**Acquisition Concept Template**

**1. Introduction**

* **Purpose**: Briefly state the purpose of this document—to define the strategies for development, procurement, contracting, production, deployment, and lifecycle support of the system. It is crucial for providing a high-level understanding of the system's acquisition journey.
* **Scope**: Define the boundaries of the acquisition concept, specifying what aspects of the system's lifecycle are covered, from conceptualization and technology maturation to production, fielding, support, and eventual disposal.

**2. Background and Context**

* **Organizational Needs and Required Capabilities**: Describe the high-level organizational needs and required capabilities that drive the acquisition.
* **Problem Statement/Opportunity**: Articulate the strategic problem or opportunity that necessitates the acquisition.
* **Mission/Business Objectives**: Summarize the mission goals or business drivers motivating the system's acquisition.

**3. Acquisition Strategy**

* **Integrated Approach**: Detail how technical, business, and management strategies will be integrated to achieve program objectives within resource constraints. This includes the master plan for guiding program execution across the entire life cycle.
* **Phased Process**: Describe how the acquisition process will be structured as a series of phases (e.g., technology development, engineering and manufacturing development, production, deployment, sustainment), with specific entry and exit criteria. Systems may enter at different phases depending on technology maturity.
* **Make/Buy Decisions**: Outline the strategy for deciding which system elements will be developed in-house versus those that will be contracted out to suppliers.
* **Contracting Approach**: Define the types of contracts to be used, the division of responsibilities between the program manager and contracting officer, and how systems engineering will be integrated into acquisition activities.
* **Supply Chain Considerations**: Address initial concepts for managing the supply chain for parts and components.

**4. Planning and Management**

* **Acquisition Planning Process**: Detail the process for determining the best approach to meet requirements, including market research and analysis of alternatives.
* **Planning Documents**: Indicate how this concept informs development of Project Management Plans (PMPs), Systems Engineering Management Plans (SEMPs), Work Breakdown Structures (WBS), Product Breakdown Structures (PBS), preliminary budgets, and schedules.

**5. Lifecycle Considerations**

* **Technical Baselines**: Describe how technical baselines (e.g., concept, functional, allocated, product) will be established and managed throughout the acquisition.
* **Integration with Systems Engineering**: Explain how systems engineering activities will be embedded in all acquisition phases, supporting requirements development, risk reduction, prototyping, and testing.
* **Human Systems Integration (HSI)**: Address how HSI considerations, including human factors, training, and maintainability, will be incorporated early in concept development and influence the acquisition strategy.

**6. Risk, Cost, and Schedule**

* **Risk Management Integration**: Incorporate strategies for identifying, analyzing, and mitigating risks across the acquisition lifecycle. Early identification helps mitigate expensive rework and technical debt.
* **Cost and Schedule Framework**: Provide a framework for cost estimation, affordability analysis, and schedule planning to ensure the program remains viable and executable within constraints. The concept stage generates early estimates for cost and schedule across the system's life cycle.
* **Constraints**: Recognize that budget and schedule are often critical external factors that must be met and typically cannot be changed through trade-off analysis. The Acquisition Concept must consider these critical constraints.
* **Affordability**: Discuss how the Acquisition Concept balances system performance, cost, and schedule constraints over the system's life, while still satisfying mission needs and strategic investment goals.
* **Trade-off Analysis**: Explain how trade-off analyses will be used to weigh cost against technical performance and schedule, as the Acquisition Concept informs and integrates with the broader Acquisition Strategy which supports these trade-offs.

**7. Purpose and Value**

* **Alignment**: Ensures all stakeholders understand and agree on the approach for acquiring the system, reducing ambiguity and rework.
* **Integration**: Bridges the gap between technical development and business management, aligning requirements, resources, and timelines.
* **Lifecycle Success**: Supports successful delivery, deployment, and sustainment of the system by anticipating challenges and planning for them early.
* **Authorization and Funding**: It is essential for gaining authorization and continuous funding for a project through portfolio management processes.

**8. Recommended Representations**

* **Narrative Text**: For detailed explanations of strategies, principles, and rationale.
* **Tables**: For summarizing stakeholders, key decisions, resource allocation, and risk mapping.
* **Diagrams**: Visualizations such as process flow diagrams for acquisition phases, or high-level organizational charts for roles and responsibilities (implied by content requirements). DoDAF's Project Viewpoint (PV-2) can describe relationships between requirements and projects, including timelines.

**9. Integration with Other Systems Engineering Artifacts**

The Acquisition Concept is a pivotal artifact, deeply interconnected with many others in the systems engineering landscape:

* **System Concept**: The Acquisition Concept defines how the initial System Concept will be sourced, developed, or purchased. It anchors all other artifacts in the strategic foundation layer.
* **Mission Concept / Stakeholder Concept / User Concept**: Acquisition strategies must align with the mission objectives, as well as the needs, expectations, and roles of identified stakeholders and users.
* **Concept of Operations (ConOps) / Operational Concept (OpsCon)**: The Acquisition Concept ensures that the operational needs defined in the ConOps (high-level operational concept) and OpsCon (detailed system usage) are addressed in the procurement strategy.
* **Development Concept**: The Acquisition Concept governs the Development Concept, as it defines how the system is procured and managed, which in turn influences the technical realization.
* **Cost and Schedule Concept**: A critical relationship exists here, as acquisition decisions directly impact project budgets and timelines. The Acquisition Concept drives more detailed budgeting and scheduling.
* **Risk Management Concept**: Acquisition planning includes assessing procurement risks, such as supplier reliability and compliance with regulations. Risks are managed in conjunction with the Risk Management Concept.
* **Sustainment Concept & Disposal Concept**: Acquisition strategies often include provisions for long-term sustainment and end-of-life considerations, linking directly to the Sustainment and Disposal Concepts.
* **Test and Evaluation Concept**: The Acquisition Concept impacts how verification and validation (V&V) are planned, including necessary facilities and resources.

**10. Special Considerations and Best Practices**

* **Early Definition**: Preliminary Acquisition Concepts are established early in the Business or Mission Analysis process (Concept Stage/Pre-Phase A).
* **Dynamic Nature**: The Acquisition Strategy (informed by the Acquisition Concept) needs to be dynamic, adapting to changes and supporting trade-offs among cost, schedule, and system performance.
* **Challenges**: Be aware of common challenges such as uncertainty in scope and cost, optimism bias in estimates, and fixing budgets/schedules too early without sufficient knowledge, which can increase project risk.