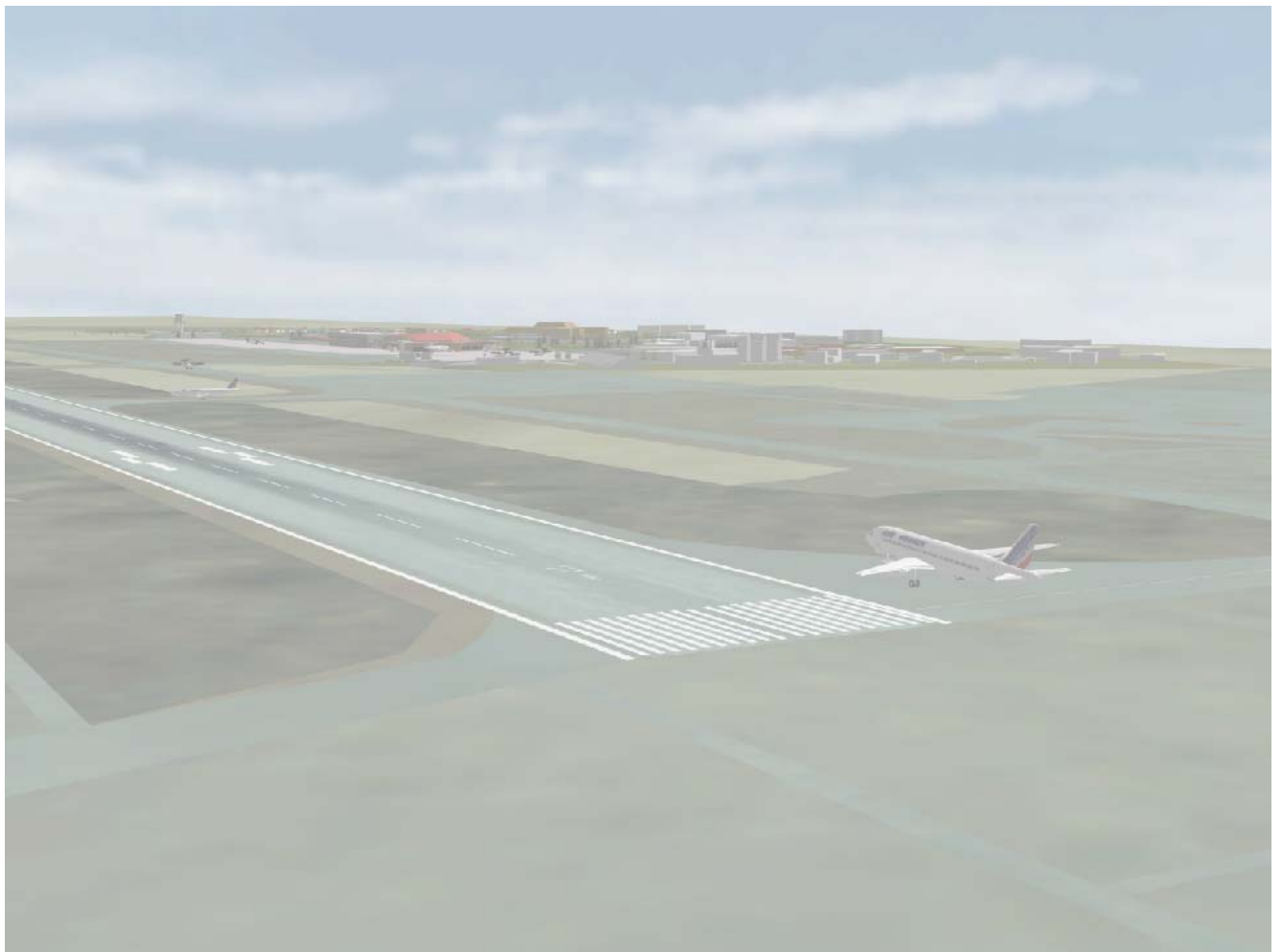




Contract N°: AST3-CT-2003-502817

WP6.2: Interpretation



1 Introduction

This document is the deliverable D6.2 established in the frame of the EC contract N°: AST3-CT-2003-502817 "SIRENA". Information is given that permits to assess the impact of non-ionising electromagnetic radiation on electronic equipment and humans on ground and on board of aircraft by application of existing technical standards.

2 Assessment of EM Radiation Impact on On-board Equipment

The on board equipment environment protection is approached through two ways: the general EUROCAE ED14 aeronautic standard and from the external environment that is currently defined (HIRF) and the aircraft attenuation; examples of Airbus aircraft are given.

3 Assessment of EM Radiation Impact on Humans

The European recommendation EC/519/1999 is summarised and it is explained how it shall be applied to the "general public" in contrast to occupationally exposed persons who are trained to be aware of potential risk and appropriate precautions.

4 Assessment of electromagnetic radiation impact on ground equipment

No specific EMC recommendations have been issued concerning the effects on civilian ground equipment. Test cases are presented concerning WLANs and GPS systems, outlining the possibility of susceptance to primary radar signals (most likely source of interference).