



Clean Sky

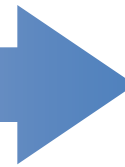
An introduction

www.cleansky.eu

Clean Sky Background: The ACARE Vision 2020

February 2008
Take-Off

Clean Sky
Preparation



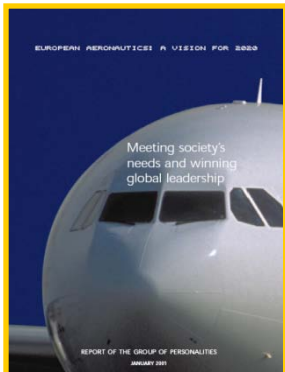
October 2004
SRA-2



October 2002
SRA-1



June 2000
Vision 2020



Flightpath
2050

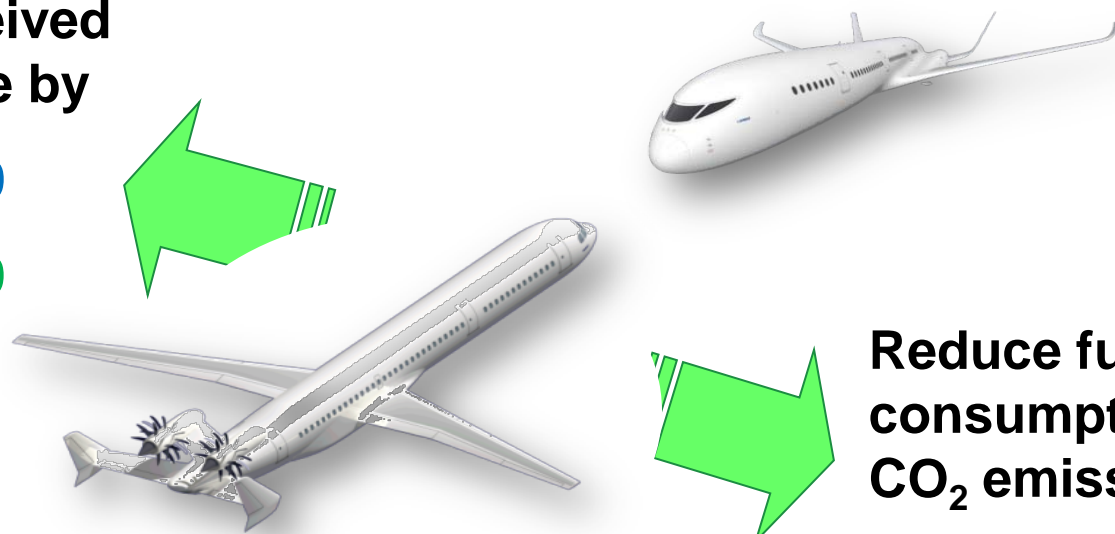


Info Day 20 01 2012

Big Technical Challenges

Reduce perceived external noise by

- 50% by 2020
- 65% by 2050



Reduce NO_x emissions by

- 80% by 2020
- 90% by 2050

Reduce fuel consumption and CO₂ emissions by

- 50% by 2020
- 75% by 2050

Vision 2020 and **Flightpath 2050** targets are for new aircraft and whole industry relative to 2000



Unique Public-Private-Partnership in Aeronautics



Europe's largest Aeronautics Research Programme ever

- €1.6B value, split 50/50 between the Commission (cash) and Clean Sky members and partners (in kind)
- Start February 2008; running up to 2017
- €650M invested to date (September 2011)



