Fleet Capabilities Based Assessment (CBA)

ASNE DAY
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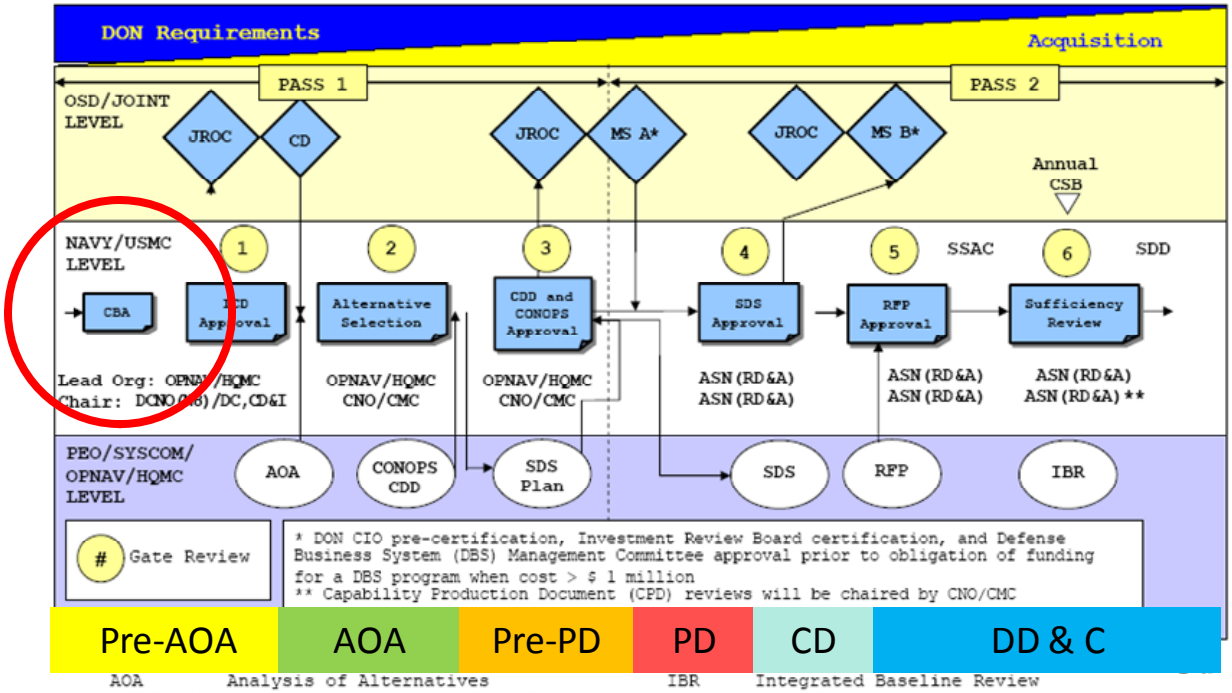
Motivation – Recent AoAs

- LHA(R) and MPFF
  - Final acquisition alternative implemented (after delay) was not part of the recommended solution set from the AoA
- CG(X)
  - Final acquisition alternative not selected over a year after the originally scheduled completion date

