

Faculty of Aerospace Engineering Aerospace Management and Operation



AIRBUS



EUROFIGHTER



METEOR



EUROCOPTER



A400M



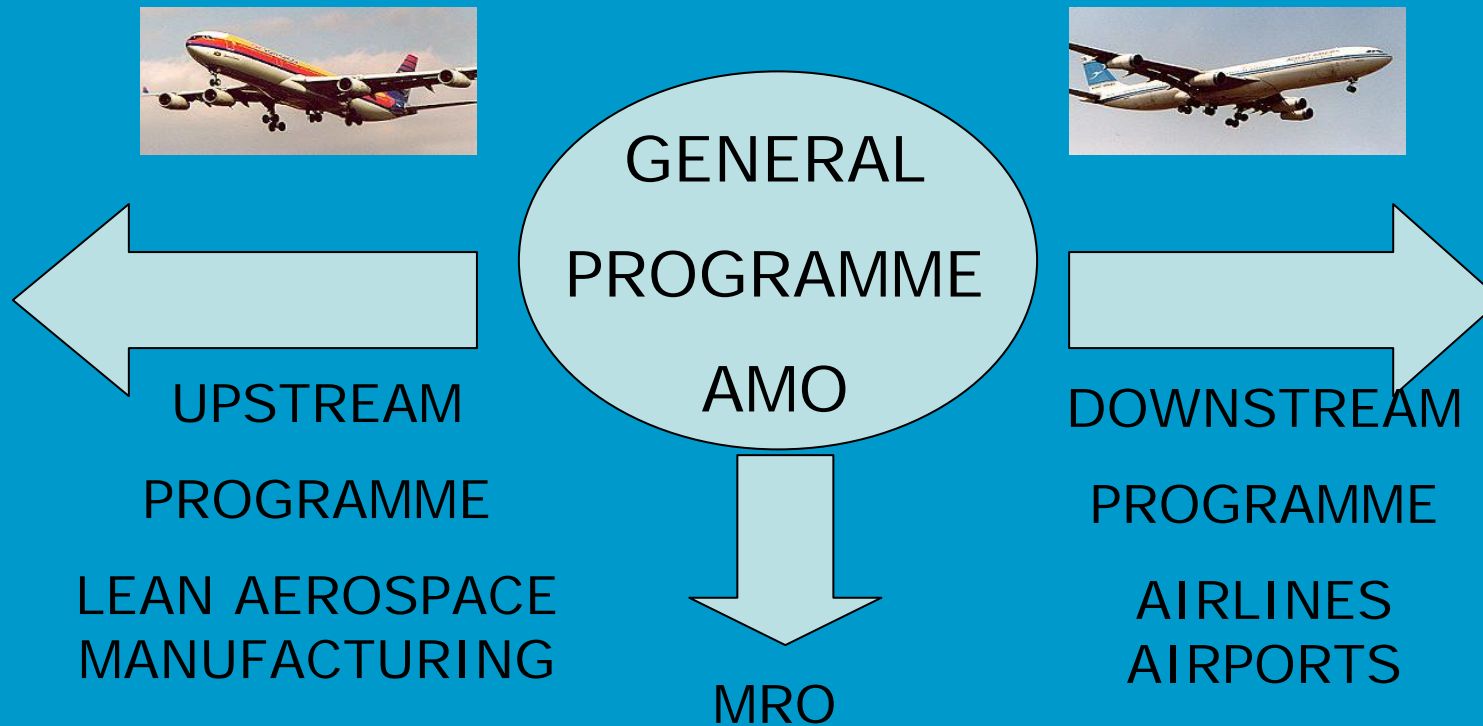
GALILEO

Interface between Aerospace Technology and Markets

*Chair of Prof. Sicco C. Santema
Technical University Delft*



Aerospace Management and Operation



Master Programme

first year

(aerospace) engineering courses

M&O
projects

second year

MSc Thesis

1. supply chain
2. airlines
3. Airports
4. MRO

Internship in Industry

1. research
2. theory
3. jointly with industry
4. jointly with other chairs

*Aerospace Management and Operation
Research Themes on Entrepreneuring and
culture:*



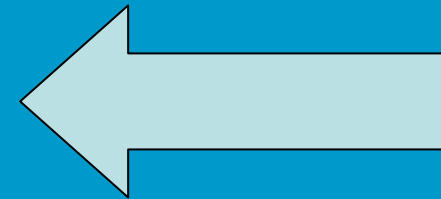
Enterprising in technological and
cultural context

Enterprising as a means of enlarging
European Competitiveness

Aerospace Management and Operation Research Themes on operations management

Lean Manufacturing:
faster, cheaper, better

The effects of E-Business in the aviation
supply chain



UPSTREAM
PROGRAMME
Supply chain

Aerospace Management and Operation Research Themes on operations management

Operations Management (Queue handling), in conjunction with Schiphol

ATM and efficiency of airports

Flight planning and control, incl. air-traffic management

Alliance creation and the effect on efficiency between airports and airlines

The use of noise as a management tool



DOWNSTREAM

PROGRAMME

AIRLINES
AIRPORTS



Aerospace Management and Operation Research Themes on operations management

Planning and efficiency (KLM E&M)

