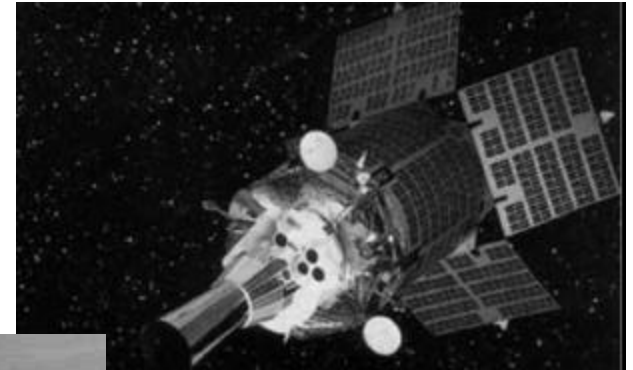




**ASN RDA CHENG**



**SYSTEMS AND  
TECHNICAL  
ARCHITECTURES  
30 MAY 2001**



**CAPT Mike Weisskopf  
ASN RDA CHENG**

## Report Documentation Page

|                                                                                                                                                                   |                                                    |                                              |
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| <b>Abstract</b>                                                                                                                                                   |                                                    |                                              |
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| <b>Report Classification</b><br>unclassified                                                                                                                      | <b>Classification of this page</b><br>unclassified |                                              |
| <b>Classification of Abstract</b><br>unclassified                                                                                                                 | <b>Limitation of Abstract</b><br>UU                |                                              |
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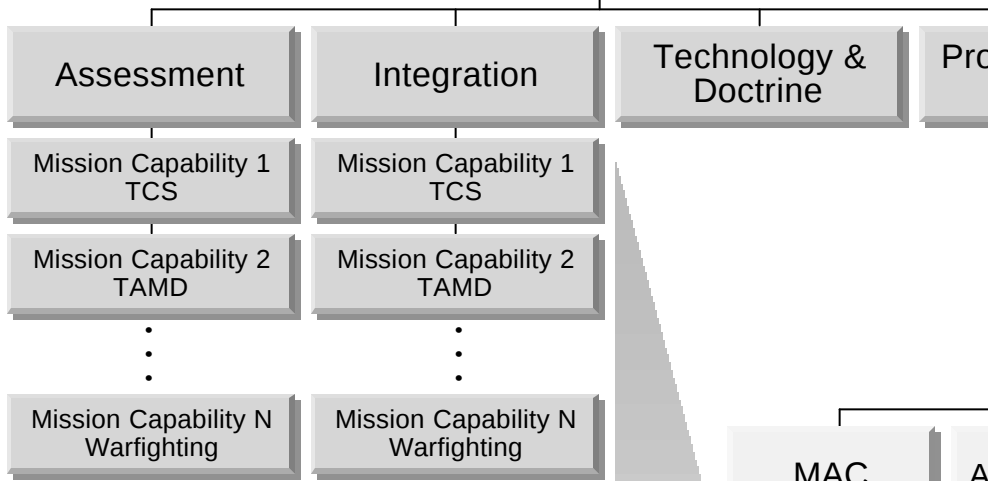
# N70/RDA CHENG FOCUS

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ENGINEER**

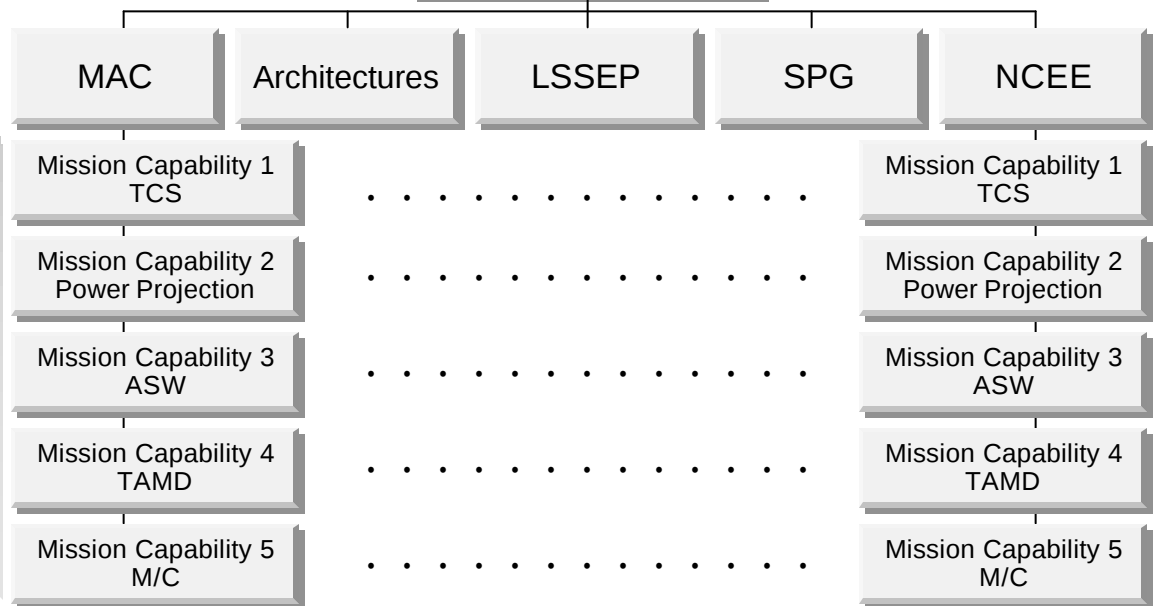
(Notional Organization)

