



| ICAO UNITING AVIATION

Aviation Data and Analysis Seminar

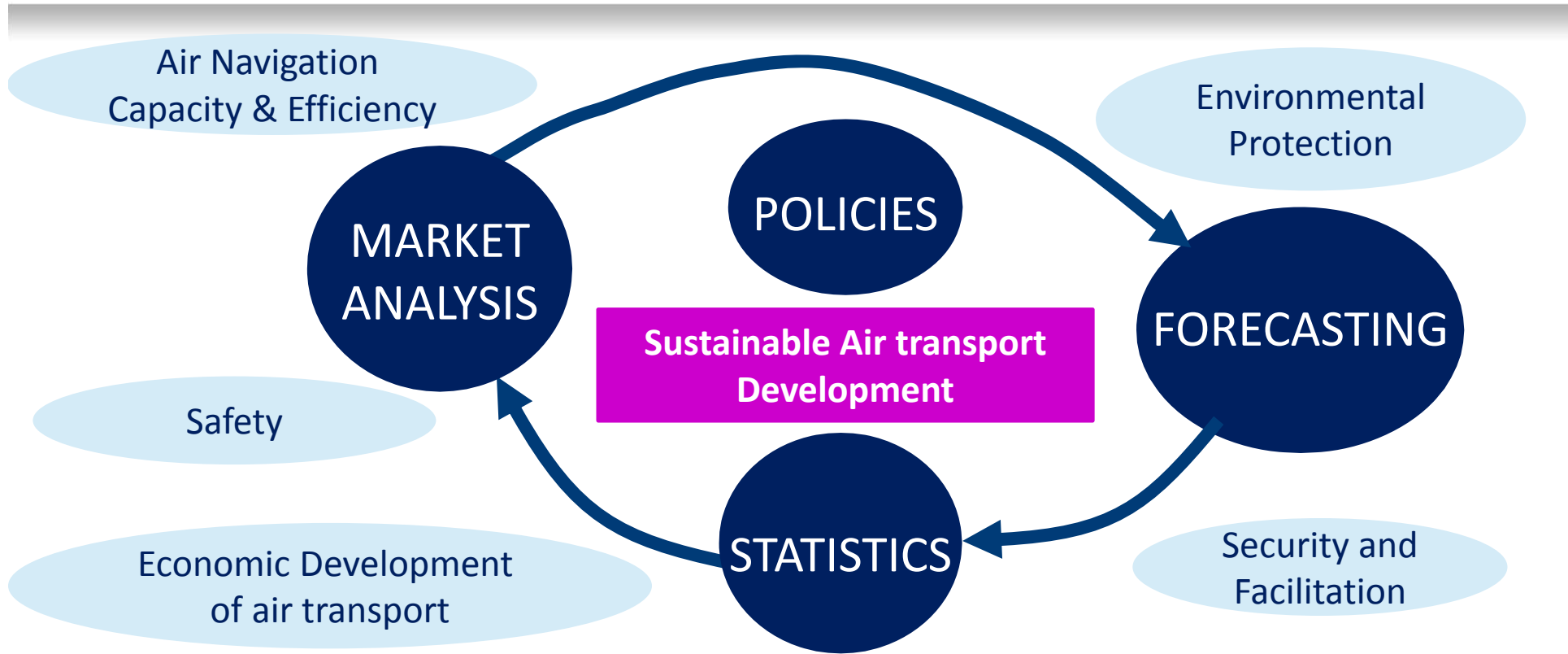
Session 7: ICAO Forecasting activities

Tehran, 20-23 February 2017





Monitoring Air ICAO SOs: Aviation Data a Vital Tool



ICAO : an independent and reliable source of information on civil aviation matters



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Forecasting activities

Economic Analysis and Policy Section



Background

Assembly Resolution A39-14

Appendix E : Forecasting, planning and economic analyses

The Assembly:

- Requests the Council to develop and update forecasts of future trends and developments in civil aviation, and to make these available to Member States;
- Requests the Council to develop and update one single set of long-term traffic forecast, from which customized or more detailed forecasts can be produced for various purposes, such as air navigation systems planning and environmental analysis; and
- Requests the Council to keep forecasting methodologies and procedures reviewed and improved.



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Why Do We Need Forecasts?

