

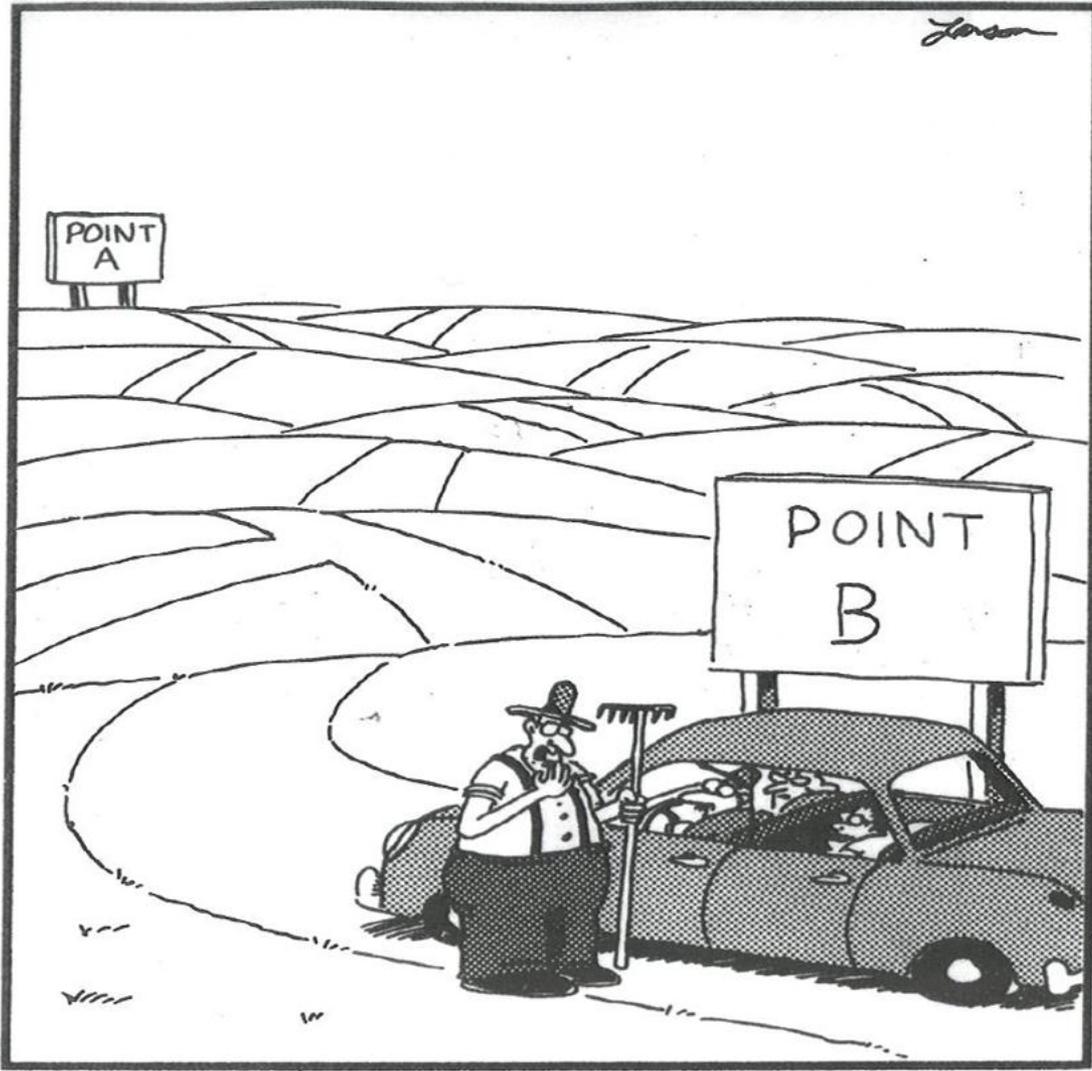


Spectrum Architecture & Standards

**Mr. Martin Westphal
Vice Director, JS J6**



Perspective

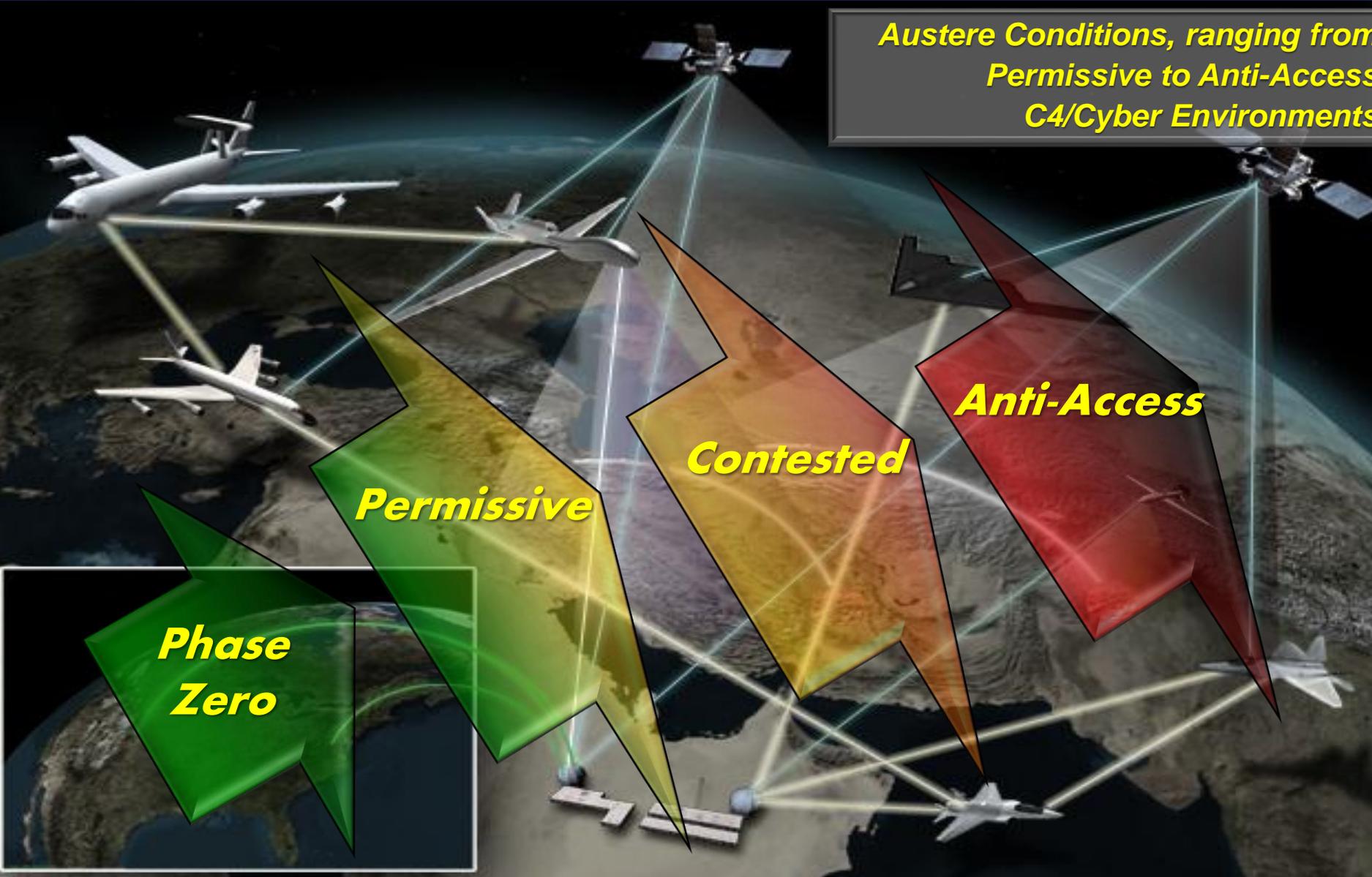


“Well, lemme think. ... You’ve stumped me, son. Most folks only wanna know how to go the other way.”



The Future Operating Environment