**N70**

**Horizontal Mission  
Focus to Improve  
Interoperability**



**RDA CHENG**

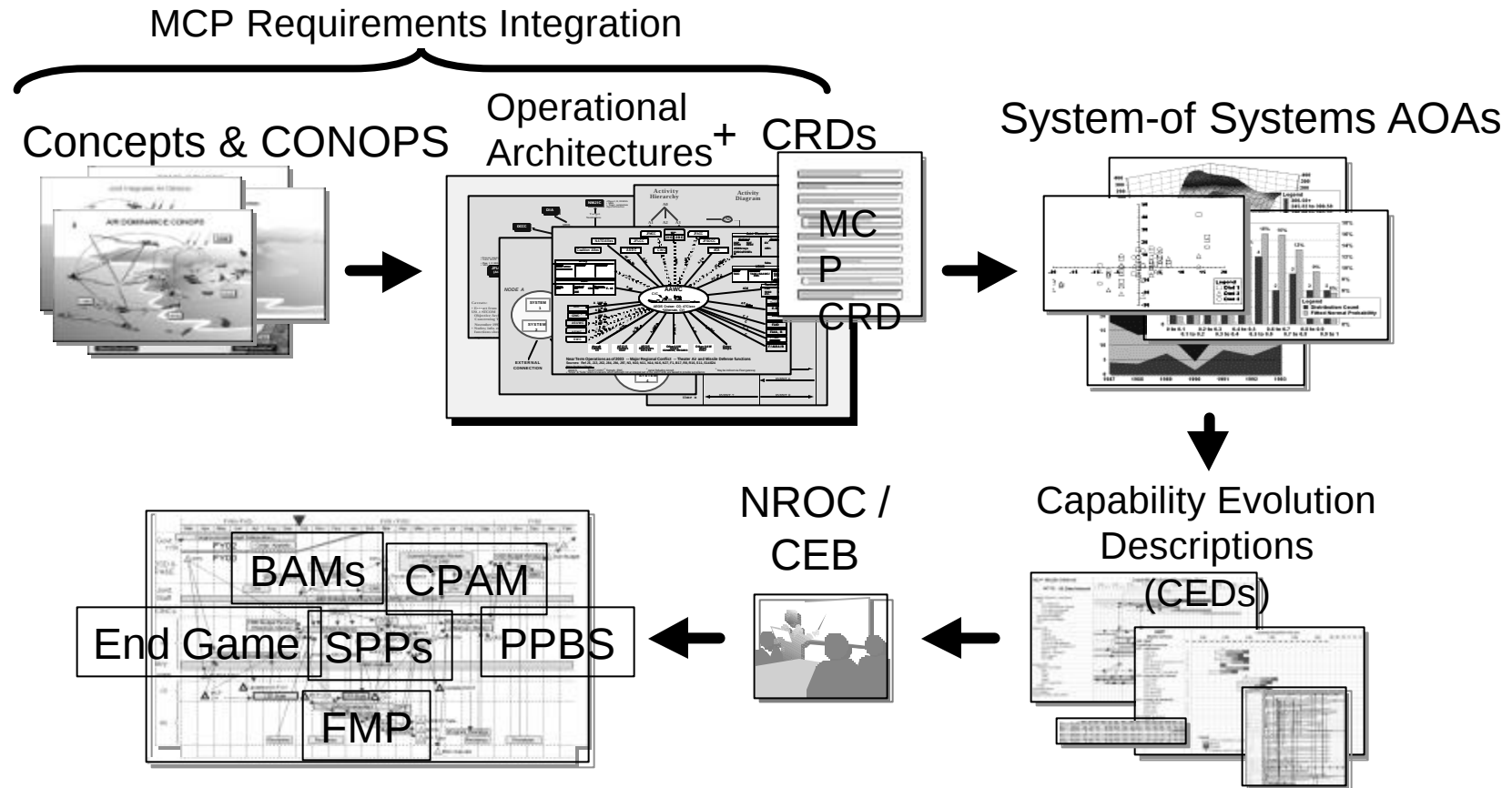




# The Basic Approach

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Given this is where we want to go...

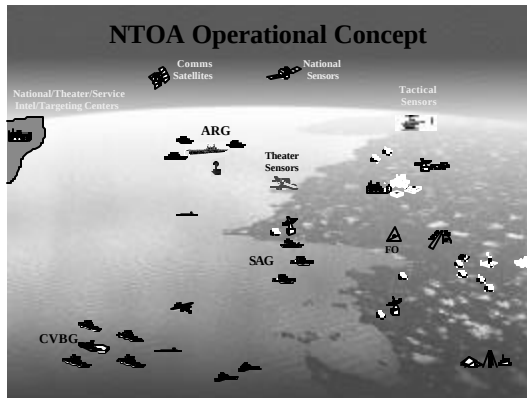


How do we make things happen in the near term?



