A380: Designed for LAX

The Environmental Benefits Of the New Larger Aircraft

Presented by

Dan Cohen-Nir

Programs Director, Airbus Americas

www.airbusamericas.com

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It’s great to be back in LAX…

A380 First of the two visits in March 2007

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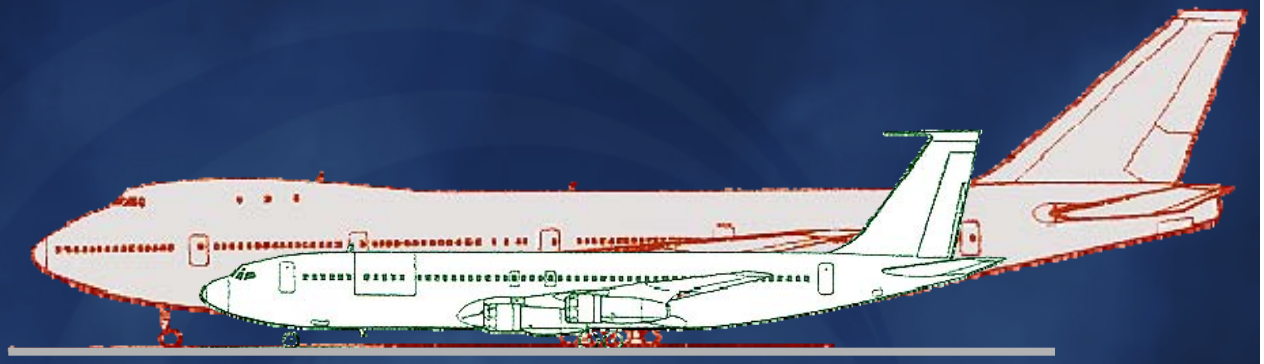
The A380 capacity change in context

The revolution of 1970

707-320B to 747-100

150 pax → ***+150%***

747-100 – 375 pax



Evolution in the 21st century

747-400 to A380

747-400 – 402 pax → ***+35%***

A380 – 555 pax

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A380 Benefits

- Higher capacity
  - 35% more passengers (passenger aircraft)
- Massive gains in economics
  - 15% lower cost/seat
  - 20% lower cost/pound of cargo
- Longer range
  - More payload on critical routes
  - New non-stop markets, simplified networks
- Passenger comfort
  - Almost 50% more cabin floor volume
  - More space per passenger

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A380 – dimensioned for the future

A380 upper deck: true wide body comfort

A380 main deck: the widest cabin ever

More space per passenger than a 747

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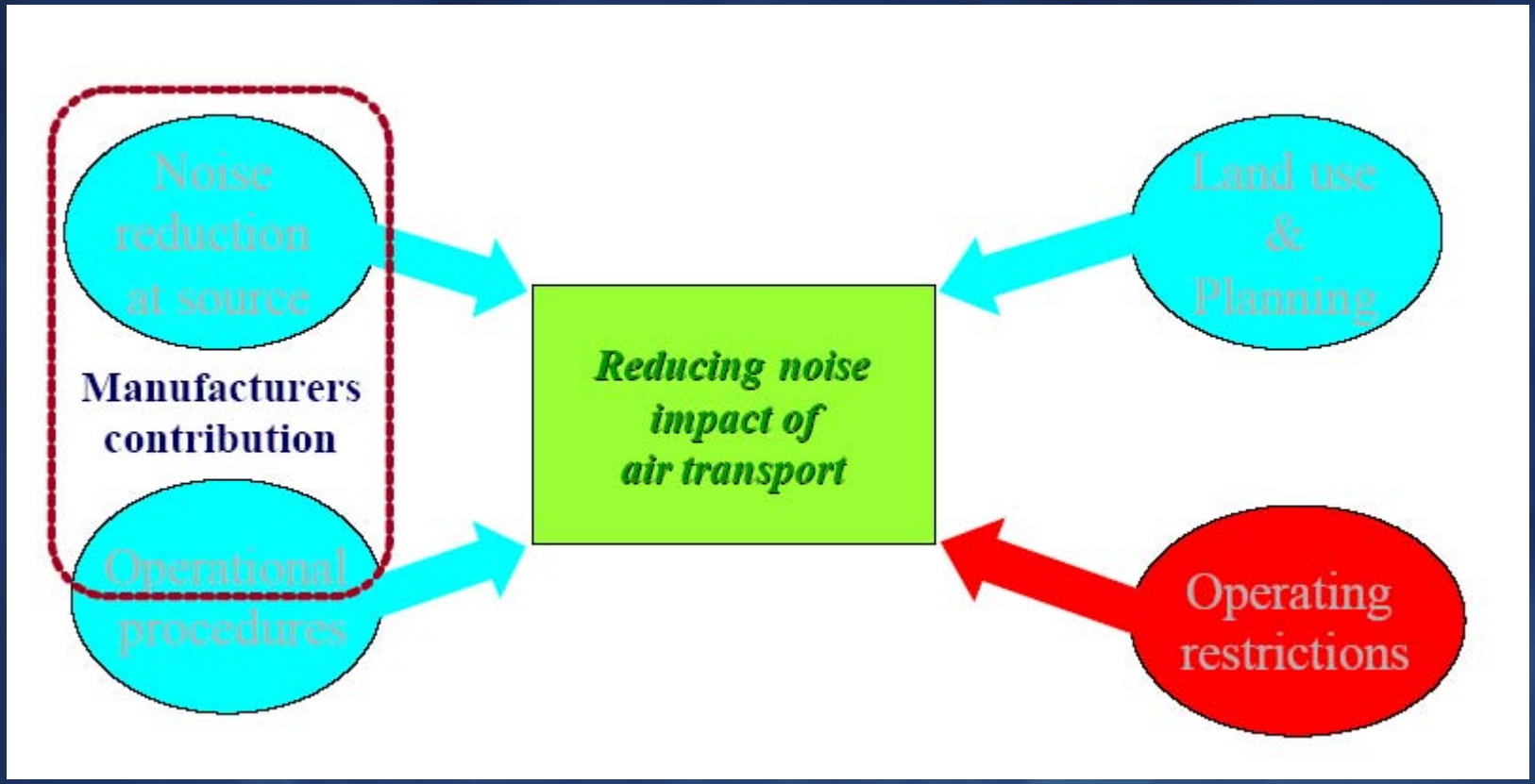
Internationally recommended balanced approach to airport noise reduction