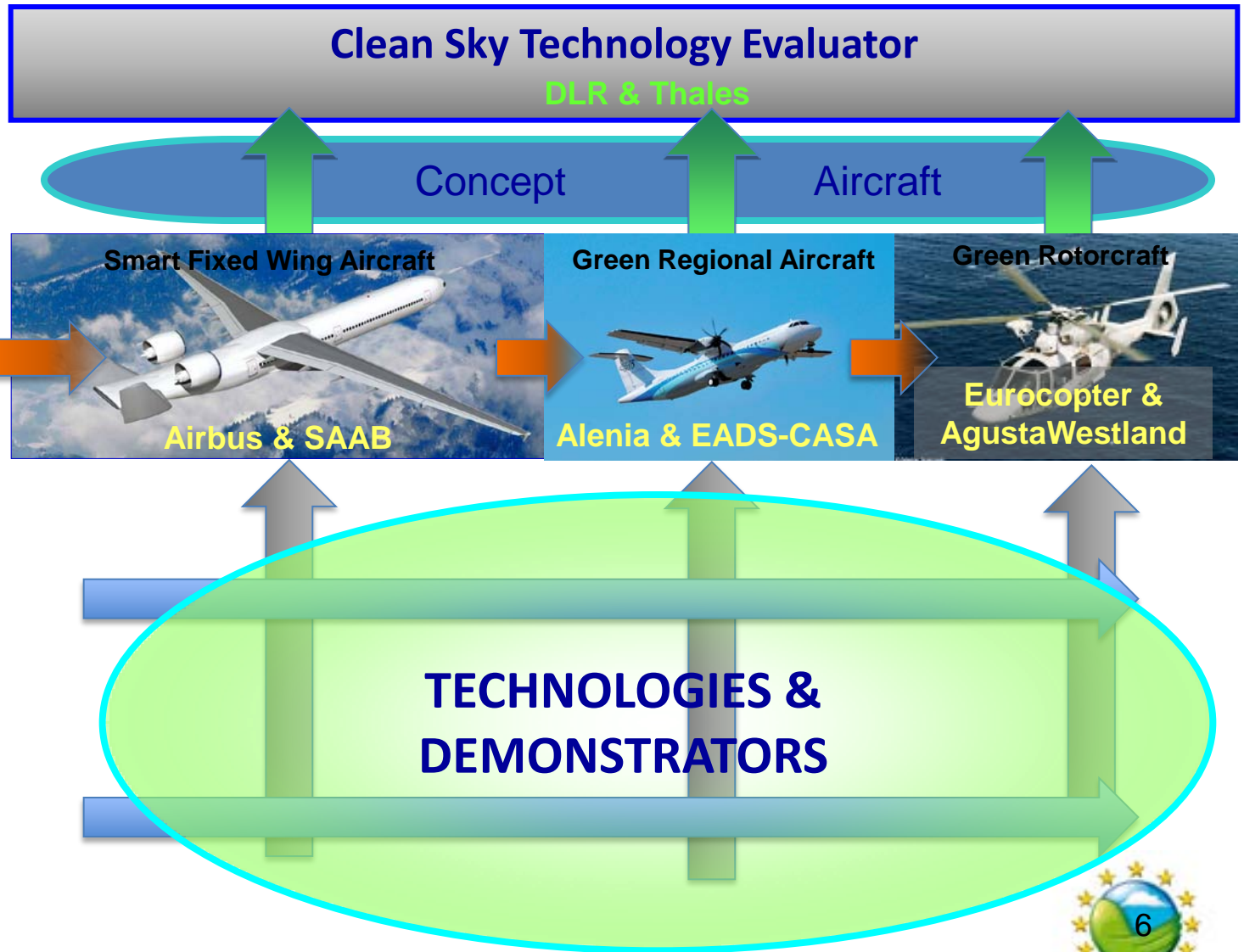
Unique Public-Private-Partnership in Aeronautics

A new way of delivering R&T

- Integrated, thematic set-up
- Downstream approach
- Large scale and complex testing, evaluation and demonstration, pulling in earlier research and accelerating TRL development
- Open Calls for engaging partners
- Founders and Commission working as equity partners