# Vision

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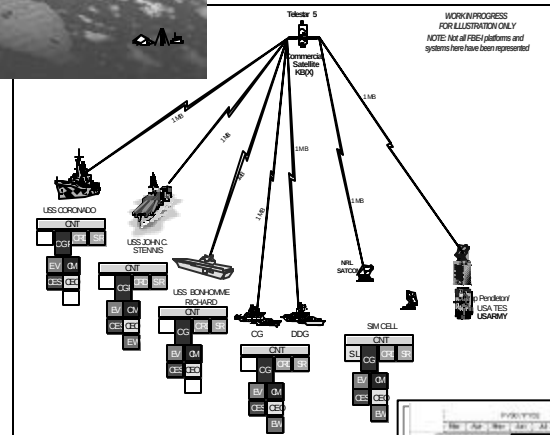


## WARFARE MISSION OPERATIONAL ARCHITECTURE

Fleet defines how they want to fight across a warfare mission area

## WARFARE MISSION SYSTEM ARCHITECTURE

Developed to align with operational architecture

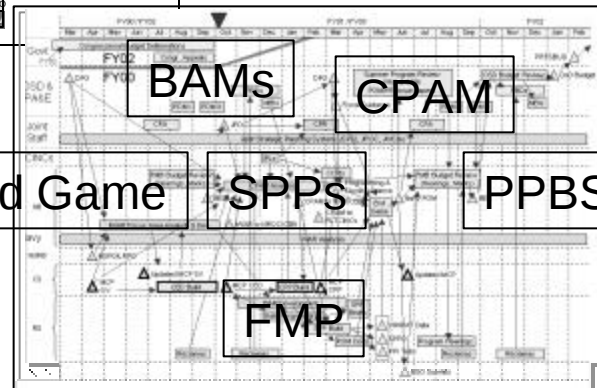


used to...

