ACOUSTICS2008/1376
Assessment of noise impacts of the air traffic

Katrin Ohlau, Peter Bickel and Rainer Friedrich
Universität Stuttgart / IER, Heßbrühlstraße 49a, 70565 Stuttgart, Germany

Against the background of the generally increasing traffic and especially the expansion plans in doubling the air traffic until 2020, this paper presents an assessment of noise effects of air traffic and underlines its future meaning.
In several projects including the EC funded projects HEATCO (Developing Harmonised European Approaches for Transport COsting and Project Assessment), GRACE (Generalisation of Research on Accounts and Cost Estimation) and ASSET (ASsessing SEnsitiveness to Transport), methodologies for assessing noise including aircraft noise have been developed, improved and applied. The methodologies focus on the impact pathway approach, i.e. first noise levels are estimated, and then level- response functions are applied to calculate health impact and annoyance level distributions. Afterwards it is evaluated by transforming the impacts into monetary levels. Own studies for assessing annoyance have been carried out with the contingent valuation method.
Results of the monetary valuation will be shown for the airports Frankfurt, Hamburg, Berlin-Tegel, Düsseldorf, Köln/Bonn, München and Stuttgart. The total air traffic noise costs for Germany range from EUR 150 million to EUR 1200 million per year.