



# Joint C4ISR Decision Support Center

## **C4I Support Plans (C4ISP) Overview Brief**

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# Problem Statement

## Given:

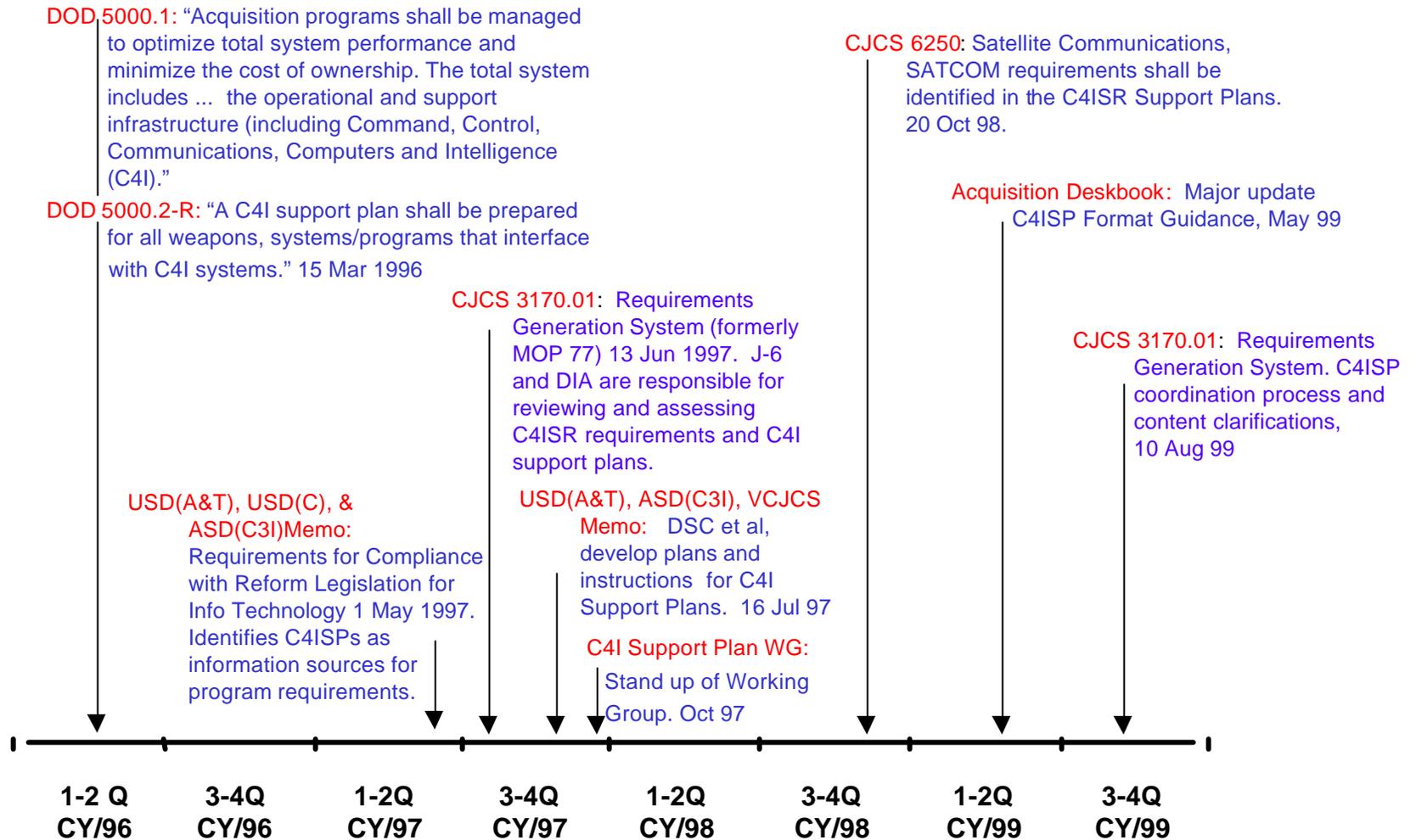
- The Joint Vision 2010 information superiority goal will require a robust, interoperable and reliable C4I system of systems architecture
- Systems will be more dependent than ever on each other to achieve information superiority
- Future military operations portend an increased demand on C4I support
- Current acquisition process must adjust

