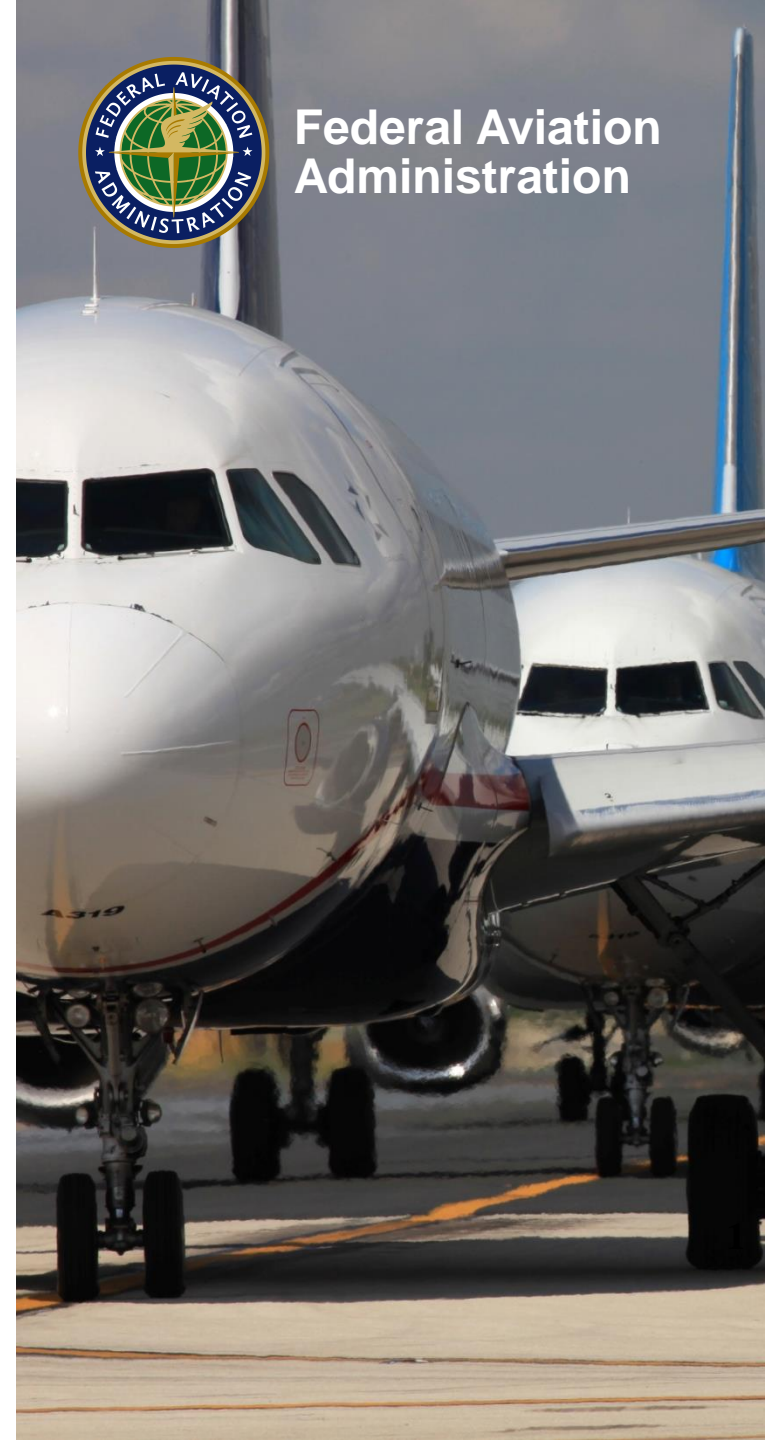


# Managing the Implementation of Enhancements to the NAS

Presented to: CDM Group  
Presented By: FAA AJV-7  
Date: April 2016

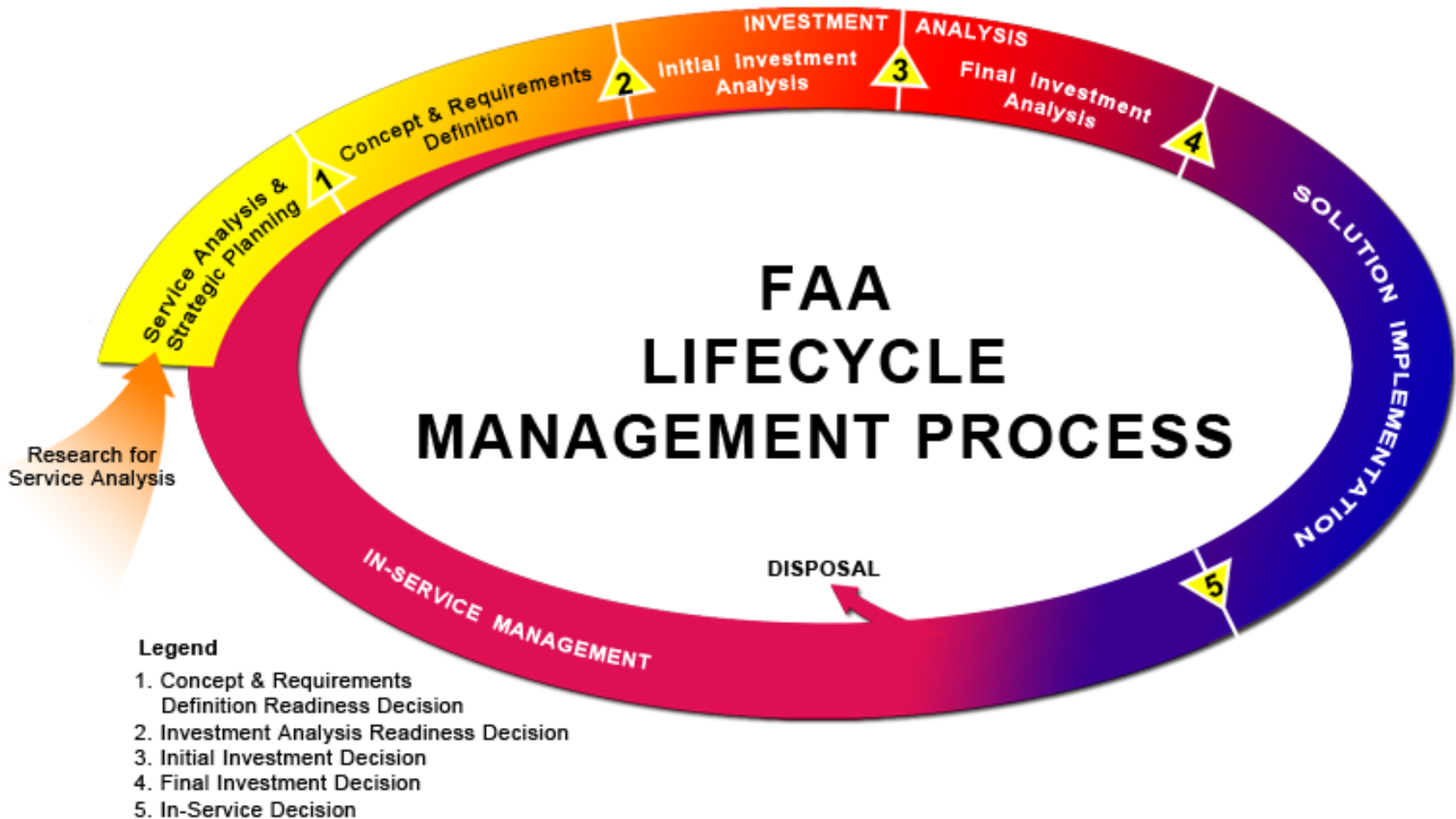


Federal Aviation  
Administration

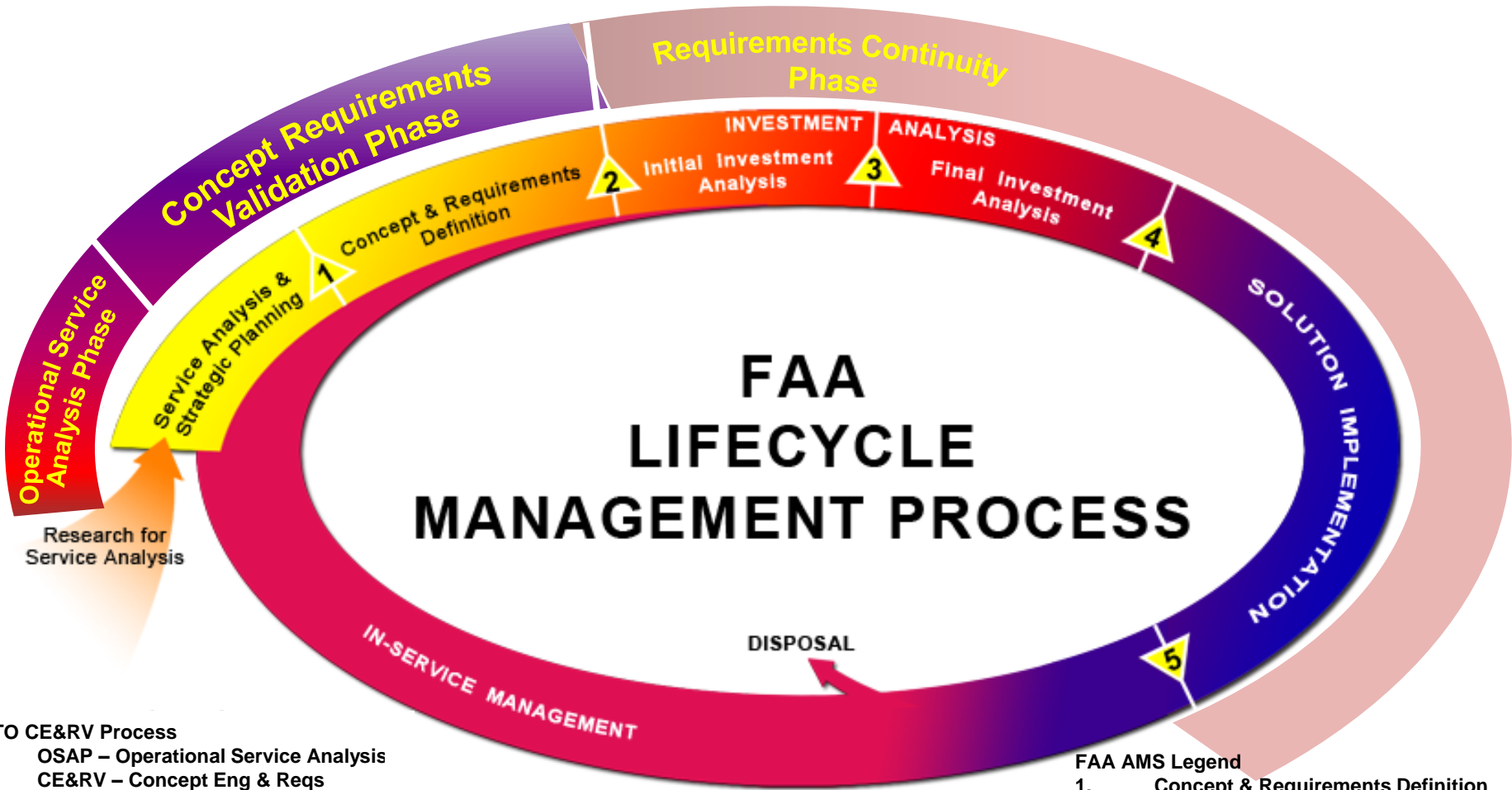


# FAA Acquisition Management System (AMS)

Enhancements to the NAS are governed by AMS



# CE&RV in Relation to AMS Lifecycle



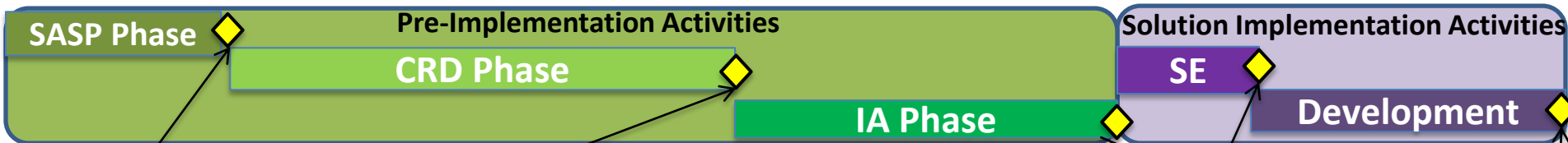
- FAA AMS Legend**
1. Concept & Requirements Definition Readiness Decision
  2. Investment Analysis Readiness Decision
  3. Initial Investment Decision
  4. Final Investment Decision
  5. In-Service Decision

- ATO CE&RV Process**
- OSAP – Operational Service Analysis
  - CE&RV – Concept Eng & Reqs Validation
    - CE – Concept Exploration
    - CD – Concept Development
    - CV – Concept Validation
  - Requirements Continuity



# Notional Generic AMS Timeline

| Year 1 |    |    |    | Year 2 |    |    |    | Year 3 |    |    |    | Year 4 |    |    |    | Year 5 |    |    |    | Year 6 |    |    |    |
|--------|----|----|----|--------|----|----|----|--------|----|----|----|--------|----|----|----|--------|----|----|----|--------|----|----|----|
| Q1     | Q2 | Q3 | Q4 | Q1     | Q2 | Q3 | Q4 | Q1     | Q2 | Q3 | Q4 | Q1     | Q2 | Q3 | Q4 | Q1     | Q2 | Q3 | Q4 | Q1     | Q2 | Q3 | Q4 |



**Ends in Concept & Requirements Definition Readiness (CRDR) Decision**

1. Shortfall documented.
2. Plan for addressing shortfall.

Effort lead by: AJV-7, AJM-22 awareness.

