Appendix I

AERODROME RUNWAY INCURSION ASSESSMENT (ARIA)

1. Any airport runs a certain risk of a runway incursion. However due to specific characteristics, e.g. a high rate of runway crossings, some airports are more vulnerable than others. ARIA should make the important differences visible. The model generates a vulnerability index that is related to the runway incursion rate. The model is developed using a taxonomy-based approach. ARIA is a simple, easy-to-use model with the potential to be used at airports worldwide.

2. ARIA was developed using the results of previous studies on the causes and contributing factors of runway incursions. A set of risk factors has been selected that represents the most important determinants of runway incursion risk. Subsequently, the risk factors are weighted reflecting their relative importance for the risk of runway incursions. Likewise a set of risk reduction factors has been developed. The model has been validated with success against data from eighteen European airports, covering a wide range of characteristics (in terms of operations, layout, etc.).

3. ARIA can be obtained from: