



**DEPARTMENT OF AUTOMOTIVE AND AERONAUTICAL ENGINEERING**

# Differences in Ground Handling in the Global Market

Task sheet for a project according to university regulations

## Background

This student project is part of the research project Aircraft Design for Low Cost Ground Handling, ALOHA (<http://ALOHA.ProfScholz.de>). ALOHA tries to optimize the aircraft for ground handling operations. Optimized ground handling is also one of the key factors in the business model of Low Cost Airlines (LCA). LCA have optimized ground handling operations, reducing turnaround times and ground handling costs. Nevertheless, ground handling procedures are not only dependent on the airline business model, but also on the strategies of ground handling agencies, the type and size of the airport and the design of the aircraft.

## Task

The project should broaden the background of ALOHA by providing a global and comparative picture of ground handling procedures and costs in different world regions. An emphasis of the investigation should be given to the comparison of ground handling between the three main world regions of the global market: Asia, Europe and North America. The tasks of the project are as follows:

- Familiarization with LCA business models and ground handling characteristics within the European region. (The European region has been already analyzed within the ALOHA project).
- Investigation on LCA business model characteristics with respect to Asia and North America.
- Literature research on ground handling: procedures, equipment, personal, costs, airport infrastructures and typical turnaround layouts with respect to Asia and North America.
- Discussion of the results and comparison between the three world regions.

The report has to be written in English based on German or international standards on report writing.