

Integrity - Service - Excellence



Continuous Capability Planning (CCP) to AFA Technology Symposium

Mr. Randy Brown
AFMC A2/5



Technology Themes – CCP Objectives

SYMPOSIUM THEMES:

- **Persist in aligning tech investments to AF needs**
 - **AF needs to id needs across all time horizons**
 - **Industry requires insight into known and emerging needs**
- **Tight budgets require even tighter communication**

CCP OBJECTIVES:

- **Influence emerging requirements**
 - **Based in part on realm-of-possible (technology)**
- **Launch high confidence programs - decreasing churn**
 - **Use Total Obligation Authority for ‘programmed’ efforts**



AF Smart Operations 21



Funding Our Priorities

“We will fund transformation through ... **organizational efficiencies, process efficiencies, reduction of legacy systems and manpower** while sustaining GWOT and ongoing operations in support of the Joint Fight.”

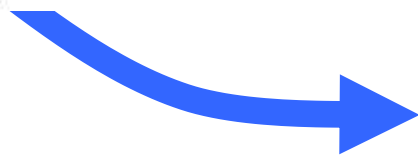


- Michael W. Wynne, SE CAF

AF Smart Ops 21



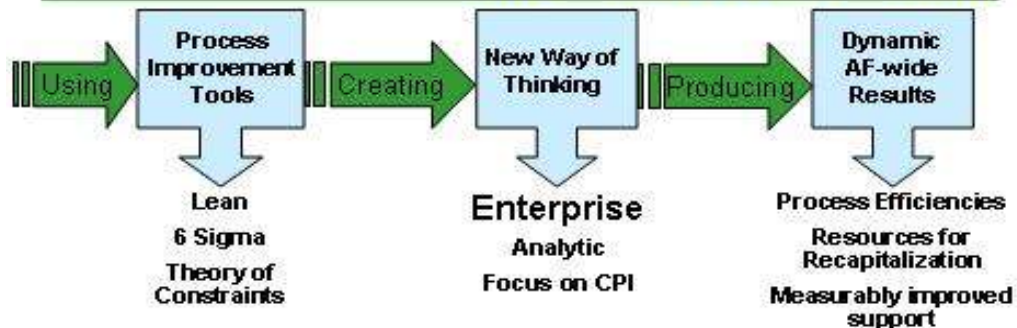
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ENTERPRISE FOCUS!!

Air Force Smart Ops 21 =

AF **S** **O** **21**
Who How Where When



Integrity - Service - Excellence

47



D&SWS Sub-Processes

***Sub-Process Owners,* Co-Leads, Design Team Leads**

Governance

Institutionalize Standard Work

TBA

Mr. Ralph DiCicco
Col Ken Moran

DTL: Mr. Jeffrey Thurston

Oversight / Command & Control

Brig Gen Janet Wolfenbarger

Mr. Jeffery Shelton
Ms. Debra Walker
Brig Gen Tom Smoot (Advisor)

DTL: Mr. Rob Pollock

Core

Technology Development

Ms. Judy Stokley

Mr. Terry Jagers
Maj Gen Curtis Bedke

DTL: Dr. Kenneth Barker

Continuous Capability Planning

Mr. Randy Brown

Maj Gen Stephen Mueller
Brig Gen Susan Mashiko

DTL: Ms. Donna Milam

Life Cycle Management

Lt Gen Ted Bowlds

Ms. Diane Wright
Maj Gen Loren Reno

DTL: Col Kevin Keck

Enabling

Test and Evaluation

Mr. Dave Bond

Maj Gen Steve Sargeant
Brig Gen Joseph Lanni

DTL: Mr. Elmer Standridge

Supply Chain Operations

Mr. Grover Dunn

TBA
Ms. Chris Puckett

DTL: Ms. Terry Brinston

Sourcing

Mr. Michael Gill

Mr. Scott Correll

DTL: Ms. Edith Ryan

DTL = Design Team Lead



Current Environment

■ AF Level Issue:

- Major Defense Acquisition Programs – cost growth and schedule delays

■ Effect of Issue:

- Life Cycle Management impact – New capabilities delayed, legacy capabilities remain longer, impacts investment and sustainment funding plans – fewer dollars for other AF priorities

■ Recent (last 10 years) initiatives – limited impact on issue:

- Broad capability planning construct (JCIDS, CRRRA) & systems architecting
- After the fact capability integration by General Officer forums

JCIDS: Joint Capabilities Integration & Development System

CRRRA: Capability Review & Risk Assessment



Current Environment (cont.)