SECNAVINST 5000.2D
2 Pass 6 Gate Process

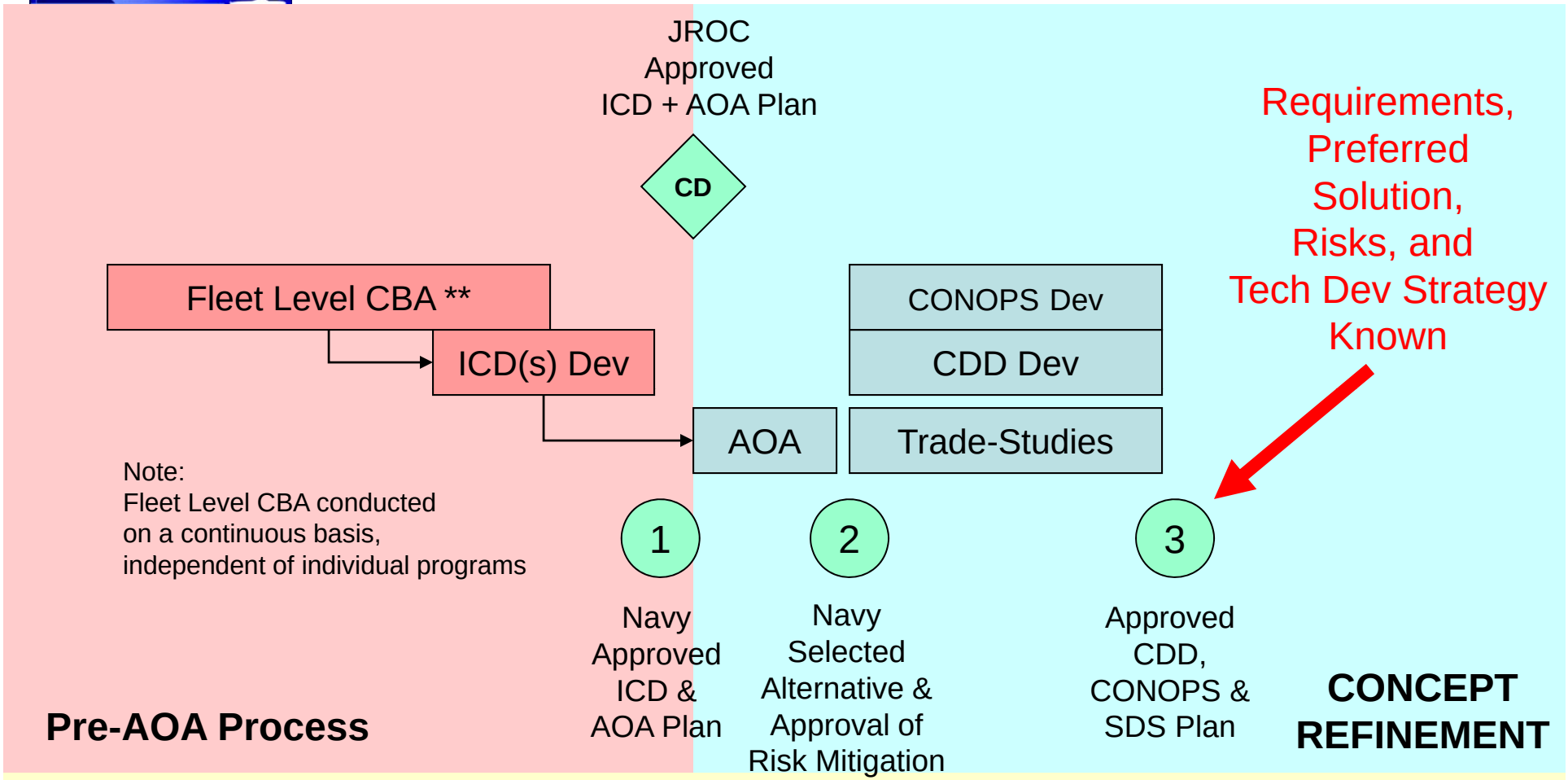


AOA	Analysis of Alternatives	IBR	Integrated Baseline Review
ASN(RD&A)	Asst Secretary of the Navy (Research, Development and Acquisition)		
CBA	Capabilities-Based Assessment	ICD	Initial Capabilities Document
CD	Concept Decision	JROC	Joint Requirements Oversight Council
CDD	Capability Development Document	PEO	Program Executive Officer
CMC	Commandant of the Marine Corps	RFP	Request for Proposal
CNO	Chief of Naval Operations	SDD	System Development & Demonstration
CONOPS	Concept of Operations	SDS	System Design Specification
CSB	Configuration Steering Board	SSAC	Source Selection Advisory Council
HQMC	Headquarters Marine Corps		

