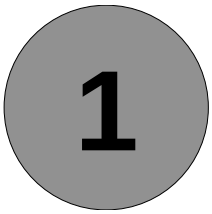

FHA INITIATION

1 OBJECTIVES

The objective of the ***FHA Initiation*** step is to develop a level of understanding of the system, its operational environment and, if appropriate, its regulatory framework, sufficient to enable the safety assessment activities to be satisfactorily carried out.

2 INPUT

2.1 System Description

- Definition of the system purpose.
- Description of operational scenarios (How the system will be used and in what environment).
- Description of system functions and the relationships between these functions (system bloc diagrams or functional flow diagrams to clarify system description, if available).
- Definition of the system boundaries. Various types of boundaries need to be considered, for example:
  - geographical boundaries (e.g., a system covering a particular airspace centre or airport);
  - operational boundaries (e.g., where the system is used only under particular circumstances, or for particular category of aircraft);

- time boundaries (e.g., where the FHA covers only one phase of the introduction of a system, or where the system is intended to provide a temporary replacement).

- Definition of external interfaces.

2.2 Operational Environment Description (OED)

- The description of the system operational environment, i.e., the ATM/CNS context into which it will be integrated and the external factors affecting it. Guidance Material A provides further detail.

2.3 Regulatory Framework

- Safety regulatory objectives and requirements related to the system: international (ICAO, EUROCONTROL, etc.) and national.

2.4 Applicable Standards

- Standards applicable to the system (e.g., EUROCONTROL Standards, standards internal to the organisations involved with the system).

2.5 Other Inputs

- When a FHA has already been performed at a higher functional level, the outputs from that FHA should be gathered. These are likely to comprise hazards, the severity of their effects and associated Safety Objectives. Where the assessment/development of the higher level system has proceeded beyond the FHA stage, the design options chosen, and their rationale, will be an input to the lower level FHA; (e.g. Safety Requirements derived during the PSSA of the higher level system are in fact Safety Objectives for the lower level systems)

- The results of FHAs and other safety assessments for similar systems; or systems with which the system being assessed will interact;

- Results from trials and simulations of similar systems;

- Operational data and experience from similar systems (e.g., performance monitoring results, user feedback, lessons from incident investigation);

- Other Inputs (e.g., hazard databases, incident investigation reports, lessons learned, etc.)

3 MAJOR TASKS

- Gather all necessary information describing the system, as outlined in Section 2 above.
- Review this information to establish that it is sufficient to carry out the FHA.
- If not available, describe the operational environment of the system.
- Identify and record assumptions made. Areas in which assumptions are commonly necessary relate to the operational scenarios, the system functions and the system environment. They should be consistent with the assumptions made in the course of the other assessments of the proposed change (.cost - benefit, security, interoperability assessment, etc.)
- Formally place the input information under configuration management.

4 OUTPUT

- Gathered input information describing the system, as outlined in Section 2 above, under configuration management.
- Derived information (e.g., description of the operational environment, description of the external interfaces, list of assumptions, list of functions) under configuration management.

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