Gust Load Alleviation techniques assessment on wind tunnel MOdel of advanced Regional aircraft

Arkusz informacyjny

Informacje na temat projektu

GLAMOUR
Identyfikator umowy o grant: 620084
Status
Projekt zamknięty
Data rozpoczęcia 1 Lutego 2014
Data zakończenia 30 Listopada 2016

Finansowanie w ramach FP7-JTI
Calkowity budżet € 2 323 860,92
Wkład UE € 1 742 895,69

Koordynowany przez POLITECNICO DI MILANO Włochy

Cel

The aim of Gust Load Alleviation techniques assessment on wind tunnel MOdel of advanced Regional aircraft (GLAMOUR) proposal is a technological optimisation and experimental validation through an aero-servo-elastic innovative WT model of gust load alleviation control systems for advanced Green Regional Aircraft. The expected benefits of such technologies are mainly the mitigation of gust load responses, the reduction of peak stresses so to potentially decrease sizing loads and consequently increase the weight saving. Most generally, the capability to control the load distribution spanwise could contribute to other global targets such as fatigue lifetime as well aeroelastic and aerodynamic performances.

GLAMOUR project has these main objectives:

- Validate the Load Alleviation techniques based on control architectures defined by ITD member
- Develop of alternative control schemes

- Design and manufacturing of a wind tunnel model representing half GRA aircraft dynamically scaled so to be used for experimental validation purpose. The model will be equipped with active split ailerons and elevator to be used for active control

- Perform wind tunnel test with and without LA controls to validate both the proposed control schemes and the new ones developed by the consortium. To this aim, the wind tunnel proposed for experimental activity will be equipped with an ad hoc developed gust generator so to inspect the whole flight envelope and frequency bandwidth typical of the considered aircraft

- Draw a final assessment on the global benefits achievable using LA technologies in both design and off-design flight conditions.

Apart from the Project management workpackage (WP0), that includes exploitation and dissemination, the tasks to be done inside of the project are included in six workpackages.

Dziedzina nauki

Program(-y)

Temat(-y)

Zaproszenie do składania wniosków

SP1-JTI-CS-2013-01

System finansowania

JTI-CS - Joint Technology Initiatives - Clean Sky

Koordynator

POLITECNICO DI MILANO

Adres
Piazza Leonardo Da Vinci 32
20133 Milano

Rodzaj działalności
Higher or Secondary Education Establishments

Wkład UE
€ 466 031,10
Uczestnicy (4)

IBK-INNOVATION GMBH & CO. KG

Niemcy
Wkład UE
€ 432 300

Adres
Butendeichsweg 2
21129 Hamburg

Rodzaj działalności
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Kontakt administracyjny
Stephan Adden (Dr.)

REVOIND INDUSTRIALE

Włochy
Wkład UE
€ 511 098,15

Adres
Via Casale Marcangeli 13
67063 Oricola

Rodzaj działalności
Private for-profit entities
(excluding Higher or Secondary Education Establishments)

Kontakt administracyjny
Paolo Lautizi (Mr.)

TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY

Izrael
Wkład UE
€ 186 570

Adres

Rodzaj działalności
Senate Building Technion City
32000 Haifa
Higher or Secondary Education Establishments
Strona internetowa
Kontakt administracyjny
Jack Lavan (Mr.)

UNIVERSITY OF BRISTOL
United Kingdom
Wkład UE
€ 146 896,44
Adres
Beacon House Queens Road
BS8 1QU Bristol
Rodzaj działalności
Higher or Secondary Education Establishments
Strona internetowa
Kontakt adminisztracyjny
Julie Coombs (Mrs.)

Ostatnia aktualizacja: 13 Lutego 2017
Numer rekordu: 185697
Permalink: https://cordis.europa.eu/project/id/620084//pl

© European Union, 2020