Have a master Warfare Plan to drive the process



End Game

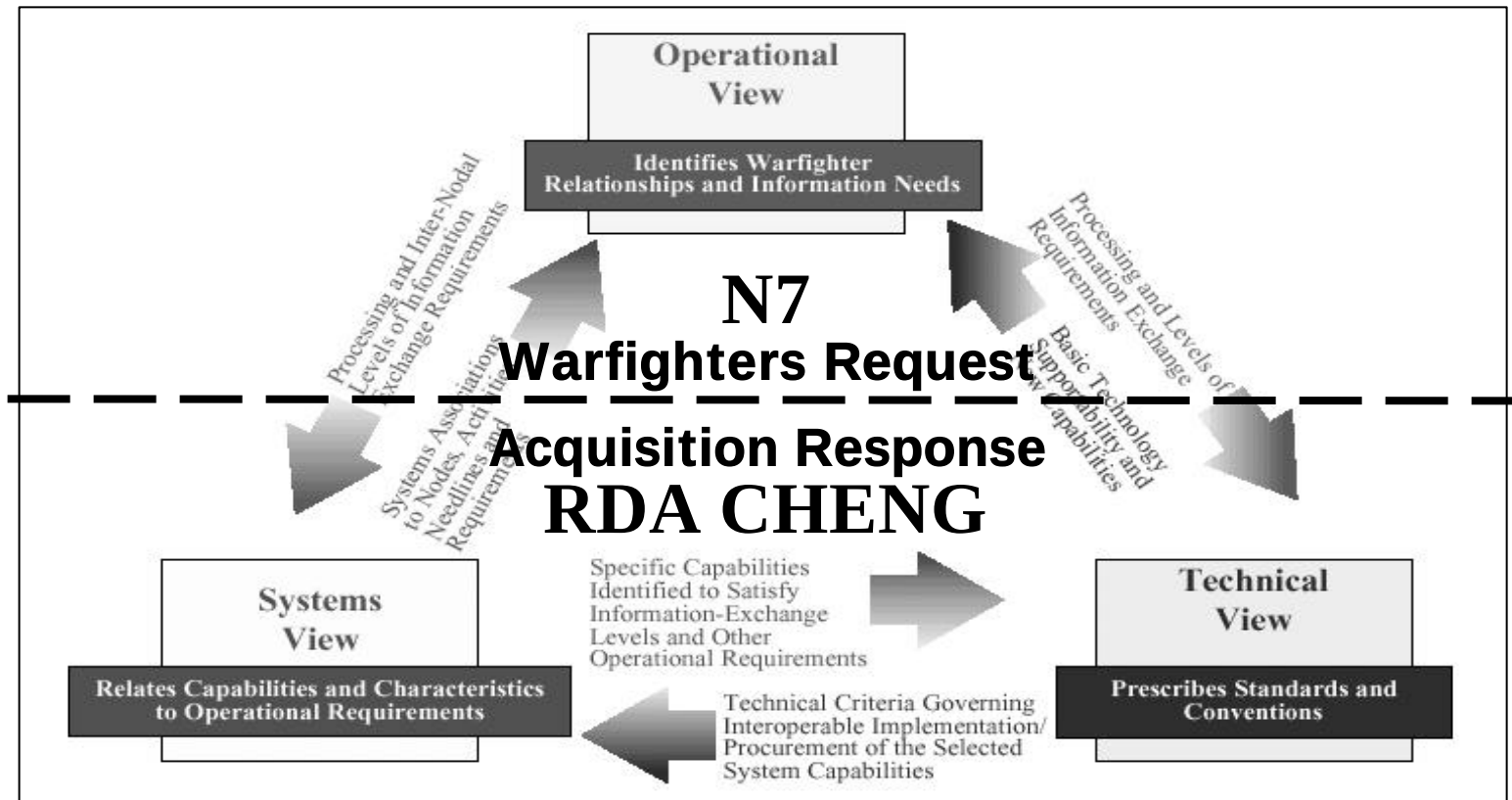


Drive  
Requirements  
Drive  
Budget



# Goal is an Integrated Architecture

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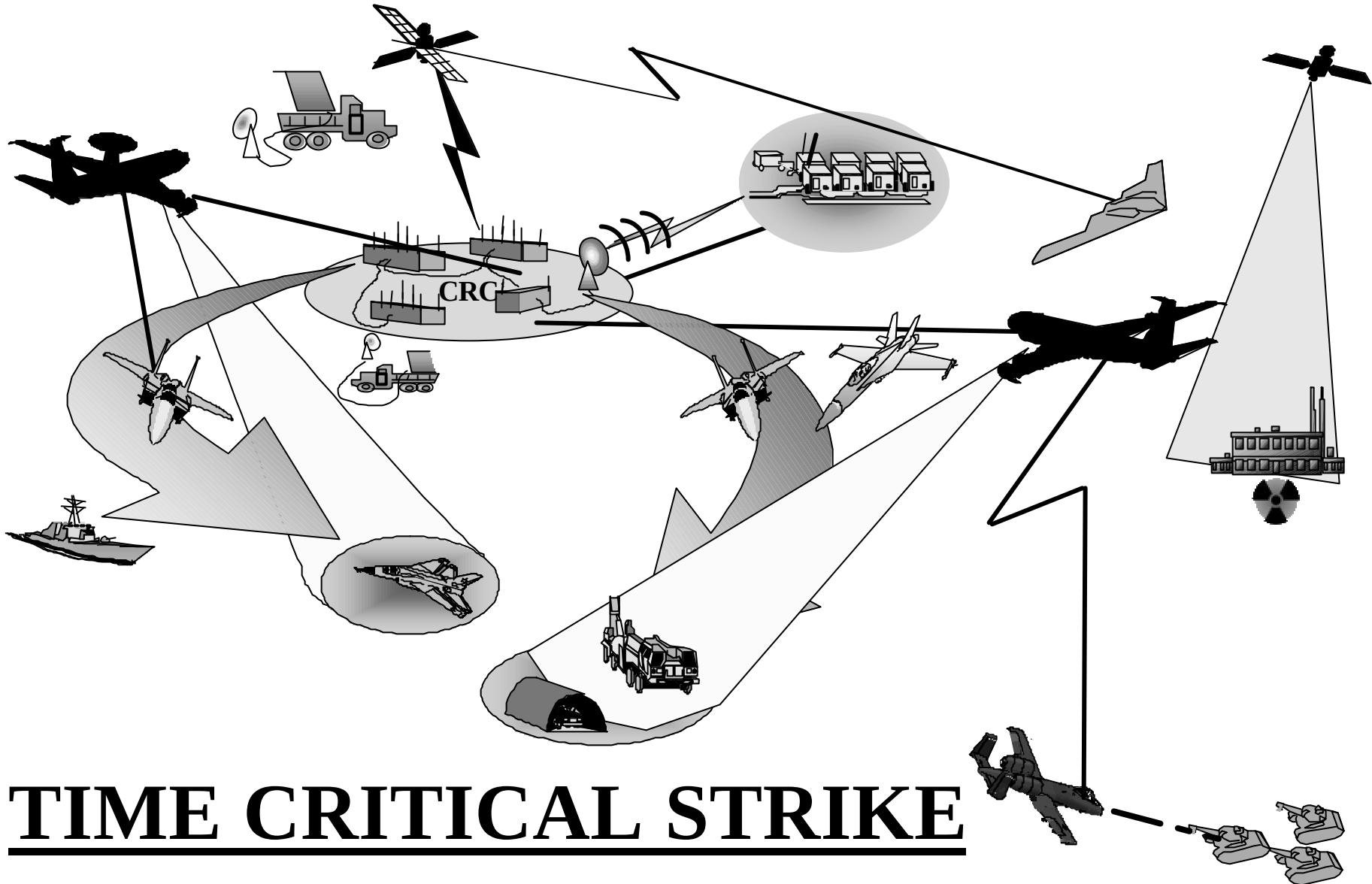


Operational Architectures Drive the Management and System Engineering of Interrelated Acquisition Programs



One of the POM04 Priorities is...

