



Project Overview

FUSETRA

Future Seaplane Traffic

Dipl.-Ing. Benedikt Mohr
Technische Universität München



Contents

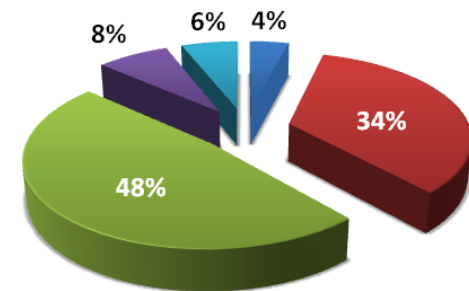
- **Why are we here today?**
- Framework Programme 7 / CSA
- Project Background and Objectives
- Consortium and Way of Working
- Operational, Aircraft, Regulatory Aspects

Why are we here today?

- Seaplane / Amphibian operation and manufacturing very well established in the US and Canada.
- Operators in Europe very scarce. Seaplane transport system seems to be sustained by enthusiasts. Requirements towards a sustainable Seaplane / Amphibian transport system will be investigated in FUSETRA work packages and workshops.
- FUSETRA goals are:
 - Identification of the **State of the Art** of Seaplane / Amphibian transport system
 - Identification of **strength and weaknesses** of the European Seaplane / Amphibian transport system
 - **Roadmap for future improvement**

Location of Seaplane Operators

■ Australia ■ Canada ■ USA ■ Europe ■ Other



Total: 327 worldwide operators

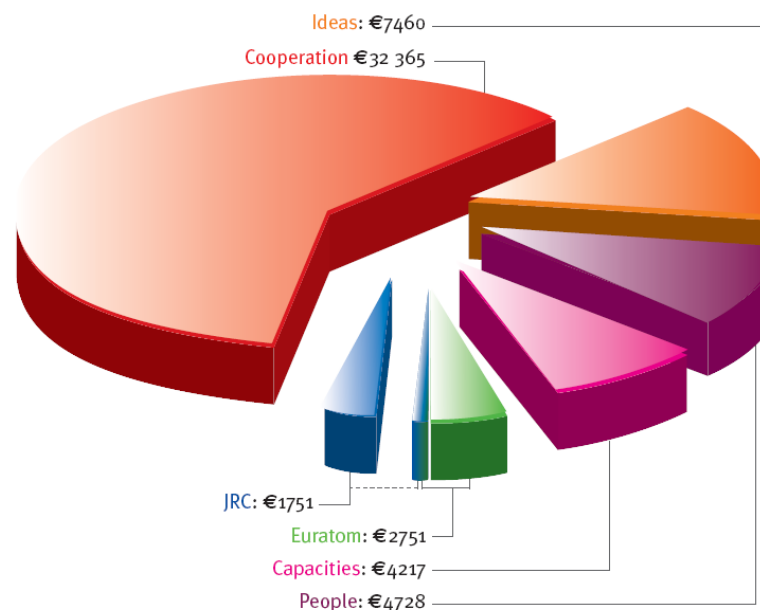
Contents

- Why are we here today?
- **Framework Programme 7 / CSA**
- Project Background and Objectives
- Consortium and Way of Working
- Operational, Aircraft, Regulatory Aspects

FP7 IN A NUTSHELL

- **FP7** is the short name for the **Seventh Framework Programme** for Research and Technological Development. This is the EU's main instrument for funding research in Europe and it runs **from 2007 to 2013**.
- The **EC budget** for research on transport is **€ 4.1 billion**
- FP7 is made up of 4 main blocks of activities
 - Cooperation - Collaborative research
 - **Ideas - European Research Council (ERC)**
 - People - Human Potential, Marie Curie
 - Capacities - Research capacities

The indicative breakdown (€ million) of FP7



CSA – Co-ordination and Support Action

- **CSA topics:** Development of a portfolio of projects to understand the impact of the ERC based on exploratory, **state-of the art**, scholarly work on broadly defined topic areas and questions
- Benefit for Researchers: **The need for new transport networks and infrastructures in Europe is growing** and development costs are increasing. Their development at the European level can become a reality only through the collaborative activities of the various RTD providers.
- **FP7 activities** are (among others):
 - reducing the impact of transport on climate change
 - **intermodal regional and national transport**
 - **environmentally efficient aviation**
 - integrative architectures

Contents

- Why are we here today?
- Framework Programme 7 / CSA
- **Project Background and Objectives**
- Consortium and Way of Working
- Operational, Aircraft, Regulatory Aspects

Project Background

- The annual air traffic growth rate of 5% and higher was nearly constant over the last decade and IATA forecasts the same or even higher rate for the coming years. As a consequence the **capacity overload of current airports** and the **demand for point-to-point connections** even to destinations away from existing airports has considerably grown.
- Number of EU member states increases and as a consequence the EU offers a **large number of lakes and shore lines** suitable for seaplane and amphibian traffic increase.
- Europe offers a **great potential for an international air traffic system using seaplanes and amphibians**.



