

## **Disruptive Technology Conference**

4 Sep 2008

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Joint Capability Integration and

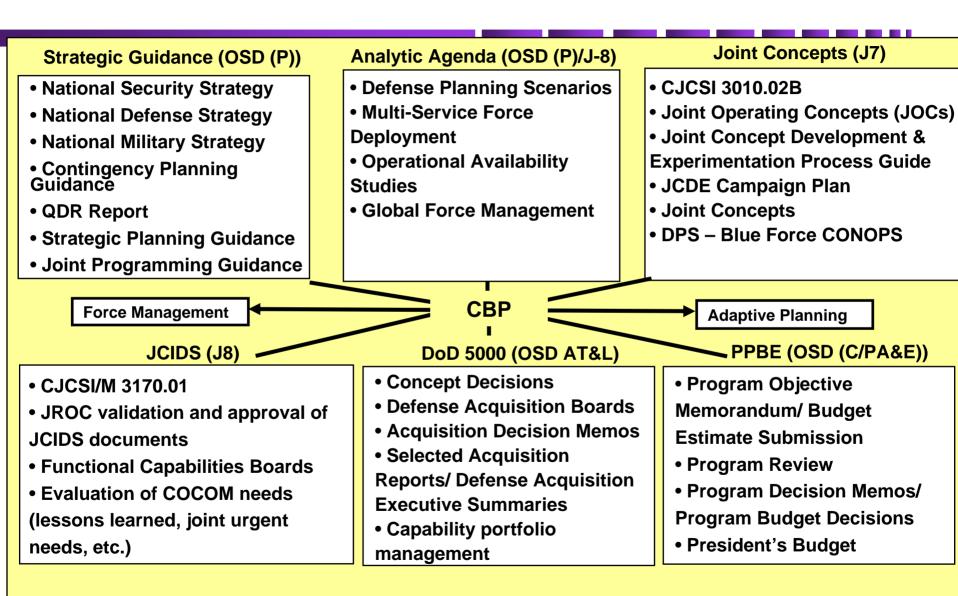
**Development System** 

- GOAL: Provide the Joint Force with the capabilities needed to perform across the range of military operations and challenges.
- Thru:
  - Integrated, collaborative review process.
  - Leveraged expertise of all government agencies.
  - Application of Joint Operating Concepts and integrated architectures.

<u>JCIDS</u> along with the <u>Defense Acquisition System</u> and the <u>Planning</u>, <u>Programming</u>, <u>Budgeting and Execution</u> processes form the principal DOD decision support processes for transforming the military forces to support the national military strategy and the defense strategy

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## Capabilities-Based Planning (CBP)



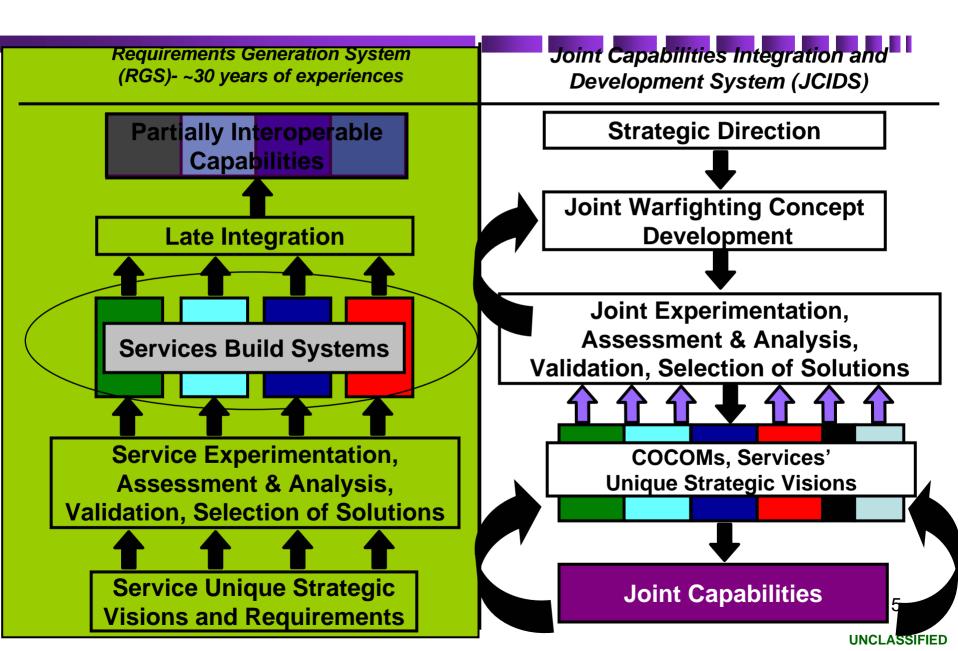
**Common Lexicon – Joint Capability Areas** 