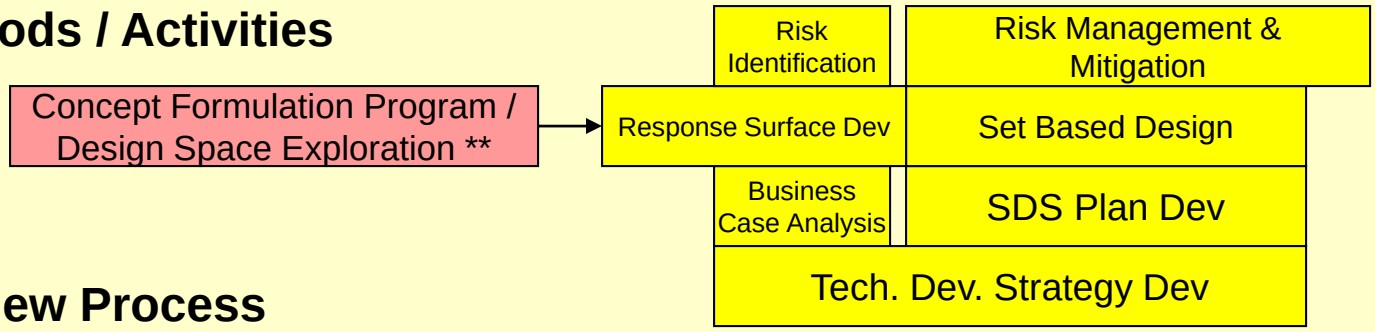
REQUIREMENTS - design → requirements - DESIGN

AOA = Analysis of Alternatives	PD = Preliminary Design
CD = Contract Design	DD&C = Detail Design and Construction

