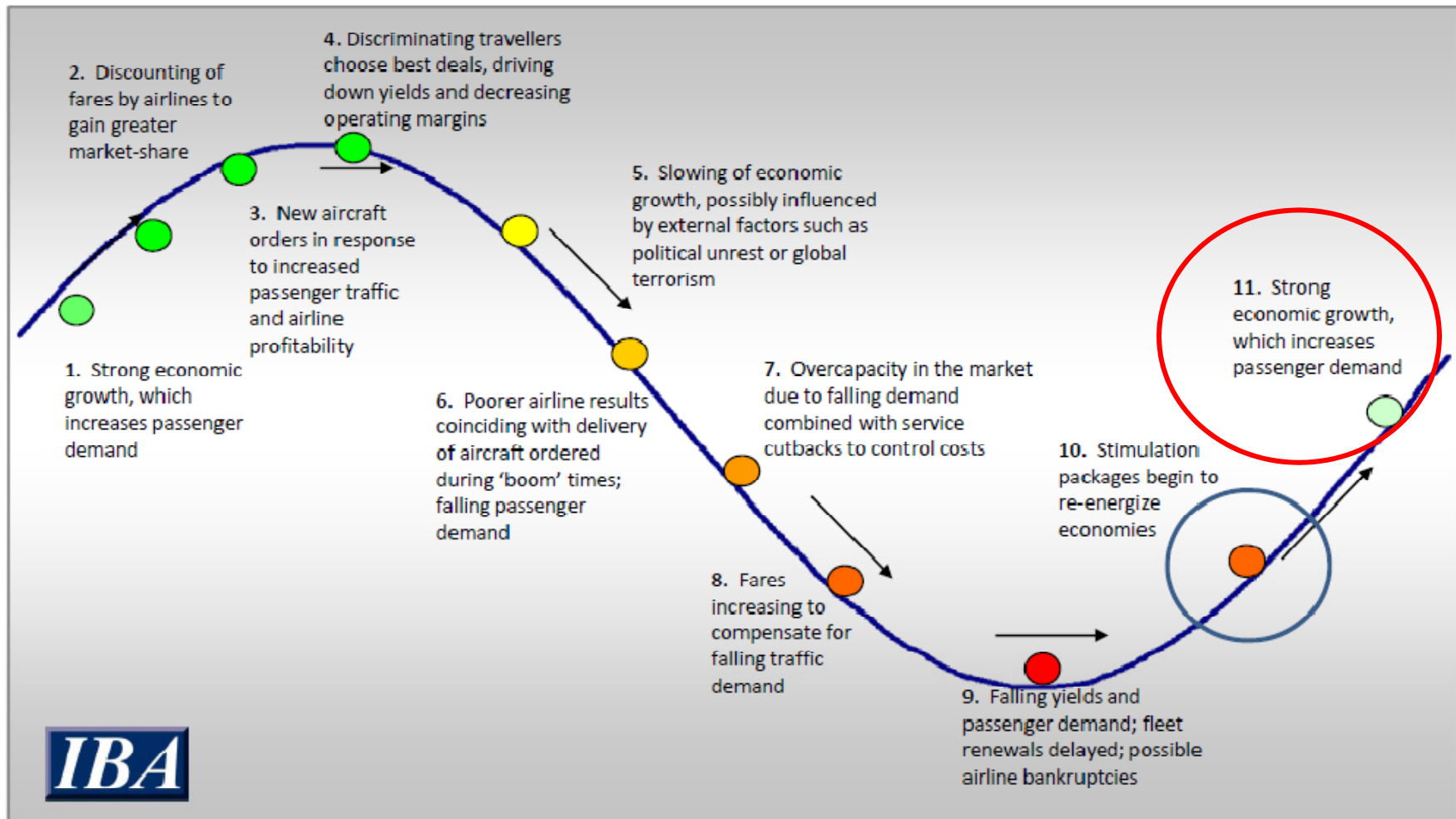
Forecasting. How? Which drivers?

