COSMA - Community oriented solutions to minimise aircraft noise annoyance

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COSMA aims to develop engineering criteria for aircraft design and operations in order to reduce the annoyance within airport communities due to aircraft exterior noise. By today, such criteria do not exist since aircraft noise engineering has historically focused on achieving ever lower noise levels for individual events and at close distance from the runway.
Within the frame of a unique approach, COSMA will:
* improve the understanding of noise annoyance effects due to aircraft in the airport surrounding community through field studies and dedicated psychometric testing - use these findings in setting up optimised aircraft noise shapes
* develop techniques for a realistic synthesis aircraft noise around airports
* validate the optimised aircraft noise shapes and their associated engineering guidelines - put in place an efficient knowledge management for design practices and scientific information on aircraft exterior noise annoyance effects
Through this comprehensive workplan, COSMA will ensure optimum exploitation of the scientific research results by reducing noise annoyance at source (whether by technological or operational means) through an improved understanding of the effects of aircraft noise in the airport surrounding community.
Under the technical guidance of industry experts, COSMA will integrate contributions from research organisations and SME's, bringing together the multi-disciplinary background that is required for achieving the project objectives.
COSMA is involving 21 partners from 9 different countries: Germany, France, UK, Netherlands, Sweden, Italy, Belgium, Portugal and Hungary.

Coordinator
EADS DEUTSCHLAND GMBH (Germany)
Other participants
UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II
AIRBUS OPERATIONS SAS (France)
ZEUS GMBH, ZENTRUM FUR ANGEWANDTE PSYCHOLOGIE, UMWELT- UND SOZIALFORSCHUNG (Germany)
ITAP (Germany)
SASS ACOUSTIC RESEARCH & DESIGN GMBH (Germany)
01DB-METRAVIB SAS (France)
TEUCHOS SA (France)
PROJECTO, EMPREENDIMENTOS, DESENVOLVIMENTO E EQUIPAMENTOS CIENTIFICOS E DE ENGENHARIA (Portugal)
UNIVERSITY OF CERGY PONTOISE (France)
INSTITUT NATIONAL DE RECHERCHE SUR LES TRANSPORTS ET LEUR SECURITE (France)
UNIVERSITY OF SOUTHAMPTON (United Kingdom)
DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV (Germany)
SNECMA SA (France)
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UNIVERSITA DEGLI STUDI ROMA TRE (Italy)
BUDAPESTI MUSZAKI ES GAZDASAGTUDOMANYI EGYETEM (Hungary)
LMS INTERNATIONAL NV (Belgium)
KUNGLIGA TEKNISKA HOEGSKOLAN (Sweden)

ALENIA AERONAUTICA SPA (Italy)
STICHTING NATIONAAL LUCHT- EN RUIMTEVAARTLABORATORIUM (Netherlands)

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