



Action Plan 5

Validation Practitioners' Workshop

Validation Data Repository

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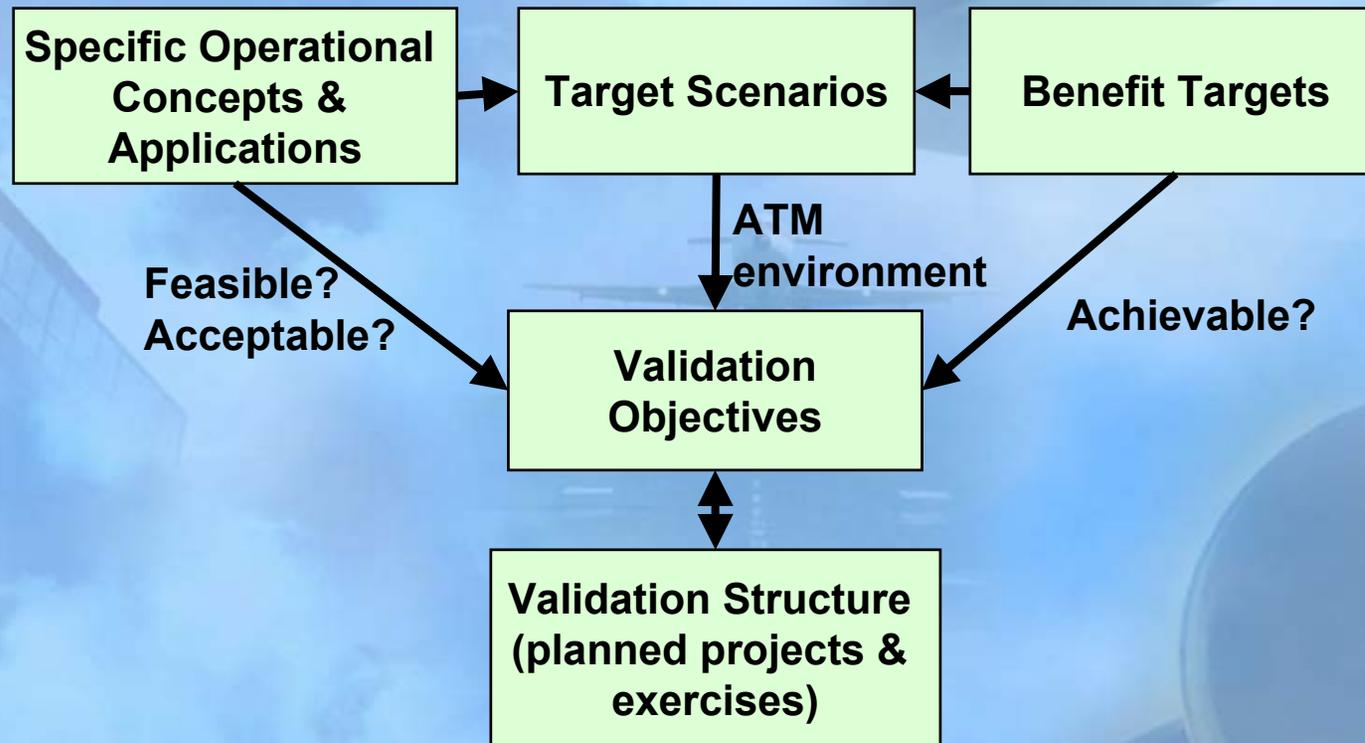
12-14 March 2003

The Validation Data Repository

- ◆ **Supports the use of a common methodical approach to ATM validation (e.g. MAEVA VGH, Joint Validation Strategy):**
 - ❖ A repository of validation activities (i.e. objectives, exercises, inputs, outputs)
 - ❖ Common reference structures
 - Operational context - concepts and scenarios
 - Technical - indicators/metrics, techniques, tools etc
- ◆ **Intended to be a source of validation information for all**