■ Root Causes:

- **Early, structured planning (capability to systems) not occurring; directed solutions**
 - **Operational and acquisition concepts not fully developed before program launch**
 - **Some planning forced to be done in development**
 - **More cost & churn with standing army (government and industry)**
- **Unprioritized needs lead to suboptimized investments**
- **Requirements by program – plan by program – budget by program – manage by program**
 - **Virtually no integrated capability requirements/planning**
 - **With allocation to programs for execution**
 - **Need to define/validate integrated systems meet capability gaps**



CCP Approach

- **Ensure decision makers have necessary information throughout life cycle**
 - **Early materiel commands' engagement with customers**
 - **Ensure systems being developed & deployed answer capability gaps**
- **Provide off-ramps for concepts/technology/systems that are not mature**
- **Align gap/planning assumptions & environments with MAJCOMs, AF, & DoD**
- **Align planning with investments and execution**
 - **Engage industry & labs early in capability/development planning process**
 - **Ensure efficient use of R&D investment – leverage R&D community**
- **Establish consistent and repeatable planning processes/products – create the tools, processes and influence the culture to move to standard work**
 - **Requires consistent life-cycle supporting processes (e.g. cost estimating...)**
 - **Rethink the way we currently plan and execute programs – including System of Systems**
- **Address process, organization then funding**

Launch High Confidence Programs -- Stop the Churn



To Date

■ CCP Recommendations:

- Materiel Single Entry Point
- Methodology to Support Rqmts Dev
- Means to Vet and Integrate Studies/Findings



■ Rqmts Analysis & Maturation (RAM) Implementation:

- Established Single Entry Point (A5C)
- Provide Methodology for Support
- Establishing Governance Structure

Air Force
RAM
Strategic
Plan




RAM Governance Structure

RAM Council
(Strategic)


Co-Chair
AFMC/CV, AFSPC/CV

Membership
SAF/AQ (deputy),
SAF/US (deputy),
MAJCOM/CVs/CAs,
AF/A2, AF/A3/5, AF/A4/7, AF/A8, AF/A9

Frequency
Annually

RAM Board
(Operational)


Co-Chair
AFMC/A2/5, AFSPC/A5

Membership
MAJCOM A2/4/5/8/9,
Materiel Centers, AFRL,
AF/A2R, AF/TE, AF/A4R, AF/A5R,
AF/A5X, AF/A8X, AF/A9R,
SAF/AQR, SAF/AQX, SAF/US(D) (3-ltr)

Frequency
Semi-Annually

RAM Working Group
(Tactical)


Co-Chair
AFMC/A5C, AFSPC/A5X

Membership O-6 level
MAJCOM A2/4/5/8/9,
Materiel Centers, AFRL,
A5RD, AF/A5XC,
AF/A4RM, AF/A8XC, SAF/AQRE,
SAF/AQXR