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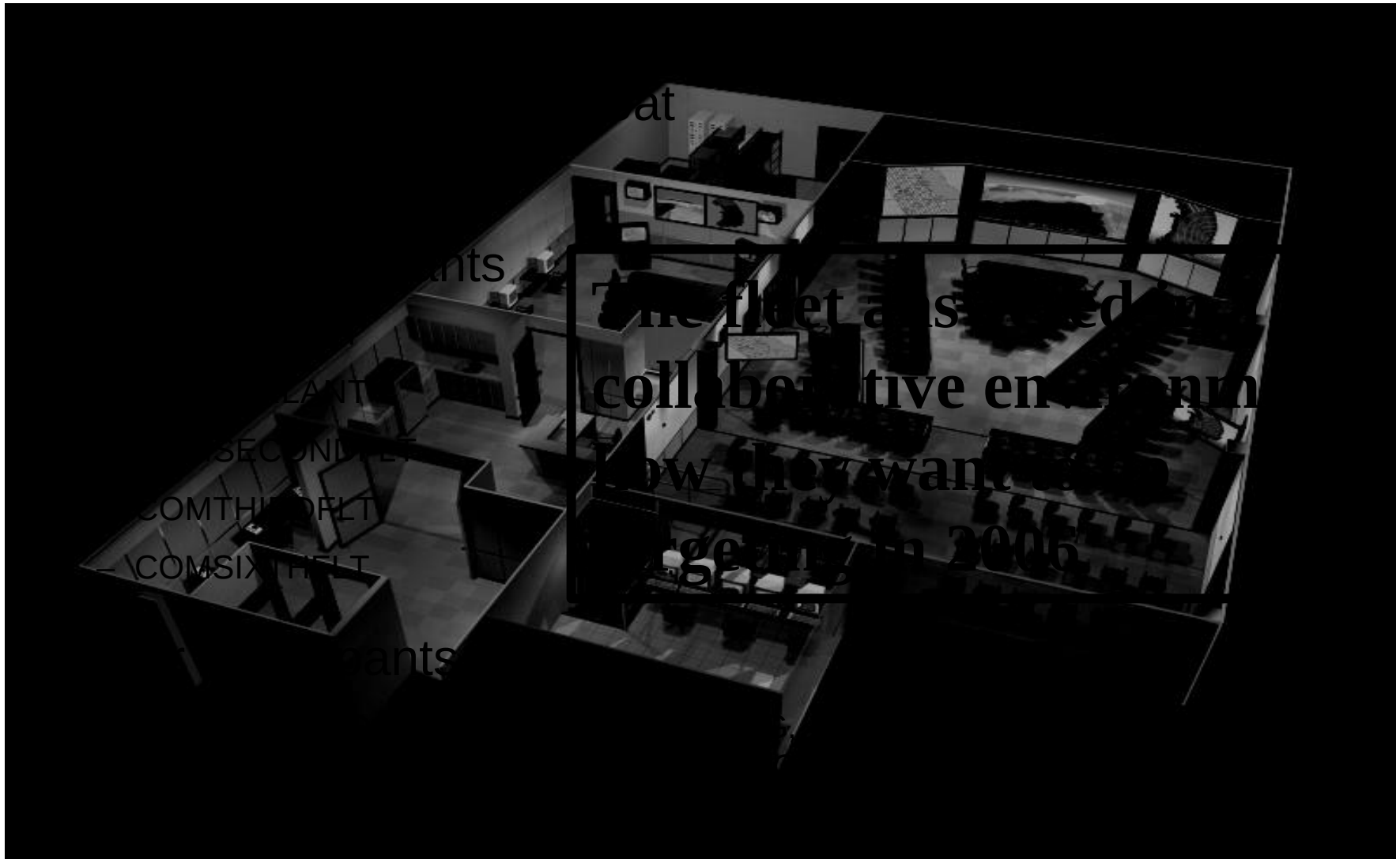


**TIME CRITICAL STRIKE**



# Naval Targeting Operational Architecture Seminar

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# Major Fleet Articulated Themes

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## Common Operating Picture

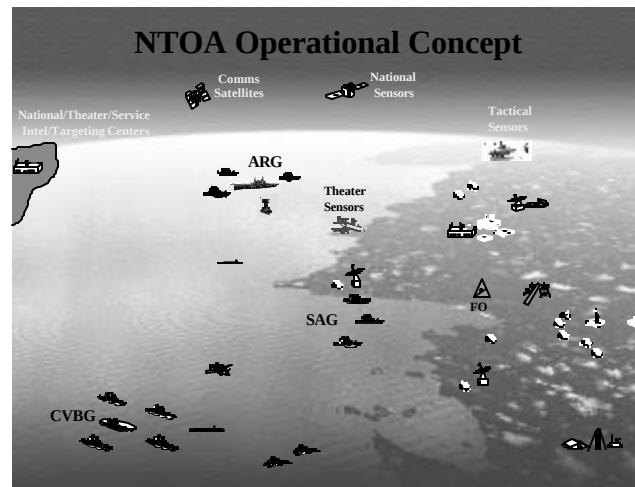
*One* common picture,  
*accessible to all, CJTF*  
*responsible* for COP production

## Processing-Exploitation-Production

*Distributed* based on unit  
capabilities, shared with all

## Information Distribution

*Smart Push*  
*User Pull*  
*Accessible Databases*



## Deconfliction

Responsibility of major  
component controlling  
the battlespace

## Aimpoint Generation

All levels capable of generating  
aimpoints based on their organic  
weapons capability.