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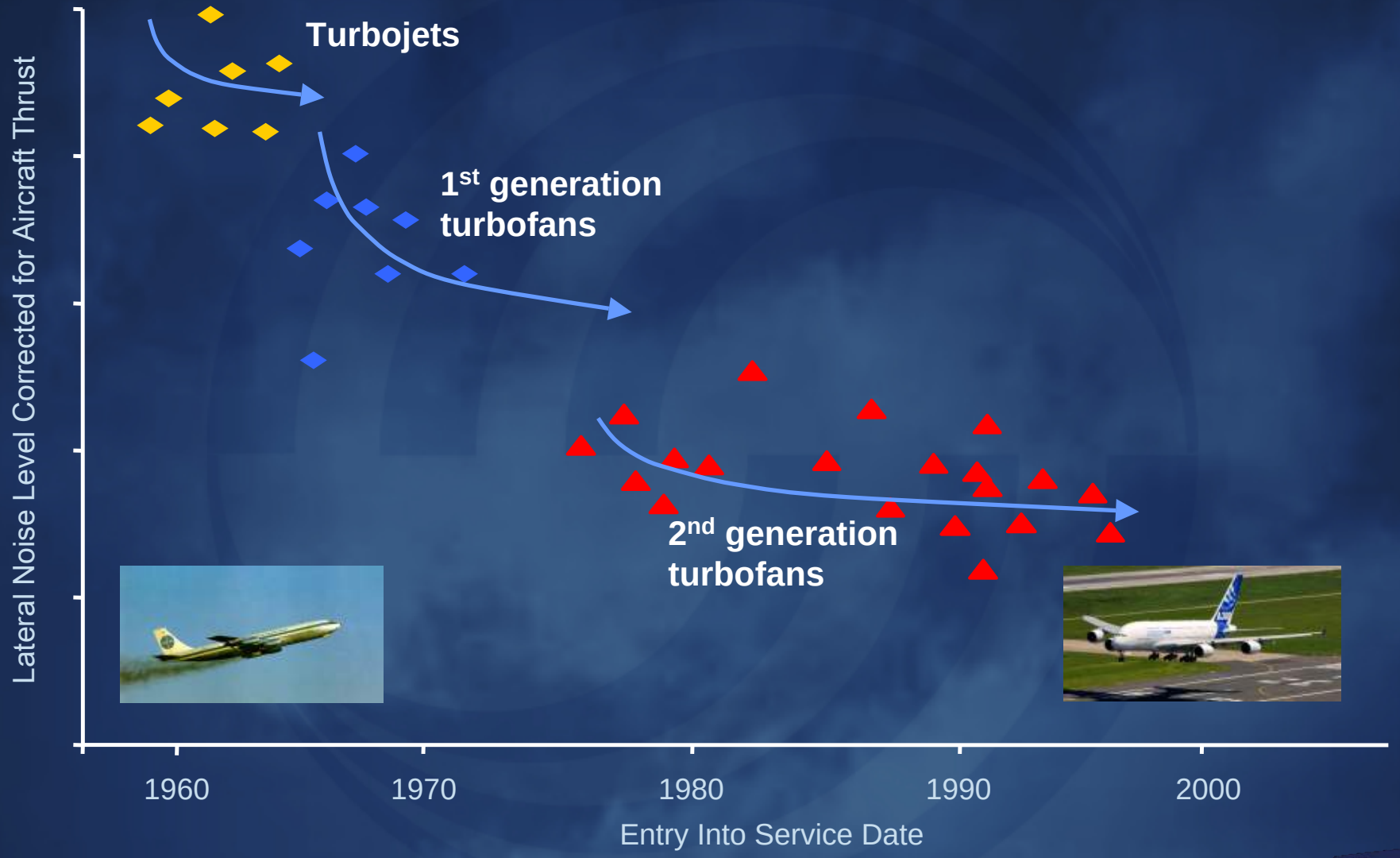
20dB airport noise reduction = 75% quieter!