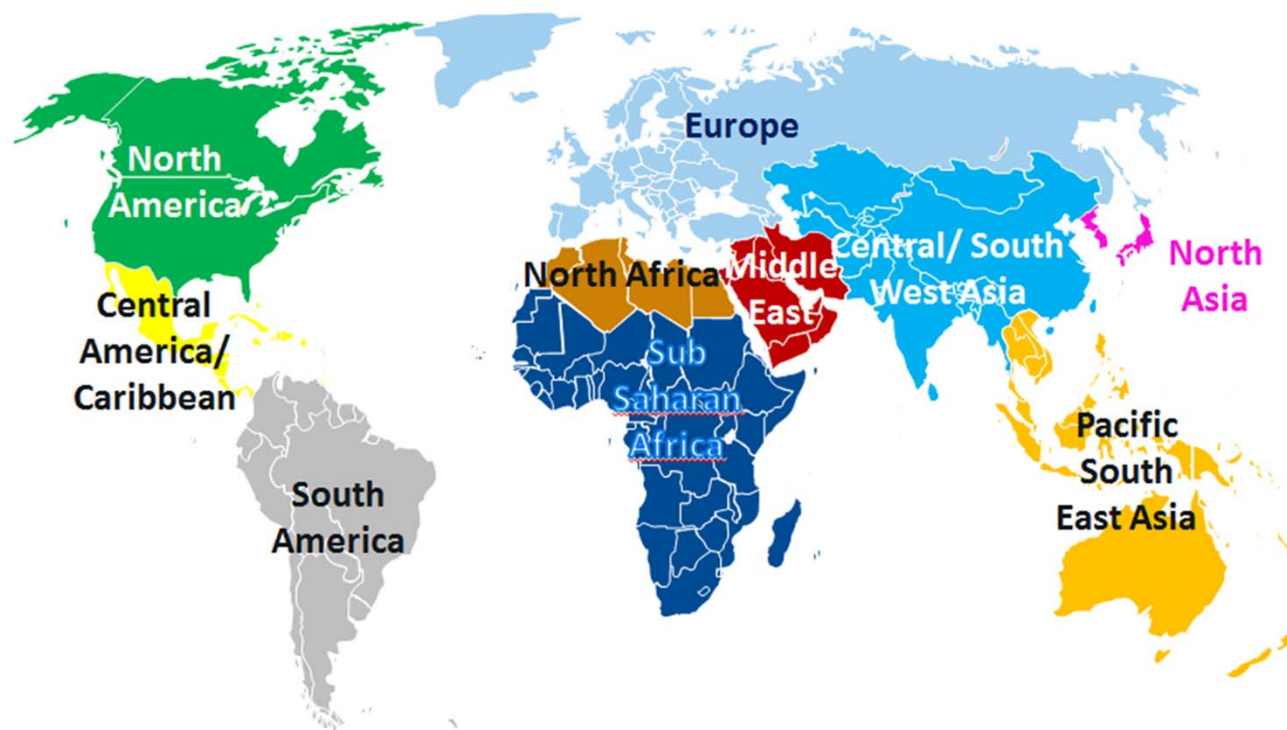
Positive results in aviation are driven by sound decisions;
Forecasts are essential for planning purposes