## Flexibility

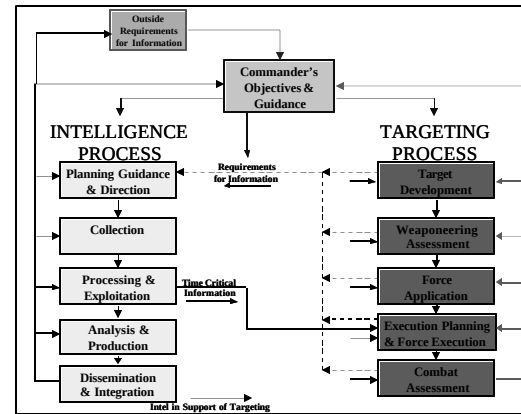
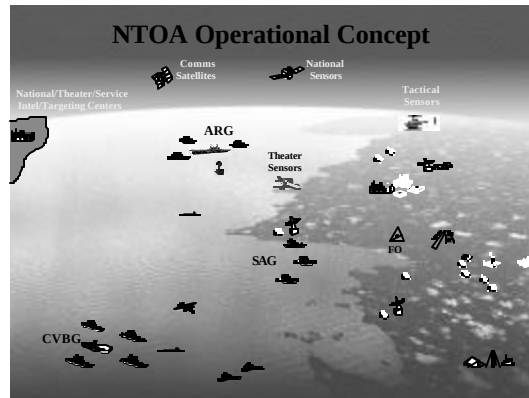
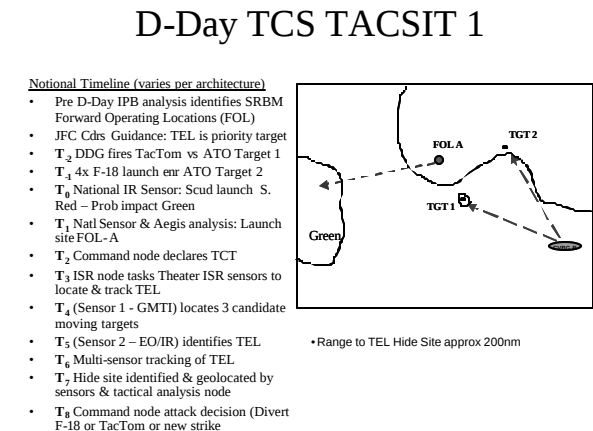
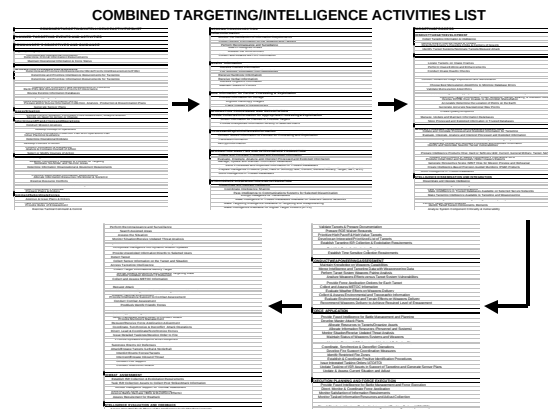
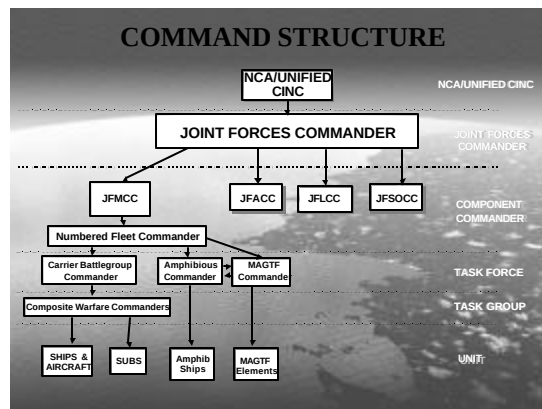
Architecture must  
support a range of options.

## Manpower and Training

Take into account when creating  
the Naval Targeting Architecture



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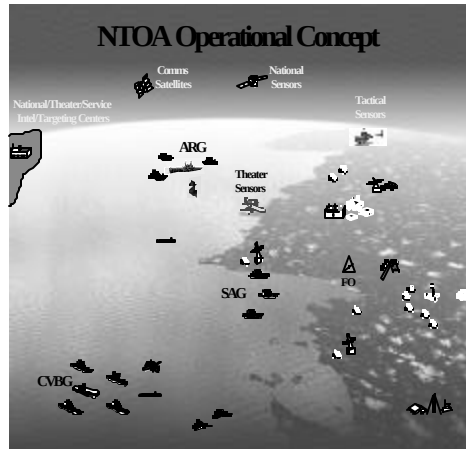
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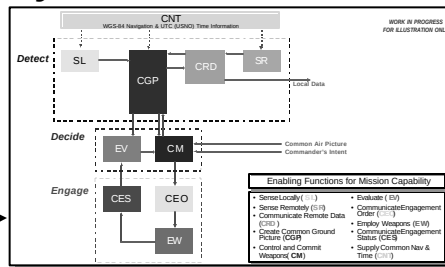
# How Will We Influence POM Decisions?

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Start with the way the  
Fleet wants to fight  
*Operational Architecture Views*



## System Functional View

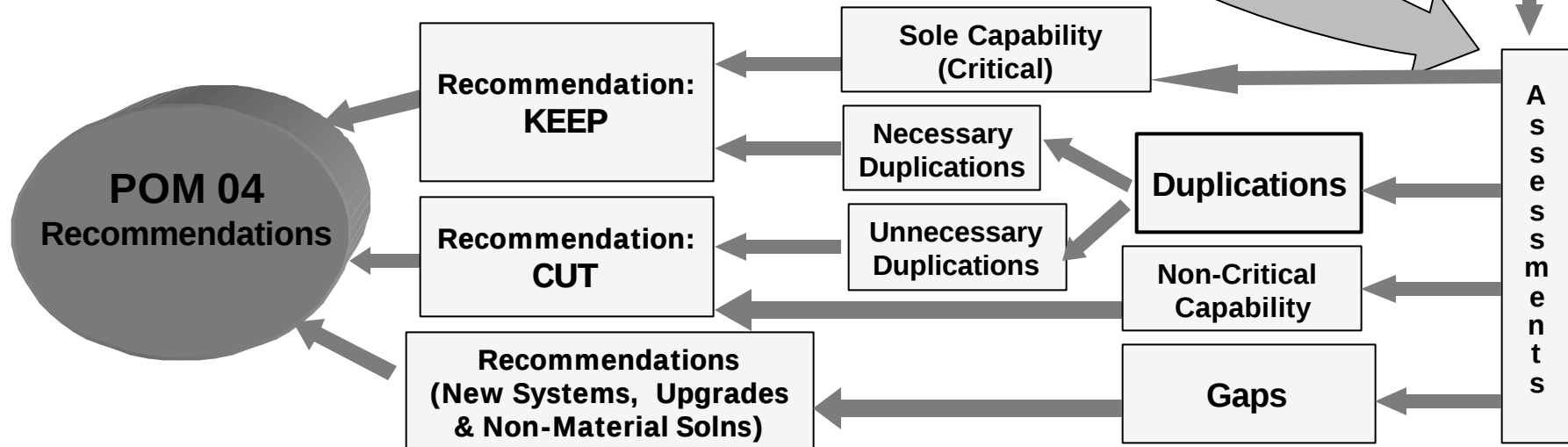
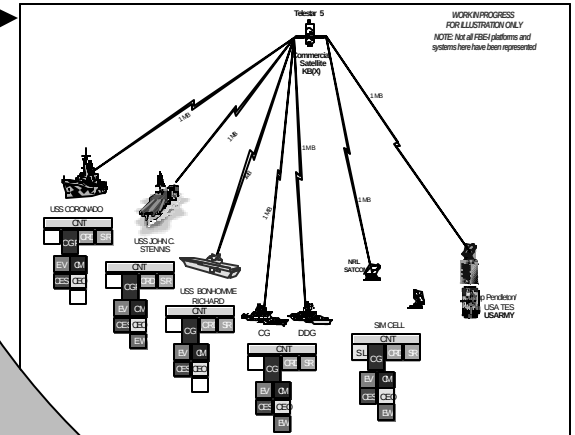