# Joint Urgent Operational Needs

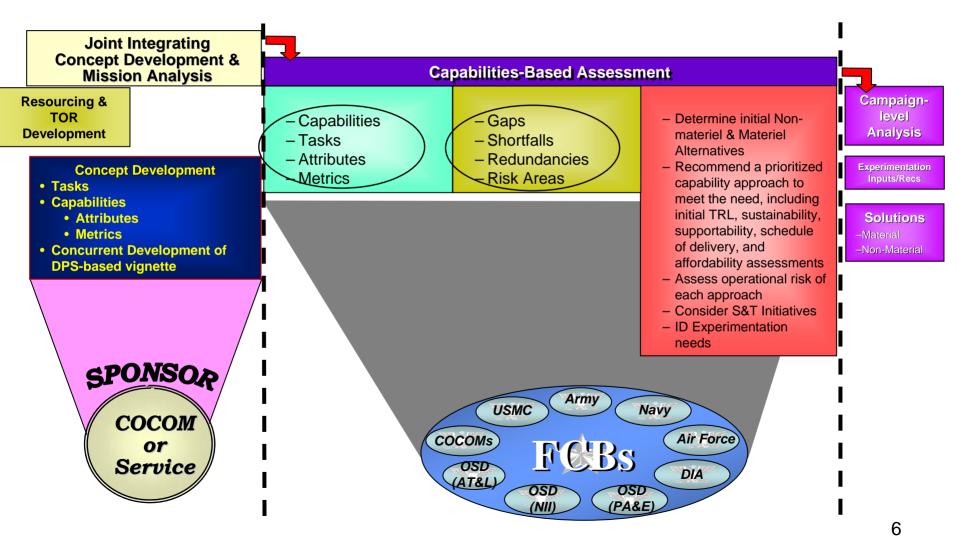
- Urgent Needs are worked through either the joint or Service processes
  - Joint Rapid Acquisition Cell (JRAC)
  - Combat MNS, Rapid Fielding Initiative, etc.
- If the solution is to become part of the formal inventory, appropriate JCIDS documentation and approvals are required
  - If further development or multiple increments are expected a CDD
  - If no development or COTS, a CPD

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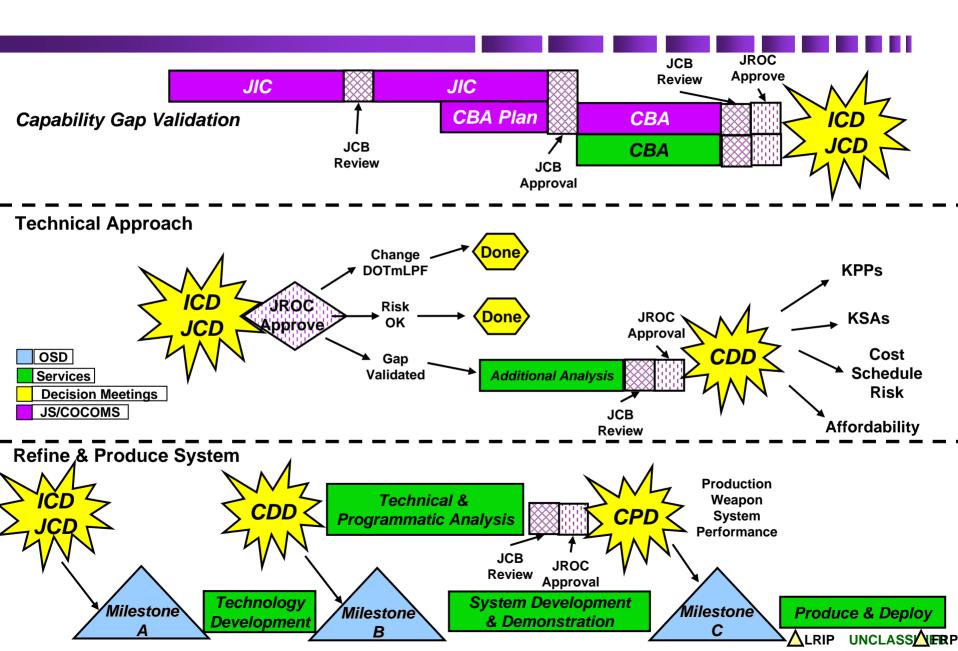
## Threat vs Capability Based Planning



