

TRANSPORT



OPEN AIR

Optimisation for Low Environmental Noise Impact AIRcraft

By adopting a whole aircraft approach based on the latest developments in active and adaptive technologies, flow control techniques and advances in computational aero-acoustics applied to the major causes of noise at source, OPENAIR aims to deliver a significant change in noise reduction. This would help in developing solutions to meet the ACARE noise goals and improving current fleet noise levels through retrofitting. The Egyptian participant focuses on developing a paint sensor that can be used for measuring acoustic pressure and testing different manufacturing technologies. This would consequently contribute to producing several sensors with different attributes. In addition, the Egyptian partner is in the process of conducting experimental tests with the new sensor and comparing it to the conventional sensors to test the credibility of the new measurement technique.

- FP7: AAT.2008.1.4.1. Integrated approach to lowering aircraft external noise
- Contract type: Large-scale integrating project
- Start date: April 2009
- Duration: 48 months
- EC contribution to the project: € 18.27 million

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List of Partners

- Andreyev Acoustics Institute (Russian Federation)
- Aircelle SA (France)
- Volvo Aero Corporation AB (Sweden)
- University of Patras (Greece)
- Chalmers Tekniska Hoegskola AB (Sweden)
- Federal State Unitary Enterprise the Central Aerohydrodynamic Institute Named After Prof. N.E. Zhukovsky (Russian Federation)
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- Short Brothers PLC (United Kingdom)
- Qinetiq Limited (United Kingdom)
- Nastech SRL - Novel Aerospace Technologies (Italy)
- Microtech International Spolka Akcyjna (Poland)
- Messier-Dowty SA (France)
- Institution of the Russian Academy of Sciences Joint Institute for High Temperatures RAS (Russian Federation)
- INASCO- Integrated Aerospace Sciences Corporation O.E. (Greece)
- GKN Aerospace Services Limited (United Kingdom)
- SC Aerostar SA (Romania)
- Dassault Aviation SA (France)
- Association pour les Transferts de Technologies du Mans (France)
- Institutul National de Cercetare-Dezvoltare Turbomotoare - Comoti (Romania)
- PFW Aerospace AG (Germany)

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X3-NOISE

Aircraft External Noise Research Network and Co-ordination

Through its network structure and comprehensive work-plan involving experts groups, the X3-NOISE project addresses the aircraft noise challenges set by the ACARE 2020 Vision. The project's objectives are to formulate priorities and key topics for the future projects aimed at noise reduction. In addition, X3-NOISE proposes to identify potential reinforcement of future project partnerships through expertise mapping, to foster new collaborations and to promote novel ideas. A broader goal of the project is to contribute to an improved integration of the European Aircraft Noise Research Community through a network of National Focal Points, including the development of local networks in new EU member states to foster participation in future projects. The Egyptian participant is the focal point for the Mediterranean Region and is planning to organize a seminar in Cairo in 2010 titled "Ultra Green Airport."

- FP7: AERO-1.2 Improving environmental impact with regard to emissions and noise
- Contract type: Coordination action
- Start date: June 2006
- Duration: 48 months
- EC contribution for the project: € 1.88 million

www.xnoise.eu

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- Teuchos Exploitation (France)
- Federal University of Santa Catarina (Brazil)
- National Aviation University (Ukraine)
- The Provost, Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth Near Dublin (Ireland)
- Integrated Aerospace Sciences Corporation (Greece)
- To70 B.V. (Netherlands)
- A2 Acoustics AB (Sweden)
- Airbus France (France)
- Zara Web Services (France)
- Free Field Technologies (Belgium)
- Ecole Polytechnique Fédérale de Lausanne (Switzerland)
- Instituto Superior Técnico (Portugal)
- Vilnius Gedimino Technical University Institute Of Thermal Insulation (Lithuania)
- Czech Technical University in Prague (Czech Republic)
- Budapest University of Technology and Economics (Hungary)
- National Research & Development Institute for Gas Turbines (Romania)
- Institute of Aviation (Poland)
- Office National d'Etudes et de Recherches Aérospatiales (France)
- Alenia Aeronautica S.P.A. (Italy)
- GFIC (France)

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