Decisions must be supported by good analysis and
information

Good Analysis and Information must be based on good
analytical models and data

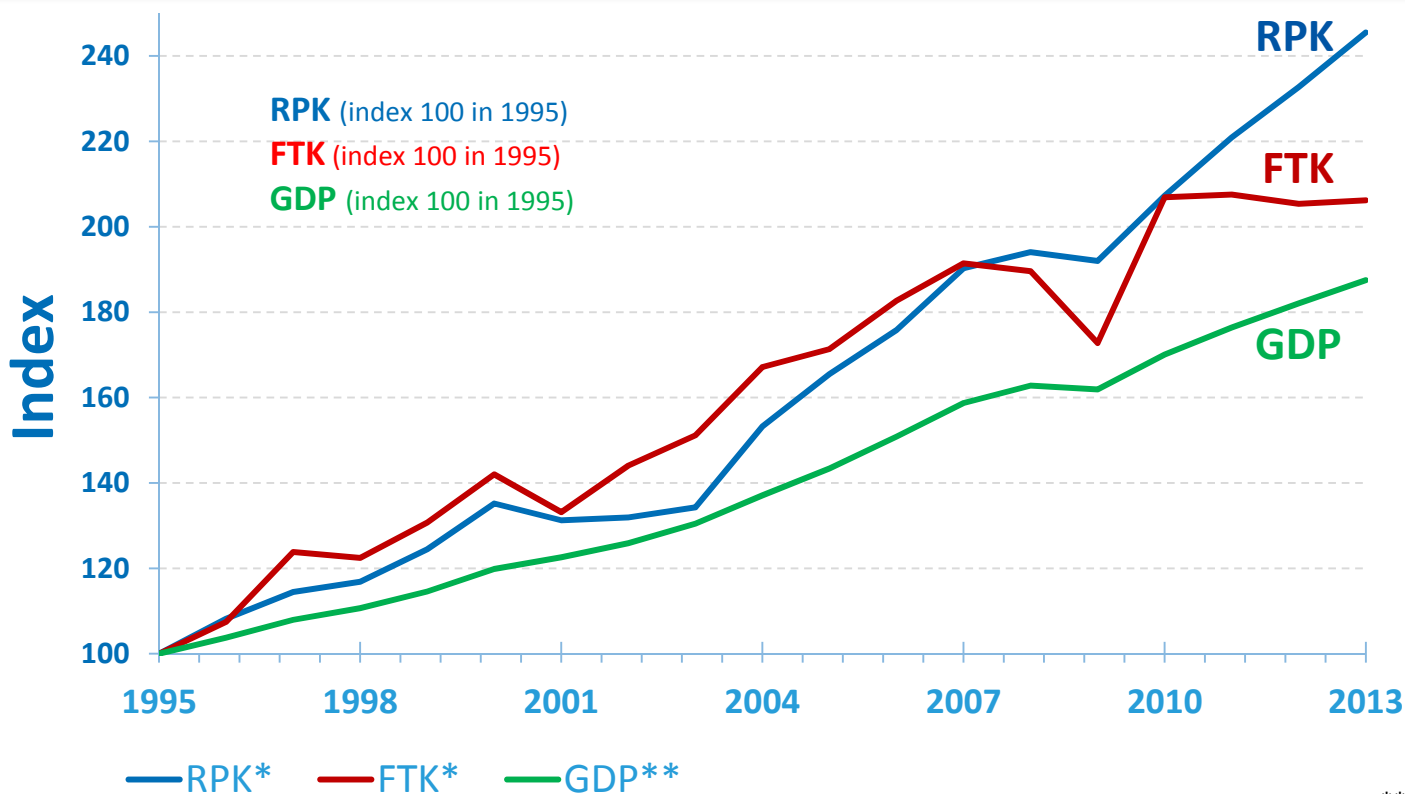


Regions for forecasting purpose





World Economy vs. Air Passenger and Cargo Traffic



A relationship that expresses **traffic in terms of GDP** closely replicates the historical traffic.

