

W3C Workshop on Multimodal Interaction

Position Paper of SEDITEC

Founded by Max Fischl, former test pilot of Airbus Industry, Groupe AEROCONSEIL has established partnership with European aeronautical manufacturers. Groupe AEROCONSEIL's offer of services is aimed at the various components in the aeronautical chain, active throughout the aircraft life circle (aircraft manufacturers, equipment manufacturers, aircraft owners, airlines and maintenance centers).

SEDITEC from the Groupe AEROCONSEIL was created in 1989 to meet the needs for Research and Development, in particular in the fields of Aeronautics. In the Business Unit Avionics, engineers and technician provide their experience in :

- warning and visualisation
- flight management system
- modular avionics
- Human Computer Interactions (HCI) and cockpit layout

Within AEROCONSEIL, a group HCI gather HCI engineers and technician who are working on different project. The group aims to capitalise, formalise, and spread HCI knowledge. There are strong links between the group and Toulouse HCI associations, like the SIGCHI Toulouse.

Members of the Business Unit Avionics and the group HCI are working on research project for future cockpit. In order to improve pilots interactions with aircraft , HCI are explored on subject such as :

- display means (including 3D displays),
- touch screen,
- voice input,
- 3D sounds,
- multimodal means.

The cockpit of an aircraft is a noisy environment, nevertheless multimodality provides to pilot different means to control and manage his data. Multimodality in a cockpit also improve the efficiency of pilots and the quality of feedback.

Improved interaction and data display in the cockpit must help pilots to :

- decrease their workload,
- have better situation awareness,
- gain in safety performance,
- allow them to keep the head out
- get and set data more quickly.