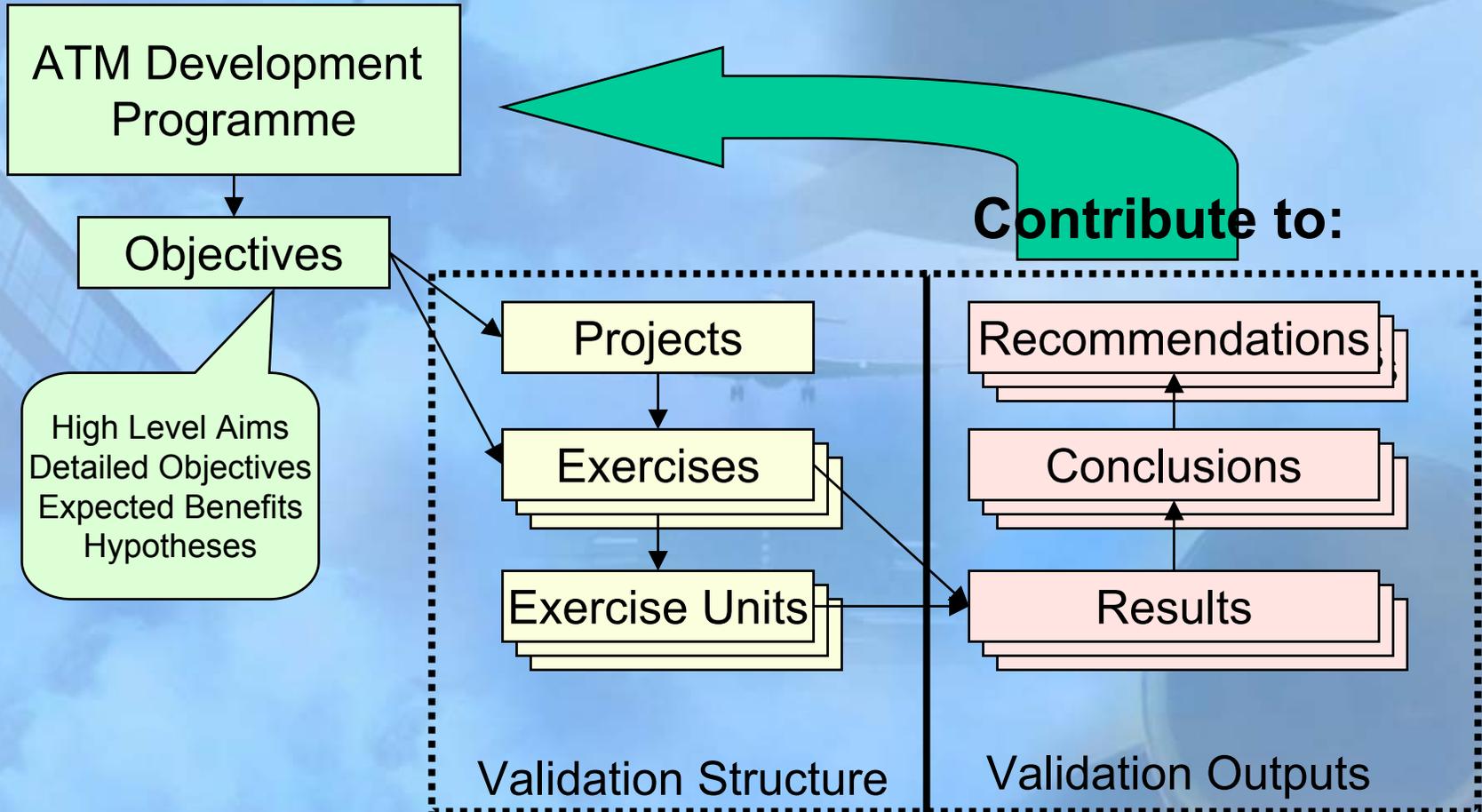
VDR organises validation information (1).....

