

PROJECT

ELCOCOS

Enhanced Low-cost COMplex COMposite Structures

Funding: European (Horizon 2020)

Duration: Apr 2019 - Jun 2021

Status: Complete

Total project cost: €1,280,183

EU contribution: €907,420



Call for proposal: H2020-CS2-CFP08-2018-01

[CORDIS RCN : 221225](#)

Objectives:

LATECOERE is the world independent leader on the “aircraft doors” market and wants to strengthen this position. ELCOCOS project is the right opportunity to maintain this leadership and to improve the European industry competitiveness as a whole. ELCOCOS consortium is a strong and complementary partnership of leading European industrials and research organizations in the area of aerospace and material development. ELCOCOS is composed of four companies whose expertise will help to develop a composite door using infusion (LRI) technologies as per the aforementioned call:

- LATECOERE for the project management, door design and sizing, composite coupons and door tests;
- CORIMA TECHNOLOGIES for the composite tooling design and manufacturing;
- COMPOSITADOUR for the lay-up; and
- INSTITUT DE SOUDURE (ISA) for the Injection process.

ELCOCOS objectives are to:

- reduce development cost,
- decrease the weight of the structure,
- improve significantly the recurring cost, and
- reduce the industrialization cost.

ELCOCOS consortium will fully define technical and cost performances of an optimized infused structure. Predicting the fibre and resin behaviour, correlated with physical specimen, mastering the infusion process through numerical simulation, optimizing the curing cycle thanks to a self-heated composite mould, the final objective of ELCOCOS is to manufacture a full-scale demonstrator representative of what could be the next generation of airframe structures comparable to door structures. ELCOCOS is fully in line with the call. The considered technical WPs, tasks and deliverables fit with the call for proposal. A project management WP is also considered. Specific actions are made to ensure dissemination of project results and sustainability of the action. Measurable KPIs and risks are also considered. ELCOCOS consortium is composed of the expected skills, capabilities and certifications expected from the applicants allowing the successful achievement of the project.

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-AIR-02-63 Enhanced Low Cost Complex Composite Structures

Lead Organisation:

Latecoere

Address:

Rue de periole 135
31079 TOULOUSE
France

EU Contribution: €397,382

Partner Organisations:**Corima Technologies****Address:**

QUARTIER CHAMPGRAND
26270 LORIOL-SUR-DROME
France

EU Contribution: €186,449

Institut De Soudure**Address:**

Rue des Vanesses 90 - Zone Industrielle Paris-Nord II
93420 VILLEPINTE
France

Organisation Website:

<http://www.isgroupe.com>

EU Contribution: €213,479

Ecole Superieure Des Technologies Industrielles Avancees**Address:**

Technopole Izarbel
64210 BIDART
France

Organisation Website:

<http://www.estia.fr>

EU Contribution: €110,110

Technologies:

Composite materials
Composite materials for structural purposes in the aircraft

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