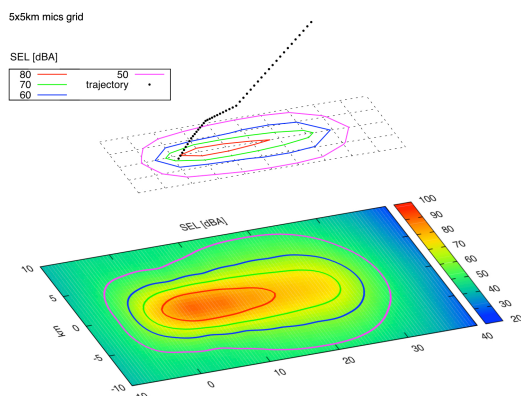


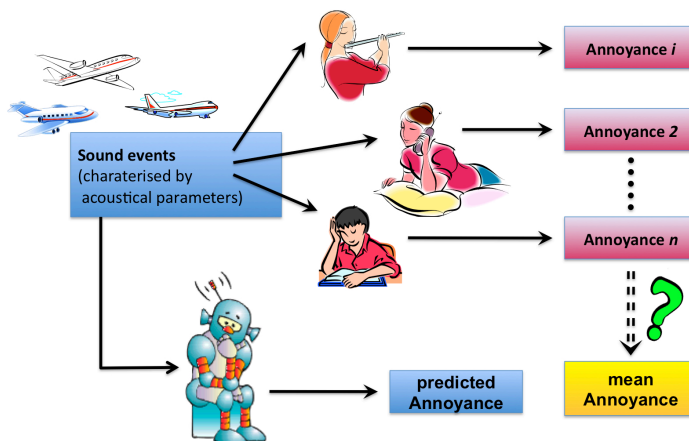
COSMA – Community Oriented Solutions to Minimize Aircraft Noise Annoyance

(Project duration: 2009-2013)



**Flight-path optimisation for low-noise
take-offs/landings**

than ever, to better understand annoyance and to serve as a basis for the so called **Virtual Resident, Sound Synthesiser Machine examinations** by lay participants for the creation of better-sounding aircraft, **single- as well as multi-event flyover optimisation** for quieter procedures, **laboratory examinations** for testing future aircraft sounds, procedures and airport scenarios. Special techniques for a realistic synthesis of aircraft noise around airports will be developed for the simulation and validation of optimised aircraft noise shapes. Associated engineering guidelines for the necessary optimisation processes will be established. The scientific research results within COSMA will help to reduce noise annoyance at the source in the future, by technological or operational means and through an improved understanding of the related effects of aircraft noise in the airport surrounding community.



The Virtual Resident approach

Project partners: EADS Deutschland GmbH (Coordinator), Snecma, Leuven Measurement Systems International N.V. (LMS), Alenia Aeronautica S.p.A., 01dB-Metravib, SASS acoustic research & design GmbH, Institut für Technische und Angewandte Physik GmbH (ITAP), ZEUS GmbH Centre for Applied Psychology, Projecto, Empreendimentos, Desenvolvimento e Equipamentos Científicos e de Engenharia, Deutsches Zentrum für Luft- und Raumfahrt (DLR), National Aerospace Laboratory (NLR), Institut Français des Sciences et Technologies des Transports, de l'Amenagement et des Réseaux (IFSTTAR), Budapest University of Technology and Economics (BME), Forschungsgesellschaft für Arbeitsphysiologie und Arbeitsschutz (IFADO), Dipartimento di Ingegneria Mecc. e Ind. Università degli Studi Roma Tre (UNIROMA TRE), Université de Cergy Pontoise (UCP), Royal Institute of Technology (KTH), Università di Napoli "Federico II" DPA, Institute of Sound and Vibration Research - University of Southampton (ISVR), Teuchos, AIRBUS OPERATIONS SAS