



# ***Cross-border provision of air navigation services with specific reference to Europe***

***Dissertation (IIASL - Leiden University)***

‘Lunch Seminar Single European Sky - Airneth’

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# Introduction

1. One day of air traffic in Europe
2. Single European Sky (Benefits)
3. Cross-border provision of Air Navigation Services
4. Three main topics of the dissertation
5. Establish transparent lines of responsibility and liability
6. Concluding Remarks





source: EUROCONTROL  
Lunch Seminar Airmeth, February 13, 2008

# Single European Sky (Benefits)

## + Benefits of SES

### (A) Improve overall efficiency

- ▶ Improve cost-effectiveness by reducing unit-cost of the ANSP (combat fragmentation and duplication of infrastructure systems)
- ▶ Improve efficiency for airlines
- ▶ Environment

### (B) Optimise airspace capacity

- ▶ Forecast growth rate is 5%

### (C) Minimise air traffic delays

- ▶ Avoid delays for consumers and airlines which has economical dimension

#### Facts

- Inefficiency for airlines approx. EUR 3 BLN per annum.
- Unnecessary distance flown by airlines approx. 440 MLN Kilometers which is the equivalent of 11.000 flights around the world. (represents 4,7 MLN ton CO2 per annum)
- SES & SESAR reduce CO2 emission by 10%

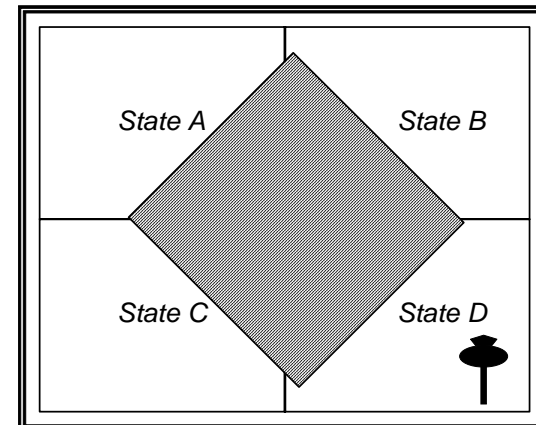
## + Cornerstone of SES: Cross-border provision of ANS (FABs)

## Cross-border provision of Air Navigation Services (1)

- + Establishing and providing ANS in the airspace of a state (delegating state) by an air navigation service provider (ANSP) that is based in the territory of another state.
- + Examples in The Netherlands:
  - Letter of Agreements (LoA's)
  - Maastricht Upper Airspace Area Control Centre
  - Airport Weeze (Netherlands / Germany)

### + Functional Airspace Blocks (FABs)

*Delegation of ANS provision by states A,B and C to ANSP with principal place of operation in state D. One (or more) ANSP providing ANS in block of airspace irrespective of the underlying territory (FABs).*



## Cross-border provision of Air Navigation Services (2)

- ✦ Mid-air collision Lake Constance (Überlingen) on 1 July 2002



Reconstruction of the collision according to FDR data and collision evidence  
source: German Federal Bureau of Aircraft Investigations (BFU report 2004)



centre wing section

## Three main topics of the dissertation

- ✦ **Institutional challenges**  
(ICAO, EUROCONTROL, European Community)
  
- ✦ **State Responsibility for provision of ANS**  
International Law
  - Art. 28(a) Chicago Convention jo Annex 11 Para 2.2
  
- ✦ **Liability for damages caused by ANSPs**  
National law

## Establish transparent lines of responsibility (1)

International law

### Variety of Bilateral – and Multilateral Arrangements

*“The state in whose airspace ANS is being provided (delegating state) to bear state responsibility.”*

#### + **Bilateral Arrangements**

- ▶ Letters of Agreement (LoA) [e.g. *Lake Constance*]
- ▶ Bilateral Agreement (USA-Canada)
- ▶ Treaty Netherlands – German (Weeze Airport)
- ▶ EUROCONTROL Model Agreement on Delegation of ATS