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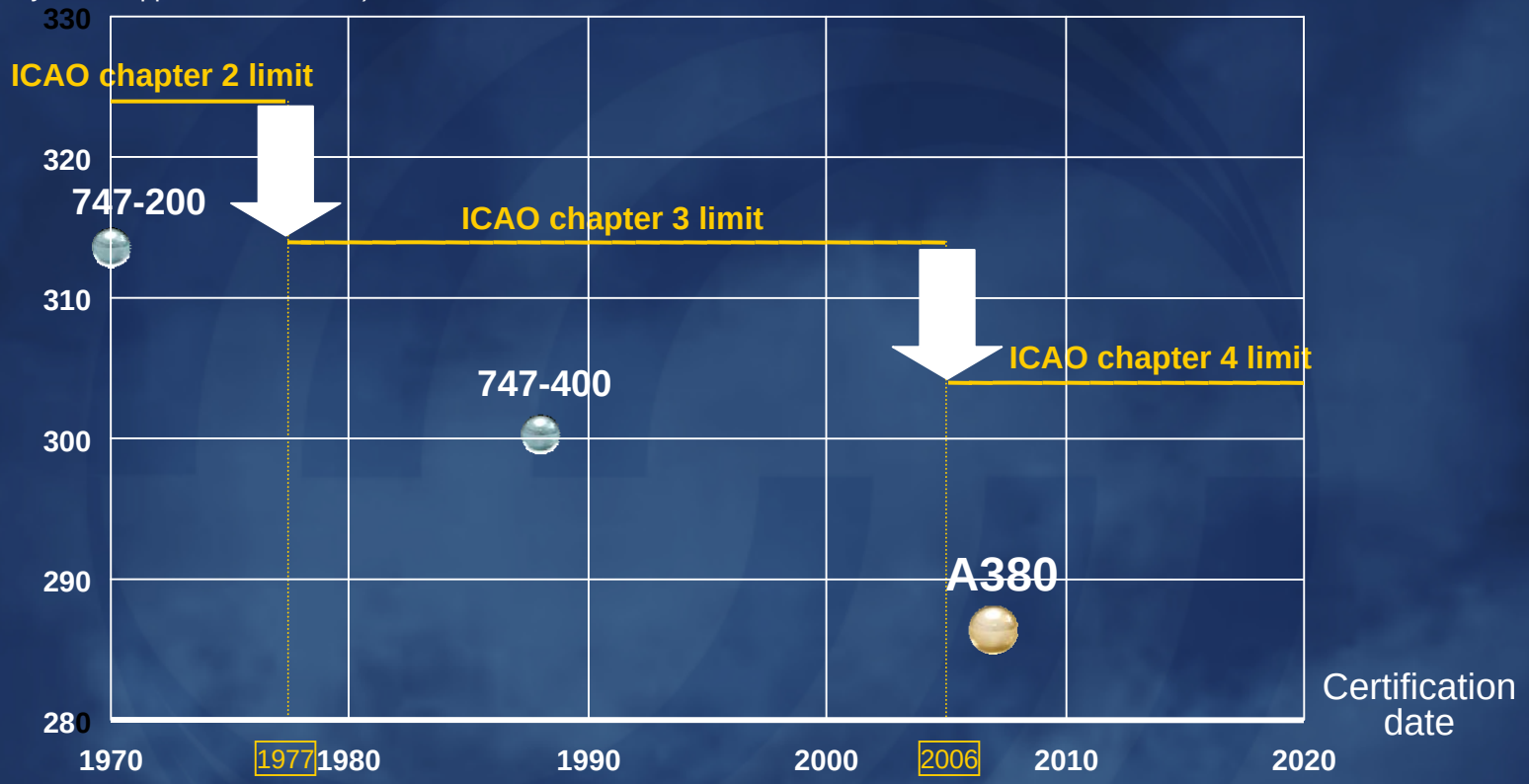
Environmental pressure: noise regulation

Cumulated certificated noise values

(sideline + flyover + approach, in EPNdB)

Source ICAO, FAA



Continuous environmental pressure: the A380 had to bring a step change in environmental friendliness

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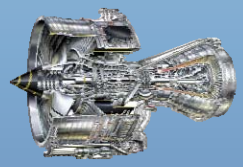
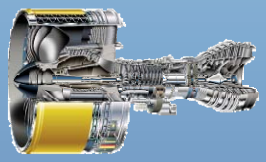
Technology for lower noise