Proposed Implementation of SECNAVINST 5000.2D
PASS 1: SYSCOM LEAD

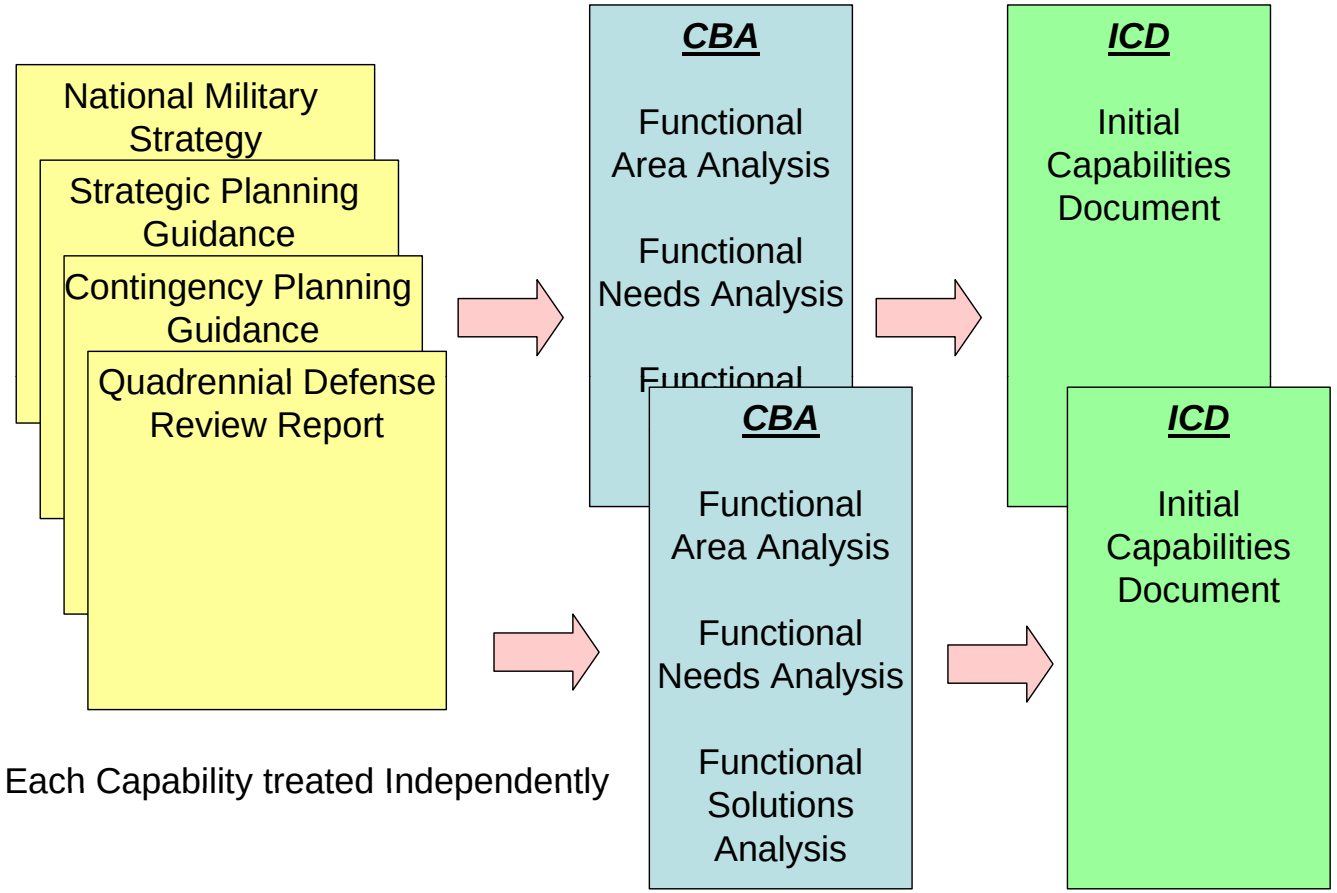


Methods / Activities



**** New Process**

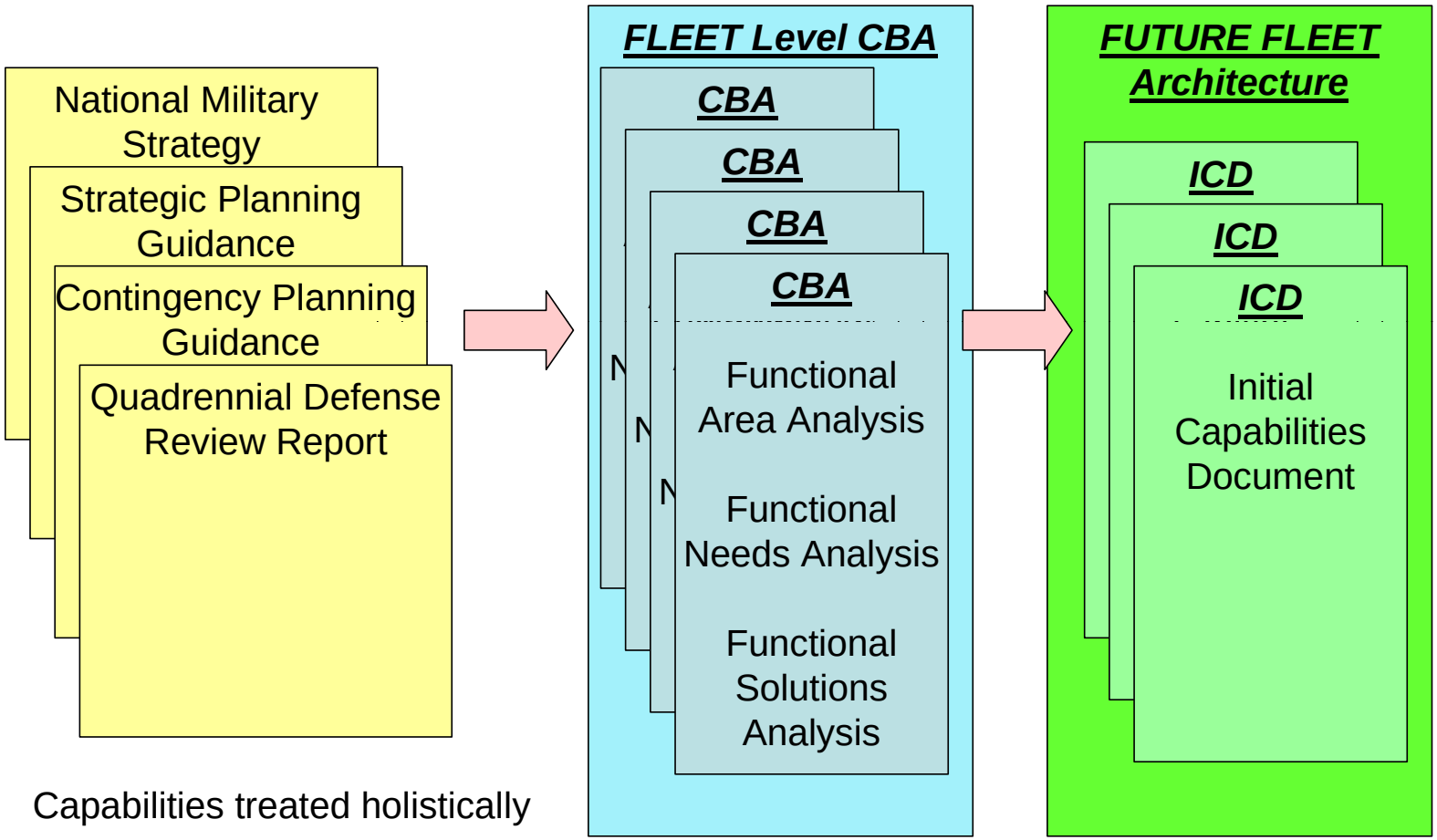
Current Pre-AOA Process



FLEET DESIGNED ONE AOA AT A TIME

