

 Content archived on 2024-05-21



Environmental noise associated with turbulent boudary layer excitation

Fact Sheet

Project Information

ENABLE

Grant agreement ID: G4RD-CT-2000-00223

Project closed

Start date

1 April 2000

End date

31 March 2003

Funded under

Programme for research technological development and demonstration on "Competitive and sustainable growth 1998-2002"

Total cost

€ 3 358 440,00

EU contribution

€ 1 996 514,00

Coordinated by

DASSAULT AVIATION S.A.

 France

Objective

The ENABLE proposal will address the interior noise generated by the turbulent boundary layer around an aircraft which usually constitutes the most important source of cabin noise during cruise. The random character of the pressure distribution induced by the boundary layer has a major effect on the noise transmitted through the fuselage and its cross-spectral density plays a major role in determining the effective force causing motion to the structure. This project will provide the designer with predictive tools for the boundary layer induced noise The enable

project will thus deliver enhanced models for the pressure fluctuations beneath a turbulent boundary layer (the effect of pressure gradients and skin surface roughness will be addressed), couple this models to structural transmission codes and validate the overall methodology against experiment undertaken during the project. Guidelines for the industrial use will be derived;

Fields of science (EuroSciVoc)

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



Programme(s)

[FP5-GROWTH - Programme for research technological development and demonstration on "Competitive and sustainable growth 1998-2002"](#)

Topic(s)

[1.1.3.-4. - Key Action New Perspectives in Aeronautics](#)

Call for proposal

Data not available

Funding Scheme

[CSC - Cost-sharing contracts](#)

Coordinator



DASSAULT AVIATION S.A.

EU contribution

No data

Total cost

No data

Address

78, quai Marcel Dassault
92214 SAINT CLOUD

 France 

Participants (12)



CENTRO ITALIANO RICERCHE AEROSPAZIALI SCPA

 Italy

EU contribution

No data

Address

Via Maiorise
81043 CAPUA 

Total cost

No data



DORNIER GMBH

 Germany

EU contribution

No data

Address

An der Bundesstrasse 31
88090 IMMENSTAAD 

Total cost

No data



EADS DEUTSCHLAND GMBH

 Germany

EU contribution

No data

Address

Willy-Messerschmitt-Strasse
OTTOBRUNN 

Links

[Contact the organisation](#)  [Website](#) 
[HORIZON collaboration network](#) 

Total cost

No data



ECOLE CENTRALE DE LYON

 France

EU contribution

No data

Address

36,Avenue Guy de Collonge 36
69131 Ecully 

Total cost

No data



INSTITUTO SUPERIOR TECNICO

 Portugal

EU contribution

No data

Address

1,Avenida Rovisco Pais 1
1049-001 LISBOA 

Total cost

No data



INTEGRATED AEROSPACE SCIENCES CORPORATION O.E.

 Greece

EU contribution

No data

Address

7,Agias Glikerias St. 7
111 47 ATHENS 

Total cost

No data



QINETIQ LIMITED

 United Kingdom

EU contribution

No data

Address

85 BUCKINGHAM GATE
LONDON 

Total cost

No data



ROYAL INSTITUTE OF TECHNOLOGY

 Sweden

EU contribution

No data

Address

8,Teknikringen 8
100 44 STOCKHOLM 

Total cost

No data



SWEDISH DEFENCE RESEARCH AGENCY

 Sweden

EU contribution

No data

Address

Ranhammarsvaegen 14
STOCKHOLM 

Total cost

No data



THE PROVOST, FELLOWS AND SCHOLARS OF THE COLLEGE OF THE HOLY
AND UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN
HEREINAFTER TRINITY COLLEGE DUBLIN

 Ireland

EU contribution

No data

Address

Parsons Building, Trinity College
2 DUBLIN 

Total cost

No data



UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II

 Italy

EU contribution

No data

Address

VIA CLAUDIO, 21
80125 NAPOLI 

Total cost

No data



UNIVERSITY OF SOUTHAMPTON

 United Kingdom

EU contribution

No data

Address

Highfield

SOUTHAMPTON



Links

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

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 12 April 2005

Permalink: <https://cordis.europa.eu/project/id/G4RD-CT-2000-00223>

European Union, 2025