Abstract

The potential of improved routing and visual guidance plays an important role in establishing the Advanced Surface Movement Guidance & Control System (A-SMGCS) concept as an integrated air-ground system. DLR's Air Traffic Management (ATM) simulation facilities were used for verification and validation of the individual visual "Follow the Greens" guidance and routing concept, where routes were generated with the help of a controller assistance surface management system which was integrated in the simulation environment. Real world controllers as well as pilots were the participants in these distributed real-time human-in-the-loop simulations under full airport traffic scenario conditions. The Apron- and Tower Simulator and two cockpit simulators were chosen as a networked environment for the experiment.