A "Scenario/Objective" Perspective



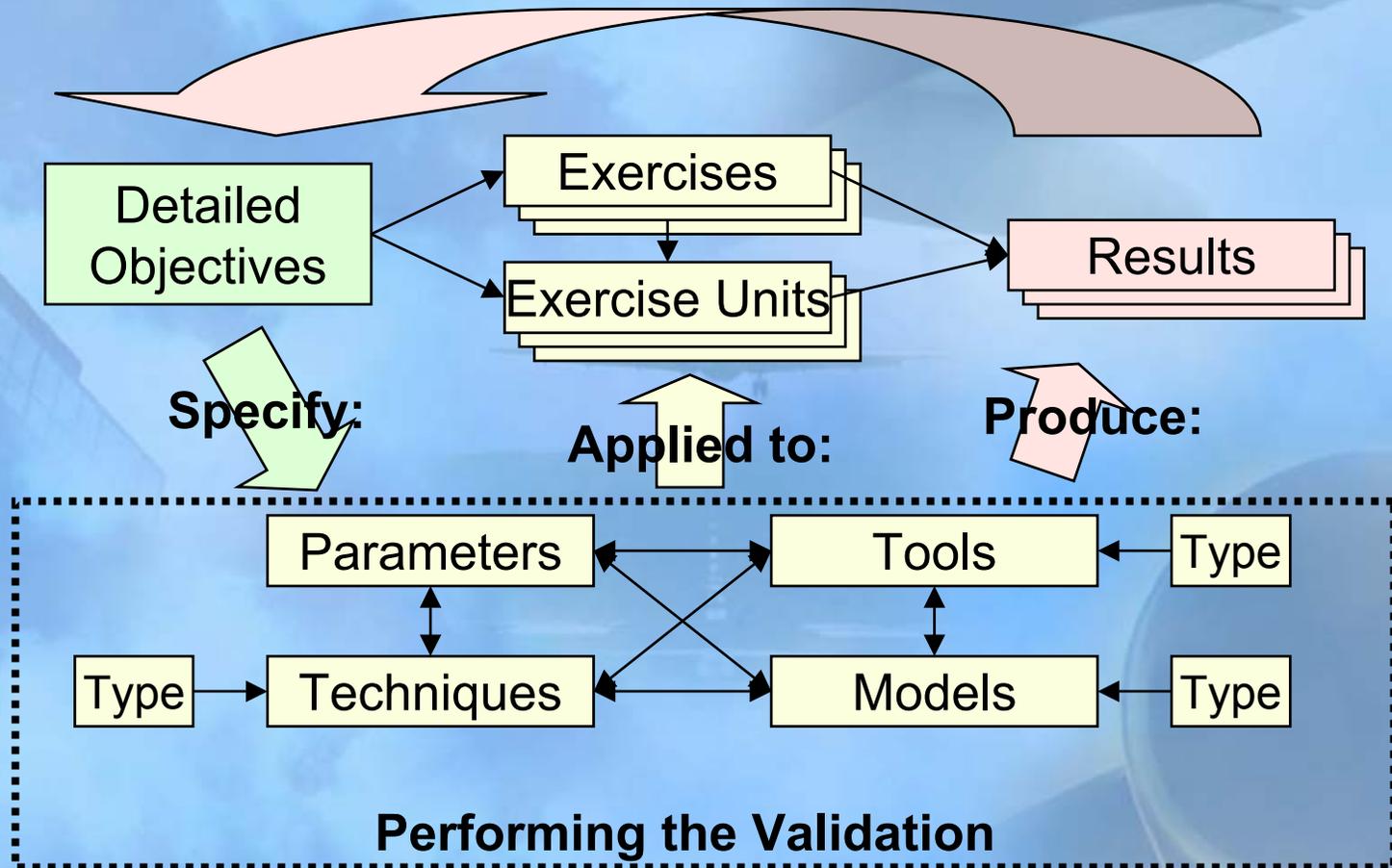
VDR organises validation information (2).....

A "Project" Perspective



VDR organises validation information (3).....

A "Technical" Perspective



VDR in operation

◆ Internet access

- ❖ Standard browser - www.eurocontrol.int/eatmp/vdr

◆ Security features

- ❖ Data Ownership
- ❖ Public/Restricted data - Restricted users log on (ID + password)
- ❖ Source Documents are protected

◆ Support Services:

- ❖ Web site maintenance
- ❖ User guidance material
- ❖ Optional: introduction courses, support to projects
- ❖ Contact by e-mail: vdr.support@eurocontrol.int

The VDR Implementation Project

- ◆ **Started in June 2001 covering the development and support of the VDR system.**
- ◆ **4 phase implementation planned over 5 years using Rapid Application Development techniques, 2 phases are complete**
- ◆ **Developments being performed now:**
 - ❖ Validation Exercise functionality enhancements
 - ❖ Management support tool requirements
 - ❖ Better support to structured methods for projects
 - ❖ General improvements to facilities/functions and HMI

Importance of Scenarios in the VDR

- ◆ **Scenarios describe the context of a validation activity in terms of the ATM operational environment (i.e. concept, actors, procedures, geographic and airspace characteristics, traffic profiles, ground and air technology etc.)**
- ◆ **A target scenario is a vision of how the ATM operational environment will look at a point of time in the future:**
 - ❖ It is the goal
 - ❖ It is closely linked to the strategic plan
- ◆ **A specific scenario is the ATM operational environment that a validation activity investigates**