## The JROC Capability-Based Assessment Process



## Capability Based Process and Acquisition

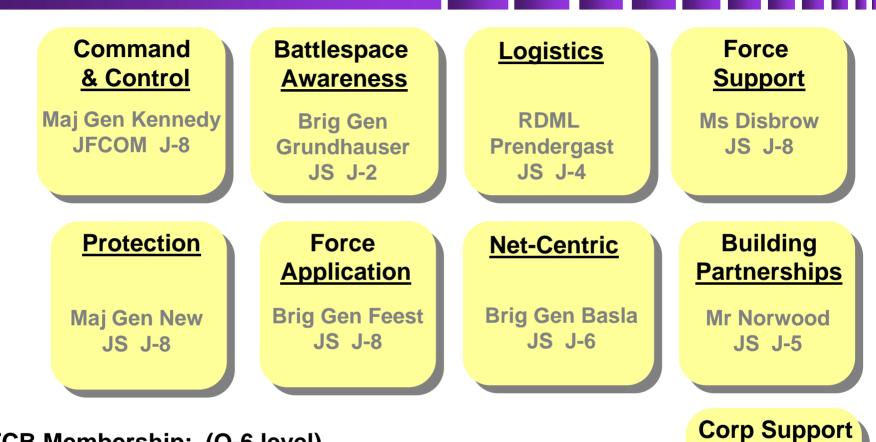


## **JCIDS Gatekeeper**

- Perform an initial review of all JCIDS proposals
- The Gatekeeper will determine:
  - Joint Potential Designator
    - JROC Interest
    - Joint Integration
    - Joint Information
    - Independent
  - Lead and supporting Functional Capabilities Boards

•Formal Staffing begins after Gatekeeper decisions

# **Functional Capability Boards**



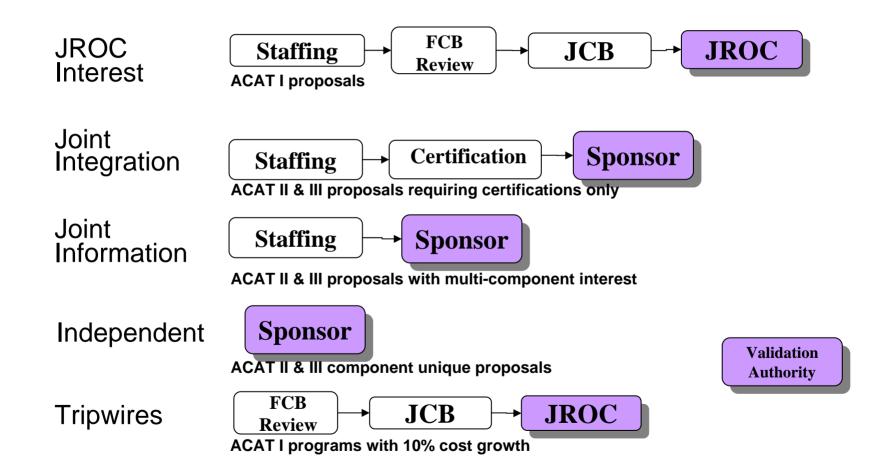
### FCB Membership: (O-6 level)

Services Combatant Command Reps OSD (AT&L) OSD (I) USecAF (Space) ASD NII/ DOD CIO D, PA&E DIA Rep (Threat) Mission Rqmts Board Exec Sec'y Other DoD Agencies as necessary <u>& Management</u> Maj Gen Goldfein VDJS