light, sweet crude oil price
2008 dollars per barrel



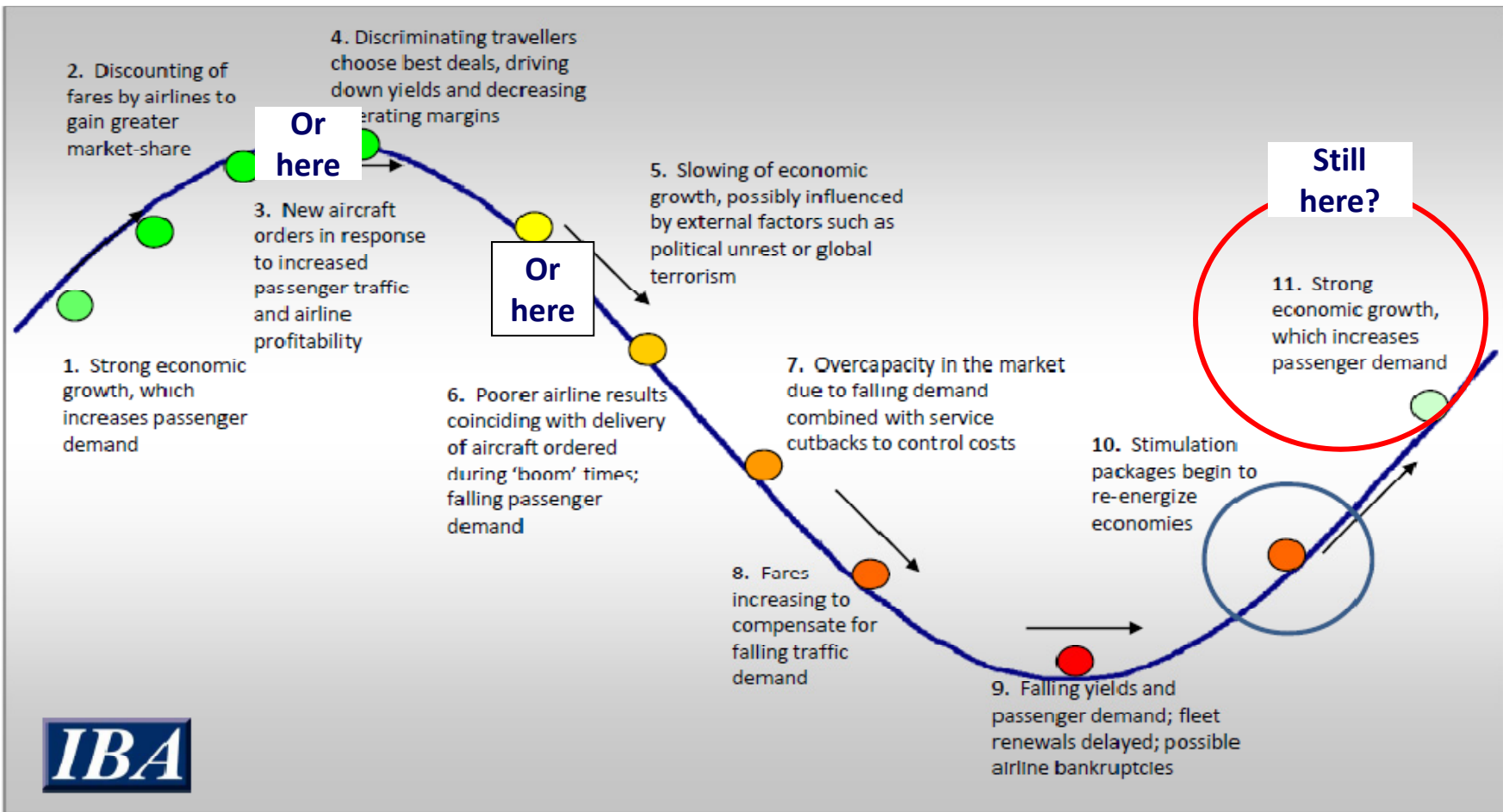
Aviation: A Cyclical Industry

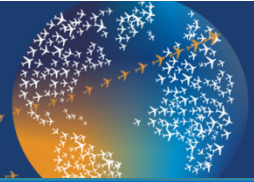
Where are we now? (early 2011)