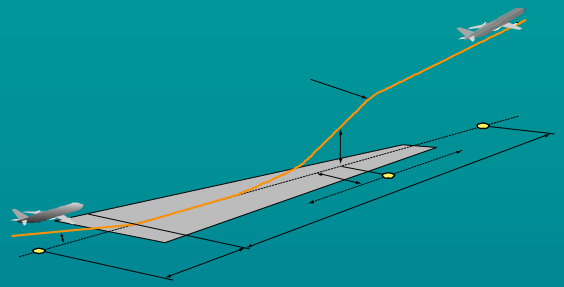
Rolls-Royce

Engine Alliance

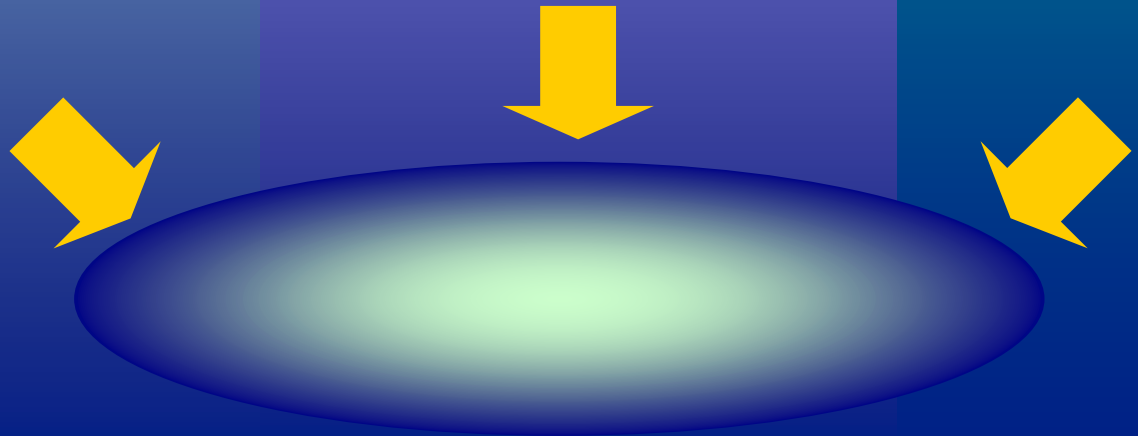




Performance



- ***Better climb performance and lower approach speed***
- ***Automated and customised noise abatement procedure for take off for further noise reduction***



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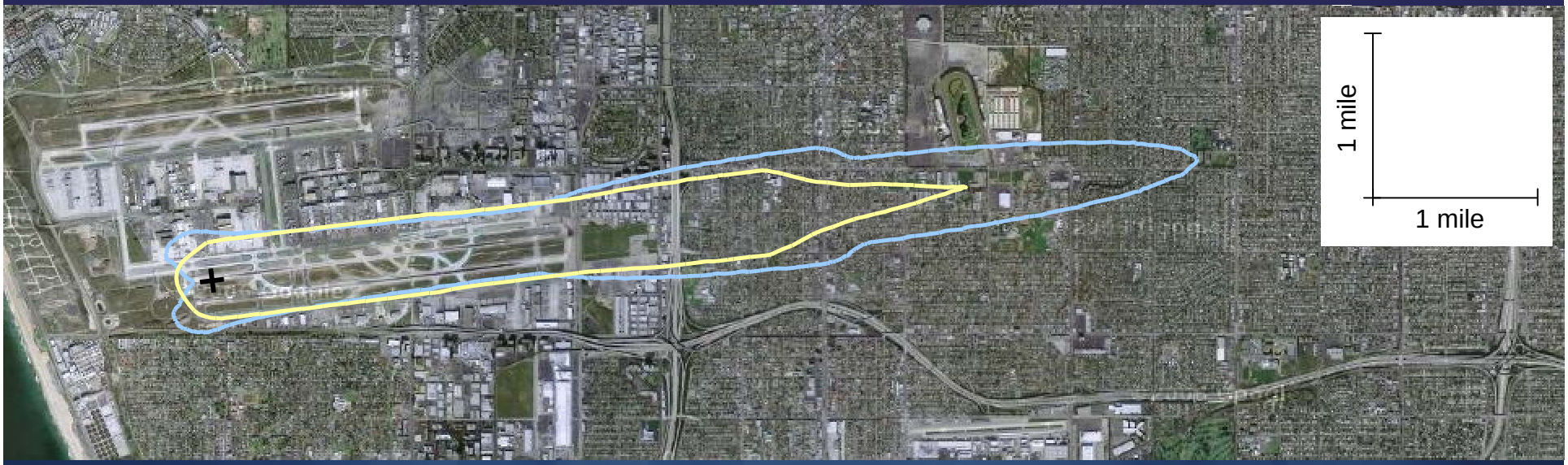
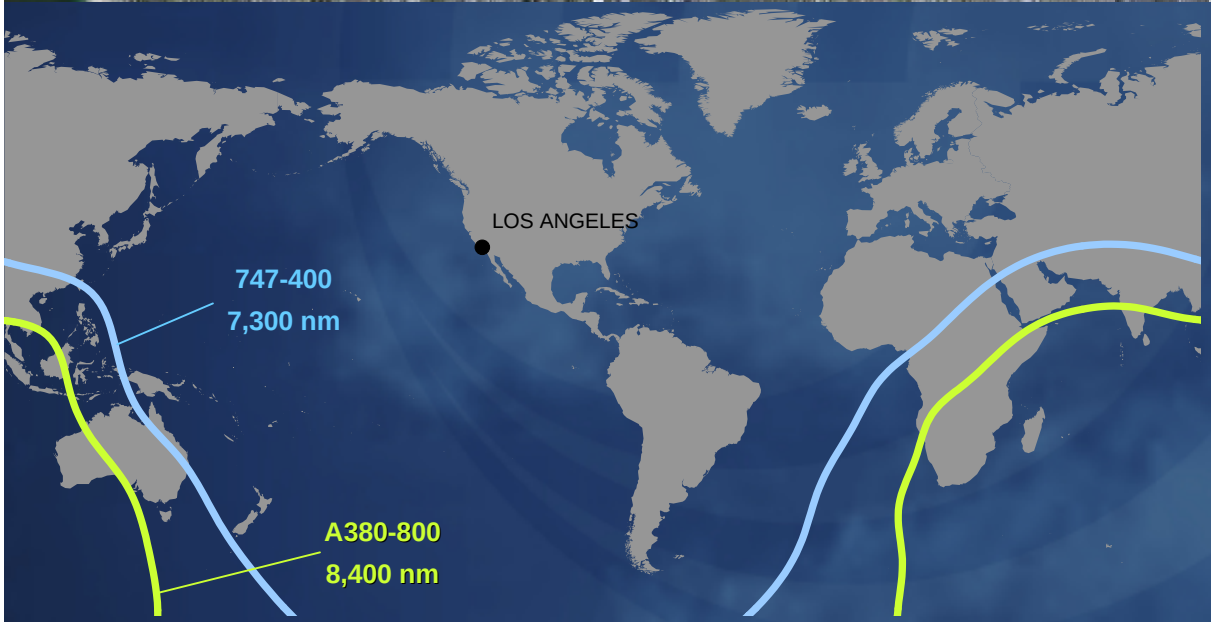
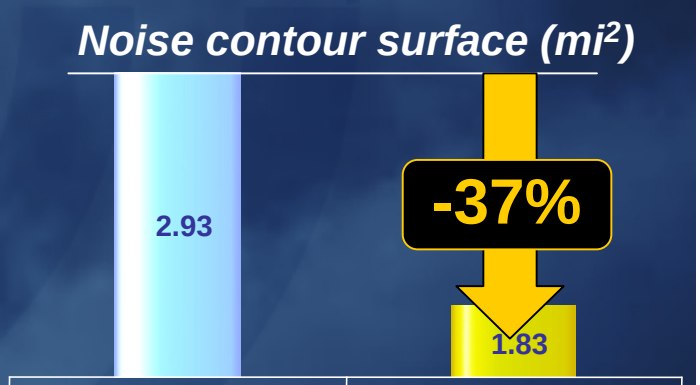
85 db noise contour from LAX at MTOW







