

 Content archived on 2024-06-18



""2nd Generation Active Wing" – Active Flow- Loads & Noise control on next generation wing"

Fact Sheet

Project Information

AFLONEXT

Grant agreement ID: 604013

Project closed

Start date

1 June 2013

End date

31 August 2018

Funded under

Specific Programme "Cooperation": Transport
(including Aeronautics)

Total cost

€ 37 159 071,80

EU contribution

€ 23 612 079,00

Coordinated by

AIRBUS OPERATIONS GMBH



Germany

Objective

AFLoNext is a four year EC L2 project with the objective of proving and maturing highly promising flow control technologies for novel aircraft configurations to achieve a quantum leap in improving aircraft's performance and thus reducing the environmental footprint. The project consortium is composed by forty European partners from fifteen countries. The work has been broken down into seven work packages. The AFLoNext concept is based on six Technology Streams:

- (1) Hybrid Laminar Flow technology applied on fin and wing for friction drag reduction.
- (2) Flow control technologies applied on outer wing for performance increase.
- (3) Technologies for local flow separation control applied in wing/pylon junction to improve the performance and loads situation mainly during take-off and landing.
- (4) Technologies to control the flow conditions on wing trailing edges thereby improving the performance and loads situation in the whole operational domain.
- (5) Technologies to mitigate airframe noise during landing generated on flap and undercarriage and through mutual interaction.
- (6) Technologies to mitigate/control vibrations in the undercarriage area during take-off and landing.

AFLoNext aims to prove the engineering feasibility of the HLFC technology for drag reduction on fin in flight test and on wing by means of large scale testing as well as for vibrations mitigation technologies for reduced aircraft weight and for noise mitigation technologies.

The peculiarity of the AFLoNext proposal in terms of holistic technical approach and efficient use of resources becomes obvious through the joint use of a flight test aircraft as common test platform for the above mentioned technologies.

To improve aircraft performance locally applied active flow control technologies on wing and wing/pylon junction are qualified in wind tunnels or by means of lab-type demonstrators.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [mechanical engineering](#) > [vehicle engineering](#) > [aerospace engineering](#) > [aircraft](#)

[natural sciences](#) > [physical sciences](#) > [classical mechanics](#) > [fluid mechanics](#) > [fluid dynamics](#)



Programme(s)

[FP7-TRANSPORT - Specific Programme "Cooperation": Transport \(including Aeronautics\)](#)

Topic(s)

[AAT.2013.1-4. - Maturation of an integrated set of active flow, load and noise control technologies for the next generation of active wing, including in-flight demonstration](#)

Call for proposal

FP7-AAT-2013-RTD-1

[See other projects for this call](#)

Funding Scheme

[CP-IP - Large-scale integrating project](#)

Coordinator



AIRBUS OPERATIONS GMBH

EU contribution

€ 2 980 333,00

Total cost

No data

Address

KREETSLAG 10

21129 Hamburg

 **Germany** 

Region

Hamburg > Hamburg > Hamburg

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](#) 

Participants (41)



AIRBUS OPERATIONS SL

 **Spain**

EU contribution

€ 621 895,00

Address

AVENIDA JOHN LENNON S/N
28906 Getafe 

Region

Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type

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

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



AIRBUS OPERATIONS SAS

 France

EU contribution

€ 158 275,00

Address

ROUTE DE BAYONNE 316
31060 Toulouse 

Region

Occitanie > Midi-Pyrénées > Haute-Garonne

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](#) 

Total cost

No data



AIRBUS OPERATIONS LIMITED

 United Kingdom

EU contribution

€ 287 422,00

Address

**PEGASUS HOUSE, AEROSPACE AVENUE, FILTON
BS34 7PA Bristol** 

Region

South West (England) > Gloucestershire, Wiltshire and Bristol/Bath area > Bath and North East Somerset, North Somerset and South Gloucestershire

Activity type

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

Links

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[HORIZON collaboration network](#) 

Total cost

No data



ACQ INDUCOM

 Netherlands

EU contribution

€ 470 400,00

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**Rijnstraat 20
5347 KN OSS** 

Activity type

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

Links

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Total cost

No data



AERNNNOVA ENGINEERING SOLUTIONS IBERICA SA 

 Spain

EU contribution

No data

Address

AVENIDA LLANO CASTELLANO 13
28034 MADRID 

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](#) 

Total cost

No data



AERNNNOVA ENGINEERING DIVISION SAU

 Spain

EU contribution

€ 90 000,00

Address

CALLE LEONARDO DA VINCI MINANO SN
01510 Vitoria Gasteiz 

Region

Noreste > País Vasco > Araba/Álava

Activity type

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

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



AIRCRAFT RESEARCH ASSOCIATION LIMITED

 United Kingdom

EU contribution

€ 351 780,00

Address

MANTON LANE

MK41 7PF Bedford 

Region

East of England > Bedfordshire and Hertfordshire > Bedford

Activity type

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

Links

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[HORIZON collaboration network](#) 

Total cost

No data



ASCO INDUSTRIES N.V.