Frequency
Monthly

- ILCM/EF and CORONA (as necessary) -



Result – Focused Collaborative Planning



**1 year before F-4D 1st Flight (Apr '56)
Planning began for the F-15**



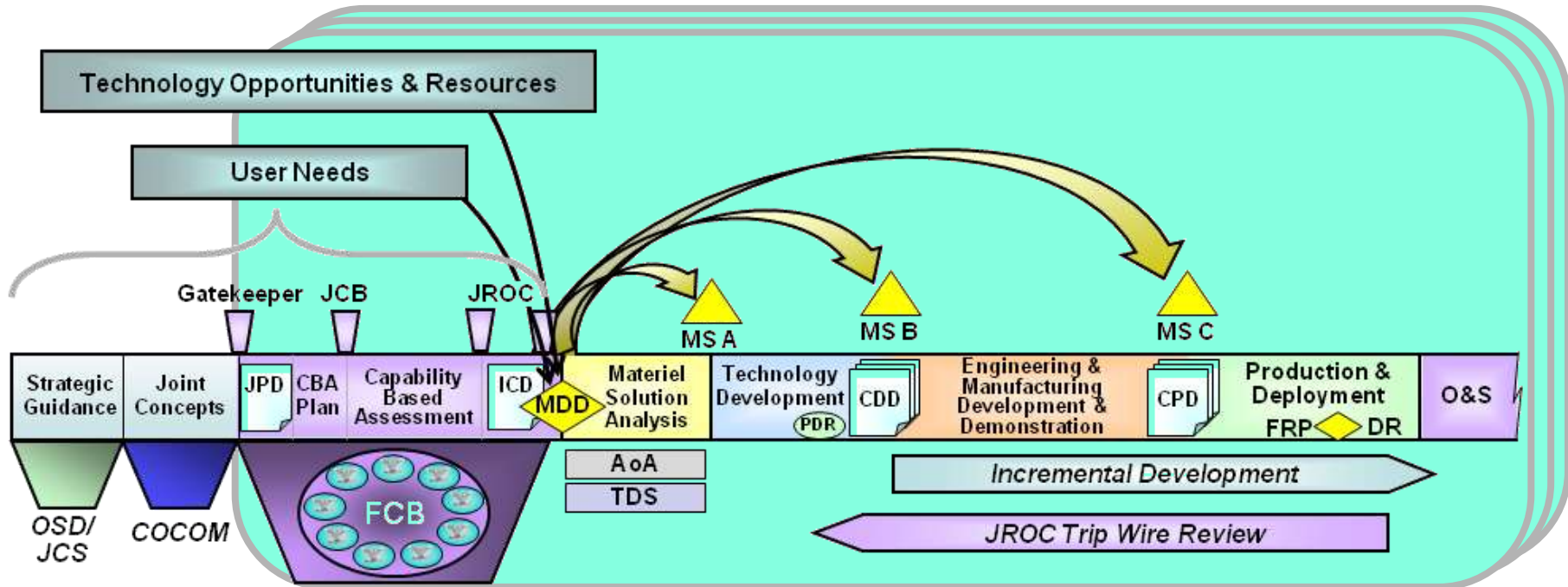
**3 years before F-15A 1st Flight (Jul '72)
Planning began for the F-22**