Note: Most Recent JCIDS instruction (March 2009) eliminates the terms FAA, FNA, and FSA

Proposed Process



Capabilities treated holistically

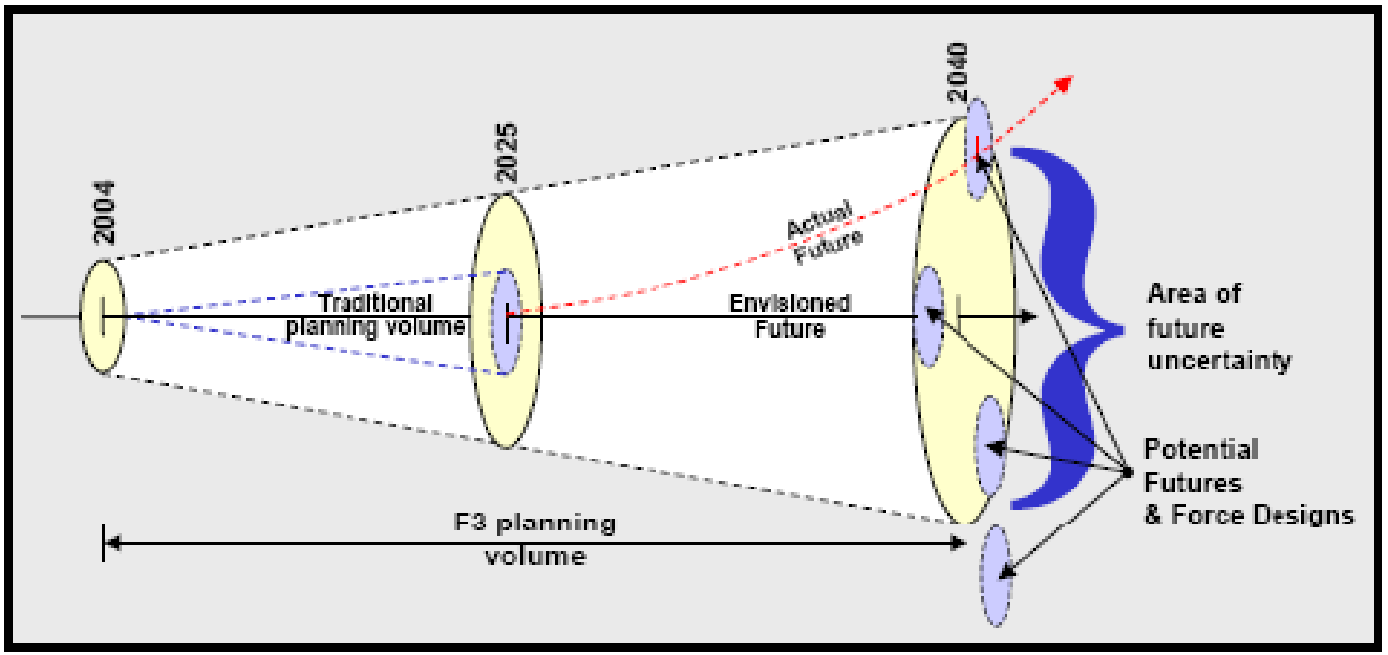
Note: Most Recent JCIDS instruction (March 2009) eliminates the terms FAA, FNA, and FSA

