



# ***Evolving Maintenance Metrics***

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## ***Acquisition Plans and Strategies***

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**ODASD Materiel Readiness**  
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# Outline

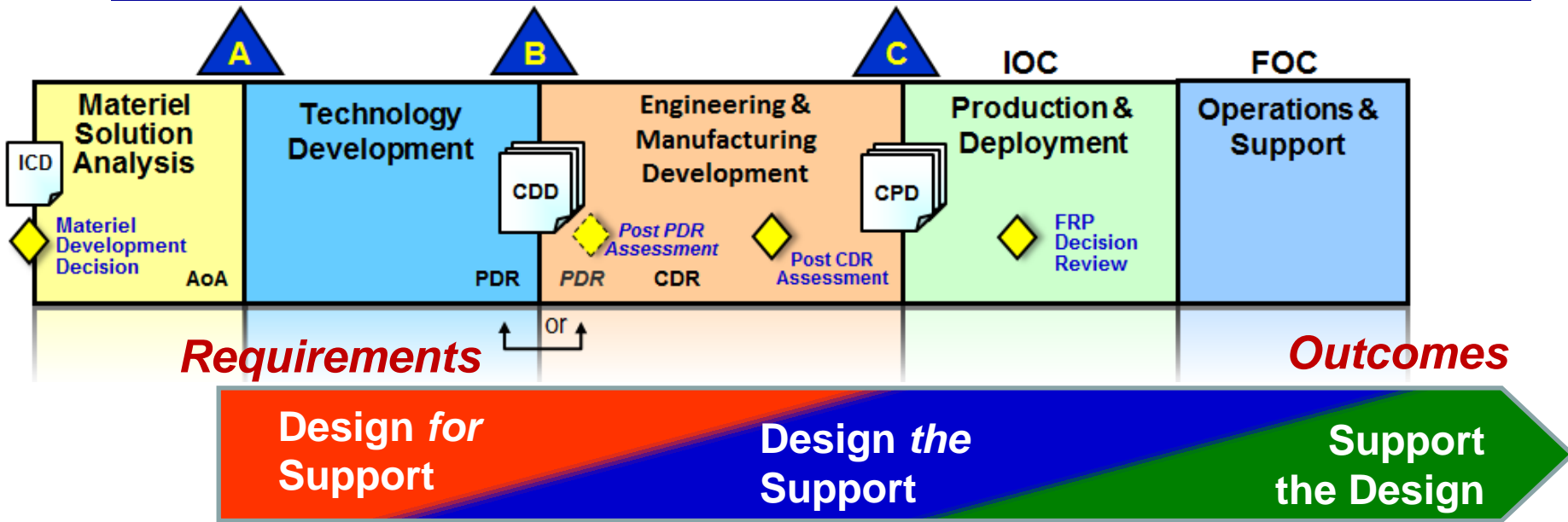
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- Life Cycle Perspective
- Acquisition Considerations
- Metrics Alignment
- Acquisition Challenges