**6 years ago F-22 1st Flight...('02)
We are behind the curve**



Focused Collaborative Planning



Concept Design & Early Trades

Alternatives & Tech Trades

Concept Refinement

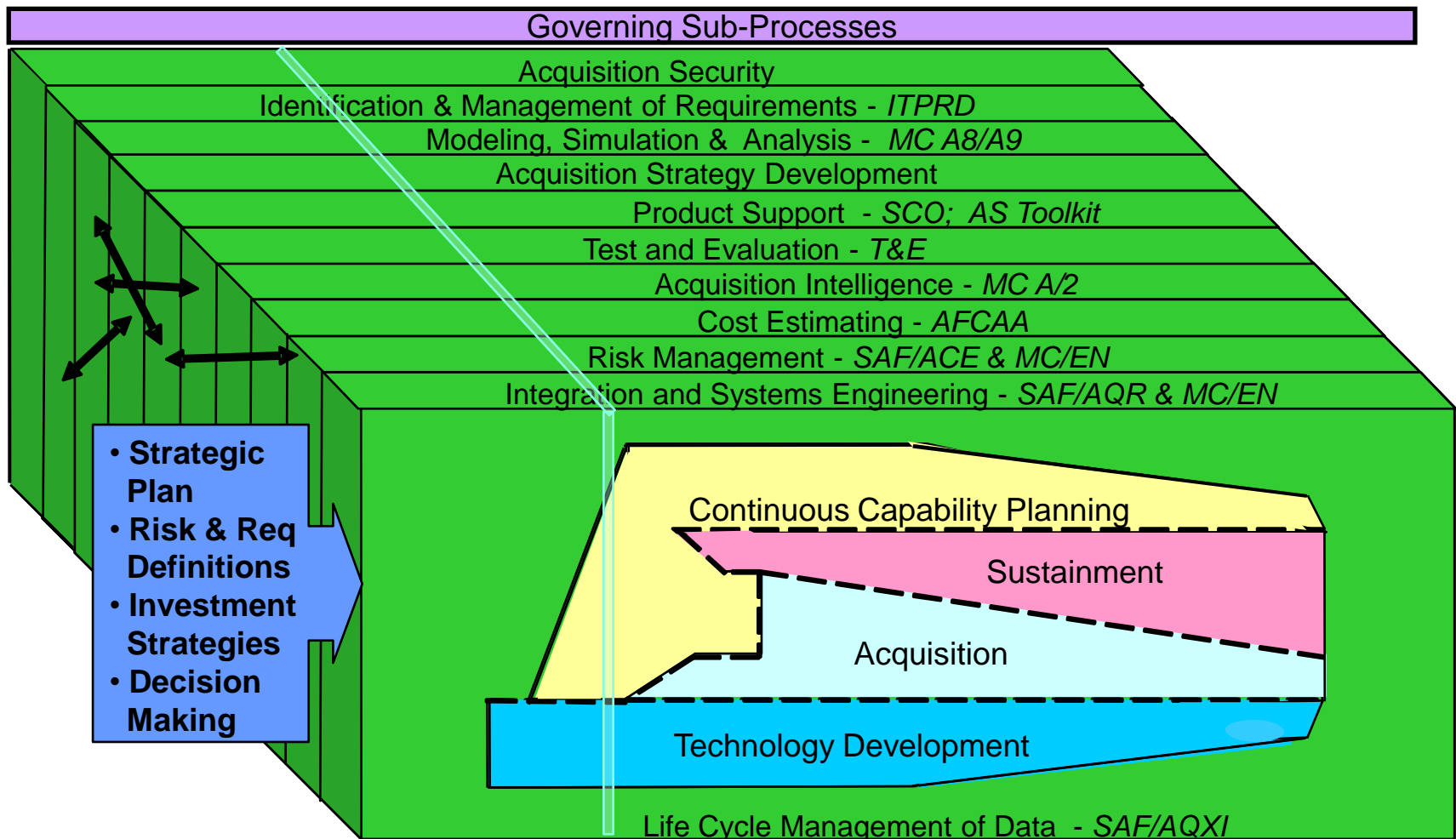
Design Trades

Capability Integration & Validation

Acq Intel, Security, Risk, Cost, Sys Engr'g, Knowledge Mgmt



Focused Collaborative Planning Requires..... Standard Processes/Work

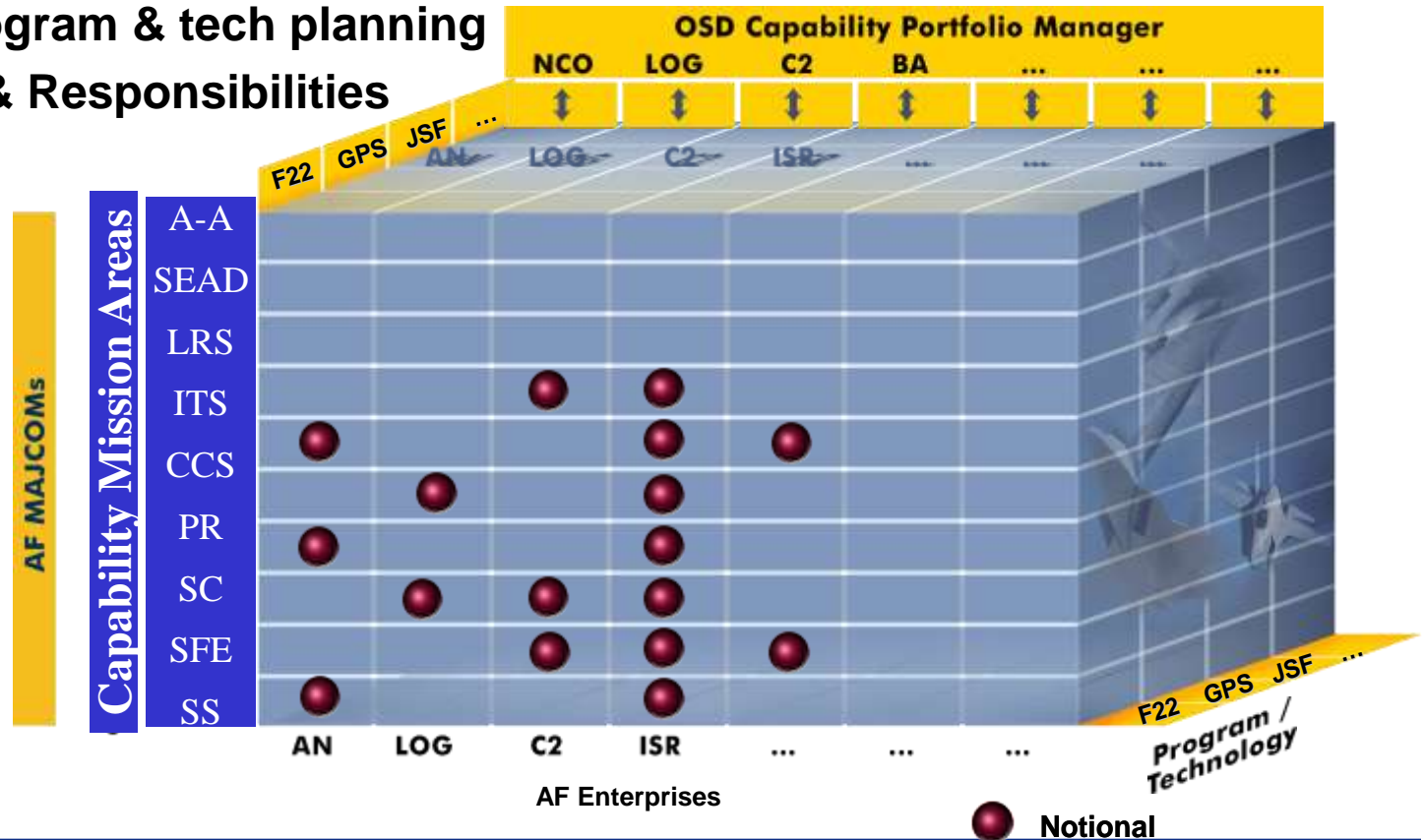


MC: Materiel Commands (AFMC & AFSPC)
ITPRD: Informed Time-Phased Requirements Development
AS: Acquisition Sustainment
SCO: Supply Chain Operations



Focused Collaborative Planning Requires..... Construct that is Responsive to Customer

- Encourages routine and proactive dialogue with customer
- Supports AF planning and programming framework
- Defines corporate and infrastructure plans
- Supports proactive cross-domain assessments/implications
- Supports program & tech planning
- Clear Roles & Responsibilities





Focused Collaborative Planning Requires..... Partnership with Industry/Academia

In work – but current thoughts....open to suggestions

- **Evolve existing forums to broaden communication of needs**
 - **Industry Days – to inform industry investments**
 - **AF IRAD Technology Exchange – for industry to respond to needs**
- **Consistent Analytic Framework – models, tools as appropriate**
 - **Common means of assessing trades**
 - **Neutral Environment for non-peer assessments**
 - **Modeling Simulation and Analysis Team working**
- **Consistent definition and application of key terms:**
 - **Risk (CCP-1-10)**
 - **Technology Readiness Levels (TRL)**
 - **Manufacturing Readiness Levels (MRL)**
 - **Technology Risk ID – Integration &ilities (TD-1-12)**