Austere Conditions, ranging from Permissive to Anti-Access C4/Cyber Environments



Permissive

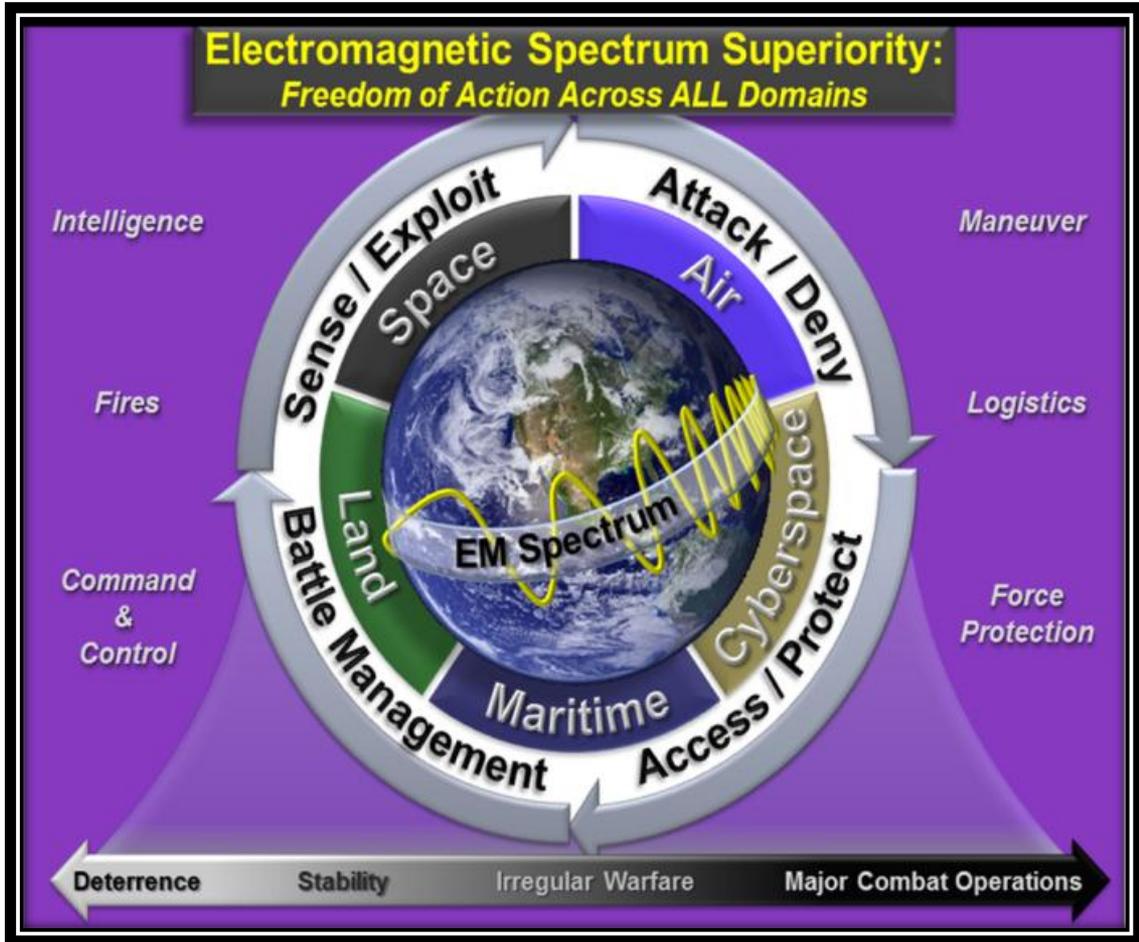
Contested

Anti-Access

Phase Zero



Commanders need ability to establish and maintain joint force freedom of action in an increasingly complex electromagnetic environment.

