



FANTASSY

Project reference: 309070 Funded under: EP7-TRANSPORT

Future Aircraft design following the carrier-pod concept as an enabler for co-modal seamless transport, passenger safety and environmental sustainability

From 2012-08-01 to 2014-10-31

Project details

Total cost:	Subprogramme:
EUR 730 754	AAT.2012.6.3-1 Breakthrough and emerging technologies
EU contribution:	Call for proposal:
EUR 560 750	FP7-AAT-2012-RTD-L0
Coordinated in:	Funding scheme:
Greece	CP-FP - Small or medium-scale focused research project

Objective

Aviation has dramatically transformed society over the past 100 years. Fast and efficient transportation has essentially been "shrinking the planet" and changing the landscape in terms of financial and societal conditions. The growth of air traffic over the past 50 years has been spectacular, and will continue in the future. This anticipated growth carries along challenges and opportunities in various aspects of life, from economics to the environment. Research must meet these emerging challenges by producing concepts and breakthrough technological achievements in air transport.

Currently, one of the most challenging areas of aeronautical research is the air-vehicle itself, mainly in what concerns its form and operation. Passenger aircrafts have kept more or less the same basic design since the 40's. Several improvements have been introduced since then (composite materials for the main load bearing structure of the aircraft eg A350, B787) but none of them had altered the basic form of the aircraft or its main operation and handling.

For the air-transport of the future several pioneering ideas meant for introducing radical changes in the air-transport system have been proposed, requiring several innovations and individual technical challenges to be met towards their implementation. An idea to be investigated within the frame of the proposed project is the design of the aircraft as a combination of a "carrier" and a "passenger pod". The benefits from such a concept are multiple.

- Inter-modal passenger transport.
- Increased flexibility in aircraft configuration and fleet management.
- Distributed airport facilities
- Faster and easier passenger loading
- Evacuation of the aircraft in case of an emergency

Related information

Result In Brief

Report Summaries

• Periodic Report Summary 1 - FANTASSY (Future Aircraft design following the carrier-pod concept as an enabler for co-modal seamless transport, passenger safety and environmental sustainability)

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Subjects

Scientific Research - Scientific Research

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: http://cordis.europa.eu/project/rcn/104570_en.html $\ensuremath{\mathbb{C}}$ European Union, 2014