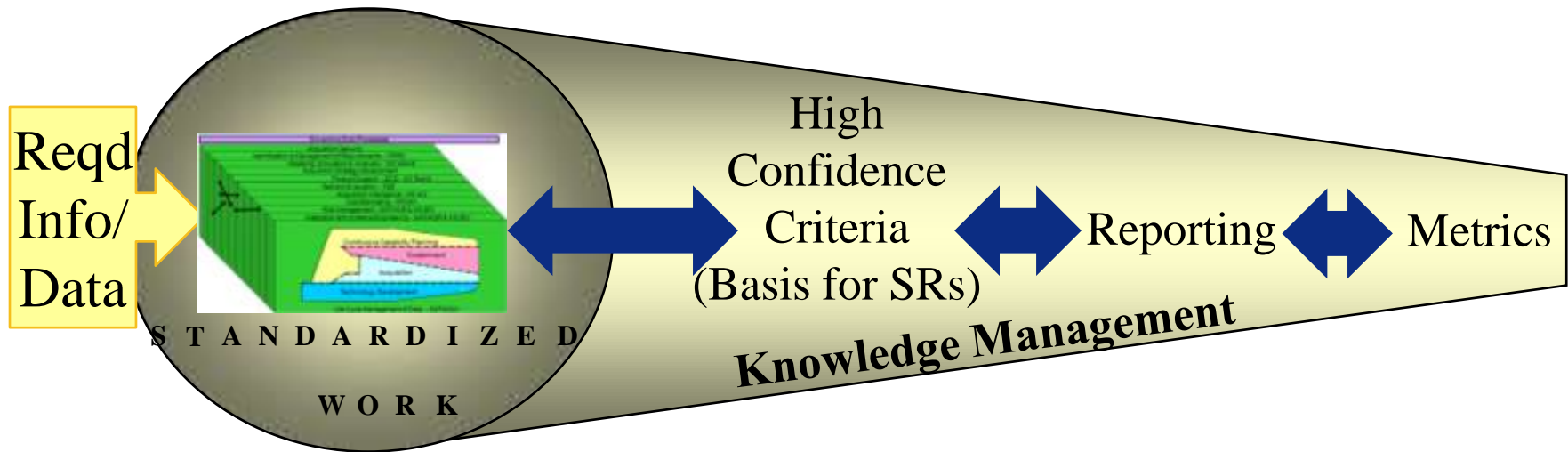
Focused Collaborative Planning Results in.....

Aligned planning and investments

- **AF wide prioritization construct for RAM – provides buy-in, focusing mechanism**
 - Strategic Alignment
 - Requirements Generation
 - RAM inform Technology Opportunities
- **AF wide analytic construct allows for consistent assessments – consistent impacts and AF priorities**
 - Planning
 - Need Assessment
 - Programming



Focused Collaborative Planning Results in..... Decision Makers having Right Info



KNOWLEDGE-BASED MANAGEMENT ENVIRONMENT

- Develop & deliver consistent, repeatable products
- Ensures an environment as authoritative source of decision quality information

SR: Sufficiency Review



Focused Collaborative Planning Results In..... Repeatable, Pedigreed Decisions

■ **Capability Based Decisions:**

- **Informed, Achievable, Evaluatable Requirements**
- **Defined integrated System-of-systems environments (acq intel, security)**
- **Integrated System-of-systems trades and options (cost, risk)**
- **State-of-the-art, realm of the possible options (technology)**
- **Alignment to warfighting capability needs**
- **Validated/Verified system and capability delivery**

■ **Consistent priorities across the AF investment portfolio**

- **Consistent analytic environment for planning, programming and execution**



Way Ahead

- Move to standard work and training
- Align planning, investments and execution
- Define measures that demonstrate value to warfighter
- Iterative process – continue to reengineer – not just react
 - Standardize, train, equip, measure, improve, repeat

Launch High Confidence Programs -- Stop the Churn



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