#### + **Multilateral Arrangements**

- ▶ Maastricht UACC
- ▶ CEATS
- ▶ NUAC
- ▶ [Draft EUROCONTROL Model State Level FAB Agreement]
- ▶ COCESNA and ASECNA

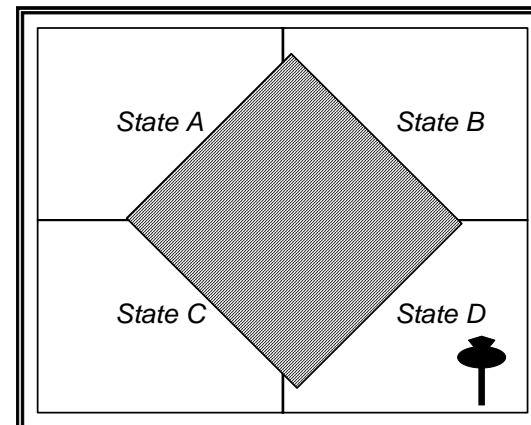
## Establish transparent lines of responsibility (2)

International law (*continued*)

### + Paradigm shift - state responsibility

ANSPs have been granted an operating license by “supervising state” (exercising regulatory / enforcement competencies)

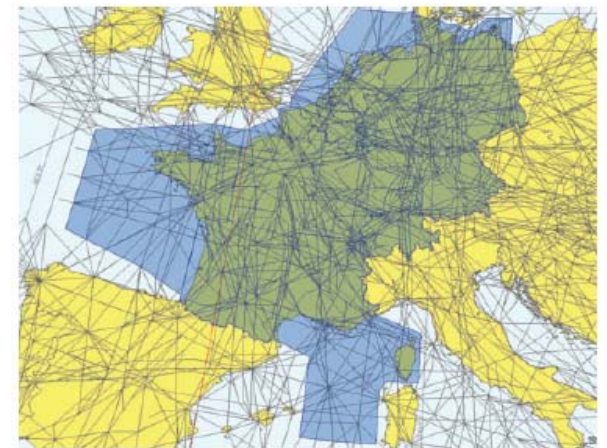
*“No longer consider territory, but the air navigation service provider as starting point. Not the state in whose territory ANS is being provided (delegating state), but the supervising state granting the operating license to the ANSP to bear state responsibility.”*



## Establish transparent lines of responsibility (3)

International law (*continued*)

- + **Formalise in treaty (Bilateral)**
  - ▶ Draft EUROCONTROL Model State Level FAB Agreement
  - ▶ Model Agreement for Cross-border provision of ANS
  - ▶ Long Term: - ICAO Regional Air Navigation Plan
    - European Community
  
- + **FAB Europe Central (Bilateral / Multilateral)**
  - ▶ A role model for FAB initiatives in EC
  - ▶ Experience with Bilateral Agreements
    - ▶ Weeze Airport
    - ▶ Maastricht UACC



FAB Europe Central for high-performing air traffic control in the heart of Europe.

source: FAB Central

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## Establish transparent lines of liability

National law

### + Review national laws:

- ▶ State Primary Responsibility Doctrine (Germany, Austria)
- ▶ State Ultimate Responsibility Doctrine (Switzerland)
- ▶ Service Provider's Exclusive Liability Doctrine (UK)

### + Paradigm shift

- ▶ Inter-state Liability and Third Parties on the ground
  - ▶ *Supervising State Ultimate Liability Doctrine*
  - ▶ *Formalise in Treaty (Bilateral/Multilateral)*
- ▶ Contractual liability framework ANSP-Airline
  - ▶ *Effective Service Provider Doctrine*
    - ▶ **Airways Corporation of New Zealand**
    - ▶ **Draft contractual framework GNSS (CNS/ATM)**

## Concluding Remarks

- + SES makes air travel on time, cost-effective and with the lowest possible environmental impact.
- + The general framework of SES is there, now is the time to act(!)
- + Legal hurdles should not be used as an excuse.

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