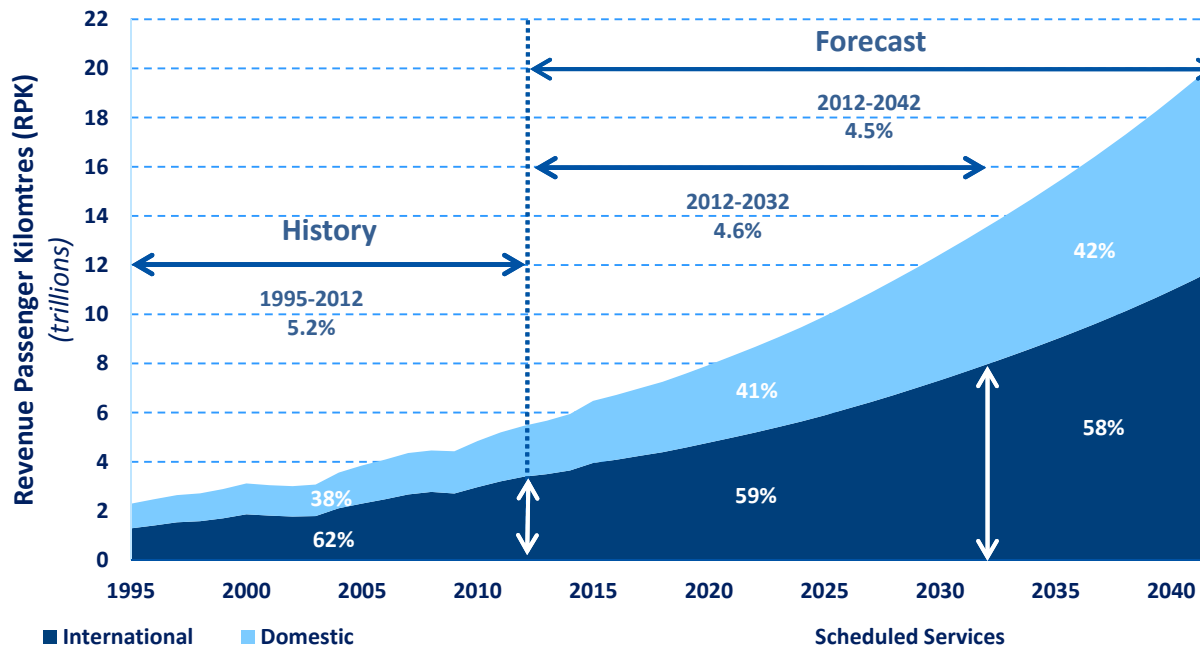


Traffic Forecasts

*: World total scheduled services
**: World Real GDP at Purchasing Power Parity



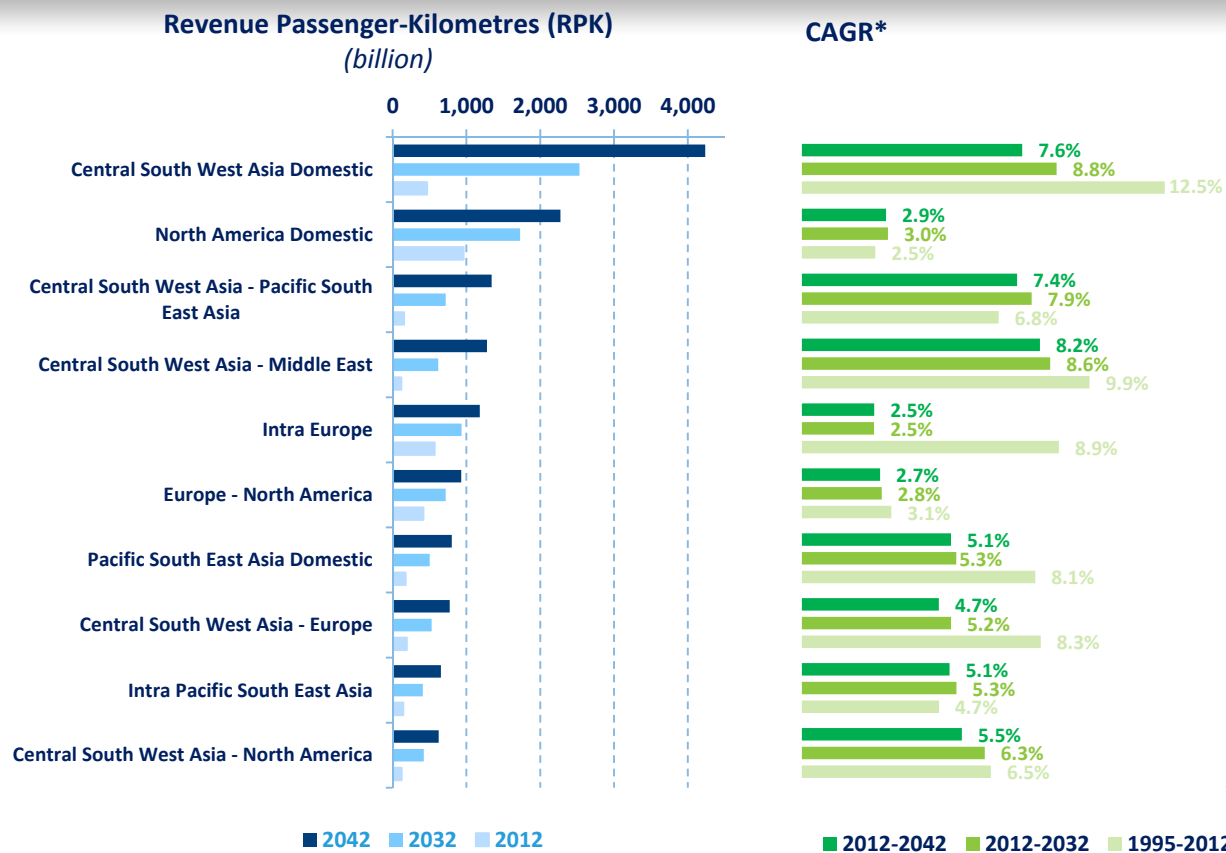
Total International Passenger History and forecasts