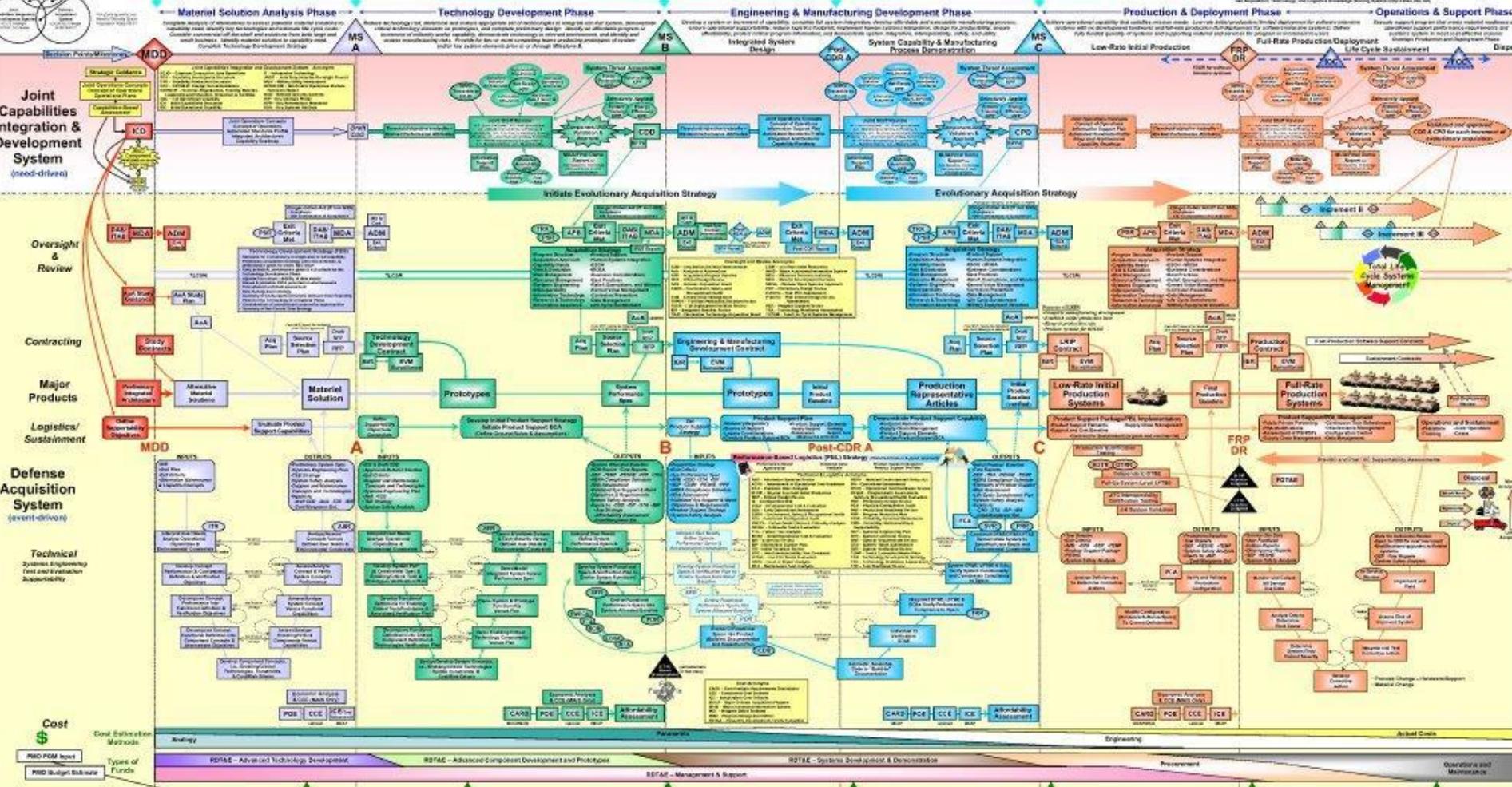


JCIDS Streamlining Efforts



Integrated Defense Acquisition, Technology, and Logistics Life Cycle Management System

Following the Materiel Development Decision, the Milestone Decision Authority may authorize entry into the acquisition process at any point, consistent with phase-specific entrance criteria and statutory requirements



Joint Capabilities Integration & Development System (need-driven)

Oversight & Review

Contracting

Major Products

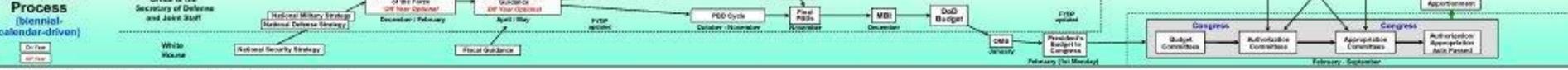
Logistics/Sustainment

Defense Acquisition System (event-driven)

Technical Systems Engineering Test Lead Evaluator Supportability

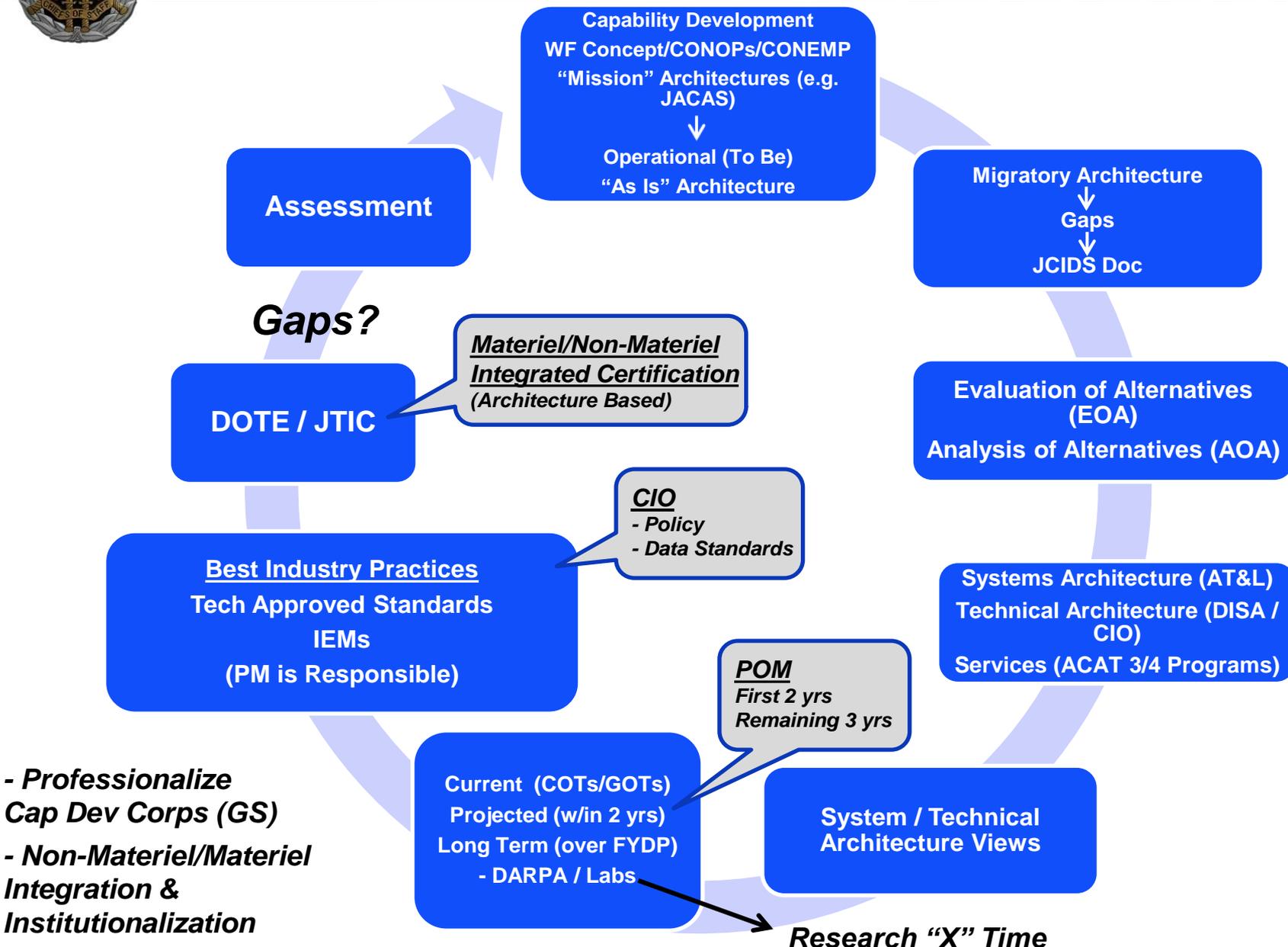
Cost Cost Estimation Methods

Planning, Programming, Budgeting & Execution Process (biennial-calendar-driven)



What's Needed!