How the VDR supports Scenarios

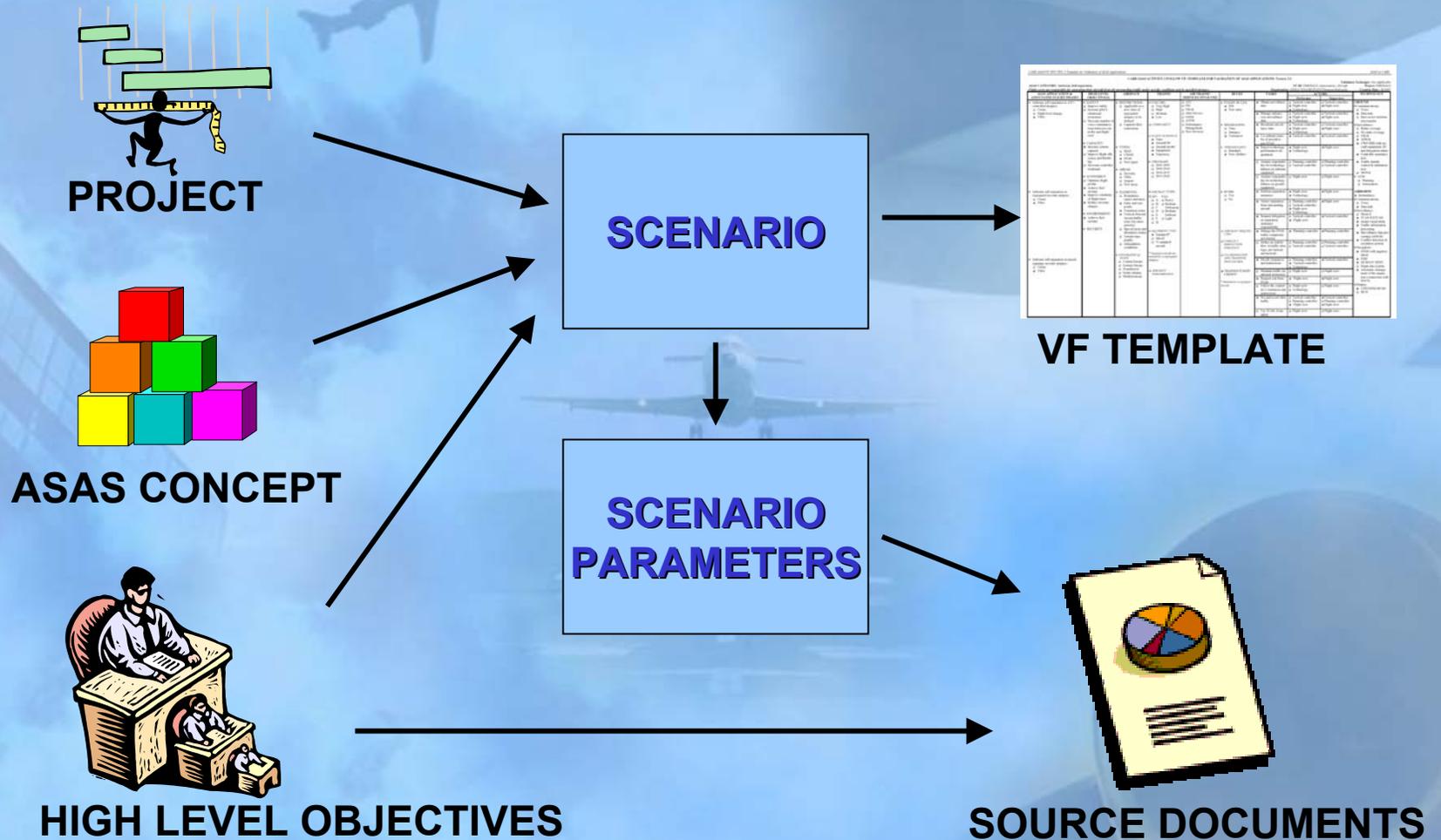
- ◆ **Provides a structure for scenario information:**
 - ❖ Summary information about a scenario
 - ❖ Descriptions of relevant operational concepts under test
 - ❖ Defining parameters of the scenario e.g. geographic area, airspace design, traffic samples and profiles, system configurations, task allocations, procedures etc.
 - ❖ Hyperlinks to detailed source reference documents
- ◆ **Enables mapping of scenarios to many exercises - i.e. supports scenarios as a reference**
- ◆ **Recognises different types of scenarios i.e. Target, Specific - Baseline, Specific - Test**

Example of application: CARE/ASAS

- ◆ **CARE/ASAS specified requirements for a Validation Framework (VF) scenario database as an information dissemination mechanism**
- ◆ **VDR identified as a potential solution**
- ◆ **VDR found to be compliant - with some specific modifications:**
 - ❖ Development of specific information perspectives
 - ❖ Development of specific information reports

CARE: Co-operative Actions of Research and development in EUROCONTROL
ASAS: Airborne Separation Assurance System

The CARE/ASAS VDR Information Structure:



Questions for the Workshop

◆ Making information consistent:

- ❖ Is there a standard information structure we can define for scenario related information that would support all users?
- ❖ Are there common ways to classify scenarios? Which classification schemes would be useful?
- ❖ Are there links between scenarios of same/different types?

◆ Reference Scenarios:

- ❖ Do they have value? Do they exist in practice?
- ❖ Are they only relevant as target scenarios?
- ❖ Is there benefit in having them in the VDR?

◆ The role for VDR with respect to scenarios:

- ❖ Information Templates for scenario definition?
- ❖ Providing a reference framework for validation context?
- ❖ Dissemination?

To be discussed in a break out session

AP5: Validation Practitioners' Workshop

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