 Belgium

EU contribution

€ 145 865,00

Address

WEIVELDLAAN 2

1930 Zaventem 

Region

Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Halle-Vilvoorde

Activity type

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

Links

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[HORIZON collaboration network](#) 

Total cost

No data



BAE SYSTEMS (OPERATIONS) LIMITED

 United Kingdom

EU contribution

€ 378 157,50

Address

WARWICK HOUSE FARNBOROUGH AEROSPACE CENTRE

GU14 6YU Farnborough 

Activity type

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

Links

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[HORIZON collaboration network](#) 

Total cost

No data



CENTRE EUROPEEN DE RECHERCHE ET DEFORMATION AVANCEE EN CALCUL SCIENTIFIQUE

 France

EU contribution

€ 109 500,00

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](#) 

Total cost

No data



CFS ENGINEERING SA

Switzerland

EU contribution

€ 99 700,00

Address

EPFL INNOVATION PARK BATIMENT A

1015 Lausanne

Region

Schweiz/Suisse/Svizzera > Région lémanique > Vaud

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](#)

Total cost

No data



C.I.R.A. CENTRO ITALIANO RICERCHE AEROSPAZIALI SCPA

Italy

EU contribution

€ 912 555,00

Address

VIA MAIORISE

81043 Capua

Region

Sud > Campania > Caserta

Activity type

Research Organisations

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

Total cost

No data



CITY UNIVERSITY OF LONDON

 United Kingdom

EU contribution

€ 98 094,00

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NORTHAMPTON SQUARE

EC1V 0HB London 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



COEXPAIR SA

 Belgium

EU contribution

€ 319 542,00

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RUE DES ENTREPRENEURS 10

5020 Namur 

Region

Région wallonne > Prov. Namur > Arr. Namur

Activity type

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

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

Total cost

No data



DASSAULT AVIATION

 France

EU contribution

€ 324 180,00

Address

**9 ROND POINT CHAMPS-ELYSEES-MARCEL DASSAULT
75008 Paris** 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

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

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data




DEUTSCHES ZENTRUM FUR LUFT - UND RAUMFAHRT EV

 Germany

EU contribution

€ 4 256 343,00

Address

**LINDER HOHE
51147 Koln** 

Region

Nordrhein-Westfalen > Köln > Köln, Kreisfreie Stadt

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



AIRBUS DEFENCE AND SPACE GMBH

 Germany

EU contribution

€ 1 696 962,00

Address

**WILLY-MESSERSCHMITT-STRASSE 1
82024 Taufkirchen** 

Region

Bayern > Oberbayern > München, Landkreis

Activity type

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

Links

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Total cost

No data



AIRBUS GROUP LIMITED

 United Kingdom

EU contribution

€ 303 350,00

Address

**WELLINGTON HOUSE 125 130 STRAND
WC2R 0AP London** 

Region

London > Inner London — West > Westminster

Activity type

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

Links

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[HORIZON collaboration network](#) 

Total cost

No data



TOTALFORSVARETS FORSKNING SINSTITUT

 Sweden

EU contribution

€ 684 072,00

Address

Gullfossgatan 6

164 90 Stockholm 

Region

Östra Sverige > Stockholm > Stockholms län

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



GKN FOKKER AEROSPACE BV

 Netherlands

EU contribution

€ 131 947,00

Address

ANTHONY FOKKERWEG 9

3351 NL Papendrecht 

Activity type

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

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV

 Germany

EU contribution

€ 901 861,00

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HANSASTRASSE 27C

80686 Munchen 

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Bayern > Oberbayern > München, Kreisfreie Stadt

Activity type

Research Organisations

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



GKN AEROSPACE SERVICES LIMITED

 United Kingdom

EU contribution

€ 50 000,00

Address

2ND FLOOR, ONE CENTRAL BOULEVARD, BLYTHE VALLEY PARK

B90 8BG Solihull 

Region

West Midlands (England) > West Midlands > Solihull

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](#) 

Total cost

No data



ISRAEL AEROSPACE INDUSTRIES LTD.