## Problem:

- A systematic approach is needed to credibly and affordably implement information capabilities and identify dependencies, shortfalls, and impact on C4I infrastructure early on in the acquisition process



# Background





# C4I Support Plan Goals

## **Program Offices:**

- *Identifies C4I system support needs for weapons, systems/programs*
- *Identifies dependencies between systems*
- *Identifies interface requirements early-on in acquisition process*
- *Mechanism to identify, plan, and manage implementation issues related to C4I infrastructure requirements*
- *Enables trade analysis*

## **C4I Support Organizations (interfacing systems, service providers)**

- *Determine if system is supportable*
- *Ensure systems being developed have adequate and sufficient C4I resources*
- *Facilitate interoperability , integration & compatibility*

## **Joint Staff**

- *Assist in certification processes (interoperability & intelligence)*
- *Assess impact on C4I infrastructure*

## **OSD**

- *Assess compliance with standards, architectures, investment strategy*
- *Identify C4I Support deficiencies*
- *Assess & manage interoperability and integration efforts*

## **ALL**

- *Raise & resolve issues*



# Game Plan

- ❑ Establish a C4ISP working group to develop the process and set of procedures to assist in developing C4ISR Support Plans
- ❑ Develop an Action Plan
- ❑ Establish C4ISP coordination process
- ❑ Clarify existing C4ISP guidance
- ❑ Raise & resolve issues related to fielding systems with necessary C4I support
- ❑ Show immediate value



# C4ISP WG Primary Players

## Organizations

- **OSD**
  - ✓ OASD(C3I)
  - ✓ OUSD(A&T)
- **JS**
  - ✓ J2 (IRCO)
  - ✓ J6
- **Services**
  - ✓ ARMY: DISC4
  - ✓ AF: SAF/AQI, XOR, AFCIC, 497th IG
  - ✓ NAVY: N6, SPAWAR

## Agencies

- ✓ DISA, JITC, JSC
- ✓ DIA
- ✓ NSA
- ✓ NIMA

## Other CAEs

- BMDO
- NRO

## Functions

- **PSAs**
- **PM**
  - ✓ JSF PMO

*Others as Appropriate*



# Milestones

## MID-TERM

(3-9 mon)

- Coordinate Action Plan with Services & Key Players
- review current instructions & processes
- Propose and prepare updates
- Prepare sufficiency checklist
- Identify C3I resources and implement procedures
- Brief Services/Agencies/PMs on process
- Establish C4ISP Helpdesk

## LONG-TERM

(9-18 mon)

- Clarify Guidance
- Coordinate and update DoD Regs and DOD and JS Instructions
- Develop DSMC curriculum to institutionalize process

## NEAR-TERM

(0-3 mon)