OPS and Industry Stakeholder input: What problems to address, definition of needs/solution space.

FAA Stakeholder Input: ANG, AJT, AJW, Etc.

**Ends in Investment Analysis Readiness Decision (IARD)**

1. Concept of Operations.
2. Functional Analysis.
3. Shortfall Quantified (Benefits pool).
4. Preliminary Program Requirements.
5. Range of Alternatives (historically waived for CATMT WPs due to set implementation path).

Effort lead by: AJV-7, AJM-22 involvement increases to take over lead during IA phase.

OPS and Industry Stakeholder input: Concept and Requirements development/validation.

FAA Stakeholder Input: ANG, AJT, AJW, Etc.

**Ends in Final Investment Decision (FID)**

1. Final Program Requirements.
2. Business case development
3. Implementation Strategy.

Effort lead by: AJM-22, AJV-7 awareness.

OPS and Industry Stakeholder input: Low – Requirements near final.

FAA Stakeholder Input: ANG, AJT, Etc.

**Ends in System Design**

1. Changes to SSS, IRS, SSDD, HAD.
2. ECP
3. Transition Strategy.

Effort lead by: AJM-22.

OPS and Industry Stakeholder input: Low – transition.

FAA Stakeholder Input: ANG, AJT, AJW, Etc.

**Ends in Deployment**

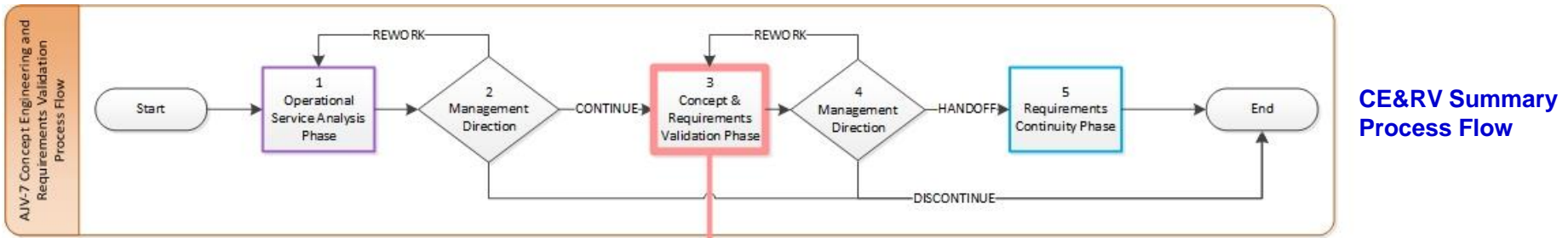
1. SW Req'ts & Design.
2. Testing
3. Deployment.

Effort lead by: AJM-22, AJV-7 & NextGen awareness.

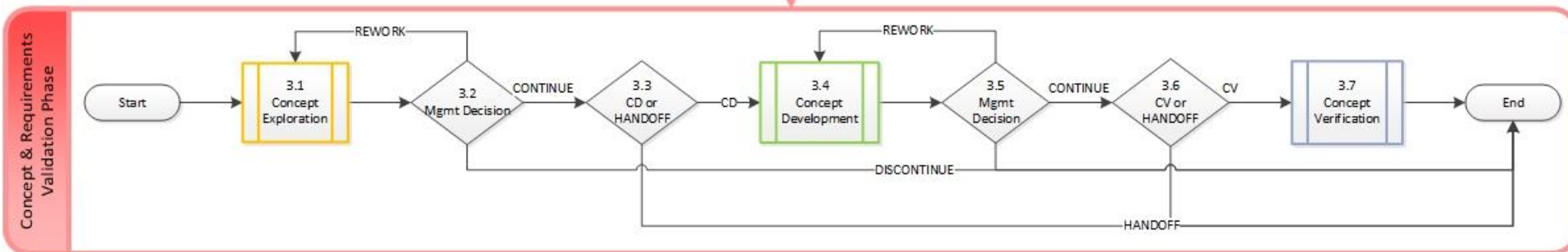
OPS and Industry Stakeholder input: High – CHI, Procedures, Testing.

FAA Stakeholder Input: ANG, AJT, AJW, Etc.

# Concept & Requirements Validation Phase



## Concept & Requirements Validation (C&RV) Process Flow



### Concept Exploration:

- Characterize “As Is” behavior to qualify legacy shortfalls
- Characterize “To Be” behavior to mitigate legacy shortfalls

### Concept Development:

- Quantify legacy shortfalls
- Validate “To Be” concept operations, functions & performance to mitigate legacy shortfalls & safety hazards

### Concept Verification:

- Verify that “To Be” concept operations & functions perform as specified



# Questions?