# Life Cycle Perspective



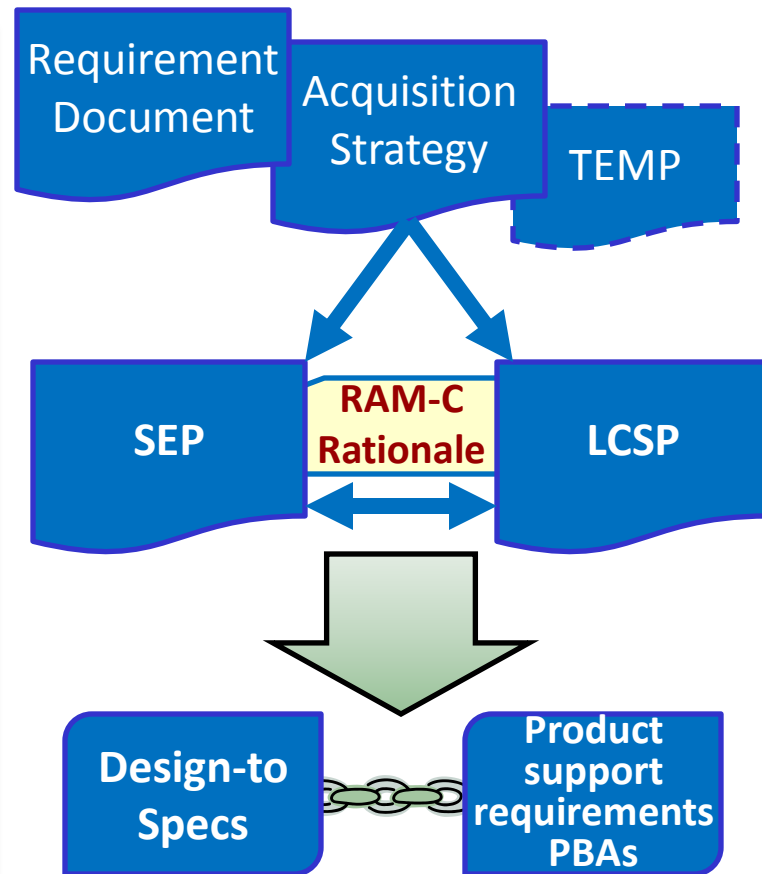
- ❑ Acquisition and O&S costs are “KPP-like” affordability targets at MS A
- ❑ Maintenance efficiency enablers (e.g., diagnostics, health management) must be defined at MS B
- ❑ Post-IOC outcomes should inform next generation development



# Acquisition Considerations: “Design-to” and “Plan-to” Metrics



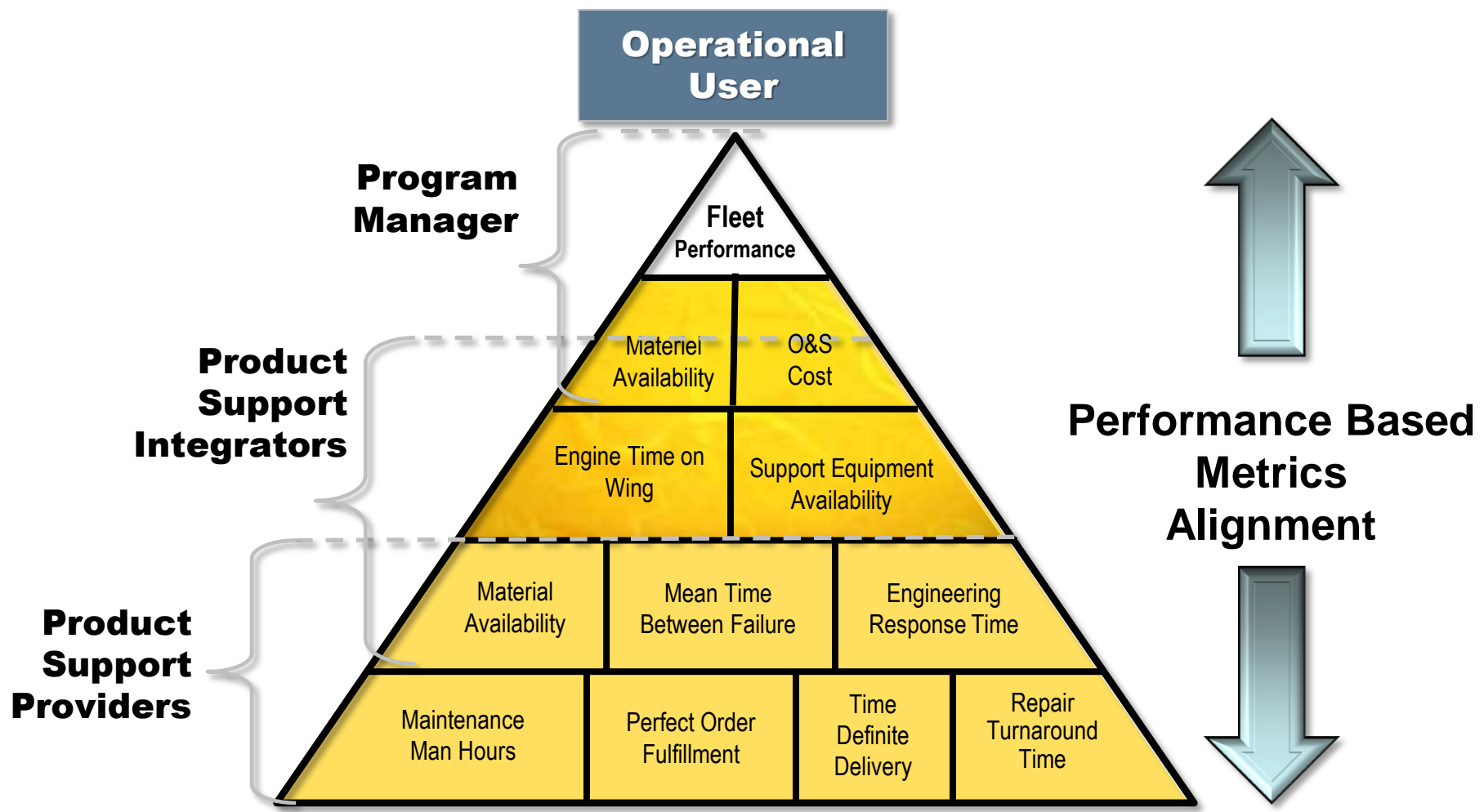
Requirement Type	Examples
Warfighter requirement	ICD, rationale for CDD/CPD requirements
Program requirement	Sustainment KPP & KSAs System RAM attributes (e.g., FD/FI/FA, transportability, CBM+ enablers)
Specification requirement	System and subsystem R&M attributes (translated) Design-to supportability attributes