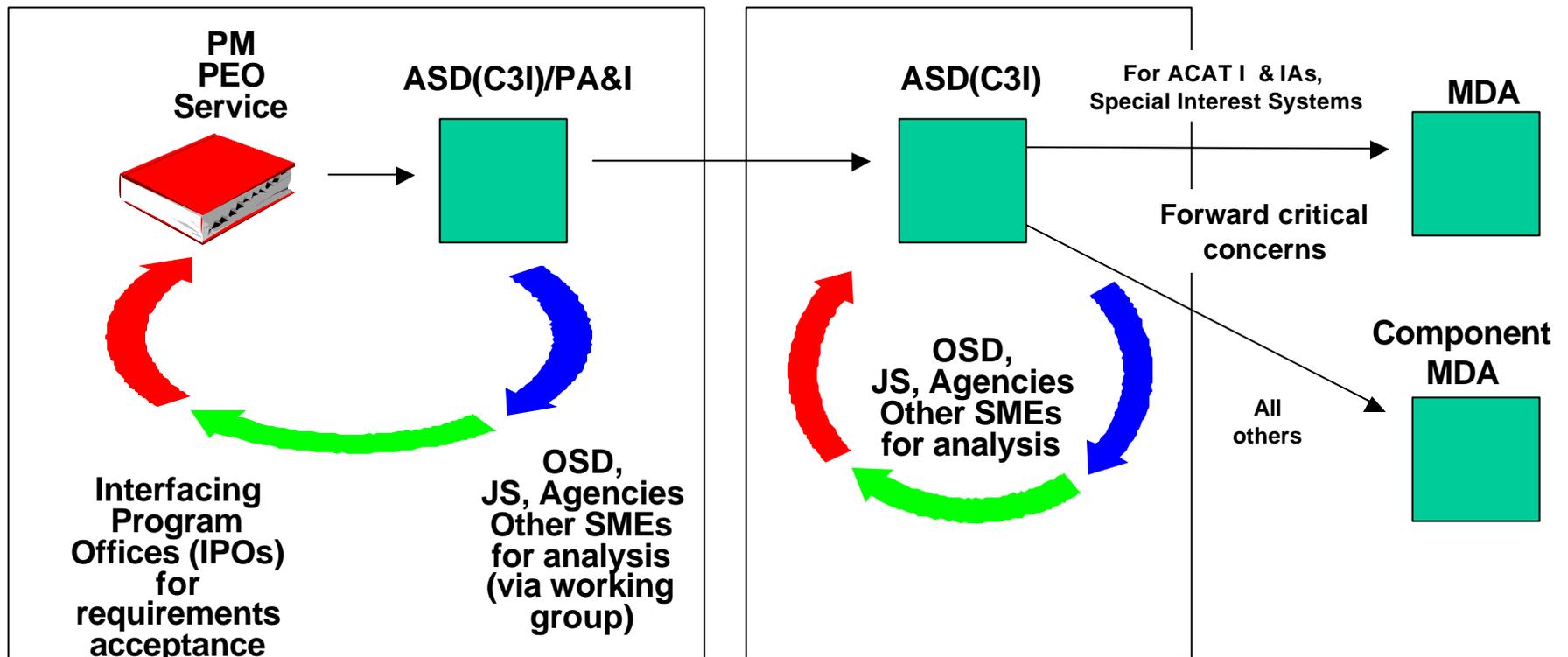
- C3I agreement on C4ISP COA
- Coordinate COA w/JS
- Establish C4ISP working group
- Develop Action Plan

