

Development of a Concept of Operations (CONOPS)

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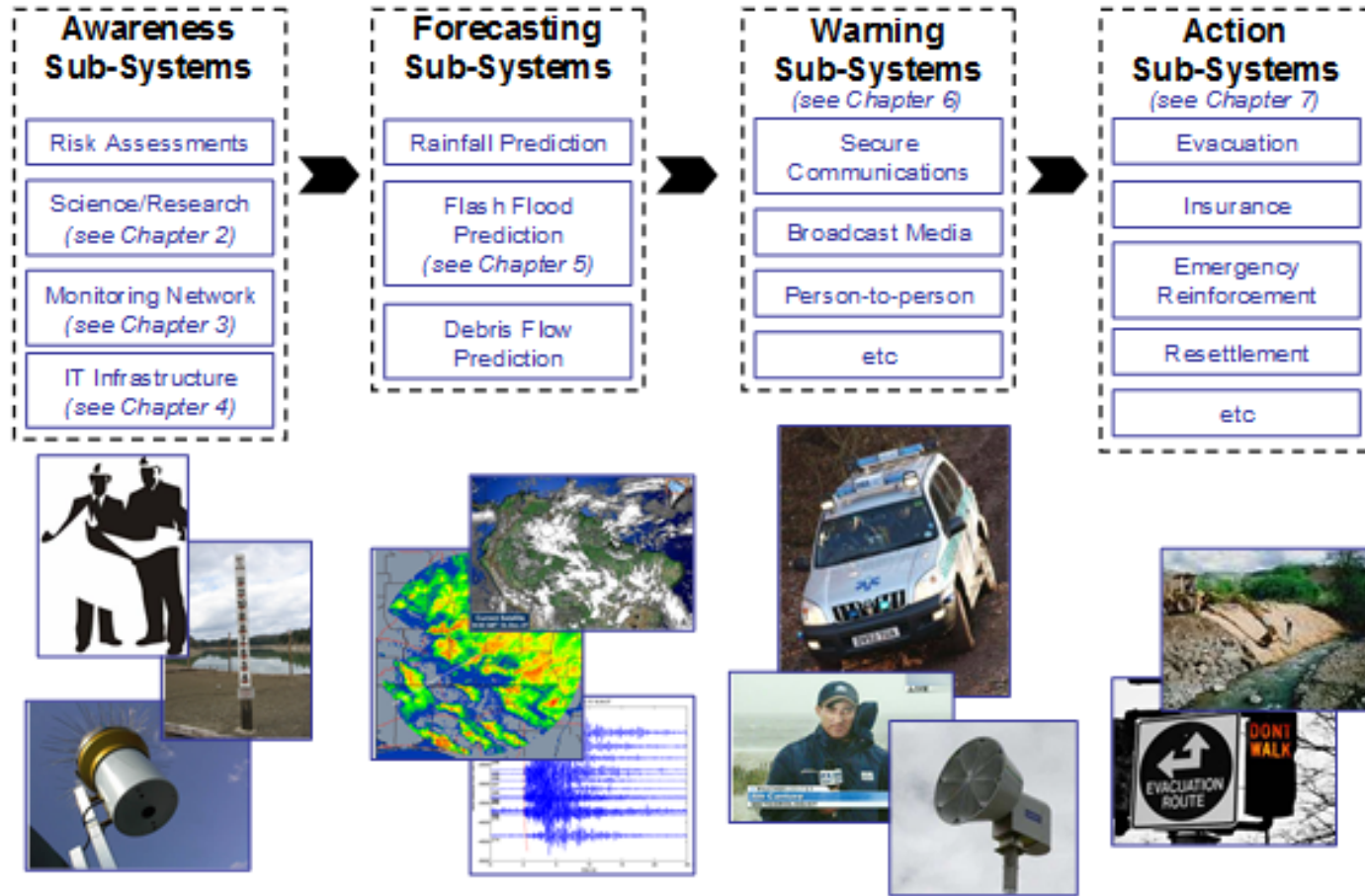
What is a CONOPS?

- One Definition
 - A document describing the likely operation of a future or existing system in the terminology of its users, providing important information for the acquisition and/or development of that system.

Why do we need a CONOPS?