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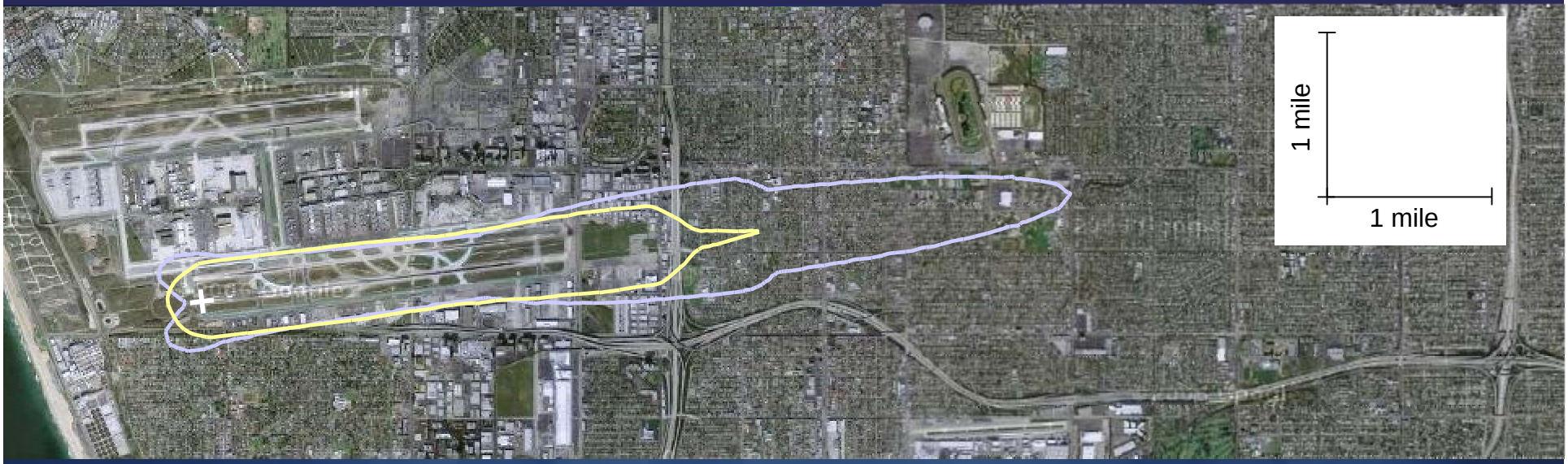
85 db noise contour for a 5,000 nm mission



Noise contour surface (mi²)

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Reducing noise at departure
ICAO standard procedures

ICAO defined two Noise Abatement Departure Procedures (NADP):

