



Dear Stakeholder,

With this periodic newsletter we would like to inform you about the progress of the EU project iSPACE – innovative Systems for Personalised Aircraft Cabin. As it turned out to be difficult to set up a joint meeting with stakeholders we have decided to send out newsletters to keep you involved in the project. If you have any comments, please contact us.

During the first year of the iSPACE project we collected multiple approaches for personalised climatisation.

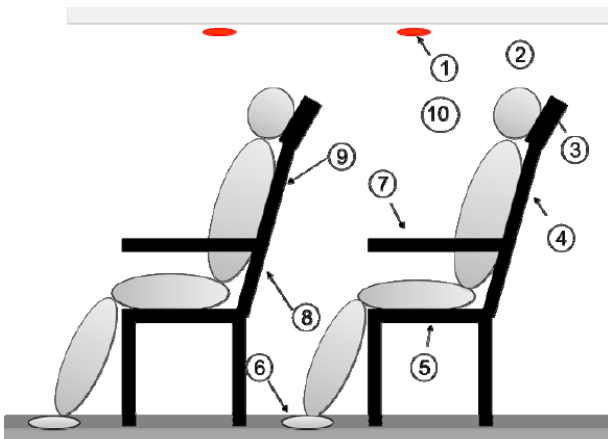


Figure 1 Ten principle air outlet positions.

Thanks to your feedback through our initial questionnaire we selected the following promising areas for business and first class seats:

- Personal ventilation concepts
- Personal temperature control
- Local humidification
- Enhanced air cleaning for local use

For a feasibility study different possible systems and various positions for air outlets were selected.

Using advanced CFD-simulation techniques we had a closer look at the efficiency of different types of air inlets and outlets. Within these simulations the age of air, thermal comfort indicators, draft risk, humidity as well as air velocities and air turbulence have been analysed.

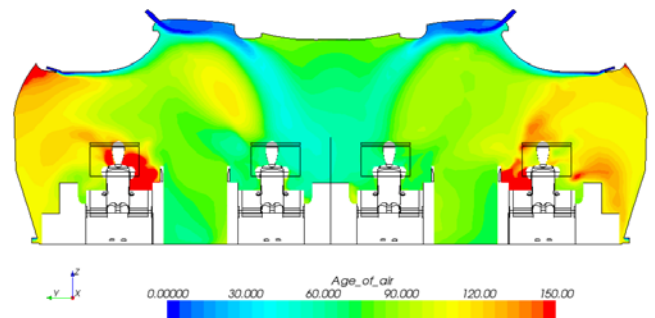


Figure 2 Age of air simulation for a nozzle set up inside a first class suite.

Some of the setups studied turned out to be able to locally climatise the passengers' environment. Technologies for these setups will be developed and applied in the next step of iSPACE. They will be installed in several business and first class seats so that they can be tested in a realistic environment in the Fraunhofer Flight Test Facility during summer 2011. At the same time subject assessments will be collected to achieve a sound comparison of the performance, usability and acceptability of the different systems.

We hope to cover your interests with this newsletter, which we are planning to distribute on a regular basis and appreciate any feedback.

With kindest regards,

The iSPACE Consortium