- Forecast/Warning systems are complex and dynamic system
 - A “system of systems” integrating a large number of stakeholders, and infrastructure
 - Complex and sophisticated
 - CONOPS will help assured subsystems are integrated into an effective system

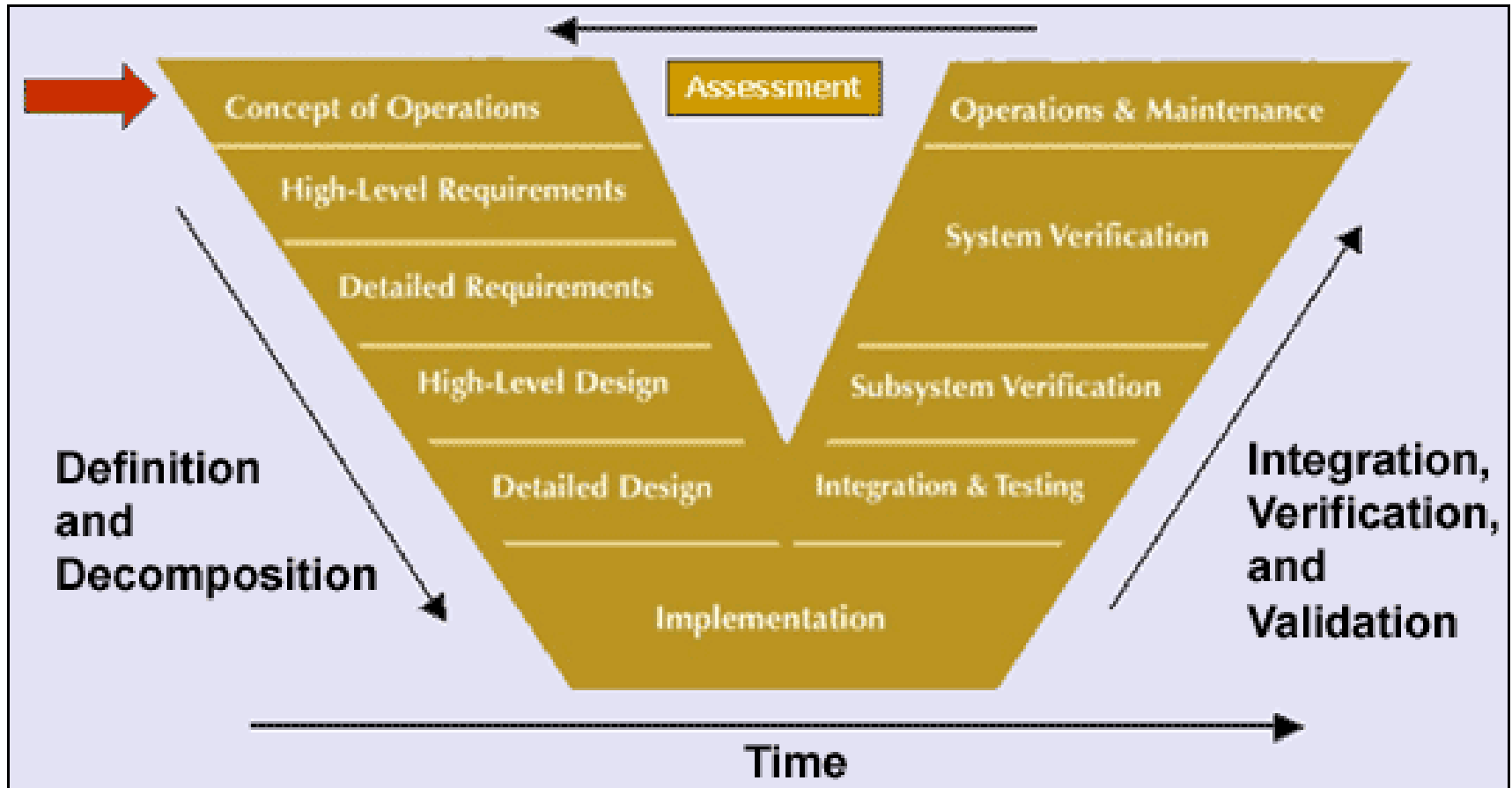
A System of Systems



CONOPS viewed as part of the Systems Engineering Life Cycle Process

- CONOPS
- Requirements
- Design
- Implementation
- Integration and Testing
- System Verification
- Operation and Maintenance
- Assessment