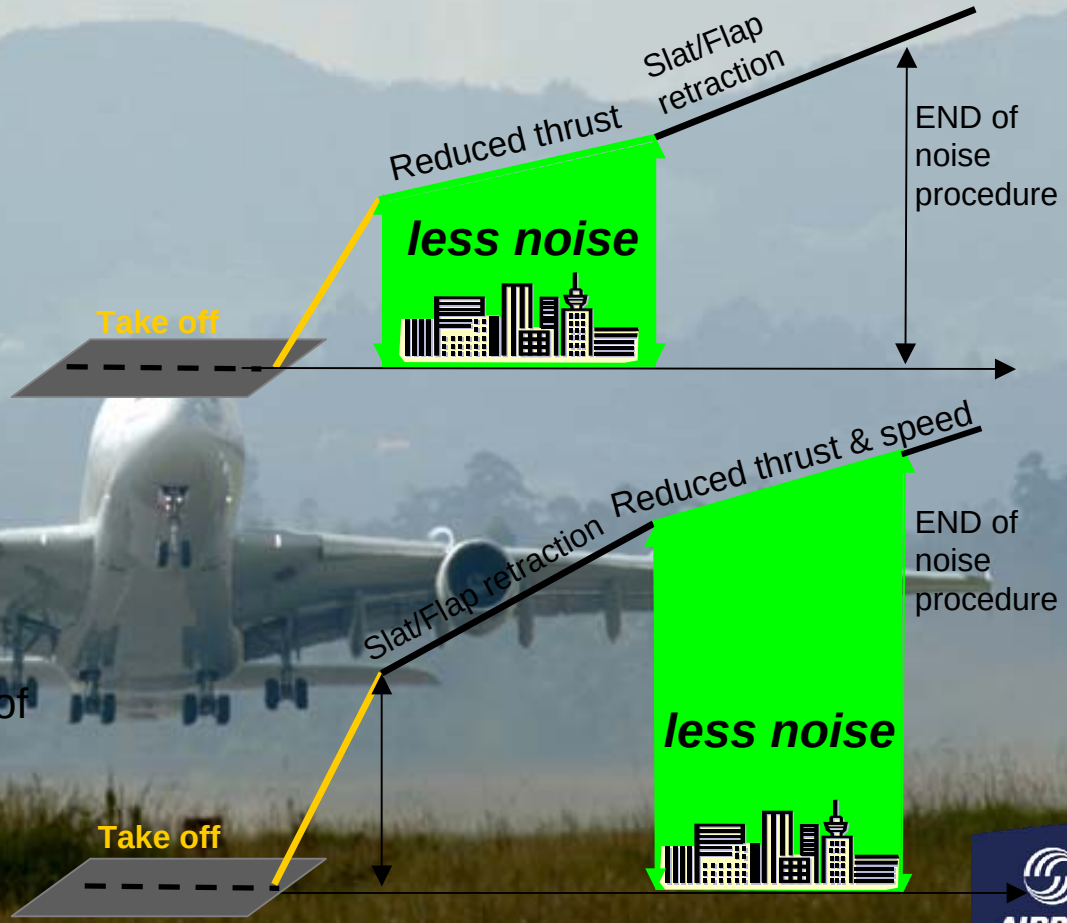
- which optimise noise and reduce impact in the airport vicinity
- by optimising aircraft speed, configuration and engine thrust

NADP 1 Close in

reduction of thrust level before slats/flaps retraction, noise reduction for sensitive areas **close** to airport.

NADP 2 Distant

slats/flaps retraction before reduction of thrust level, noise reduction for areas **distant** to airport



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Reducing noise at departure

The A380 Airbus Departure Analysis Software

Airport specific noise constraints

Aircraft data

→ **Airbus Departure Analysis Software (ADAS)** →

Optimized NADP
in Flight Management System

ADAS calculates customised NADP enabling additional noise reduction up to 2 dB

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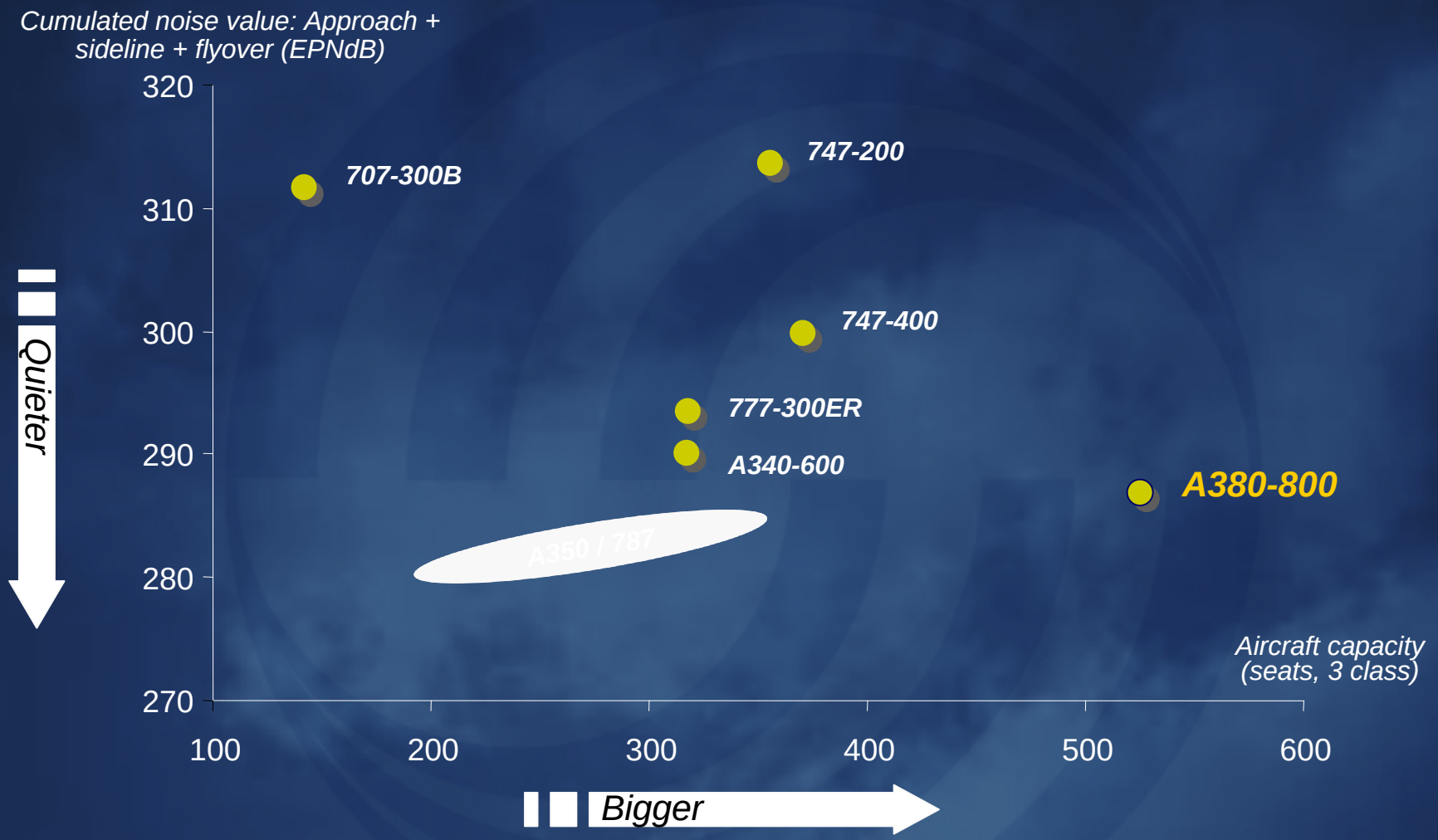
The A380 is the quietest large aircraft



