DEPART2050

Design Evaluation and Performance Assessment of Rotorcraft Technology by 2050

Funding: European (Horizon 2020)
Duration: Oct 2017 - Oct 2021
Status: Ongoing
Total project cost: €579,775
EU contribution: €579,775

Call for proposal: H2020-CS2-CFP05-2016-03
CORDIS RCN: 211593

Objectives:

The aim of project DEPART2050 is to undertake novel rotorcraft technology assessments (Tilt rotor aircraft and Compound rotorcraft), utilising a flexible and extensible modular multi-disciplinary framework. The objective of the work in the project will be to undertake at the airport and ATS level, assessments of environmental (emissions and noise) and mobility (connectivity and productivity) improvements that may be accrued through replacement of reference technology over the designated time scales (2015/2020/2035/2050).

Within CS2, the Technology Evaluator (TE) is positioned as a dedicated evaluation platform, with a critical role of assessing the environmental impact of the technologies developed. Apart from assessing the level of success achieved by the novel technologies and their contribution to well-defined environmental goals, the TE is also tasked with establishing any societal benefits that may be accrued. Therefore, based on requirements of the call, Project Depart2050 will focus on assessing and establishing the impact of introducing novel rotorcraft concepts at the airport and air transport system level. The comparison will be made against a selected baseline technology in terms of impact on the environment and mobility.

The consortium will include NLR, ANOTEC, and University of Padua and will be led by Cranfield University. The partners have been specially chosen based on their individual strengths in the field of research and their past experience in EU projects.

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)

Lead Organisation:

Cranfield Aerospace Limited
Address: Cranfield University Campus Hangar 2
Cranfield
MK43 0AL
United Kingdom

Organisation Website: http://www.cranfield.ac.uk
EU Contribution: €241,000
**Partner Organisations:**

<table>
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| **Stichting Centrum Voor De Ontwikkeling Van Transport En Logistiek In Europa** | Van Nelleweg 1  
3044 BC Rotterdam  
Netherlands | [http://www.cetle.org](http://www.cetle.org) | €154,400 |
| **Universita Degli Studi Di Padova** | Via 8 Febbraio 1848 2  
35122 Padova  
Italy | [http://www.unipd.it](http://www.unipd.it) | €87,875 |
| **Anotec Engineering SL** | CALLE RECTOR JOSE VIDA SORIA 2 PORTAL 7 PLANTA 2 PUERTA C  
18613 MOTRIL  
Spain | | €96,500 |

**Technologies:**

- Unclassified
- Non-technology

**Development phase:** Research/Invention

**STRIA Roadmaps:** Vehicle design and manufacturing

**Transport mode:** Air transport

**Transport sectors:** Passenger transport, Freight transport  
Societal/Economic issues, Environmental/Emissions

**Transport policies:** aspects

**Geo-spatial type:** Other