* Compound Average Growth Rate



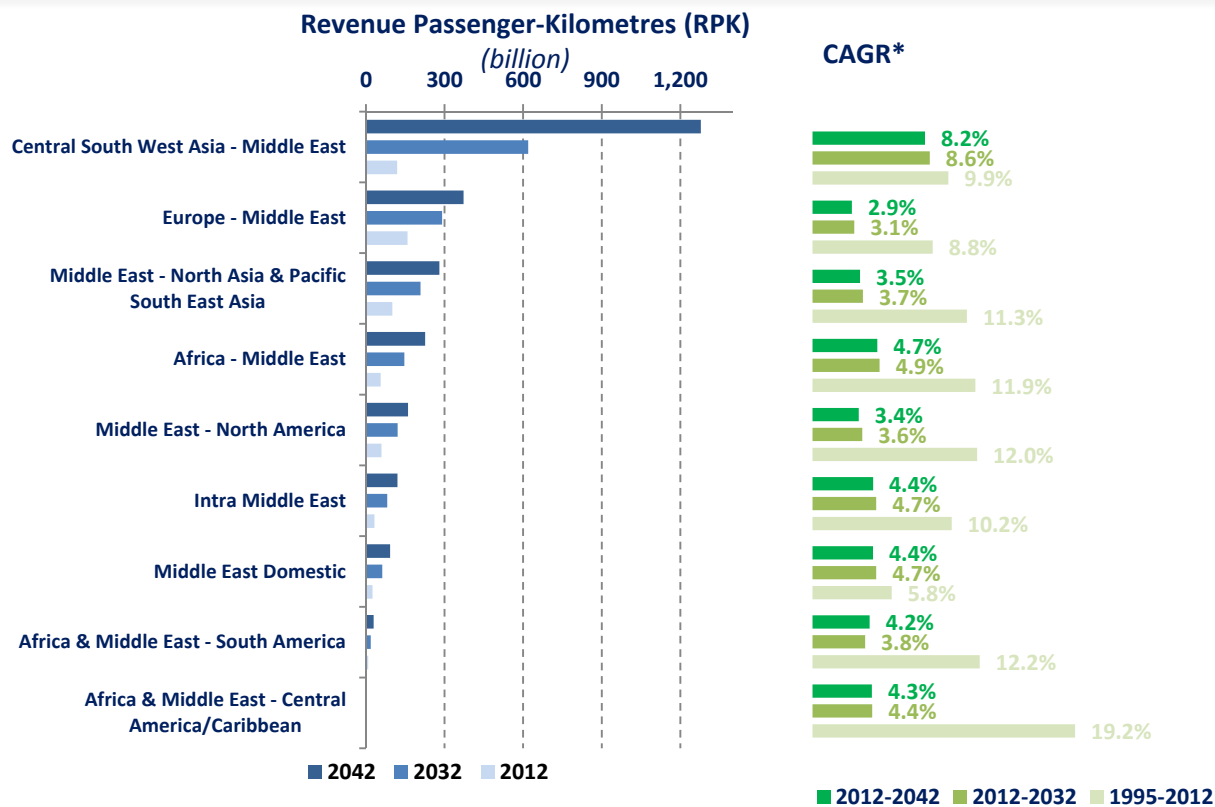
Top 10 Passenger Route Groups in 2042



* Compound Average Growth Rate



Top Passenger Route Groups in 2042 for the Middle East Region

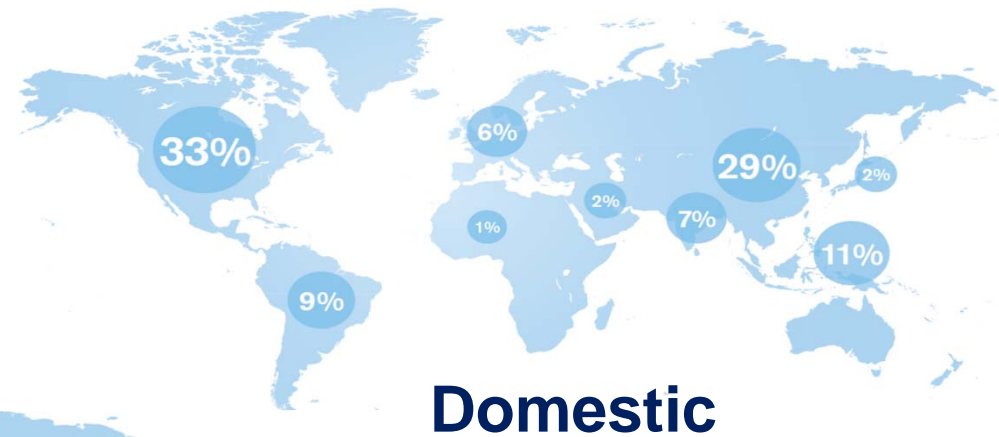


* Compound Average Growth Rate



Long-Term Air Traffic Forecasts

RPK distribution in 2030



Source: ICAO