More passengers with less noise

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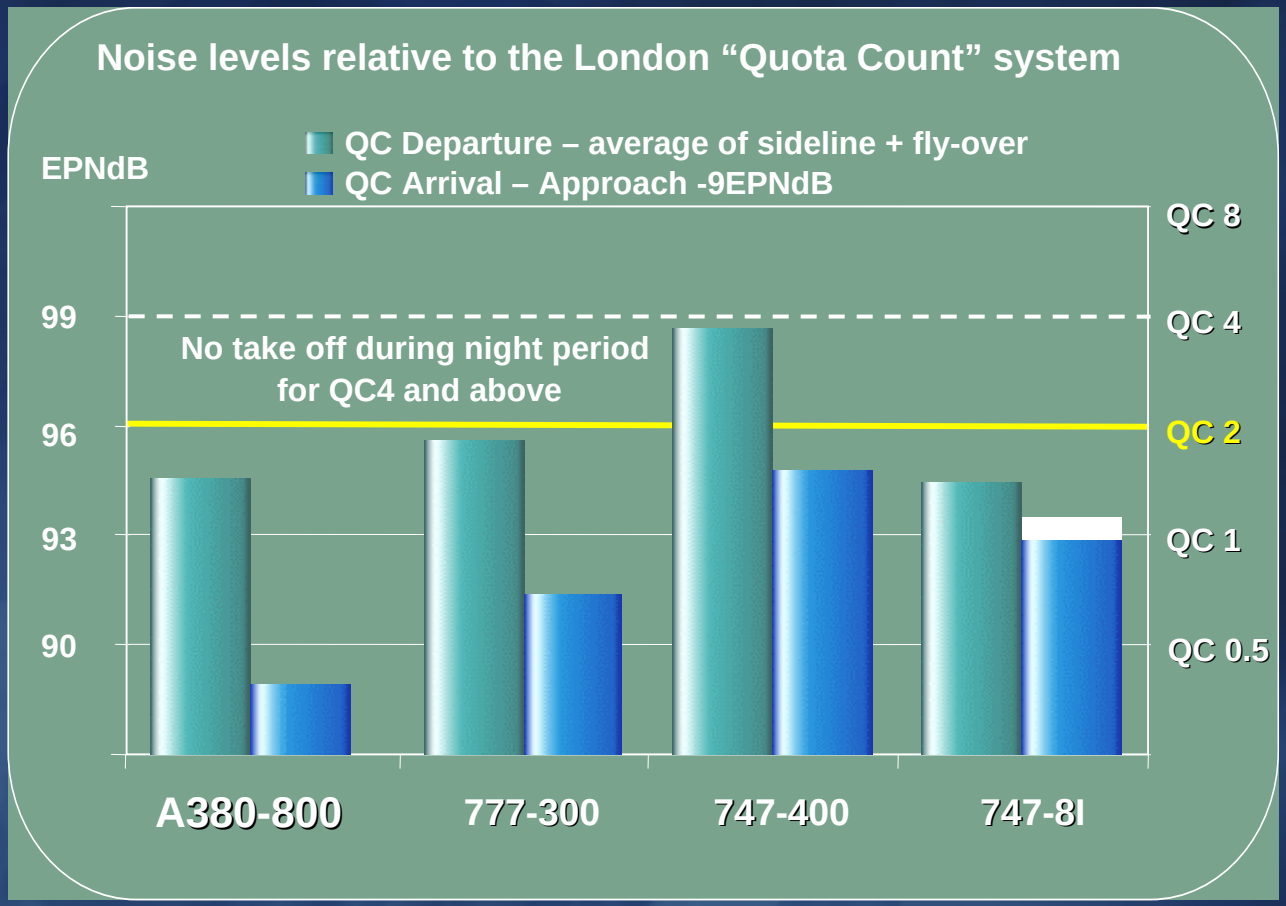
A380 – The quietest in its class



