

DLR, Air Transport and Airport Research

Emission Related Landing Charges - An Economic Instrument to Improve Local Air Quality At Airports in Germany

The German Aerospace Center (DLR) has studied an emission charge model which aims at reducing local NOx and HC emissions at airports in Germany. NOx and HC are the main contributors to combustion-related local air pollution and precursors of ground level ozone. Considering this local environmental problem, the standardised LTO cycle (landing and take-off movements below 3000 ft) is the basis for emission charging. Both NOx and HC emissions of the LTO cycle form the quantitative measure for calculating the amount of charges. The emission charge model aims at setting economic incentives to accelerate introduction and to foster the use of environmentally friendly engine technology. At the same time the model is designed to be revenue neutral which means that the emission charge does not increase the airports overall-revenues from air traffic. Therefore, the general landing fee will be decreased by the total amount of the emission charge. This emission charge model will be implemented at selected German airports around 2008.