CBA Time Horizons

- Long Range Planning: 15 to 40 years in the future
  - Use methods such as Future Force Formulation
  - Input to 30-year shipbuilding plan
  - Provide Science & Technology / Discovery & Invention guidance
  - Recommend Modernization and Service Life Extensions (SLEP)
- Mid Term Planning: FYDP to 15 years in the future
  - Produce ICDs to enter the Acquisition Process
  - Input to 30-year shipbuilding plan
  - Inform technology development roadmaps
- Near Term Planning: within FYDP
  - Concentrates on the number of ships/aircraft/systems to acquire, modernize, and retire from service to meet affordability goals while best meeting Navy and Joint Force Operational Requirements.

FYDP = Future Year Defense Plan -> 5 to 6 years

Long Range Planning



- Future is hard to predict
- Analyze multiple futures
  - Identify common solution elements
  - Identify when one has to decide on which future to prepare for
- Develop Draft ICDs for elements of proposed fleets

Mid Term Planning

- FYDP to 15 years in the future
- Alternate Futures necked down to one
- Analysis uses physics based models
- Trade Industrial Base, Cost, Capability, and CONOPS to optimize Navy Capability
- Develop ICDs to enter acquisition.
- Fund work to “get ready” for acquisition
  - Risk Reduction
  - Technology Transition
  - Tool Development

Table 3. Navy FY2009 30-Year Shipbuilding Plan
(including FY2009-FY2013 FYDP)

FY	Ship type (see key below)										
	CVN	SC	LCS	SSN	SSGN	SSBN	AWS	CLF	MPF (F)	Supt	TOTAL
09		1	2	1				1	1	1	7
10		1	3	1					2	1	8
11		2	3	2						1	8
12	1	1	4	2					2	2	12
13		2	6	2					1	1	12
14		1	6	2					2	2	13
15		2	6	2					1	2	13
16	1	2	6	2			1				12
17		2	6	2			1			1	12
18		2	6	2			1	1		1	13
19		2	4	2		1				1	10
20		2		2			2	2		2	10
21	1	2		2				2			7
22		2		2		1	1	2		2	10
23		1		2			1	2		3	9
24		2		2		1	1	2		2	10
25	1	3		2		1		2		2	11
26		3		2		1	2	2			10
27		3		2		1					6
28		3		2		1	1				7
29	1	3		1		1	1	1		1	9
30		3		2		1	1			1	8
31		3		1		1		1		1	7
32		3	1	2		1	2	1		1	11
33		3		1		1		1		1	7
34	1	3	2	2			1			1	10
35		3	5	1			1			1	11
36		3	5	2			1				11
37		3	5	1							9
38	1	3	5	2			2				13

Source: *Report to Congress on Annual Long-Range Plan for Construction of Naval Vessels for FY 2009.*

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Short Term Planning

- Optimize fleet with the Future Year Defense Plan
- Force Structure Dominated by ships and systems that already exist
- Generally dealing with determining the number of ships/systems to acquire, modernize, and retire to produce best capability within cost constraints.

