

PROJECT

GAM-2020-LPA

Large Passenger Aircraft Innovative Aircraft Demonstrator Platform

Funding: European (Horizon 2020)

Duration: Jan 2020 - Dec 2021

Status: Ongoing

Total project cost: €142,140,284

EU contribution: €106,688,121



Call for proposal: H2020-IBA-CS2-GAMS-2019

[CORDIS RCN : 231017](#)

Objectives:

The main objective for the Clean Sky 2 Large Passenger Aircraft Programme (LPA) is to further mature and validate key technologies such as advanced wings and empennages design, making use of hybrid laminar airflow wing developments, the integration of most advanced engines into the large passenger aircraft design as well as an all-new next generation fuselage cabin and cockpit-navigation. Dedicated demonstrators are dealing with research on the best opportunities to combine radical propulsion concepts, and the opportunities to use scaled flight testing for the maturation and validation of these concepts via scaled flight testing. Components of hybrid electric propulsion concepts are developed and tested in a major ground based test rig. The LPA program is also contributing with a major work package to the E-Fan X program.

The R&T activities in the LPA program is split in 21 so-called demonstrators. In the project period 2020 and 2021 a substantial number of hardware items ground and flight test items will be manufactured, assembled tested. For some large items like the Multifunctional Fuselage demonstrators or the HLFC wing ground demonstrator the detailed design and manufacturing of test items will be commenced.

For the great majority of contributing technologies a Technology Readiness level (TRL) 3 or 4 will be accomplished or even exceeded.

Based on data generated for each key technology contributing to the LPA program inputs will be provided to the CleanSky Technology Evaluator via the integration in agreed concept aircraft models in order to conduct the overall CS2 assessment. LPA is also contributing to conduct Eco Design Life Cycle assessments for selected LPA technologies.

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: CS2-GAM-2020-LPA Large Passenger Aircraft ITD GAM 2020

Lead Organisation:

Airbus

Address:

2 ROND POINT EMILE DEWOITINE
31700 BLAGNAC
France

Organisation Website:

<http://www.airbus.com>

EU Contribution: €1,205,849

Partner Organisations:

Coventry University

Address:

Priory Street
Coventry
CV1 5FB
United Kingdom

EU Contribution: €88,763

Gmvis Skysoft Sa

Address:

Av. D.joao li Lote 1.17.02, Torre Fernao Magalhaes 7°
1998025 Lisboa
Portugal

Organisation Website:

<http://www.skysoft.pt>

EU Contribution: €121,524

Safran Aerotechnics

Address:

RUE PIERRE CURIE 61
78370 PLAISIR
France

Organisation Website:

<http://www.zodiacaerospace.com>

EU Contribution: €2,144,041

Saab Aktiebolag

Address:

..
581 88 LINKOPING
Sweden

Organisation Website:

<http://www.saabgroup.com>

EU Contribution: €1,867,408

Fundacion Para La Investigacion, Desarrollo Y Aplicacion De Materiales Compuestos

Address:

Avda Rita Levi Montalcini (Tecnogetafe) 29
28906 Getafe
Spain

Organisation Website:

<http://www.fidamc.es>

EU Contribution: €989,896

Safran Aircraft Engines**Address:**

2 Bvd Du General Martial-Valin
75724 Paris
France

Organisation Website:

<http://www.safran-aircraft-engines.com>

EU Contribution: €3,596,947

Stichting Nationaal Lucht En-Ruimtevaartlaboratorium**Address:**

Anthony Fokkerweg 2
1059CM AMSTERDAM
Netherlands

Organisation Website:

<http://www.nlr.nl>

EU Contribution: €2,386,525

Airbus Operations Sas**Address:**

ROUTE DE BAYONNE 316
31060 TOULOUSE
France

Organisation Website:

<http://www.airbus.com>

EU Contribution: €17,574,470

Honeywell International Sro**Address:**

V PARKU 2325/16 CHODOV
148 00 PRAHA
Czech Republic

EU Contribution: €3,197,997

Fraunhofer Gesellschaft Zur Foerderung Der Angewandten Forschung E.v.**Address:**

HANSASTRASSE 27C
80686 MUNCHEN
Germany

Organisation Website:

<http://www.fraunhofer.de>

EU Contribution: €2,847,438

Societe Nationale De Construction Aerospatiale Sonaca Sa**Address:**

Route Nationale Cinq
6041 Gosselies
Belgium

Organisation Website:

<http://www.sonaca.com>

EU Contribution: €1,040,811

Erneo**Address:**

290 RUE A. NOBEL - 505 RUE LOUIS LEPINE ATELIERS R ILLENAIRE
34080 MONTPELLIER
France

EU Contribution: €474,006

Safran Power Units**Address:**

Chemin Du Pont De Rupe 8
31200 Toulouse
France

EU Contribution: €2,569,442

Airbus Defence And Space Gmbh**Address:**

Ludwig-Boelkow-Allee 1
85521 Ottobrunn
Germany

Organisation Website:

