



## Second ATM R&D projects Co-ordination and networking meeting

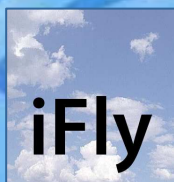
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# Alignment with the SESAR programme

**iFly**

Safety, Complexity and Responsibility based design and validation  
of highly automated Air Traffic Management

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Directorate-General for Energy and Transport



# Context

## → Innovative project for EC DG-TREN (6<sup>th</sup> Framework)

- iFly project duration: May 2007- August 2010
- Budget: 5.2 MEuro / Total effort: ~ 45 person-years
- 18 Partners: 7 from ATM/aviation and 11 universities

## → Motivation:

- Airborne self separation has been “invented” as a potential solution for high traffic demand airspace
- During recent years ATM community research trend is to direct airborne self separation research to situations of less demanding airspace

## → Key research questions:

- At which en route traffic demands is airborne self separation sufficiently safe?
- Which complementary support services from ground ATM are needed in order to accommodate higher traffic demands?



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## Explain how the Project is supporting the SESAR D3 Target Concept

- ➔ **iFly minimal aim is twofold:**
  - To support SESAR ATM Capability 4 ConOps, by assessing of airborne self separation in busy en-route area
  - To support SESAR ATM Capability 3 ConOps, by assessing of airborne self separation outside the busy en-route area
- ➔ **iFly maximal effect is that the outcomes are too good for busy en route airspace to leave SESAR ATM Capability 4 ConOps wait until 2025**
- ➔ **iFly results include requirements on the supporting Architecture and CNS technology**



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## Most important results and actual “shape” of the project deliverables supporting the SESAR D3 results

### → Production of two advanced design references:

1. Self Separation with maximal capacity accommodated
2. Best Ground support to this Self Separation baseline

### → Safety/capacity, human factors and cost-benefit assessment of the self separation concept

### → Innovative features:

- Predict traffic complexity, multi-agent situational awareness, guaranteed conflict resolution

### → Development and validation in line with E-OCVM



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## First orientations for better alignment with SESAR D3

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- iFly will connect with SESAR's Business Trajectory concept
- If possible, iFly will conduct a liability study regarding ASAS use (SESAR D3 safety report)
- If possible, iFly would like to invite an interested SESAR D3 expert to accept an iFly internal advisor role
- Coordination with RESET; Informal contacts with ERASMUS, SuperHighway, ASSTAR, and CAATS2



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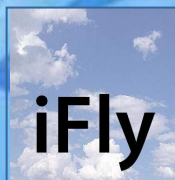


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# Thank you

For further information see:  
<http://iFly.nlr.nl>

or contact  
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