(Ships funded in FY2007 and FY2008 shown for reference)

	FY07	*FY08*	FY09	FY10	FY11	FY12	FY13	Total FY09-FY13
CVN-21		*1*				1		1
SSN-774	*1*	*1*	1	1	2	2	2	8
DDG-1000	*2*[a]	*0*[a]	1	1	1	1	1	5
CG(X)					1		1	2
LCS	*0*[b]	*1*	2	3	3	4	6	18
LPD-17		*1*						0
LHA(R)	*1*							0
TAKE	*1*	*0*[c]	2[c]					2
JCC(X)						1		1
TATF								0
JHSV[d]			1	1	1	1	1	5
MPF(F) TAKE								0
MPF(F) LHA(R)				1				1
MPF(F) LMSR						1		1
MPF(F) MLP				1		1	1	3
Total	*5*	*4*[c]	7	8	8	12	12	47
Subtotal: ships other than LCSs	*5*	*3*	5	5	5	8	6	29

Source: Navy FY2009 budget submission.

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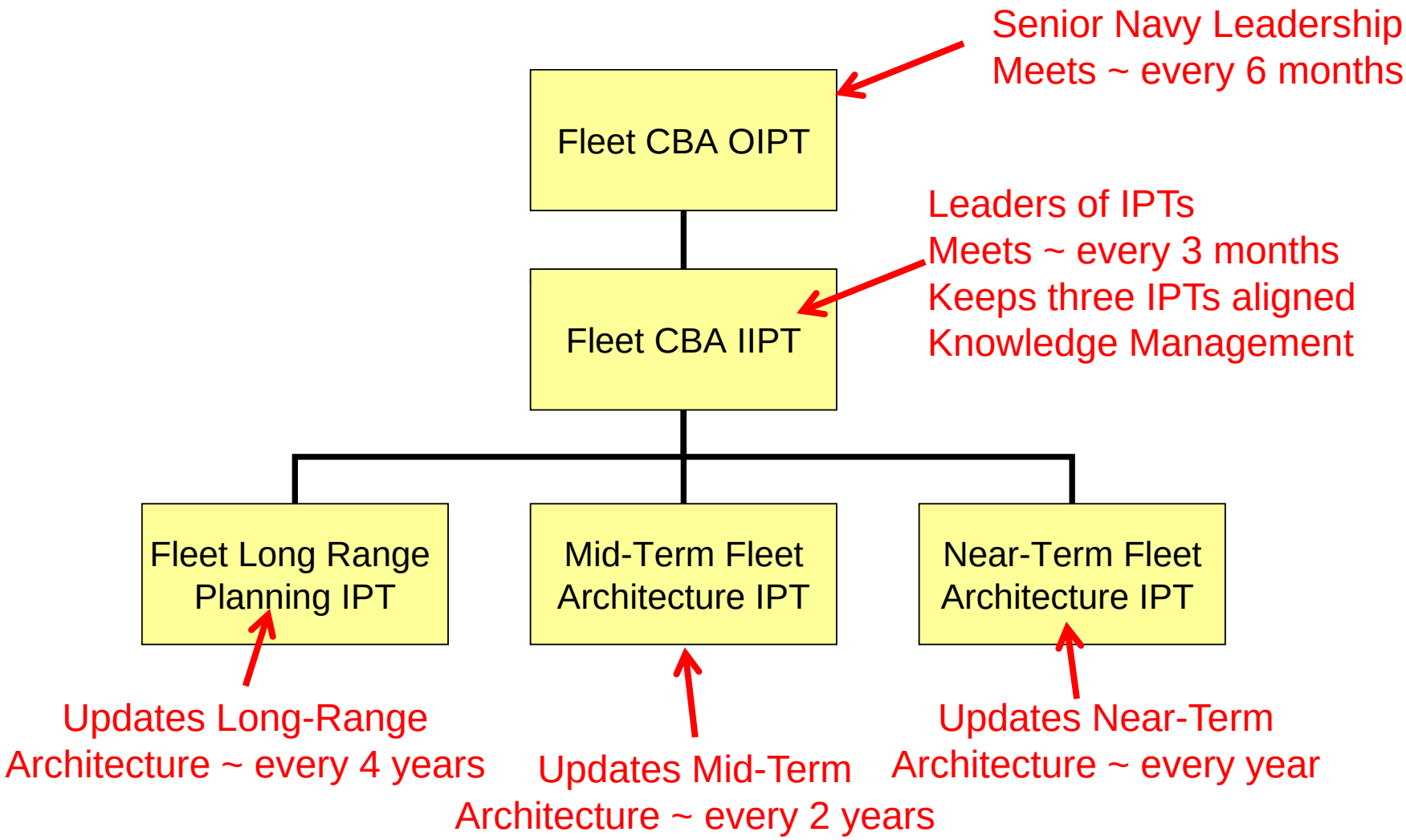
Fleet Level CBA Organizational Structure