Mission Based Integrated Architectures



- Professionalize Cap Dev Corps (GS)
- Non-Materiel/Materiel Integration & Institutionalization

Research "X" Time



Executable Architecture Simulation Model (ExAM)

➤ Identify

- Gaps
- Redundancies
- Duplicities
- Deficiencies
- Restrictions

➤ Determine (DOTMLPF-P)

- Doctrine
- Organization
- Training
- Materiel
- Leadership
- Personnel
- Facilities
- Policy



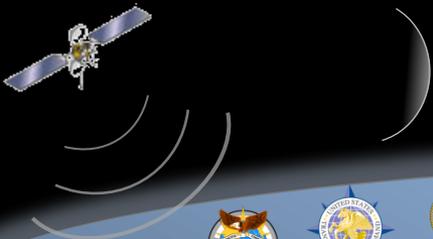
QUESTIONS?



Back-ups

Defense Spectrum Management

Assuring Global Spectrum Access



SATCOM,
Precision
Navigation
& Timing



Tracking
Telemetry &
Control

Surveillance



Data Links



Congested and
Contested
Electromagnetic
Environments

Spectrum
Monitoring



RADAR
Operations



Communications



Electronic
Warfare



Business
Mission Area

Warfighter
Mission Area

Intelligence
Mission Area

Strategic SM Planning

Influencing Capabilities
Development & Acquisition

Spectrum Management
Operations

Defense Information Enterprise

GEMISIS Services Data Services Training & Education Analytical Services Tools & Software Capabilities Development

Net-Centric SM Support Services



International

Allied, Coalition, NGO

High Level Operational Context

DSMA OV-1



National



Intra-government, State, Local, Commercial

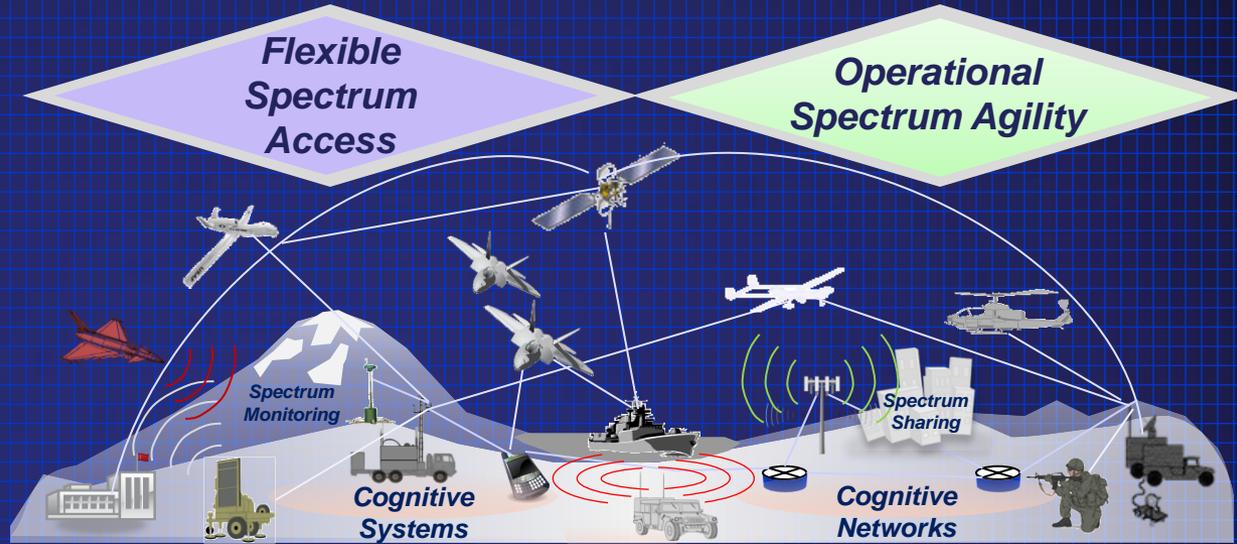
CV1 Defense Spectrum Management of the Future

Desired Outcomes

Flexible Spectrum Access

Operational Spectrum Agility

Real-time SM at the tactical edge



Services & Support

Monitored EME Data & reports

Digital Spectrum Policies

Net-Centric SM Services

	Operational Spectrum Planning	Assignments/ Allotments	Digital Spectrum Policy Generation	
Spectrum Visualization E3 Risk Assessment	Modeling & Simulation Education & Training	Strategic Planning HN Coordination	Engineering Analysis Spectrum Data Mgt	
Spectrum Supportability Risk Analysis	Interference Analysis & Resolution	Spectrum Capabilities Development		

