RoCS

Rotorcraft Certification by Simulation

Funding: European (Horizon 2020)
Duration: May 2019 - Apr 2022
Status: Ongoing
Total project cost: €2,999,769
EU contribution: €2,842,172

Call for proposal: H2020-CS2-CFP08-2018-01
CORDIS RCN: 221314

Objectives:

This proposal answers the call JTI-CS2-2018-CfP08-FRC-01-19 on Certification by Simulation for Rotorcraft Flight Aspects. The aim is to define a virtual engineering flight simulation process for the generation of evidence for certification of rotorcraft.

The objective is to establish, in collaboration with industry and regulators, the characteristics that a virtual flight simulation environment must have to be adequate to demonstrate compliance with airworthiness standards, in a safer, more economical and more effective way than that which could be achieved through current flight test procedures.

The challenge is to develop, in agreement with the regulatory authority, guidelines that define the part of the certification basis that could be substituted or complemented by flight simulation, as well as the metrics and methodology to assess simulation model and flight simulator cueing fidelity.

Parent Programmes:
H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport

Institute type: Public institution
Institute name: European Commission
Funding type: Public (EU)
Other programmes: JTI-CS2-2018-CfP08-FRC-01-19 Certification by Simulation for Rotorcraft Flight Aspects (CSRFA)

Lead Organisation:

Politecnico Di Milano
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Organisation Website:
http://www.polimi.it
EU Contribution: €692,688

Partner Organisations:

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EU Contribution: €139,151

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EU Contribution: €367,725

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Organisation Website: http://www.dlr.de
EU Contribution: €516,381

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Organisation Website: http://www.liv.ac.uk
EU Contribution: €438,103

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Organisation Website: http://www.nlr.nl
EU Contribution: €688,125

Technologies:

Computer-aided design and engineering
Virtual reality simulation for production and assembly planning

Development phase: Research/Invention

STRIA Roadmaps: Vehicle design and manufacturing
Transport mode: Air transport
Transport sectors: Passenger transport, Freight transport
Transport policies: Digitalisation
Geo-spatial type: Other