*as of 9 Jan 1998*





# C4I Support Plan Coordination CONOPs

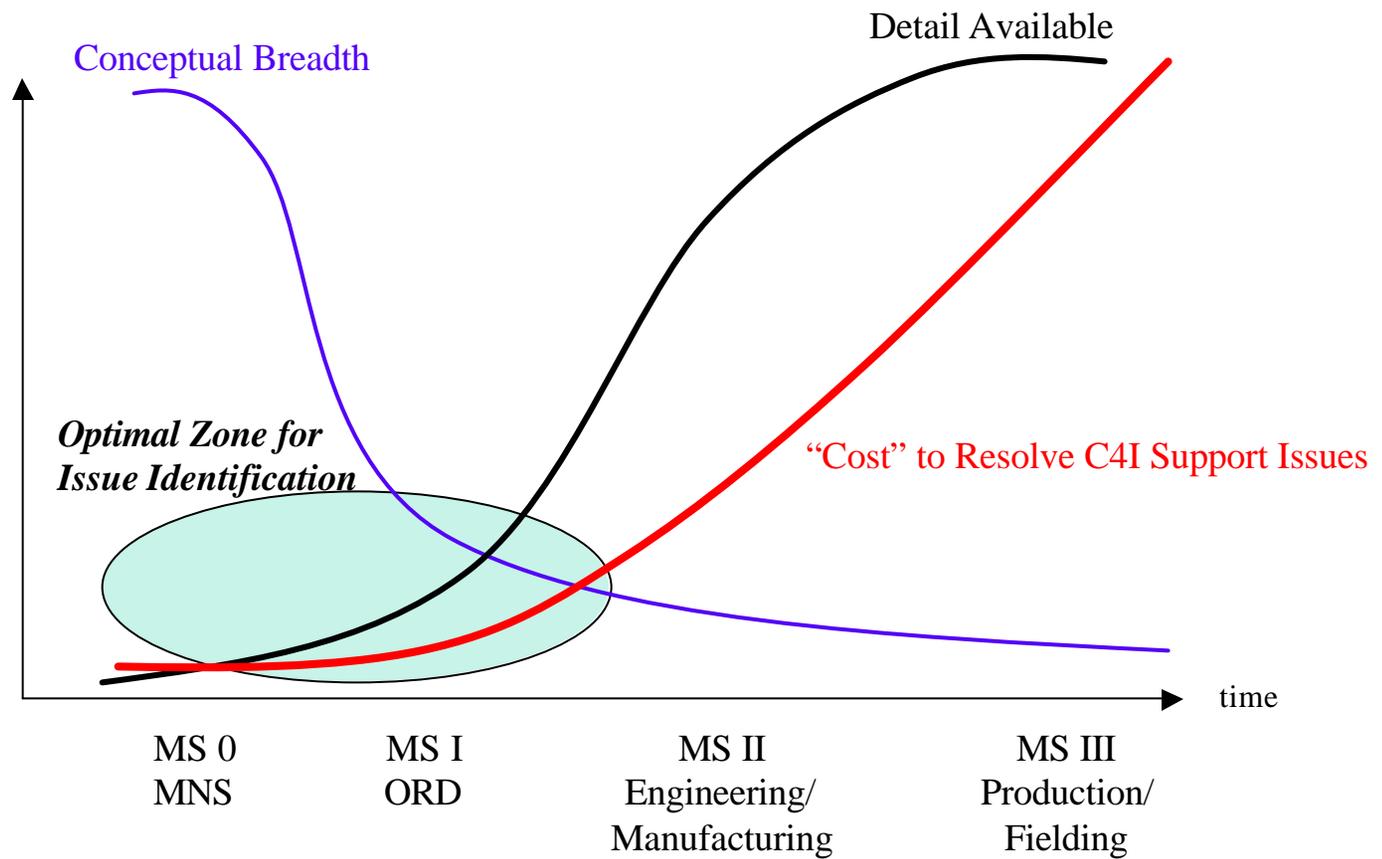


**Integrated Product Team  
For Plan Development**

**Formal Milestone  
Coordination**  
(NLT 60 days prior to MS)

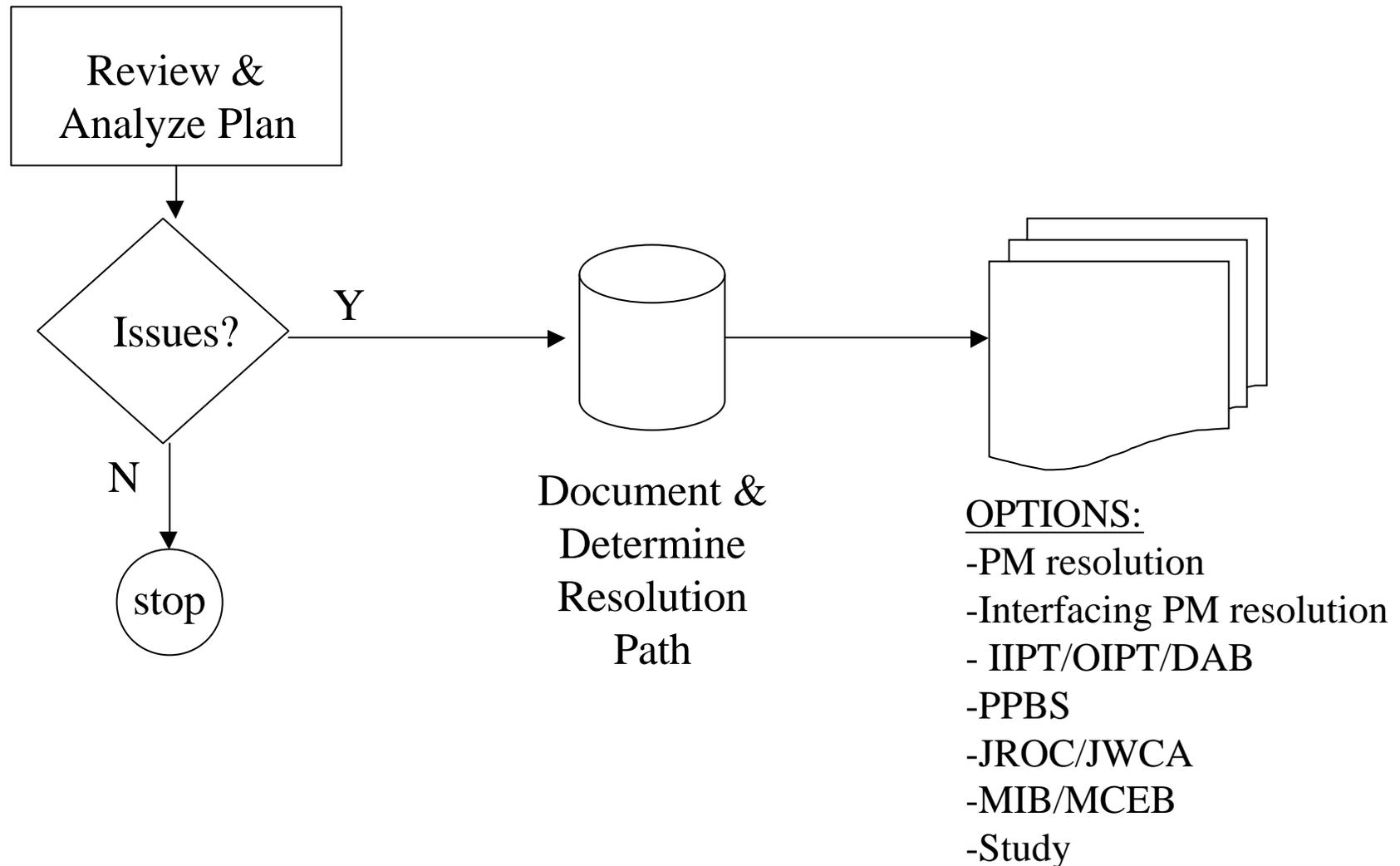


# Challenge





# Issue Resolution Process





# C4I Support Plan Contents

- **Introduction:**
  - High level system description, directory of related information to be exchanged
- **System Description:**
  - Detailed overview of the system, including all characteristics relevant to C4I support
- **Operational Employment:**
  - Defines employment concept, roles & missions, mission type, employment rate/requirements, operational architecture view, operational info exchange requirements, event trace timelines
- **Derived C4I Support Requirements**
  - Quantify operational requirements placed on supporting C4I systems
  - Define systems architecture view and system info exchange requirements
  - Identify C4I infrastructure necessary for T&E and training
- **Potential C4I Support Shortfalls & Proposed Solutions**
  - Operational employment, testing & training support shortfalls
  - Identify impact of shortfall on operations and propose solution
- **Appendix (i.e. ITMRA requirements compliance)**