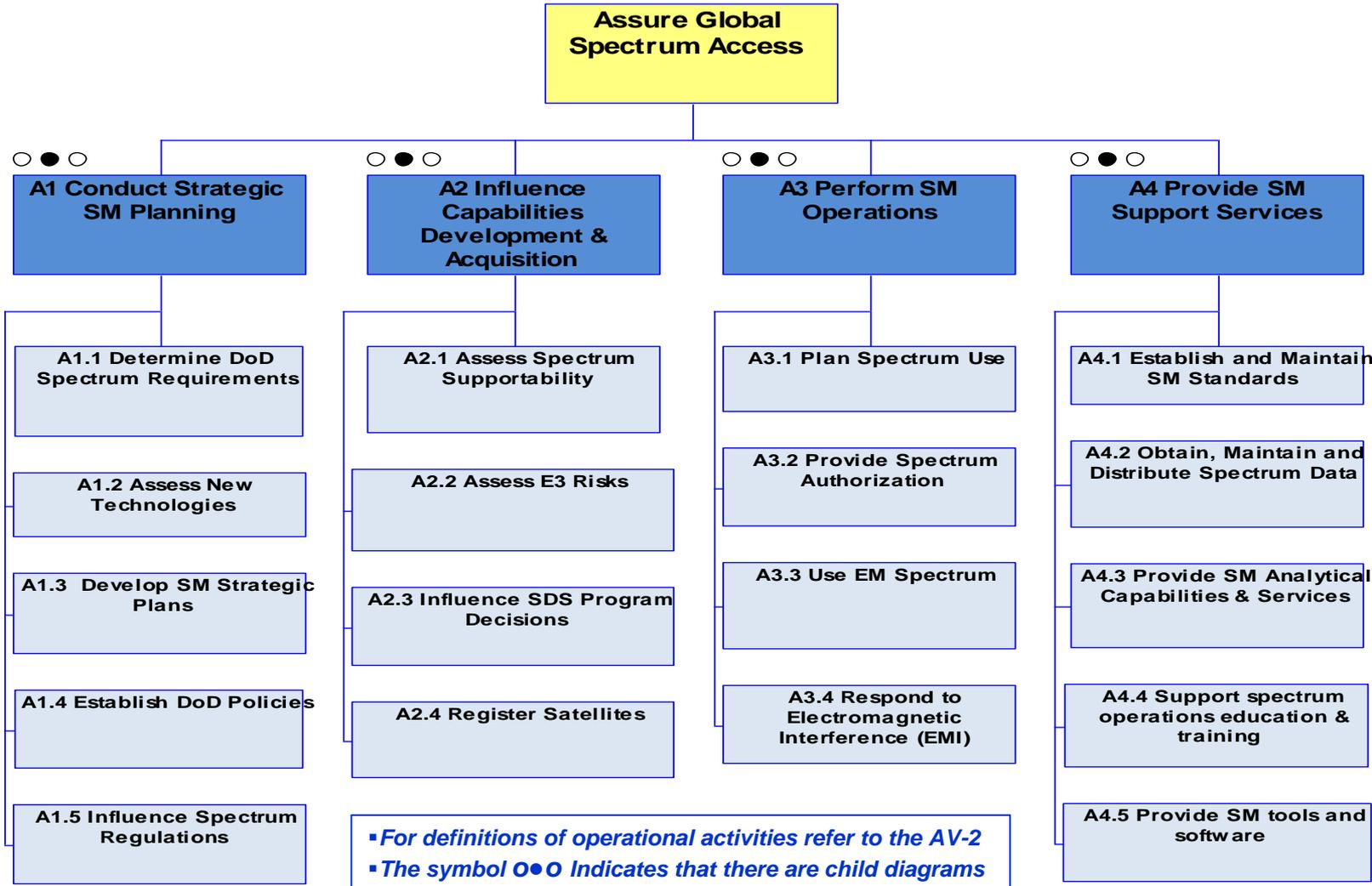
Critical Enablers

Authoritative Data	Advanced Technologies	Policy Based SM	Shared Spectrum Situational Awareness
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DSMA OV-5a

High Level Operational Activities

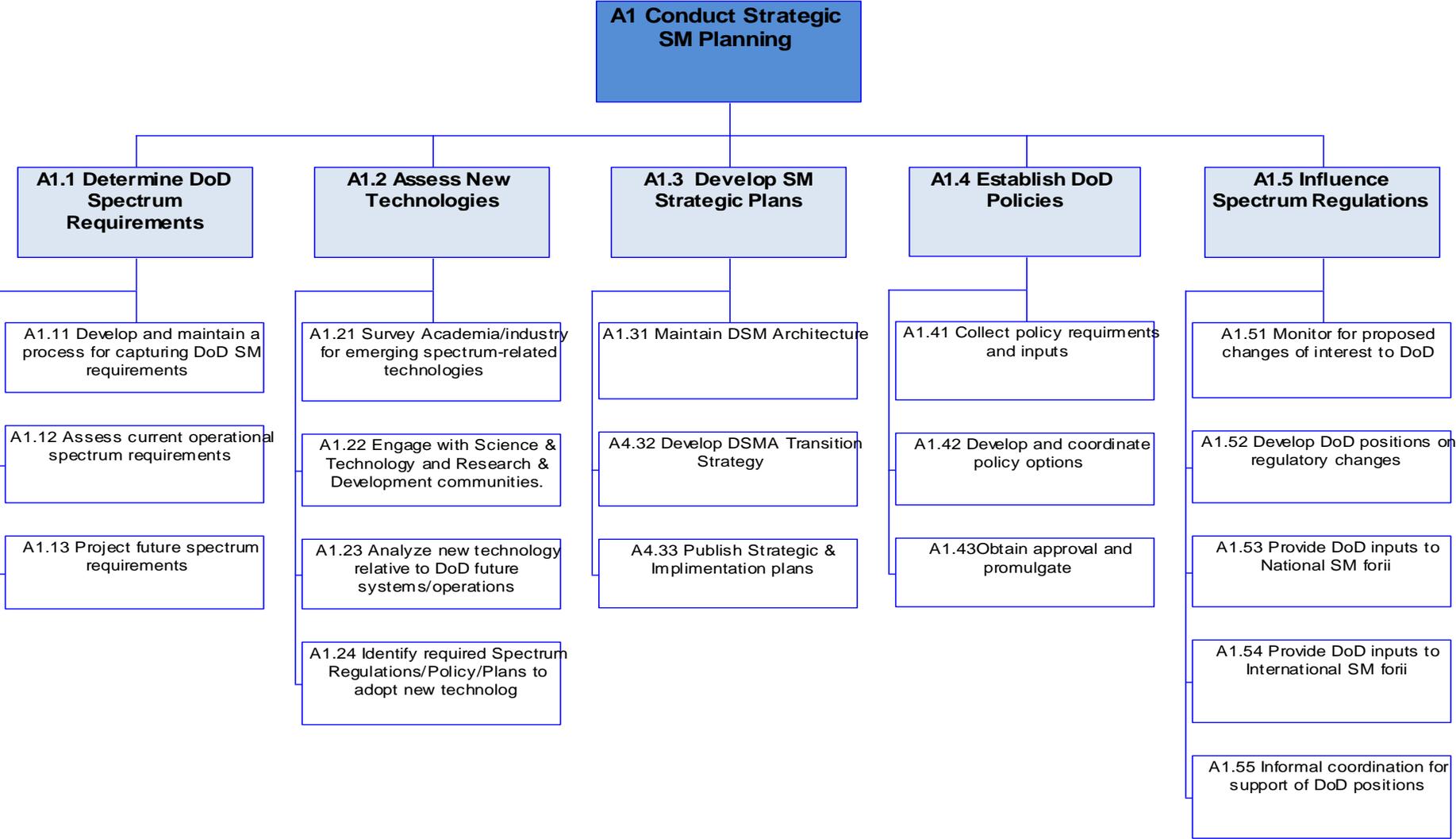


- For definitions of operational activities refer to the AV-2
- The symbol **O●O** Indicates that there are child diagrams
- For a more extensive decomposition of operational activities, refer to the spreadsheet version of this product.