 Israel

EU contribution

€ 85 390,50

Address

BEN GURION INTERNATIONAL AIRPORT

70100 Lod 

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](#) 

Total cost

No data



IBK-INNOVATION GMBH & CO. KG

 Germany

EU contribution

€ 142 020,00

Address

BUTENDEICHSWEG 2

21129 Hamburg 

Region

Hamburg > Hamburg > Hamburg

Activity type

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

Links

[Contact the organisation](#)  [Website](#) 

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Total cost

No data



"INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE AEROSPATIALA ""ELIE CARAFOLI""- INCAS BUCURESTI"

 Romania

EU contribution

No data

Address

SECTOR 6, B-DUL IULIU MANIU NR. 220

061126 Bucuresti 

Region

Macroregiunea Trei > București-Ilfov > București

Activity type

Research Organisations

Links

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Total cost

No data




INSTITUTUL NATIONAL DE CERCETARI AEROSPATIALE ELIE CARAFOLI - I.N.C.A.S. SA

 Romania

EU contribution

€ 726 000,00

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**IULIU MANIU 220 SECTOR 6
061121 BUCURESTI** 

Activity type

Research Organisations

Links

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[Participation in EU R&I programmes](#) 

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Total cost

No data



INVENT INNOVATIVE VERBUNDWERKSTOFFEREALISATION UND VERMARKTUNG NEUERTECHNOLOGIEN GMBH

 Germany

EU contribution

€ 219 570,00

Address

**CHRISTIAN POMMER STRASSE 47
38112 Braunschweig** 

Region

Niedersachsen > Braunschweig > Braunschweig, Kreisfreie Stadt

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](#) 

Total cost

No data



KUNGLIGA TEKNISKA HOEGSKOLAN

 Sweden

EU contribution

€ 177 555,00

Address

BRINELLVAGEN 8

100 44 Stockholm 

Region

Östra Sverige > Stockholm > Stockholms län

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



L - UP SAS

 France

EU contribution

€ 504 870,00

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Avenue de Friedland 32

75008 Paris 

Region

Ile-de-France > Ile-de-France > Paris

Activity type

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

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



SAFRAN LANDING SYSTEMS

 France

EU contribution

€ 289 000,00

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7 RUE GENERAL VALERIE ANDRE INOVEL PARC SUD
78140 Velizy-Villacoublay 

Region

Ile-de-France > Ile-de-France > Yvelines

Activity type

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

Links

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[HORIZON collaboration network](#) 

Total cost

No data



STICHTING KONINKLIJK NEDERLANDS LUCHT - EN RUIMTEVAARTCENTRUM

 Netherlands

EU contribution

€ 548 097,00

Address

ANTHONY FOKKERWEG 2
1059 CM Amsterdam 

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES

 France

EU contribution

€ 1 469 355,00

Address

CHEMIN DE LA HUNIERE

91120 Palaiseau 

Region

Ile-de-France > Ile-de-France > Essonne

Activity type

Research Organisations

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



POLITECHNIKA WARSZAWSKA

 Poland

EU contribution

€ 68 264,00

Address

PLAC POLITECHNIKI 1

00-661 Warszawa 

Region

Makroregion województwo mazowieckie > Warszawski stołeczny > Miasto Warszawa

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



SOCIETE LORRAINE DE CONSTRUCTION AERONAUTIQUE

 France

EU contribution

€ 146 890,00

Address

RUE DES ARTISANS 6
57190 FLORANGE 

Region

Grand Est > Lorraine > Moselle

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](#) 

Total cost

No data



SOCIETE NATIONALE DE CONSTRUCTION AEROSPATIALE SONACA SA

 Belgium

EU contribution

€ 1 451 025,00

Address

ROUTE NATIONALE CINQ PARK INDUSTRIEL
6041 Gosselies 

Region

Région wallonne > Prov. Hainaut > Arr. Charleroi

Activity type

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

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



TUSAS-TURK HAVACILIK VE UZAY SANAYII AS

 Türkiye

EU contribution

€ 356 033,00

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FETHIYE MAHALLESİ HAVACILIK BULVARI 17 KAZAN
06980 Ankara 

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Batı Anadolu > Ankara > Ankara

Activity type

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

Links

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



TEL AVIV UNIVERSITY

 Israel

EU contribution

€ 248 838,00

Address

RAMAT AVIV
69978 Tel Aviv 

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



FEDERAL STATE UNITARY ENTERPRISE THE CENTRAL AEROHYDRODYNAMIC INSTITUTE NAMED AFTER PROF. N.E. ZHUKOVSKY

 Russia

EU contribution

€ 889 000,00

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140180 ZHUKOVSKY 

Activity type

Research Organisations

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[HORIZON collaboration network](#) 

Total cost

No data



TECHNISCHE UNIVERSITAT HAMBURG

 Germany

EU contribution

€ 149 760,00

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AM SCHWARZENBERG CAMPUS 1
21073 Hamburg 

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Hamburg > Hamburg > Hamburg

Activity type

Higher or Secondary Education Establishments

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[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data



THE UNIVERSITY OF MANCHESTER

 United Kingdom

EU contribution

€ 129 078,00

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[HORIZON collaboration network](#) 

Total cost

No data



VZLU AEROSPACE AS

 Czechia

EU contribution

€ 639 100,00

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190 00 PRAHA 18 

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Česko > Praha > Hlavní město Praha

Activity type

Research Organisations

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Total cost

No data

Last update: 25 May 2022

Permalink: <https://cordis.europa.eu/project/id/604013>

European Union, 2025