<http://www.airbus-group.com>

EU Contribution: €2,973,209

Akira Technologies Sarl**Address:**

TECHNOCITE 6 RUE JOSEPH SZYDLOWSKI
64100 BAYONNE
France

Organisation Website:

<http://akira-technologies.fr/>

EU Contribution: €770,438

Office National D'etudes Et De Recherches Aerospatiales**Address:**

CHEMIN DE LA HUNIERE
91120 PALAISEAU
France

Organisation Website:

<http://www.onera.fr>

EU Contribution: €5,677,463

Bae Systems (Operations) Limited**Address:**

Warwick House, Farnborough Aerospace Centre

FARNBOROUGH, HAMPSHIRE
GU14 6YU
United Kingdom

Organisation Website:

<http://www.baesystems.com>

EU Contribution: €64,397

Deutsches Zentrum Fr Luft Und Raumfahrt E.v

Address:

Linder Hoehe
51147 KOELN
Germany

Organisation Website:

<http://www.dlr.de>

EU Contribution: €10,376,179

Thales Avs France Sas

Address:

75-77 Avenue Marcel Dassault
33700 Merignac
France

EU Contribution: €6,400,000

Airbus Operations Limited

Address:

New Filton House, Filton
BRISTOL
BS99 7AR
United Kingdom

Organisation Website:

<http://www.airbus.com>

EU Contribution: €234,211

Brightloop Sas

Address:

RUE DE BERRI 8
75008 PARIS
France

EU Contribution: €643,721

Airbus Deutschland Gmbh

Address:

Kreetslag 10
950109 HAMBURG
Germany

Organisation Website:

<http://www.airbus.com>

EU Contribution: €12,592,796

Airbus Espana, S.I. Sociedad Unipersonal**Address:**

P John Lenon, s/n
28906 GETAFE
Spain

Organisation Website:

<http://www.airbus.com>

EU Contribution: €1,113,350

Diehl Aviation Laupheim GmbH**Address:**

AM FLUGPLATZ 1
88471 LAUPHEIM
Germany

Organisation Website:

<http://www.diehl-aircabin.de>

EU Contribution: €566,344

Dassault Aviation**Address:**

9, Rond-Point des Champs-Élysées - Marcel Dassault
75008 PARIS
France

Organisation Website:

<http://www.dassault-aviation.com>

EU Contribution: €2,638,873

Liebherr Aerospace Toulouse**Address:**

408 avenue des Etats-Unis
31200 TOULOUSE
France

Organisation Website:

<http://www.liebherr.com>

EU Contribution: €1,299,375

C.i.r.a. Centro Italiano Ricerche Aerospaziali Scpa**Address:**

VIA MAIORISE
81043 CAPUA
Italy

Organisation Website:

<http://www.cira.it>

EU Contribution: €574,554

Ge Avio Srl**Address:**

VIA I MAGGIO 99

10040 RIVALTA DI TORINO
Italy

Organisation Website:

<http://www.avioaero.com>

EU Contribution: €3,699,719

Liebherr-Aerospace Lindenberg GmbH

Address:

Pfaenderstrasse 50-52
88161 LINDENBERG
Germany

Organisation Website:

<http://www.liebherr.com>

EU Contribution: €1

Gkn Aerospace Sweden Ab

Address:

-
46181 Trollhaettan
Sweden

EU Contribution: €230,000

Aernnova Aerospace S.a.u.

Address:

LEONARDO DA VINCI Parque Tecnologico de ALAVA 13
01510 MIÑANO (ALAVA)
Spain

Organisation Website:

<http://www.aernnova.com>

EU Contribution: €6,897,974

Airbus Defence And Space Sa

Address:

Avenida De Aragon 404
28022 Madrid
Spain

EU Contribution: €996,476

Safran Nacelles

Address:

Route Du Pont Viii
76700 Gonfreville L Orcher
France

EU Contribution: €0

Rolls Royce Plc

Address:

65 Buckingham gate

LONDON
SW1E 6AT
United Kingdom

Organisation Website:
<http://www.rolls-royce.com>

EU Contribution: €4,785,657

Technische Universiteit Delft

Address:
STEVINWEG 1
2628 CN DELFT
Netherlands

Organisation Website:
<http://www.tudelft.nl>

EU Contribution: €1,025,591

General Electric Deutschland Holding Gmbh

Address:
BLEICHSTRASSE 64-66
60313 FRANKFURT AM MAIN
Germany

EU Contribution: €383,038

Fokker Aerostructures Bv

Address:
Industrieweg 4
3351 LB Papendrecht
Netherlands

Organisation Website:
<http://www.storkaerospace.com>

EU Contribution: €2,639,640

Technologies:

Aircraft design and manufacturing
Hybrid wing blended body

Development phase: Validation

Computer-aided design and engineering
Improvement of transition-prediction tools for future laminar flow aircraft

Development phase: Validation

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Air transport

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

Transport policies: Safety/Security

Geo-spatial type: Other