DSMA OV-5a for All Epochs

A1 Conduct Strategic Spectrum Management Planning

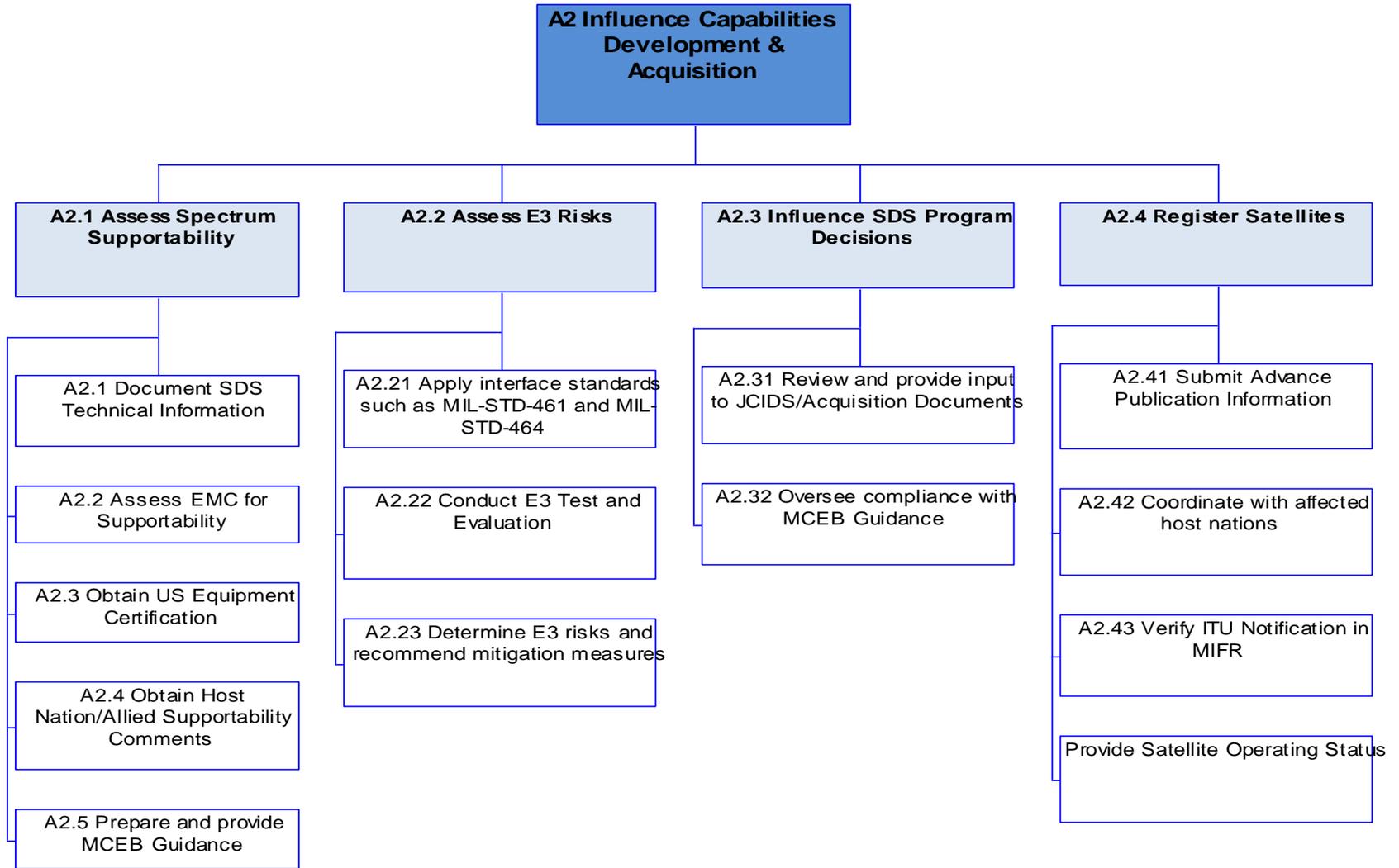


• For definitions of operational activities refer to the AV-2



DSMA OV-5a for TA-1 only

A2 Influence Capabilities Development and Acquisition

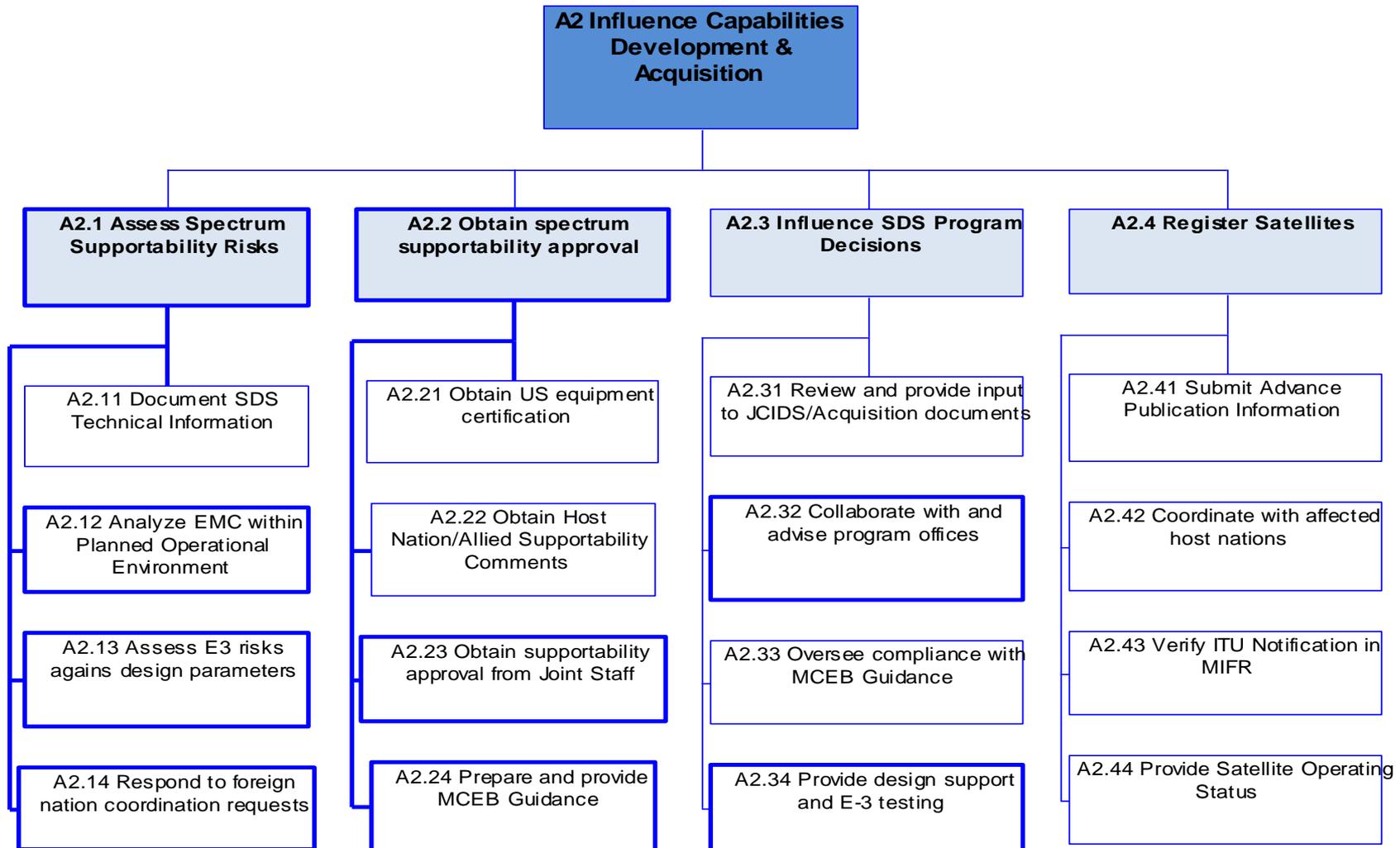