Organizational Contributions

Operational Expertise
- Office of the Chief of Naval Operations (OPNAV)
- Fleet Representatives
- Naval Warfare Development Command (NWDC)
- Military Sealift Command (MSC)

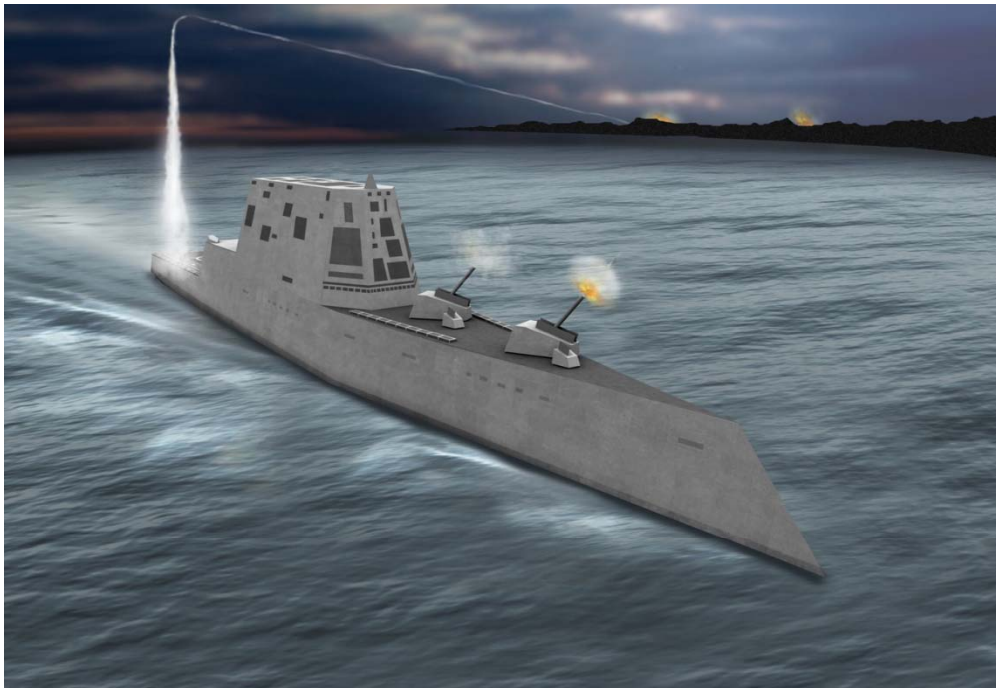
System Cost and Performance
- Naval Sea Systems Command (NAVSEA)
- Naval Air Systems Command (NAVAIR)
- Naval Facilities Command (NAVFAC)
- Space & Naval Warfare Systems Command (SPAWAR)
- Naval Surface Warfare Center (NSWC)
- Naval Undersea Warfare Center (NUWC)
- Navy Center for Cost Analysis (NCCA)

Operational Analysis
- OPNAV N81,
- Navy QDR Office
- Naval Postgraduate School (NPS)
- Naval War College (NWC)
- Center for Naval Analysis (CNA)
- Applied Physics Laboratory (APL)

Technology Development
- Office of Naval Research (ONR)
- Naval Research Laboratory (NRL)
- Naval Surface Warfare Center (NSWC)
- Naval Undersea Warfare Center (NUWC)
- DARPA
- UARCS

Summary

- A Fleet CBA provides a holistic fleet architecture to base investment decisions
- Three Time Horizons
  - Long Range
  - Mid Term
  - Near Term
- Development of these architectures need to involve the intellectual capability of the entire Navy.



QUESTIONS?