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Unpredictable Circumstances

Some examples:

- The European volcanic ash cloud
- Snow storms in Europe
- Japanese earthquake and tsunami
- Europe's sovereign debt crisis
- Political unrest in the Middle East
- Continuous higher oil prices
- Increasing tax burdens placed on aviation, etc...



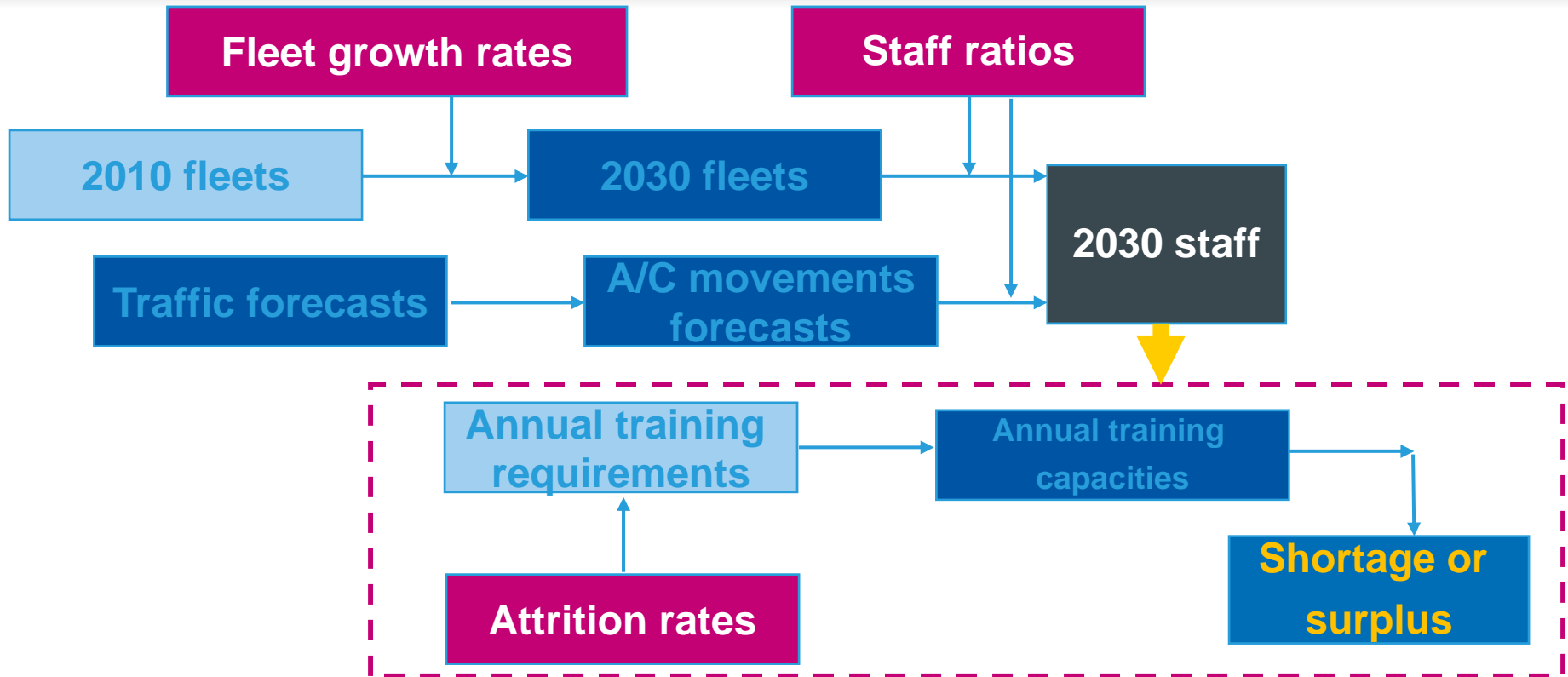
“ killing the goose that lays the golden eggs “