• For definitions of operational activities refer to the AV-2



DSMA OV-5a for TA-2 , TA-3 & TGT

A2 Influence Capabilities Development and Acquisition

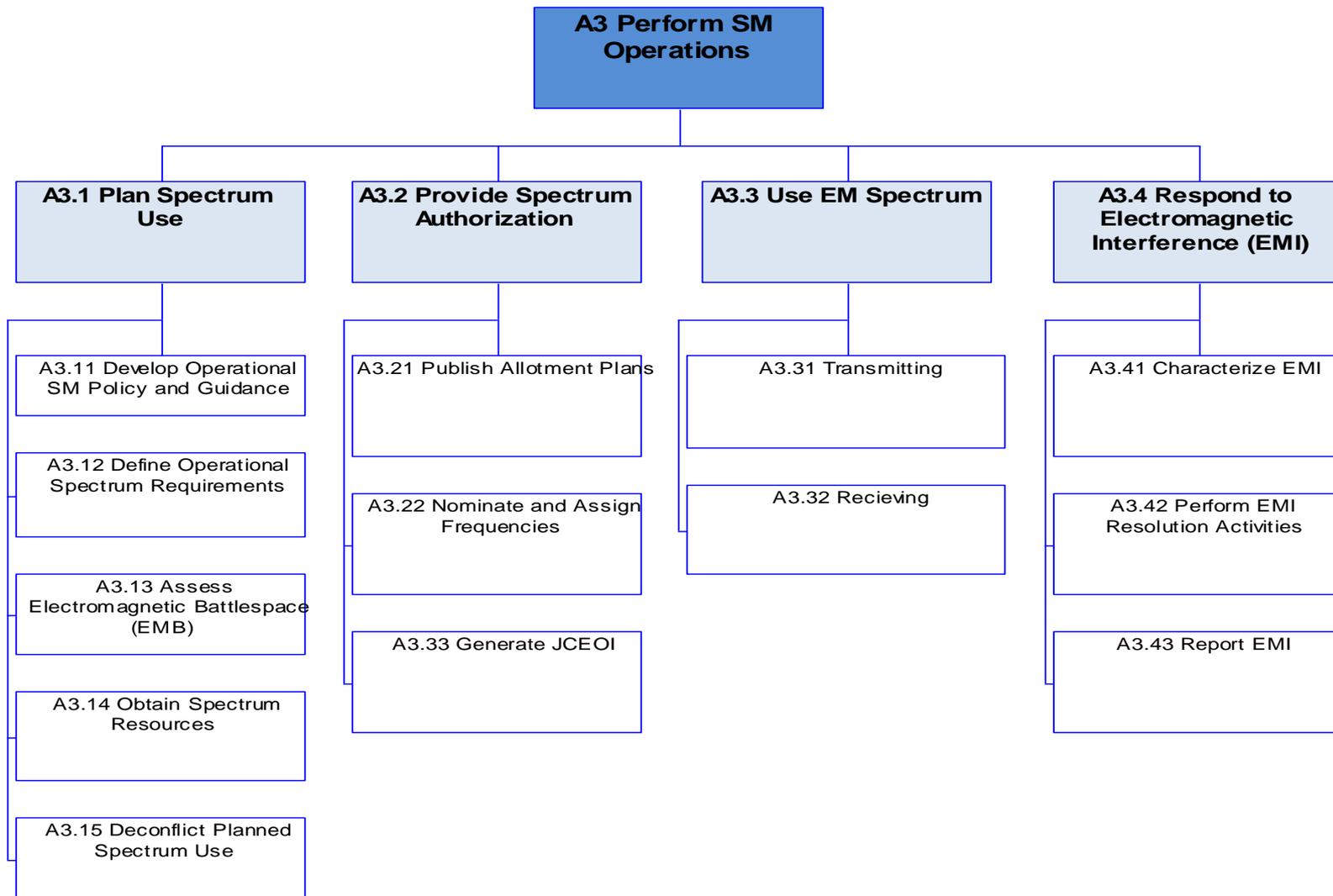


- *Activity boxes that have changed from the previous epoch are in bold*
- *For definitions of operational activities refer to the AV-2*