## JROC Organization

JROC DECISION CHAIN	JROC MEMBERSHIP	
FINAL DECISION AUTHORITY	Chair: VCJCS	
CJCS ADVICE TO SECDEF	Council Members:	
JROC RECOMMENDATION APPROVAL	<ul> <li>Vice Chief of Staff, Army</li> </ul>	
TOP LEVEL GUIDANCE	<ul> <li>Vice Chief of Naval Operations</li> </ul>	
JCB ISSUE DEVELOPMENT	<ul> <li>Vice Chief of Staff, Air Force</li> </ul>	
FCB INITIAL ISSUE REVIEW	<ul> <li>Assistant Commandant of the Marine Corps</li> </ul>	
FCBWG ANALYTIC FOUNDATION		
JROC: Joint Requirements Oversight Council JCB: Joint Capabilities Board FCB: Functional Capabilities Board	COCOMs have a standing invitation to attend all JROC sessions	
FCB WG: Functional Capabilities Board Working Group	10	

# JCIDS Tracks



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# Approved Changes to JCIDS



- JROCM 102-05 Safe weapons in a Joint Environment
- DDFP performs additional assessments on weapons used in Joint operating environments
  - Example: Army or SOF helicopters on Navy Carriers
- JROCM 120-05 Force Protection and Survivability KPPs Mandated by Congress
- $\langle \bullet$  JROCM 062-06 Changes to JCIDS
- JROCM 161-06 New Mandatory KPP for materiel availability (materiel reliability and ownership cost)
  - Selectively applied KPPs on training and energy efficiency
  - Proposed process for initially identifying applicable KPPs
- JROCM 163-06 New suspense and procedures for Comment Resolution
- JROCM 262-06 Cost Drivers, Technology Readiness, Interdependency
- JROCM 074-07 System Training KPP