\* as per Acquisition Deskbook, dtd May 99





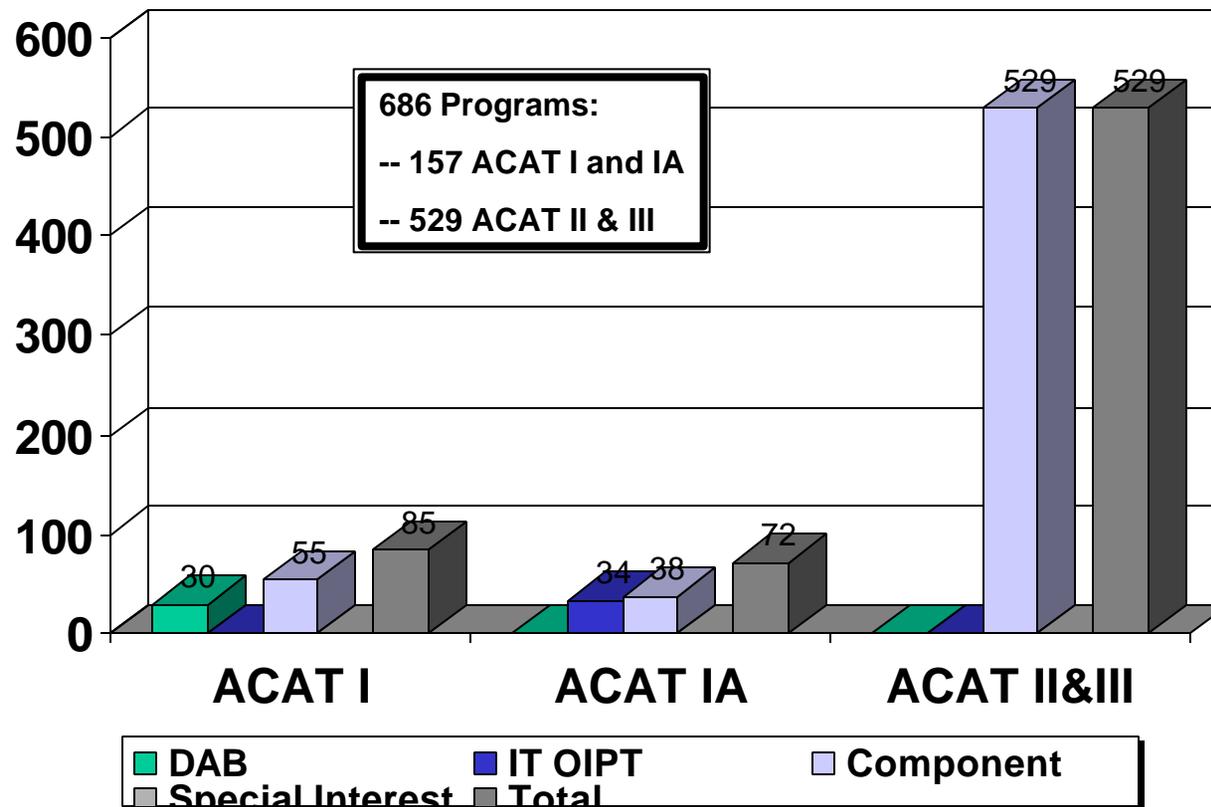
# C4ISP Potential Shortfalls Product

Task	C2	Comm	CM	ISR Sensors	PED	Nav	Log
<b>INGRESS</b>							
Accurate navigation data							
Ability to pass data in flight							
Ability to receive threat updates in flight							
Ability to receive new tgt locn (prec. Coords)							
...							



# ACAT Distribution

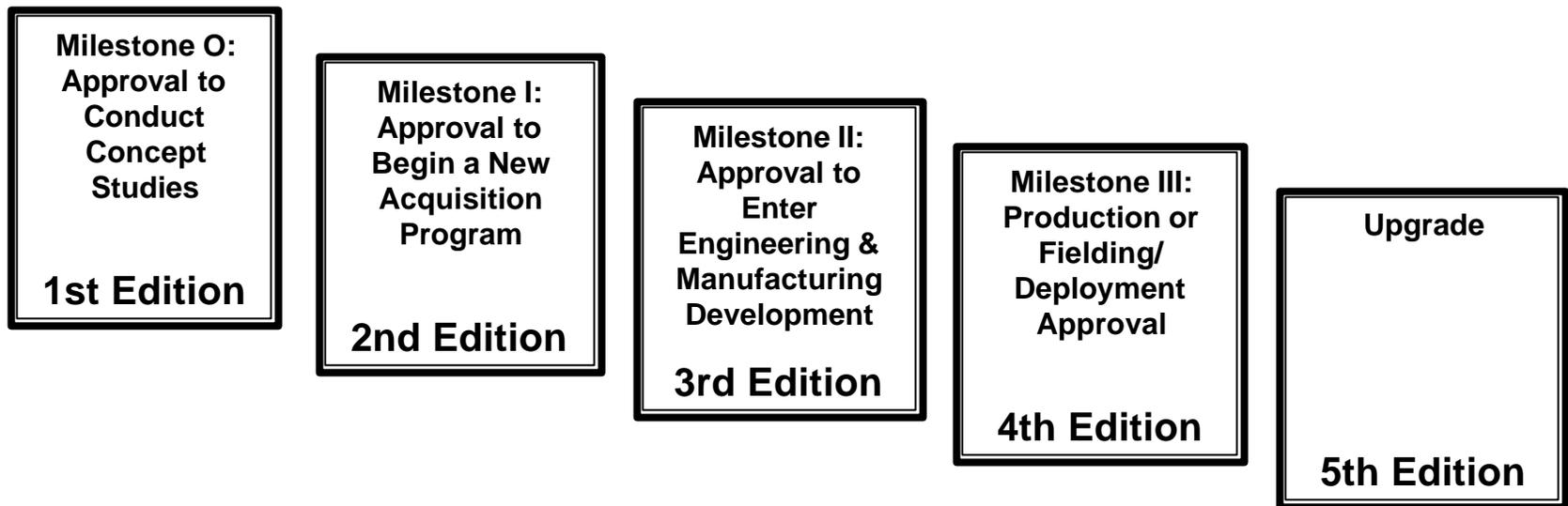
**1997 Programs by Acquisition Category**





