Low NOx / low soot injection system design for spinning combustion technology

Fact Sheet

Project Information

**LOOPS**

Grant agreement ID: 882300

**Funded under**

SOCIAL CHALLENGES - Smart, Green And Integrated Transport

**Total cost**

€ 591 280,00

**EU contribution**

€ 591 280,00

**Coordinated by**

GDTECH FRANCE SAS

France

Project description

High-efficiency injection system propels commercial rollout of spinning combustion technology

Safran Helicopter Engines has patented a new spinning combustion technology that improves air/fuel mixture ignition and enables a weight reduction in the combustor, without compromising its lifetime. Assessing nitrogen oxides (NOx) and soot emissions is a key step before the technology enters the market. The EU-funded LOOPS project plans to design (GDTECH), manufacture, test (INSA Rouen) and model (CERFACS, GDTECH) an advanced low-NOx and low-soot injection system.
for the spinning combustion technology. Experimental work will be complemented by numerical simulations that will provide, for the first time, a detailed characterisation of soot particle concentration and size distribution.

Fields of science

engineering and technology > mechanical engineering > vehicle engineering > aerospace engineering > aircraft > rotorcraft

Programme(s)

H2020-EU.3.4. - SOCIETAL CHALLENGES - Smart, Green And Integrated Transport

MAIN PROGRAMME

H2020-EU.3.4.5.5. - ITD Engines

Topic(s)

JTI-CS2-2019-CfP10-ENG-01-43 - Low NOx / Low soot injection system design for spinning combustion technology.

Call for proposal

H2020-CS2-CFP10-2019-01

See other projects for this call

Funding Scheme

CS2-RIA - Research and Innovation action

Coordinator

GDTECH FRANCE SAS

Net EU contribution

€ 220 280,00

Address
Site aeropolis
64510 Bordes
France

Region
Nouvelle-Aquitaine > Aquitaine > Pyrénées-Atlantiques

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00

Participants (2)

CENTRE EUROPEEN DE RECHERCHE ET DEFORMATION AVANCEE EN CALCUL SCIENTIFIQUE
France

Net EU contribution
€ 108 000,00

Address
Avenue g coriolis 42
31057 Toulouse cedex

Region
Occitanie > Midi-Pyrénées > Haute-Garonne

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00
INSTITUT NATIONAL DES SCIENCES APPLIQUEES DE ROUEN

France

Net EU contribution

€ 263 000,00

Address

Avenue de l'université
76 801 Saint etienne du rouvray

Region

Normandie > Haute-Normandie > Seine-Maritime

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding

€ 0,00

EC signature date 8 April 2020
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Permalink: https://cordis.europa.eu/project/id/882300

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