Battlespace Awareness MTI

TRL 6

TRL 8

### **Program X**

N – no capability T – Threshold

24 mos

UNCLASSIFIED

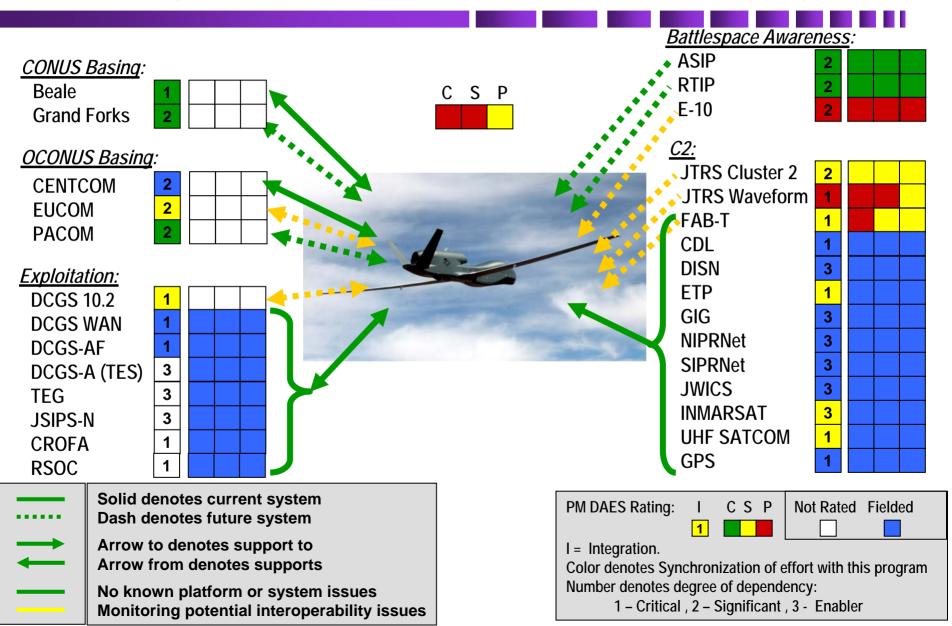
Baseline

**O** – Objective

<u>Top Cost Drivers</u>			KPP 1, Endurance	nce (KPPs & seled	<u>et KSAs)</u>
<ol> <li>Force Structure</li> <li>KPP BA SIGINT</li> <li>Electronic Protection</li> <li>KPP BA Optical</li> <li>C<sup>3</sup></li> </ol>	n	26.9% 9.0% 6.0% 4.8% 1.9%	KPP 2, World-wide KPP 3, Dynamic Crl KPP 4, Net Ready KPP 5, BA		
Tech Readiness Assessment		Acquisition Program Baseline (APB)			
lech Readiness A	Assessi	ment	Acquisition	Program Baselin	<u>ie (APB)</u>
Critical Technologies	ASSESSI To Date	<u>ment</u> Estimate @ IOT&E	Dec baseline	Program Baselin +10%	<u>+15%</u>
	То	Estimate @	Dec baseline Cost	+10%	
Critical Technologies	To Date	Estimate @ IOT&E	Dec baseline	-	+15%
Critical Technologies Endurance	To Date TRL 6	Estimate @ IOT&E TRL 8	Dec baseline Cost - PAUC	+10%	+15% 1 45%
Critical Technologies Endurance World-wide operations	To Date TRL 6 TRL 6	Estimate @ IOT&E TRL 8 TRL 6	Dec baseline Cost	+10%	+15%
Critical Technologies Endurance World-wide operations Dynamic Control	To Date TRL 6 TRL 6 TRL 6	Estimate @ IOT&E TRL 8 TRL 6 TRL 8	Dec baseline Cost - PAUC - APUC	+10% Baseline	+15% 1 45%
Critical Technologies Endurance World-wide operations Dynamic Control Net Ready	To Date TRL 6 TRL 6 TRL 6 TRL 5	Estimate @ IOT&E TRL 8 TRL 6 TRL 8 TRL 8 TRL 6	Dec baseline Cost - PAUC - APUC Schedule - IOC	+10% Baseline Baseline +6 mos	+15% 45% 57% +9 mos
Critical Technologies Endurance World-wide operations Dynamic Control Net Ready Battlespace Awareness EO	To Date TRL 6 TRL 6 TRL 6 TRL 5 TRL 5 TRL 6	Estimate @ IOT&E TRL 8 TRL 6 TRL 8 TRL 8 TRL 6 TRL 8	Dec baseline Cost - PAUC - APUC Schedule - IOC	+10% Baseline Baseline	+15% 45% 57% +9 mos

## Interrelationships, Dependencies and

Synchronization with Complementary Systems





# Potential Changes to JCIDS

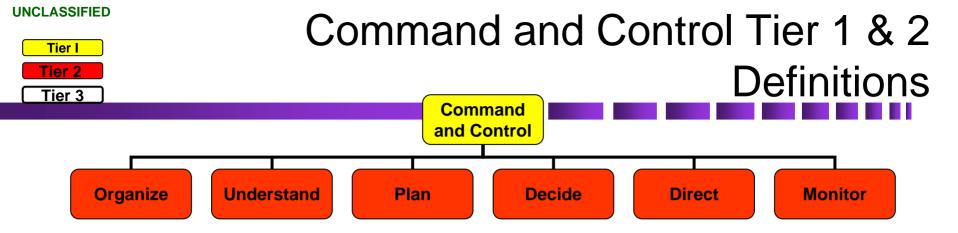
- New JPD JCB Interest
  - Take ACAT II and below off JROC oversight
- New guidance on CBAs
  - Less analytic rigor needed based on scope of capability
  - Potentially eliminate analysis of materiel alternatives
  - Combine JCD and ICD
- Restructure overall document
  - CJCSI very brief high level policy
  - Convert CJCSM to a web-based J-8 guide
    - Easier to update
    - Easier for sponsors to get formats for documents and briefs

# JCID Summary

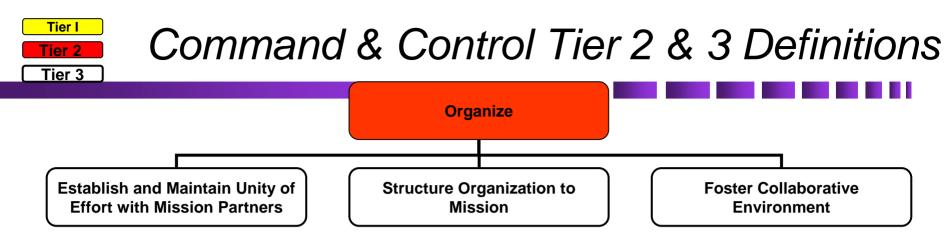
- JCIDS was implemented as a 70% solution
  - Issues with the JCIDS process are resolved as identified
- Provides an enhanced methodology to identify and describe capabilities gaps and redundancies
- Helps to prioritize capability proposals
- Facilitates joint review of capability proposals independent of ACAT (Acquisition Category)
- Engages the acquisition community early
- Improves the identification of non-material alternatives
- Improves collaboration with other departments and agencies