| SERVICE AREA           | SERVICE                 | SERVICE CATEGORY        | STANDARD                                                                                        |
|------------------------|-------------------------|-------------------------|-------------------------------------------------------------------------------------------------|
| SYSTEMS SERVICES       | COORDINATE SYSTEM       | COORDINATE SYSTEM       | DDP 111-1: Portable Operating System Interface (POSIX) 1.1 System Application Program Interface |
| ANALYTICAL SERVICES    | INFORMATION INTERCHANGE | INFORMATION INTERCHANGE | DDP 111-1: Portable Operating System Interface (POSIX) 1.1 System Application Program Interface |
| COMMUNICATION SERVICES | DATA TRANSPORT          | DATA TRANSPORT          | DDP 111-1: Portable Operating System Interface (POSIX) 1.1 System Application Program Interface |

## Technical Architecture Profile

Mapping

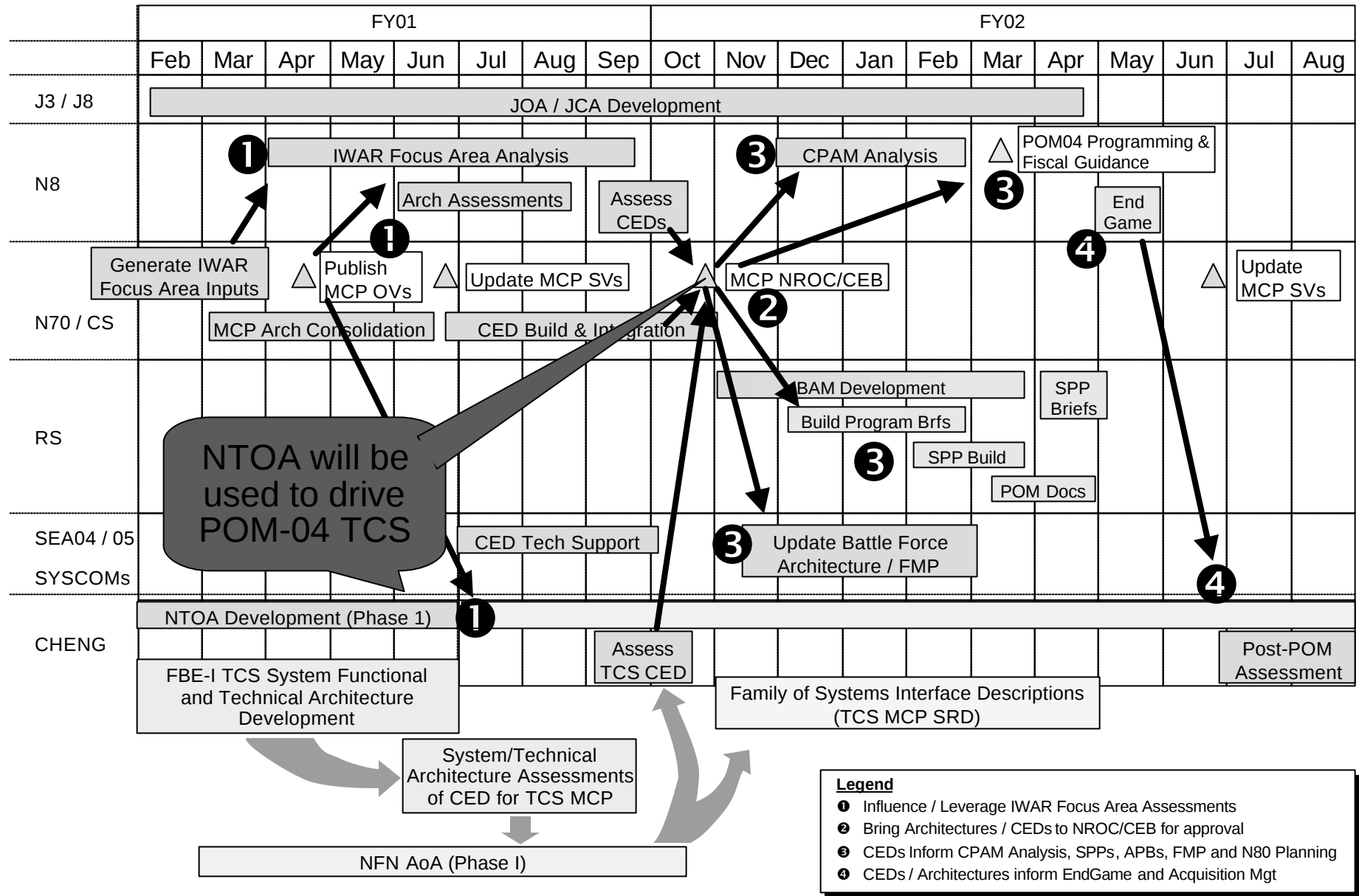
## Functions of Current Naval Family of Systems





