

PROJECT

AUDACITY

compAct powerfUl and reliAble piezoeleCtrlc acTuator for landing gear sYstems

Funding: European (Horizon 2020)

Duration: Apr 2019 - Mar 2022

Status: Ongoing

Total project cost: €990,213

EU contribution: €798,963



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

[CORDIS RCN : 221219](#)

Objectives:

Design and development of the objective of the AUDACITY project is to make the demonstration of a compact powerful and reliable piezoelectric actuator for future locking applications in landing gear systems.

Audacity is required to get rid of the well-established hydraulic actuators in order to comply with System ITD Strategic Objectives in terms of environmental impact and More Electric Aircraft (MAE).

One American and one Japanese company have shown the relevance of the piezoelectric technology to be used in landing gear systems. Their demonstrations are today without equivalent in Europe.

Whereas the principle of long stroke piezoelectric actuator is not new, technical challenges occur. The consortium of AUDACITY has concluded every technical limitation one by one during the 20 past years. The technical objective is then to integrate all these individual progresses within a prototype for TRL4 demonstration.

AUDACITY aims at impacting the competitiveness of Europe and Associated countries with the direct creation of 20 jobs and 45 Million of cumulative sales before 2030.

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-SYS-02-48 Design and development of a long stroke Piezo Electric Actuator

Lead Organisation:

Cedrat Technologies Sa

Address:

CHEMIN DU VIEUX CHENE 59
38240 MEYLAN
France

Organisation Website:

<http://www.cedrat-technologies.com>

EU Contribution: €446,250

Partner Organisations:

Partner Organisations:

Csem Centre Suisse D'electronique Et De Microtechnique Sa - Recherche Et Developpement

Address:

Rue Jaquet Droz 1
2002 Neuchatel
Switzerland

EU Contribution: €179,813

Universita Degli Studi Di Roma "la Sapienza"

Address:

Piazzale Aldo Moro 5
00185 ROMA
Italy

Organisation Website:

<http://dma.ing.uniroma1.it>

EU Contribution: €172,900

Technologies:

Aircraft design and manufacturing
Piezoelectrically driven Synthetic Jet Actuators

Development phase: Research/Invention

STRIA Roadmaps: Transport electrification, Vehicle design and manufacturing

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Other specified

Geo-spatial type: Other