Aviation: A Cyclical Industry

Where are we now? (April 2012)





Dealing with forecast

- Aviation industry subject to highly volatile and unpredictable external influences.
- Factors such as oil price volatility, economic uncertainty, congestion concerns, credit crunch/financial turmoils and environmental issues are not going away.
- They are here to stay, along with possible new, unknown challenges.
- Developing forecast of aviation demand and activity levels continues to be challenging. In terms of amplified volatility, the process is filled with uncertainty.
- Given the current instability in the global economy, there is much uncertainty as to the timing and strength of the different cycles and the relative speed of recovery in aviation demand.

Short-term discontinuities of cycles hard to predict





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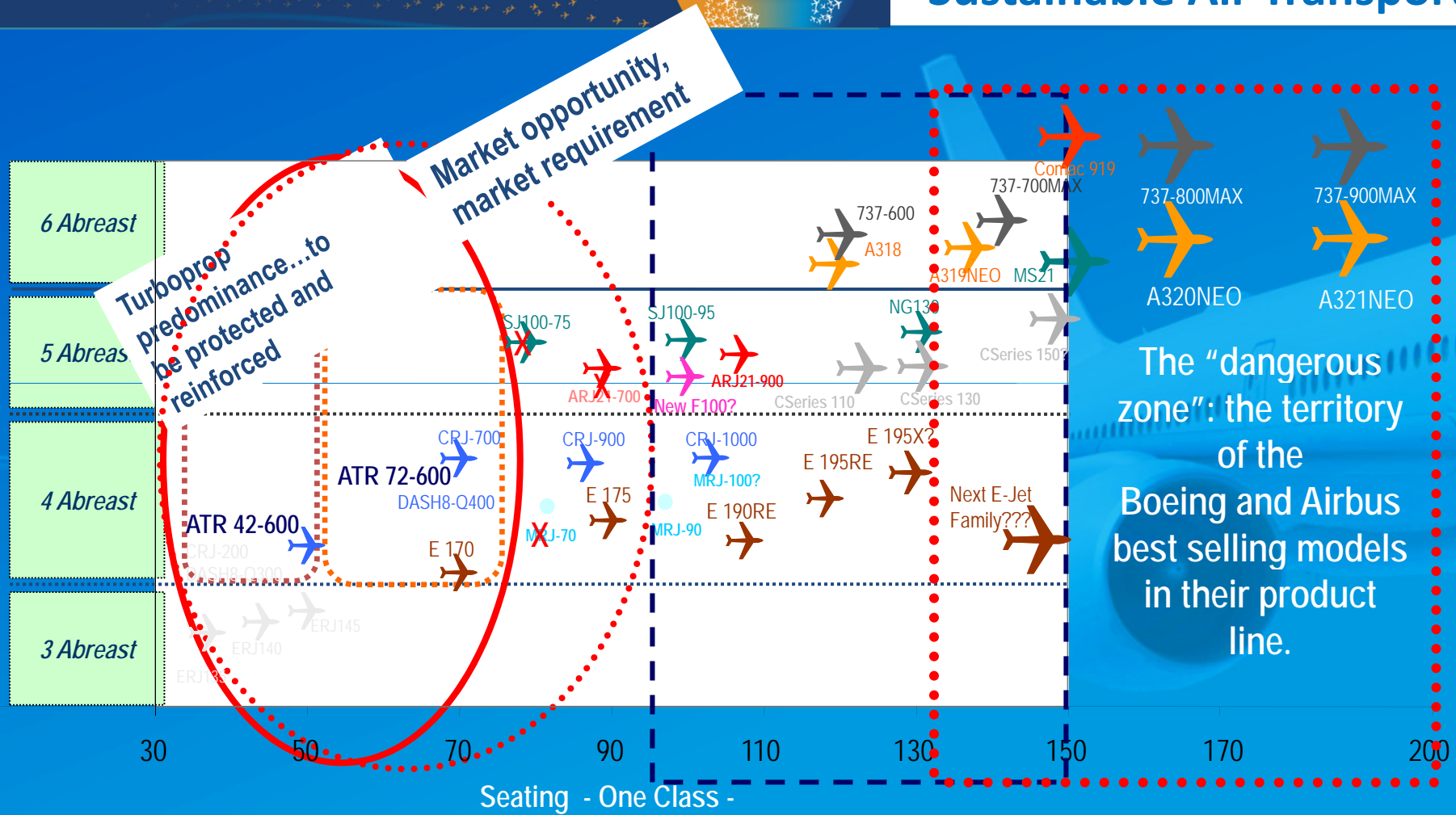
Strategies for sustainability: Larger Capacity Turboprop?