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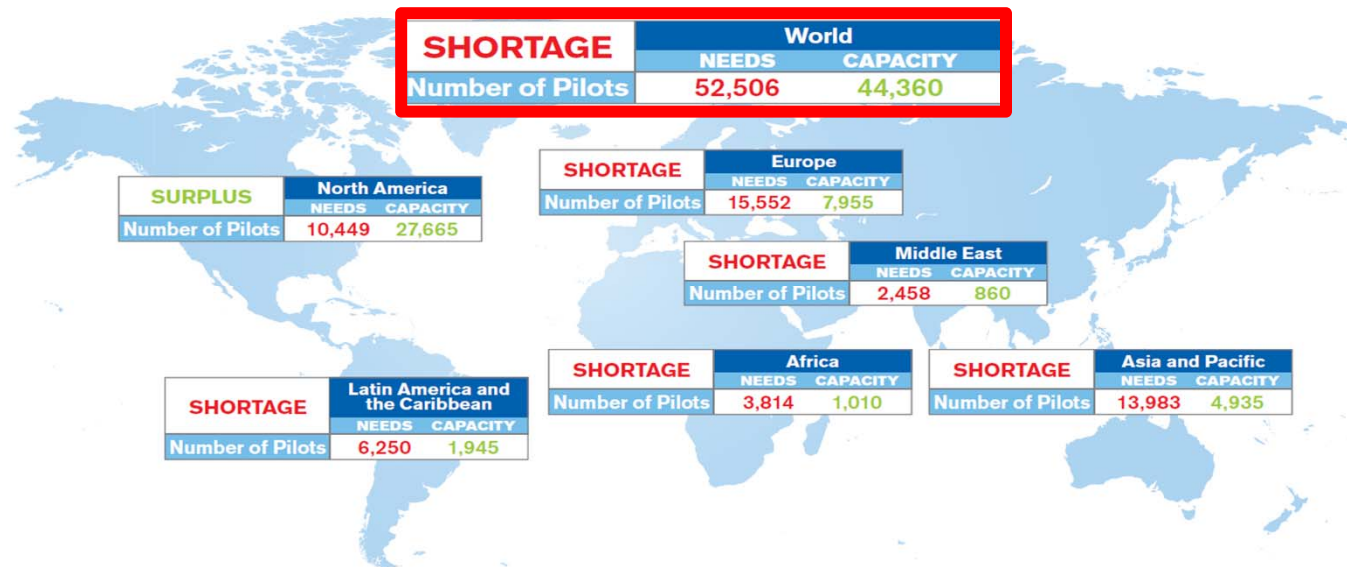
The Personnel Requirement Forecasting Process





Future Licensed Personnel: Surplus or Shortage

Pilots needs and training capacity in 2030



1) Estimate of average annual needs for 2010 to 2030 period based on various world fleet categories:

→ Regional and business jets, Turboprops, Single aisle, Twin aisles and Freighters

2) Training capacity is based on current figures without any incremental effect due to planned additional capacities



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Licensed Personnel Forecasts



ICAO vision for Next Generation Aviation Professionals

- The need for reliable statistics
- The « Best and the Brightest »
- Facilitating the use of competency-based approaches
- Removing regulatory obstacles
- A coordinating mechanism is required



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