Continuous improvement Support Flexibility and Agility Maintain Relevance

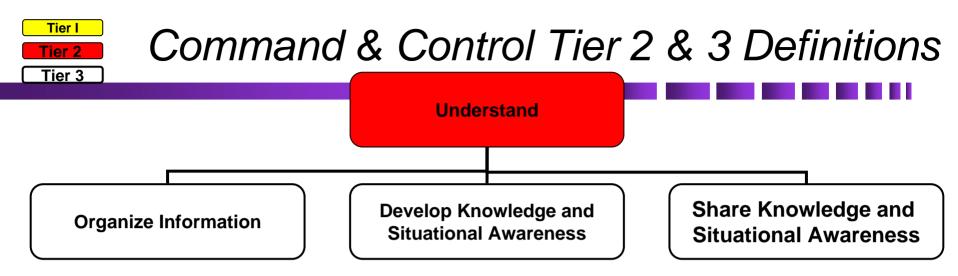
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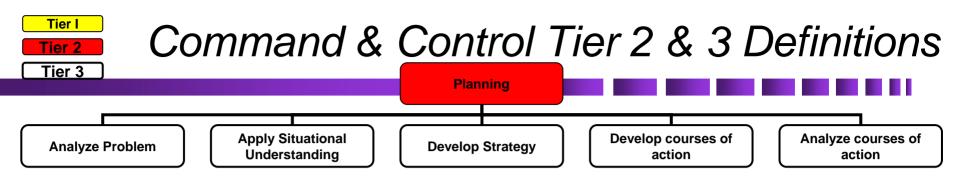
- <u>Tier 1 Command and Control:</u>
  - The ability to exercise authority and direction by a properly designated commander or decision maker over assigned and attached forces and resources in the accomplishment of the mission.
- <u>Tier 2 Organize:</u>
  - The ability to align or synchronize interdependent and disparate entities, including their associated processes and capabilities to achieve unity of effort.
- <u>Tier 2 Understand:</u>
  - The ability to individually and collectively comprehend the implications of the character, nature, or subtleties of information about the environment and situation to aid decision-making.
- <u>Tier 2 Planning:</u>
  - The ability to establish a framework to employ resources to achieve a desired outcome or effect.
- Tier 2 Decide:
  - The ability to select a course of action informed and influenced by the understanding of the environment or a given situation.
- <u>Tier 2 Direct:</u>
  - The ability to employ resources to achieve an objective.
- Tier 2: Monitor:
  - The ability to adequately observe and assess events/effects of a decision.



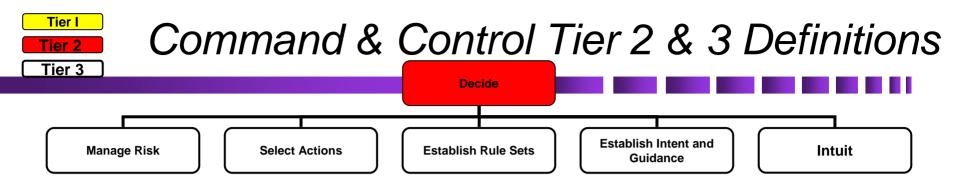
- <u>Tier 2: Organize</u> The ability to align or synchronize interdependent and disparate entities, including their associated processes and capabilities to achieve unity of effort..
  - <u>Tier 3: Establish and Maintain Unity of Effort with Mission Partners</u> The ability to foster and maintain cooperative relations with mission partners.
  - <u>Tier 3: Structure Organization to Mission</u> The ability to dynamically organize elements and define roles, responsibilities, and authorities.
  - <u>Tier 3: Foster Organizational Collaboration</u> The ability to establish internal structures and processes, and external interfaces that facilitate interaction and coordination.



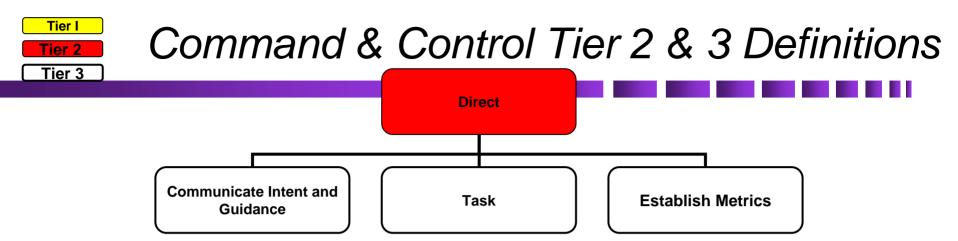
- <u>Tier 2: Understand</u> The ability to individually and collectively comprehend the implications of the character, nature, or subtleties of information about the environment and situation to aid decision-making.
  - <u>Tier 3: Organize Information</u> The ability to discover, select, and distill information within an established context.
  - <u>Tier 3: Develop Knowledge</u> The ability to apply context, experience, and intuition to data and information to derive meaning and value. (Derived from NCE JFC)
  - <u>Tier 3: Share Knowledge</u> The ability to communicate synthesized information and context. (Derived from NCOE JIC)