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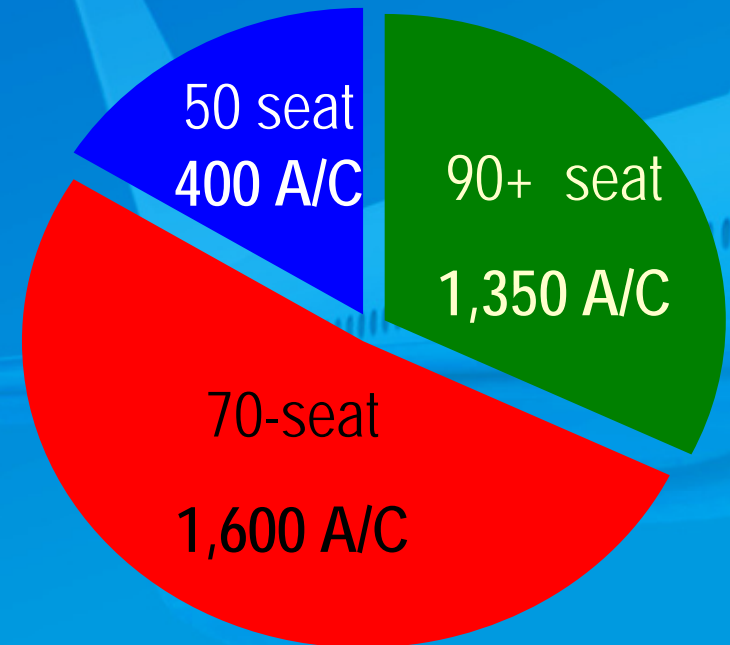


Regional Jet market demand is clearly moving towards the 100-150+ seat category. Turboprops set to dominate the sub-100 –seat market



Long-Term demand for Modern Turboprops remains strong

- 20 Years, 2012-2031
- Airlines will need 3,350 new turboprops
- Value: \$ 78.5Bn



About 80% of the total demand for new turboprops is represented by 70 and 90+seat segments



Priorities and future directions

- A generation ago, “Higher, Further, Faster” were the imperatives for any vision of the future for air transport.
- Now they are “More affordable, Safer, Cleaner, Quieter”, reflecting the need to combine cost-effectiveness with an uncompromising attachment to safety and environmental objectives.



The Future: Sustainability

1. The *environmental* dimension

Seeks to reduce environmental impact on a global and regional scale (noise, pollution, land-use...)

2. The *economic* dimension

Considers economic efficiency and contribution to economic growth (jobs, ability to easily move, productivity, cost recovery...)

3. The *social* dimension

Represents solidarity and equity (access to remote areas, public service obligations, safety...)

Regional aircraft and turboprops namely can play a fundamental role towards a sustainable air transport growth



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Merci de votre attention