# Milestones

- C4ISPs are “living documents”
- Updates prior to each milestone decision
- Update when program/system upgrades affect or impact C4I infrastructure



*PM's submit NLT 60 days prior to Milestone*

*Decision 30 day approval process*

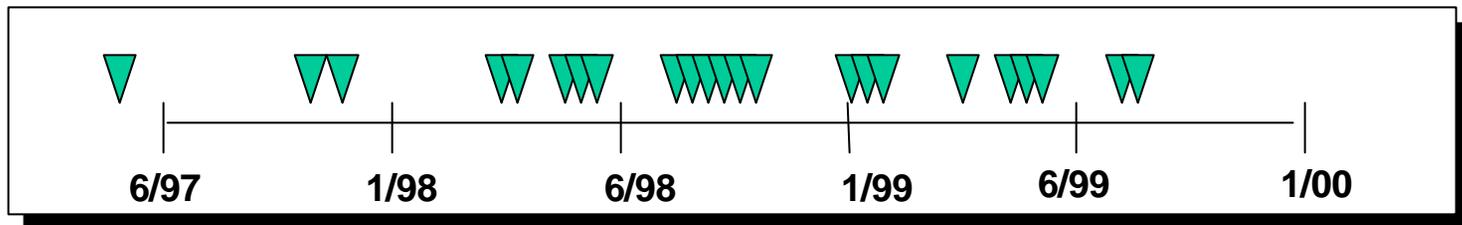
**PROPOSED**

*Service C4ISP office submits 30 days prior to decision point for upgrade*



# C4ISPs Received

- Force XXI Battle Command Brigade & Below (FBCB2), dtd 8/99
- F/A-18 (Strike Fighter), dtd 8/99
- Theater High Altitude Area Defense (THAAD), dtd 7/99
- F-22 Advanced Tactical Fighter , dtd 5/99
- Battlefield Combat ID System (BCIS)dtd 5/99
- Theater Medical Information Program (TMIP) dtd 5/99
- JSTARS Common Ground Station (CGS) dtd 4/99
- Navy Theater Wide BMD dtd 2/99
- Hard & Deeply Buried Target Defeat dtd 1/99
- Advanced EHF MILSATCOM dtd 1/99
- Army Tactical Missile System-BAT dtd 10/98
- Secure Mobile Anti-Jam Reliable Tactical Terminal (SMART-T), dtd 10/98
- Maneuver Control System (MCS), dtd 8/98
- Joint Air to Surface Standoff Missile (JASSM),dtd 8/98
- 21st Century Tactical Aviation Seabased Platform (CVX), dtd 5/98
- Joint Strike Fighter (JSF),dtd 3/98
- Joint Precision Approach and Landing System (JPALS), dtd 3/98
- Joint Stand Off Weapon (JSOW)
- Patriot System, dtd 5/97
- Theater Missile Defense (TMD), 7/96





# Checks and Promising Tools

## Analysis Needs

- System of Systems Check. Can the proposed system be coherently integrated into the operational and systems architecture by mission area?
- Interoperability & Compliance Check. Is proposed system interoperable w/ interfacing systems? Is proposed system compliant w/ tech standards, ITMRA
- Information Mgmt/Delivery/Dissemination & Sufficiency. Are information timelines adequate? Is there sufficient information support & resources for this system?
- Cross-Program Analysis. Are interfacing programs in synchronization?
- Info Security Check. Are proposed information security solutions adequate?
- Issue identification and resolution. What C4I support issues exist and how can they be resolved ?

## Other needs

- C4ISP Development
- On-line library & electronic doc coord

## Promising Tools

- • Joint C4I Architecture Planning System (JCAPS)
- • Levels of Information Systems Interoperability(LISI)
- • NETWARS
- • PPBS tracker
- • Issue Tracking DB
- • Joint System Requirements Tracking Tool (JSRT2)
- • Info Analysis Program



# OSD C4I Support Plan Points of Contact

## OASD(C3I) C4I Support Plans:

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