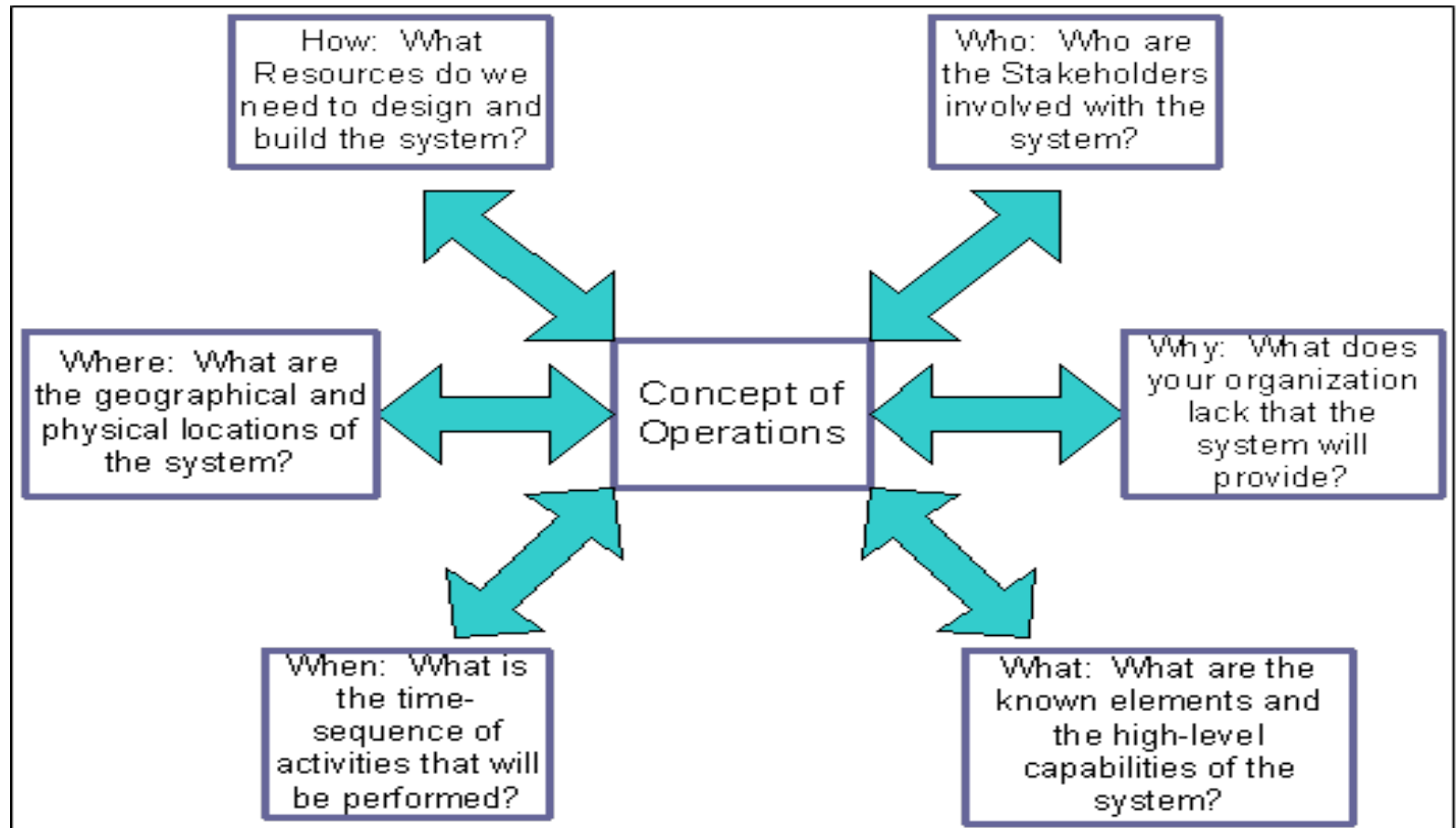
System Engineering Life Cycle Process



Basic Elements of a CONOPS

- How?
- Who?
- Where?
- Why?
- When?
- What?

Questions any CONOPS must answer



Specific Elements of a CONOPS

- Scope
- Knowledge References
- Operational Description
- System Overview
- Operational and Support Environments
- Operational Scenarios

Mistakes to Avoid

- Expecting vendors/contractors/ext. partners to develop ConOps for them
- Postponing ConOps development until after the system is designed and delivered.
- Allowing inadequate resources for development
- Cut and paste vs. your own plan
- Neglecting to update

ConOps checklist will be distributed to help with the process- its elements

- Documentation
- Introduction
- Strategic Framework
- Operational Framework
- Evaluation and Performance Indicators
- Appendices

Summary of Points to remember CONOPS Development

- First step in Engineering Life Cycle for this project
- Every CONOPS is a living and unique document requiring input from all stakeholders
- CONOPS answers the basic questions: Who, What, Why, Where, When, and How
- No shortcuts here – this requires serious attention from strategic and operations personnel.