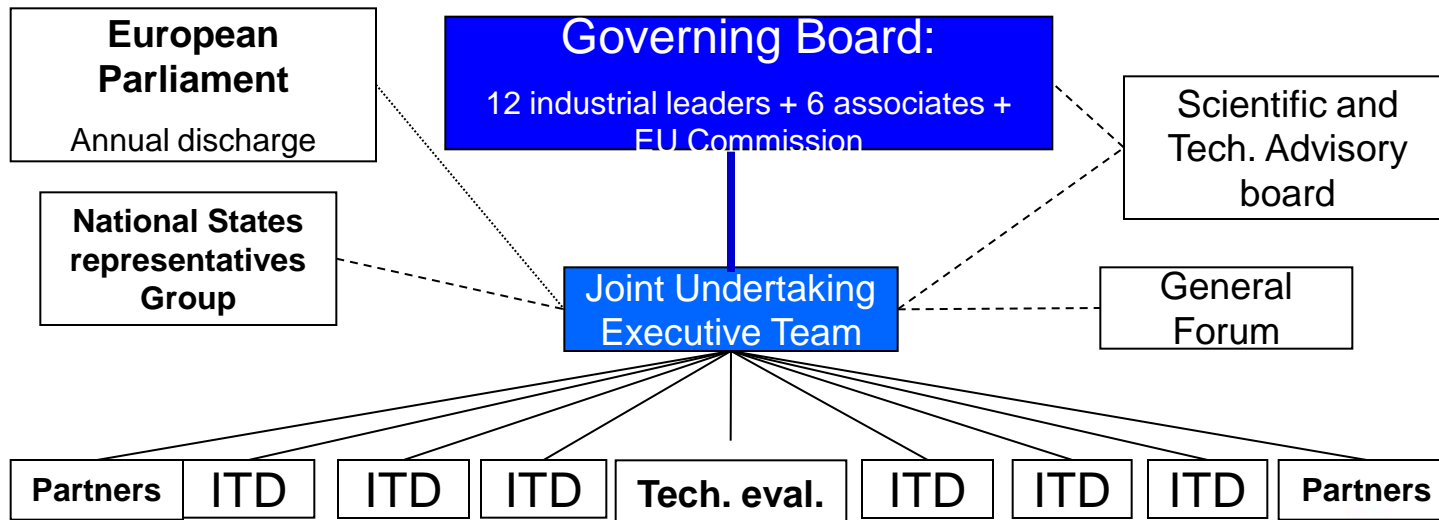
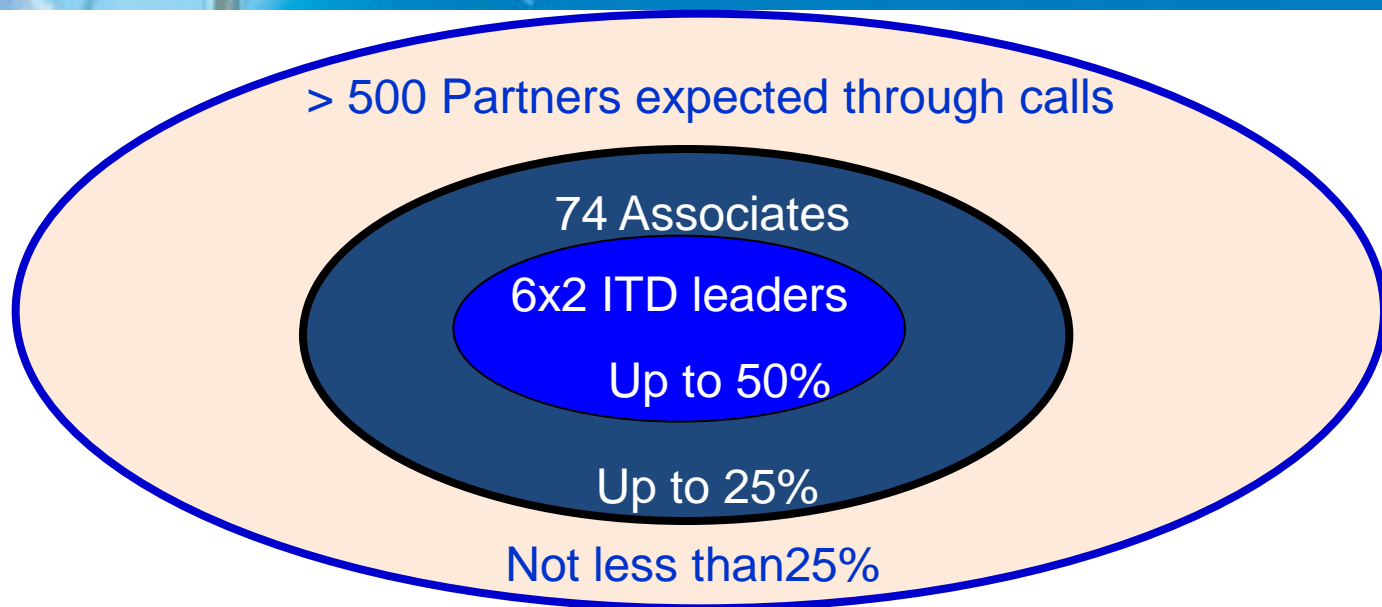