System design, specifications, and product support package requirements must work together to deliver affordable readiness.



# Metrics Alignment





# Acquisition Challenges

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- Defining well-aligned maintainability requirements**
- Linking sustainment outcomes with system capability requirements and preliminary design**
- Aligning acquisition strategies to enable competitive performance based product support**
- Integrating with systems engineering process to prevent maintenance enablers from being traded off**
- Implementing full-spectrum performance-based strategies as programs move into execution**
- Migrating to performance-based strategies with organic and partnered depots**



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# Backups



# PERFORMANCE BASED LOGISTICS



- Analyses provided conclusive evidence that:
  - Properly structured and executed, PBLs reduce Services' cost per unit-of-performance while simultaneously driving up absolute levels of system, sub-system and component readiness
- Savings potential
  - Avg annual savings for programs with generally sound adherence to PBL tenets is 5-20% over the life of the PBL arrangement compared to transactional support



Properly Structured/Exec PBL



Readiness ↑ & Costs ↓

“PBLs are a Home Run – we just need to make sure we get the deal right!”





# Maintainability Design Parameters

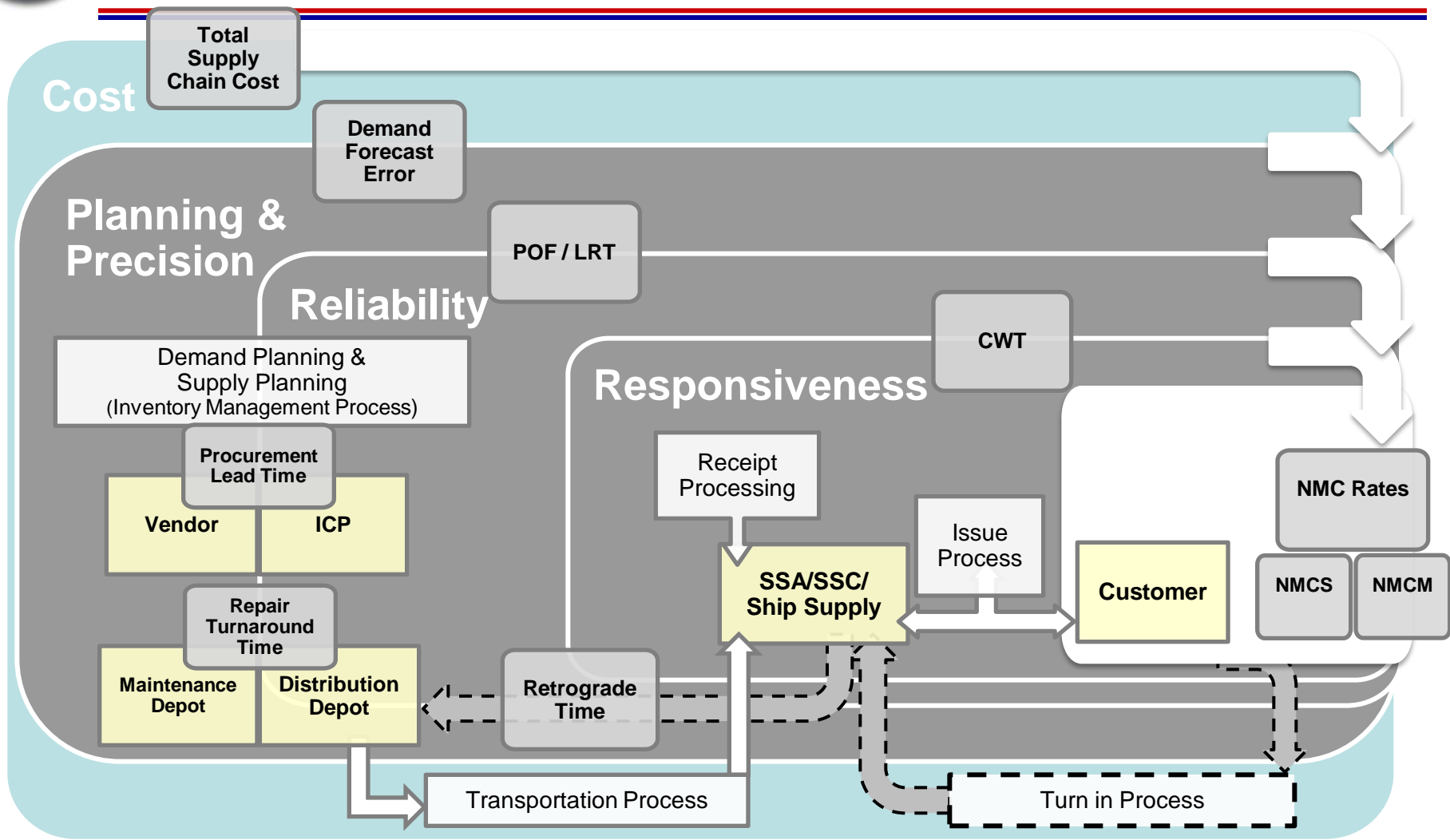
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- Durability → controls depot service interval**
- Maintenance Ratio → MMH/OH**
- Mean Corrective Maintenance Time and Max Time to Repair → Turn Around Time for field maintenance**
- FD/FI/FA → controls CND, NEOF**
  
- Other measures:**
  - Producibility measures
  - Reliability measures
  - Procurement and reprourement cost



