



# Second US-Europe Practitioners' Workshop Action Plans 5 & 9

**11 March, 2003**



**Benvenuti !**  
**Welcome !**



## Second Practitioners' Workshop

- **FAA/Eurocontrol R&D**
  - **Action Plan 5 : Validation Strategy**
  - **Action Plan 9 : Air Traffic Modelling of Operational Concepts**
- **Objectives of Workshop**
- **Some Basic Definitions**
- **Results**



## **FAA/EUROCONTROL R&D Committee**

### **Joint/Cooperative research between US and Europe**

- **Action Plan 5 – Validation and Verification Strategy**
  - **Validation Strategy Document**
  - **Validation Data Repository**
  - **Workshops on best practices (putting VSD to practice and supplying the flesh to its bones)**
  - **AP5 activities can provide the glue that provides continuing benefits of cooperation**



## **FAA/EUROCONTROL R&D Committee**

- **Action Plan 9 – Air Traffic Modelling of Operational Concepts**
  - **Developing Scenarios**
  - **Best Practices**
  - **Developers Workshop**
  - **Aircraft Performance Standards**
  - **Data Interchange Activities (files and results)**
  - **Validation Data Repository**

## HISTORY

**EATMS Validation Strategy  
Document  
(as part of EATCHIP)**

**Operational Concept  
Validation Process**



### **Operational Concept Validation Strategy Document**

- Establishes a common understanding of the context, purpose, and scope of validation
- Presents a set of general principles underlying the approach to be taken



## OBJECTIVES

- **Capture best practices for validation exercises from Europe and US**
- **Focus of this workshop – Developing Scenarios for Real-Time & Fast-Time simulation studies**
- **Think about follow on workshops**



## DEFINITIONS

### Validation:

- “The process through which a *desired level of confidence* in the ability of a deliverable to operate in a real-life environment may be demonstrated against a pre-defined level of functionality, operability and performance.”

**Have we built the right system?**

### Verification:

- “The process of evaluating the products of a given *system development activity* to determine correctness and consistency with respects to the products and standards provided as input to that activity. “

**Have we built the system correctly?**



## DEFINITIONS

### Certification:

- “The process aiming at the satisfaction of an authority that a deliverable complies with a set of regulations, in order to ensure its proper operation.”

### Concept Validation:

- “The sequence of validation steps integrated into the concept development process by which ‘individual instantiations’ are validated, and through which the necessary understanding to mature the concept is gained.”



## DEFINITIONS

### Scenario:

- An outline or model of a set of events planned to excite system and/or human performance and their interaction with the aim of examining the resulting behavior.



## RESULTS

- **Products from this workshop**
  - **Best Practices paper – second appendix to the Validation Strategy Document**
  - **Lessons learned**
    - **Do we sponsor another workshop?**
    - **What can we do better?**
    - **How do we ensure that the community applies these methodologies?**
    - **Can we have harmonization on techniques between/within Europe and US?**