A380 produces half the noise generated by the 747-400

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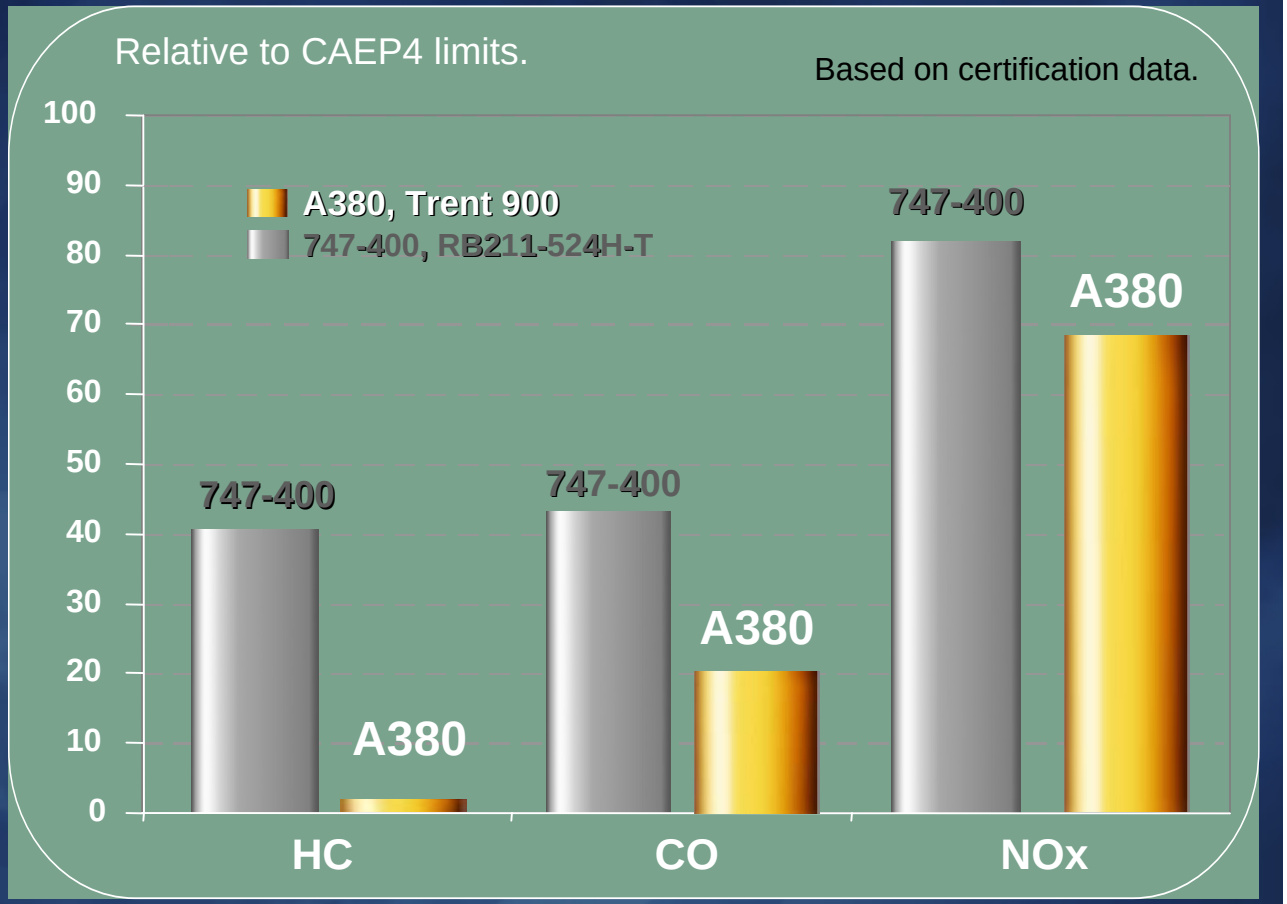
A380 – The lowest emissions



Setting a new standard for the environment

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Conclusion: The A380 double noise benefit

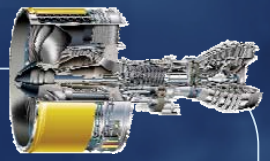
1

The capacity effect

- With 35% more capacity than the 747-400, the A380 allows airlines to cater for growth with fewer additional movements

2

The technology effect



- The A380 is an all new design benefiting from technological advancements in noise reduction,

leading to halve the acoustic energy of a 747-400

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A380 entry into service
October 25, 2007

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21st Century flagship

A380	525 seats	8200nm
A380F	150 tonnes	5800nm

196 orders & commitments
from **17** customers

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SIA A380: comfort, space and luxury

Cabin pictures: courtesy Singapore Airlines

Singapore Airline Suites

A cabin class **beyond** First class

New Business Class

The world's **widest** B/C seat

New Economy Class

More personal **space**

UD boarding

Quietest cabin

Special lighting features

New version of KrisWorld IFE: eX2

A dream becomes reality

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WITH BAE SYSTEMS

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