Integrated Program Structure



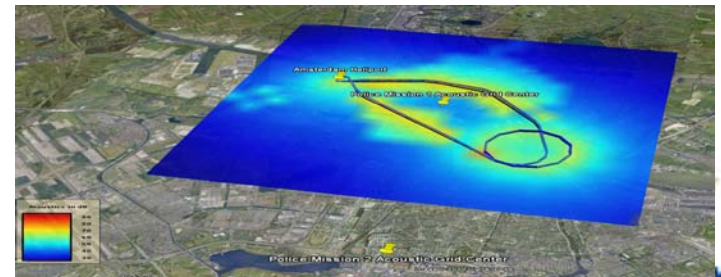
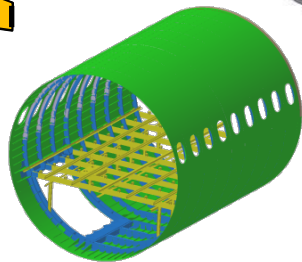
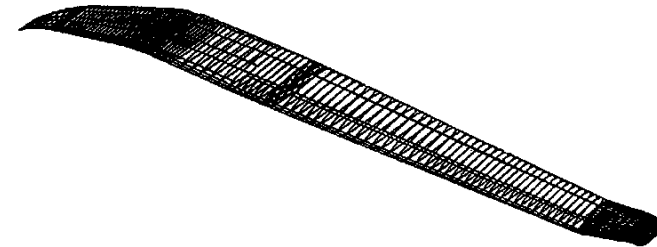
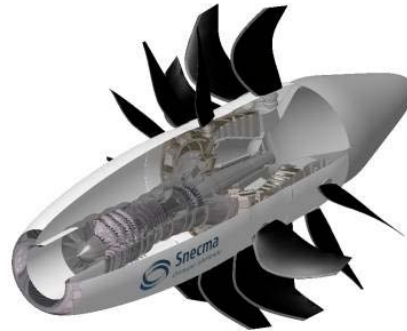
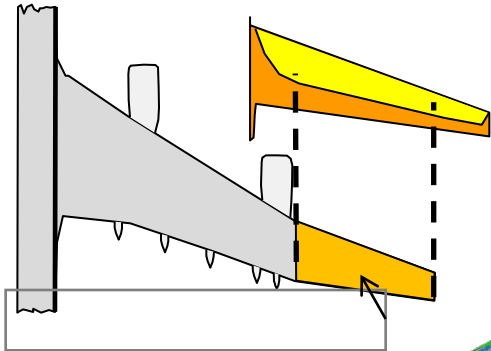
Clean Sky involves a broad and open participation

~450 participants
(members+partners)
to date



Technology streams

- Aerodynamics
- Advanced Materials and structures
- Propulsion
- On-board energy
- Trajectory



Progressing from Technology to Demonstration

Design Studies, Rig
Testing, Modelling

Flying
Demonstrators

Engine / System
Demonstrators

Risk Reduction

A few statistics: Call 1 to 9

142 M€ of total cost, 91 M€ funding

339 partners for 265 topics

32% applicants success rate

500 K€ average cost by topic

Average duration 21,5 month

Average 2 participants by topic

40% SME

20% Universities

24 countries involved (Members + Partners)