Project Objectives

- Demonstrate the needs and quantify the potential of seaplane traffic business development
- Propose recommendations for the introduction of new seaplane/amphibian transportation system
 - the improvement of passenger's/customer's choice
 - better time and cost efficient travel and transport
- The objectives will be achieved by the organization of three workshops of relevant stakeholders in the Atlantic, Mediterranean and Baltic region.



Contents

- Why are we here today?
- Framework Programme 7 / CSA
- Project Background and Objectives
- **Consortium and Way of Working**
- Operational, Aircraft, Regulatory Aspects

Consortium

The FUSETRA team consists of representatives of international industry leaders and three universities from across Europe. The team will be supported by invited experts at the different workshops. The FUSETRA partners are:

- Dornier Aviation
- Harbour Air Malta
- Sträter Consulting
- Technische Universität München
- Glasgow University
- Rzeszow University

Sträter Consulting ■ ■ ■

harbourair 



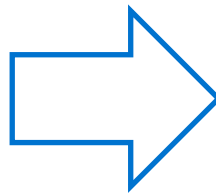
DORNIER AVIATION



Way of Working

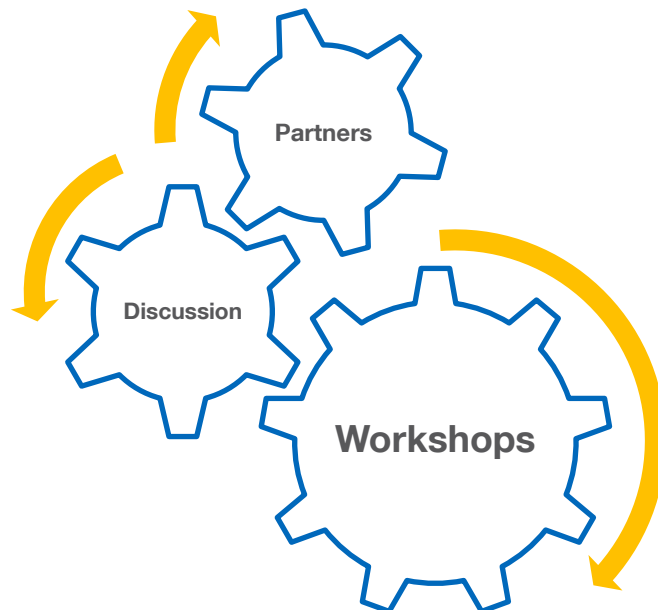
Main Topics

- Operational Aspects
- Aircraft Aspects
- Regulatory Aspects



Related Workshop

- Workshop Atlantic
- Workshop Mediterranean
- Workshop Baltic



Contents

- Why are we here today?
- Framework Programme 7 / CSA
- Project Background and Objectives
- Consortium and Way of Working
- **Operational, Aircraft, Regulatory Aspects**

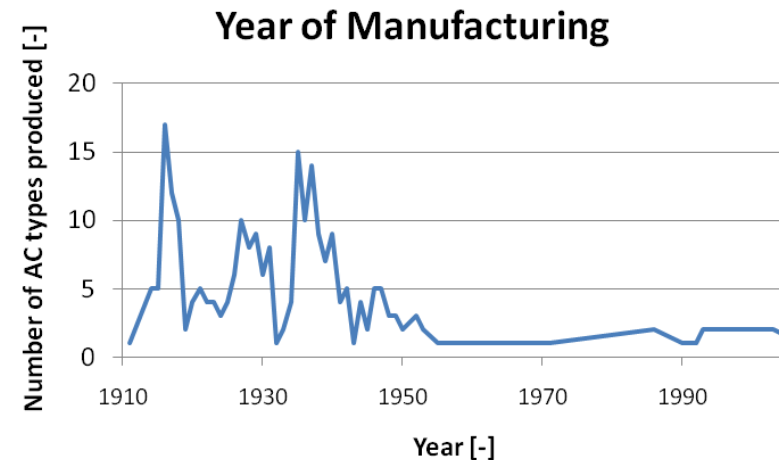
Operational Aspects

- Identification of regions to be improved with seaplane transportation (Coverage of peripheral areas)
- Identification of routes to be improved with seaplane transportation (Decongestion of highly frequented routes)
- Seaplane park infrastructure
- Choice of region & route to be examined in detailed scenarios for future use of seaplanes
- Commercial view: Passenger / Cargo / Special Mission / Environmental
- Environment (environmental Impact / Weather)



Aircraft Aspects

- Current aircraft types
- Current modes of operation and issues
- Total demand for aircraft in 2020
- Possibilities for conversion of existing non-seaplanes
- Seaplane requirements derived from operational issues
- European mission profile of Seaplanes / Amphibian



Source: FUSETRA WP I: Seaplane Database



Regulatory Aspects

- Legislative aspects (infrastructure, airworthiness, national differences)
- Legislative aspects of seaplane / amphibian operation
- Safety
- Pilots training & certification

→ Please participate: www.fusetra.eu



Any questions ?