# Proposed Timeline and Pressure Points (TCS for POM-04)

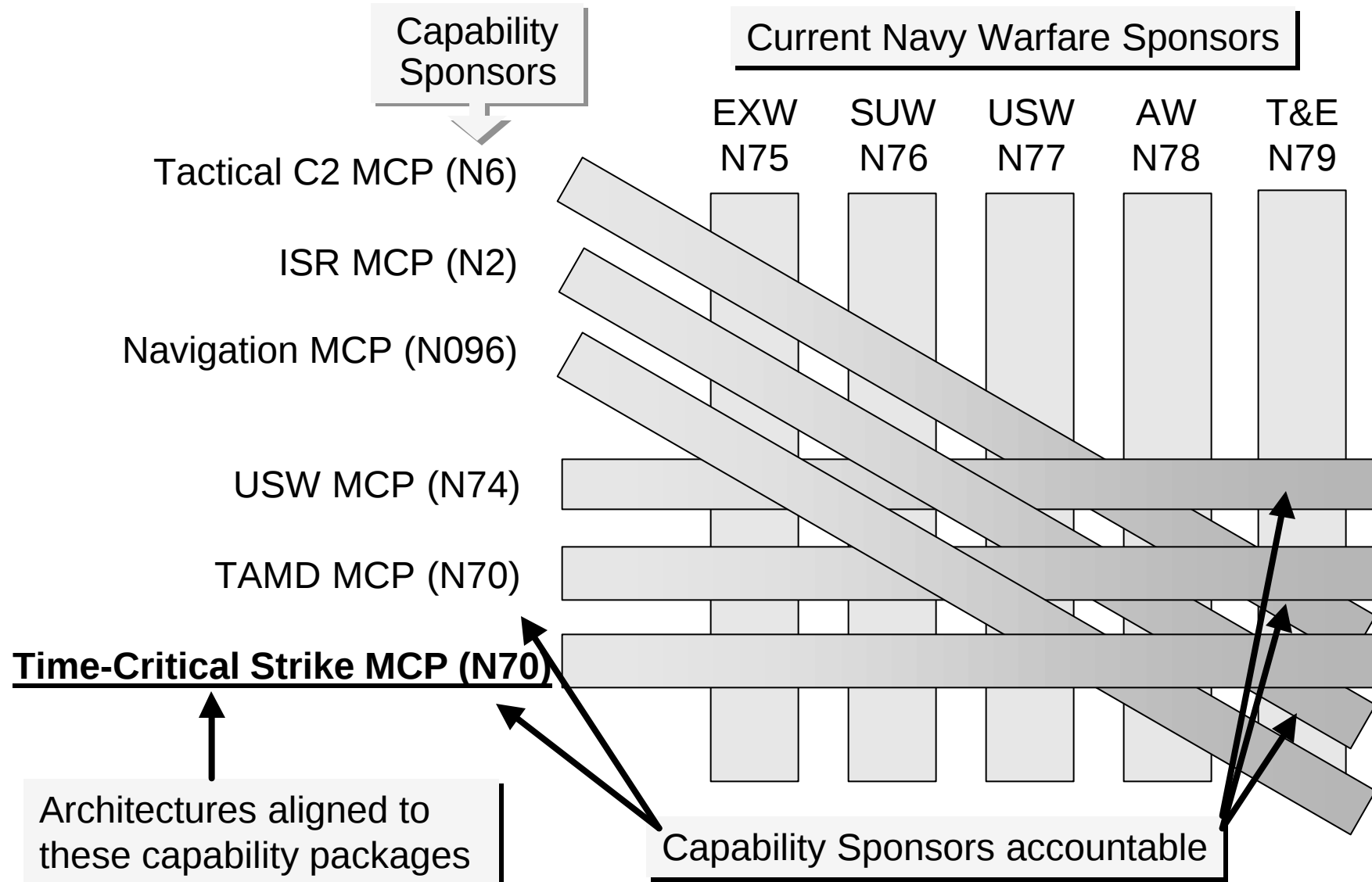
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# Goal is to get TCS Programs to Align

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# Summary

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ENGINEER*

- Requirements and Acquisition communities are committed to work with the fleet (Afloat Targeting IPT) to influence POM 04
  - Specific commitment is to work with IPT to guide Navy investment for a significant improvement in Time Critical Strike
- This is a pilot effort with the following goals:
  - Improve Interoperability
  - Focus horizontally on Naval Mission Areas
  - Strengthen fleet input to mission needs to compete with platform/system centric priorities
  - Will expand to other mission areas if successful