PROJECT

AEROMO2

Towards the application of MOphing MOvables in AEROstructures

Funding: European (Horizon 2020)
Duration: Jun 2020 - Jul 2023
Status: Ongoing
Total project cost: €903,925
EU contribution: €882,475

CORDIS RCN: 228826

Objectives:

The framework of the project is to support the development of an active morphing winglet demonstrator within the Airframe ITD. The current project will deliver elements necessary for the future industrialisation of the technologies involved in morphing movables. These elements concern:

1. a comprehensive material behaviour characterisation and prediction method, specific for the requirements coupled with this application, subsequently called ‘Part A’;
2. a production method necessary to demonstrate the application of a novel pressurised cell actuation system subsequently called ‘Part B’.

Both parts are complementary, though these will support two types of demonstrators. The first part is meant to realise a large step towards qualification of the morphing technology on focussing on materials able to realise morphing deformation in an existing concept, while the second one focuses on a technology integrating all aspects related to morphing movables, around an innovative fluid based control system, named FAMoUS.

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-CS2-2019-CFP10-AIR-01-45 Coupon and element testing and manufacturing of test article for morphing technologies

Lead Organisation:

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EU Contribution: €582,425

Partner Organisations:

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**EU Contribution:** €50,050 |

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**Organisation Website:**  
http://www.tu-braunschweig.de  
**EU Contribution:** €250,000 |

| **Technologies:** |
| Aircraft design and manufacturing  
Morphing wing  
**Development phase:** Research/Invention |

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