Propulsion, incl. noise

Aeroscrap



MRO

Lean maintenance

Examples in research

DELFT CENTRE OF AVIATION

SIM: SCHIPHOL INNOVATION CENTRE



Examples in research

DELFT CENTRE OF AVIATION

SIM: SCHIPHOL INNOVATION CENTRE



Growing importance and complexity of aviation issues

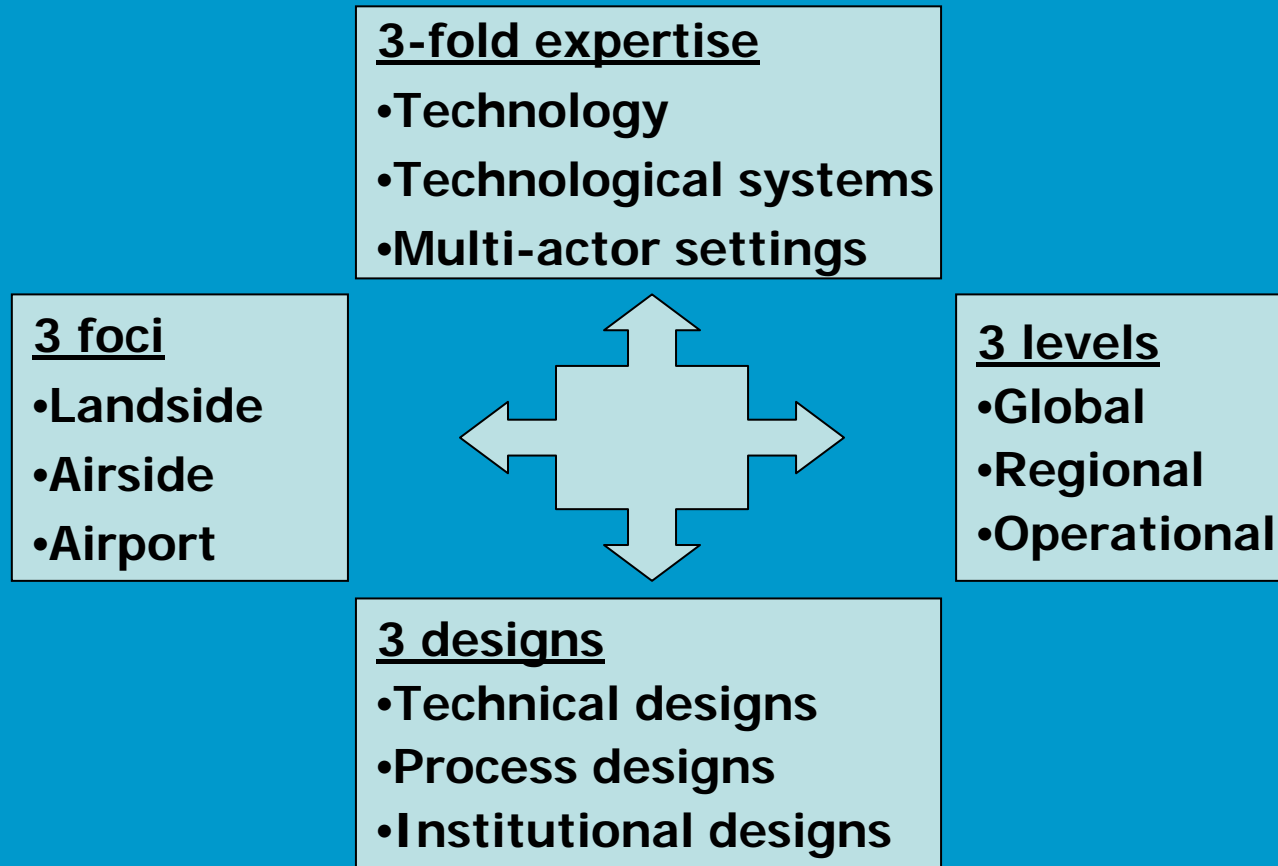
- **Civil aviation will continue to increase**
Due to economic developments, globalization, liberalization and technological developments
- **Good for the economy, but also concerns**
Finding a sound balance between the economic goals and environmental, safety and security concerns is needed
- **Multi-actor setting**
Plurality of actors, stakes, goals and conditions
- **Growing need for innovative solutions**

DCA, the gateway to knowledge-based solutions

- **Wide knowledge and expertise at TU Delft**
- **DCA is the front-office, concentrator and catalyst for aviation research at TU Delft**
- **Participating faculties:**
 - o *Aerospace Engineering*
 - o *Civil Engineering and Geosciences*
 - o *Mechanical, Maritime and Materials Engineering*
 - o *Technology, Policy and Management*

Other faculties and institutes on demand

DCA, for sustainable and efficient air(trans)port



Critical issues in DCA's research portfolio

- **Infrastructure and traffic management**

Airside: Air traffic management and control
Freeflight zones versus hub and spoke
Noise safety and health management

Airport: Airport capacity management
Luggage, passenger and vehicle stream management

Landside: Landside accessibility

- **Transport means/services and logistics**

Airside: Glare, hydrogen propulsion, blended wing
Combi
Level playing field

Airport: Security

Landside: E-ticketing, low-cost carrier marketing
Gate-to-gate and door-to-door
Pax and cargo

Examples in research

DELFT CENTRE OF AVIATION

SIM: SCHIPHOL INNOVATION CENTRE



Examples of concrete projects

Samenwerking Innovatieve Mainport
'Samen werken aan de duurzame ontwikkeling van de Mainport'

TU Delft NLR KLM
TNO

Next generation screening

Environmental simulator

Transferia

Scope SIM

