

C. Stockhammer, H. Gao, Th. Heuer, U. Hartmann, K. Dimitropoulos, N. Grammalidis, I. Gragopoulos, N. Pavlidou and J. Pfister, ISMAEL – RELIABLE EYES FOR AIR TRAFFIC CONTROLLERS AT AIRPORTS, September 17-20, 2006, [9th International IEEE Conference on Intelligent Transportation Systems \(ITSC 2006\)](#), Toronto, Canada

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*Abstract*—Against the background of aggravated capacity constraints at airports due to increasing air traffic, airports are in need of innovative systems enabling Air Traffic Controllers to improve situation awareness on the position of vehicles moving on the surface, even under reduced visibility conditions. While this demand is addressed by the development and introduction of Advanced Surface Movement Guidance and Control Systems (A-SMGCS), technologies currently applied to A-SMGCS feature some weak points regarding coverage, robustness interference, and climate conditions. ISMAEL targets these weak points by developing an innovative detection solution based on magnetic sensing technology. Thus, ISMAEL will represent a valuable and cost-efficient complementary contribution to existing and planned ASMGCS at small and large airports.

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