DSMA OV-5a for TA-1 and TA-2

A3 Perform Spectrum Management Operations

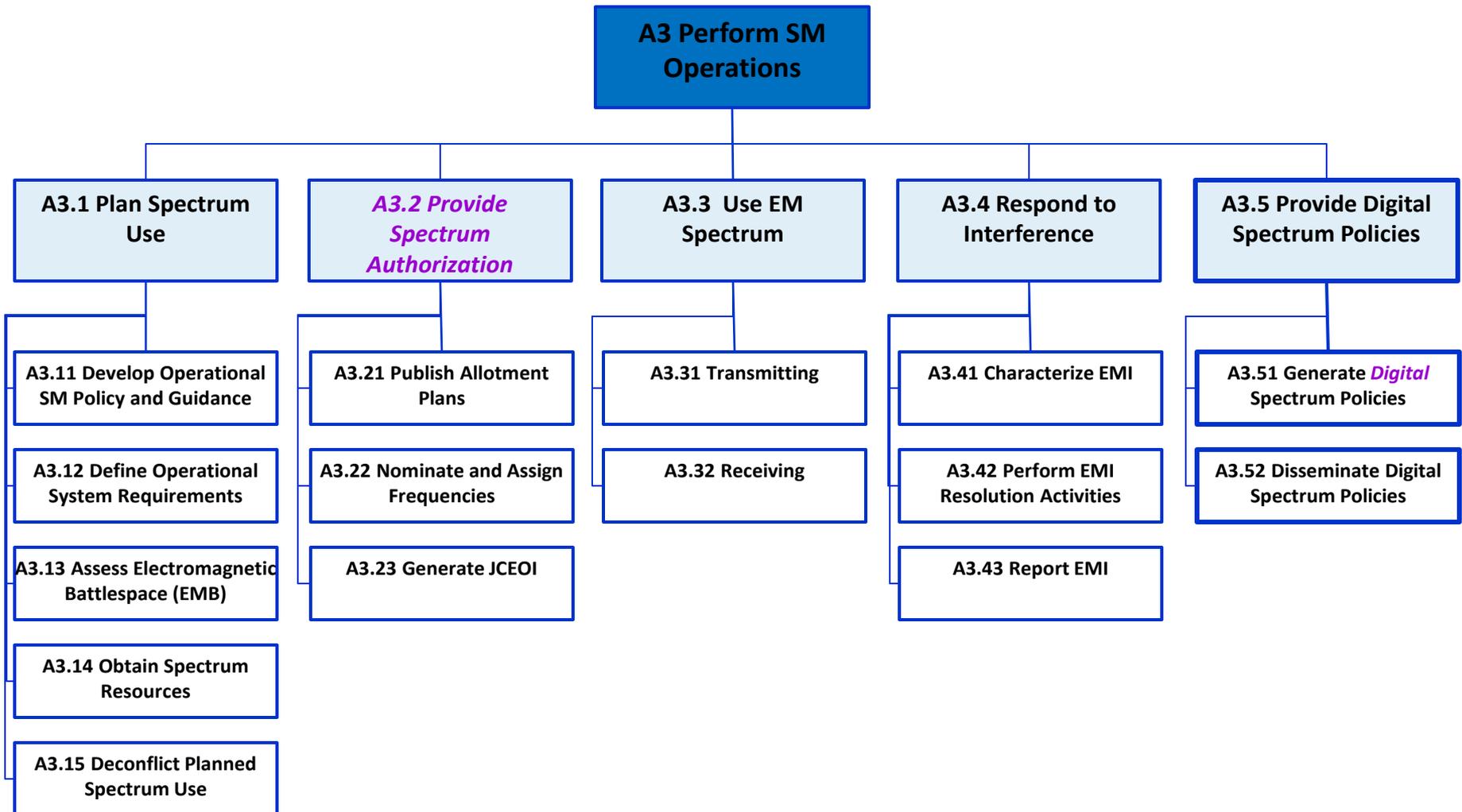


▪ For definitions of operational activities refer to the AV-2



DSMA OV-5a for TA-3 & TGT

A3 Perform Spectrum Management Operations

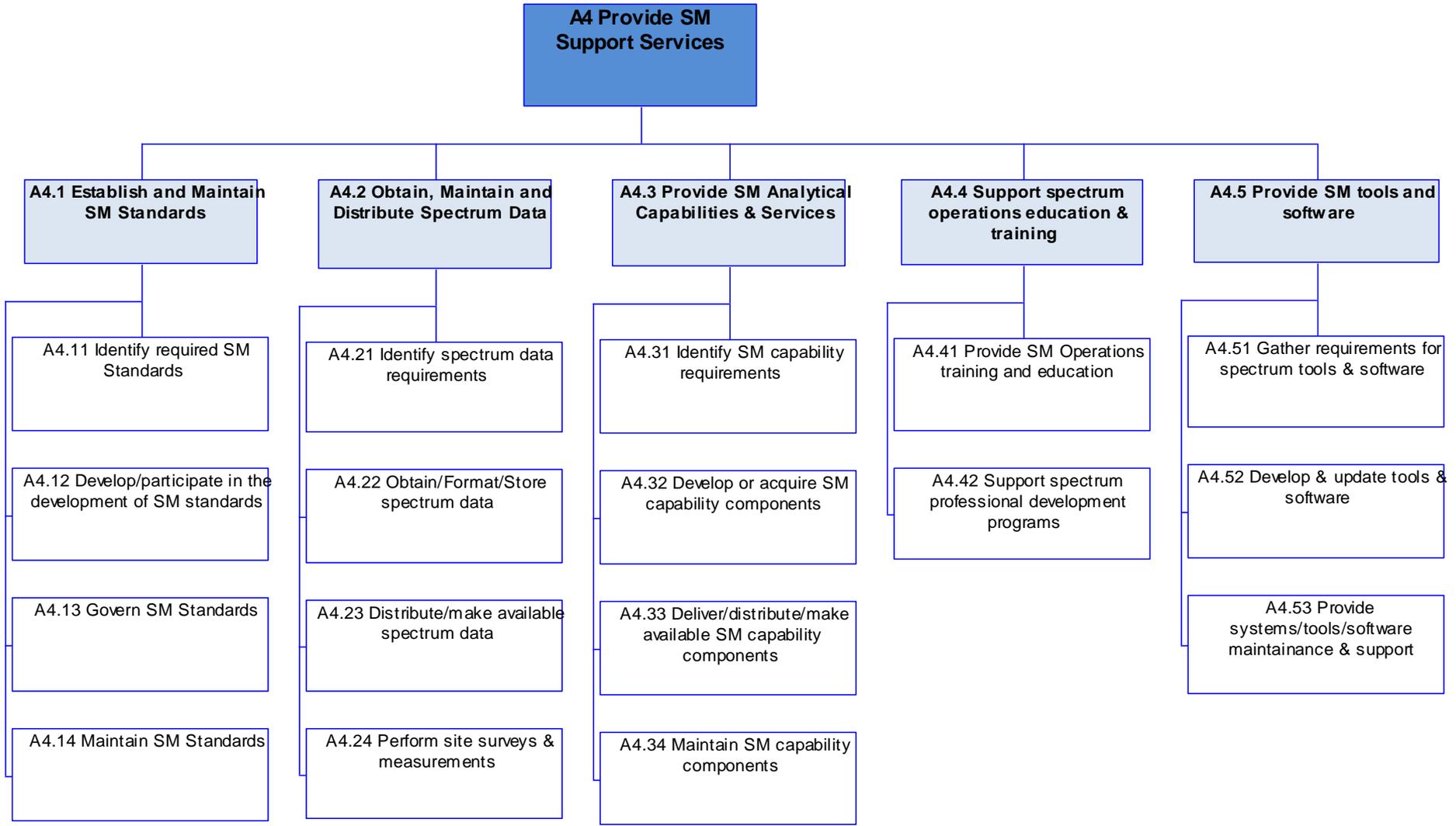


- Activity boxes that have changed from the previous epoch are in bold
- For definitions of operational activities refer to the AV-2



DSMA OV-5a for All Epochs

A4 Provide SM Support Services



▪ For definitions of operational activities refer to the AV-2