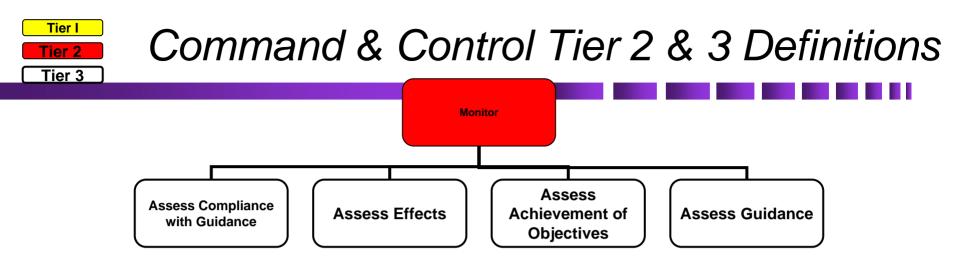
- <u>Tier 2: Planning</u> The ability to establish a framework to employ resources to achieve a desired outcome or effect.
  - <u>Tier 3: Analyze Problem</u> The ability to review and examine all available information to determine necessary actions.
  - <u>Tier 3: Apply Situational Understanding</u> The ability to use synthesized information and awareness applicable to a given situation or environment to further understand the problem.
  - <u>Tier 3: Develop Strategy</u> The ability to create a framework that synchronizes and integrates the resources available to achieve a desired outcome or effect.
  - <u>Tier 3: Develop courses of action</u> The ability to build and refine sequences of activities to achieve a desired outcome or effect.
  - <u>Tier 3: Analyze courses of action</u> The ability to evaluate potential solutions to determine likelihood of success.



- <u>Tier 2: Decide</u> The ability to select a course of action informed and influenced by the understanding of the environment or a given situation.
  - <u>Tier 3: Manage Risk</u> The ability to recognize and balance the likelihood and consequences of undesired effects with the desired outcomes/effects.
  - <u>Tier 3: Select Actions</u> The ability to choose a prudent idea or set of ideas that leads to a desired outcome or end-state within a defined set of constraints.
  - <u>Tier 3: Establish Rule Sets</u> The ability to construct directives that delineate circumstances and limitations for actions.
  - <u>Tier 3: Establish Intent and Guidance</u> The ability to construct directives that delineate circumstances and limitations for actions.
  - <u>Tier 3: Intuit</u> The ability to make instinctive assessments and preemptive decisions to adjust to and/or shape change.



- <u>Tier 2: Direct</u> The ability to employ resources to achieve an objective.
  - <u>Tier 3: Communicate Intent and Guidance</u> The ability to promulgate a concise expression of the operational purpose, assessment of acceptable operational risk, and guidance to achieve the desired end state.
  - <u>Tier 3: Task</u> The ability to direct actions and resources.
  - <u>Tier 3: Establish Metrics</u> The ability to establish objective criteria to assess performance and results.



- <u>Tier 2: Monitor</u> The ability to adequately observe and assess events/effects of a decision.
  - <u>Tier 3: Assess Compliance with Guidance</u> The ability to determine if performance adheres to established parameters and expectations.
  - <u>Tier 3: Assess Effects</u> The ability to analyze, track, and measure the results of actions taken.
  - <u>Tier 3: Assess Achievement of Objectives</u> The ability to determine when the desired end-state has been reached.
  - <u>Tier 3: Assess Guidance</u> The ability to determine if direction is achieving the desired end-state and is appropriate for the situation.

# Potential Disruptive Technology Support

- Improved collaborative planning tools to provide decision makers with relevant information and intelligence
- Common, standard lexicon among DOD, interagencies and allied/coalition members
- Improved agility to quickly and effectively organize, staff and establish command relationships