# Integrated Relationships between Core Supply Chain Enterprise Metrics (Cont.)

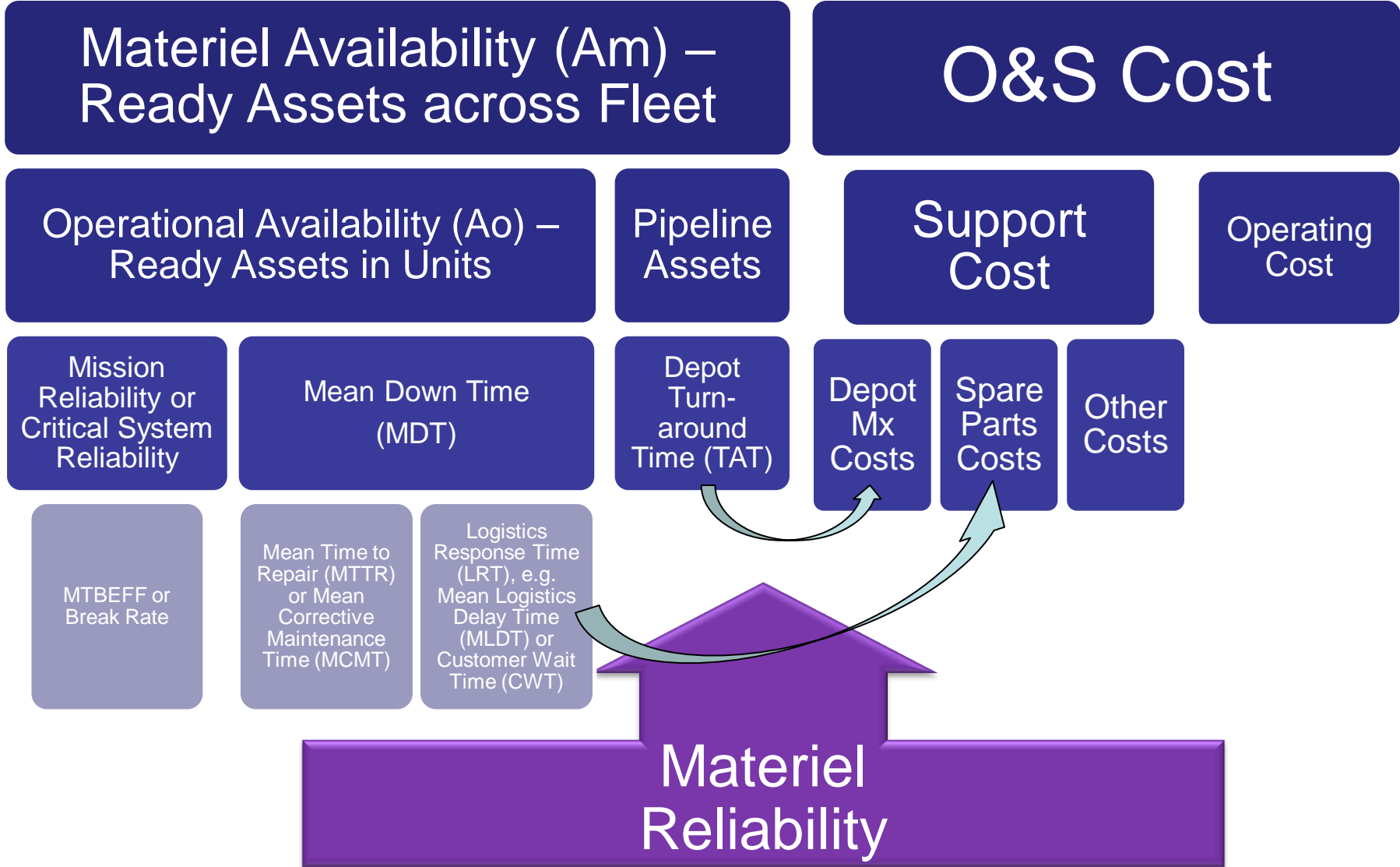


**Key**

- Attributes
- Metrics
- Stakeholders
- Processes
- Outcome



# Sustainment Metrics Relationships





# Maintenance Programming Challenges

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- Defining the “no-kidding” maintenance requirement**
- Defending programming numbers so DoD can defend budget submissions**
- Answering “what-if” on funding scenarios in terms of readiness**
- Quantifying and communicating latent effects of funding decisions on readiness**