Automation Evolution Strategy (AES)

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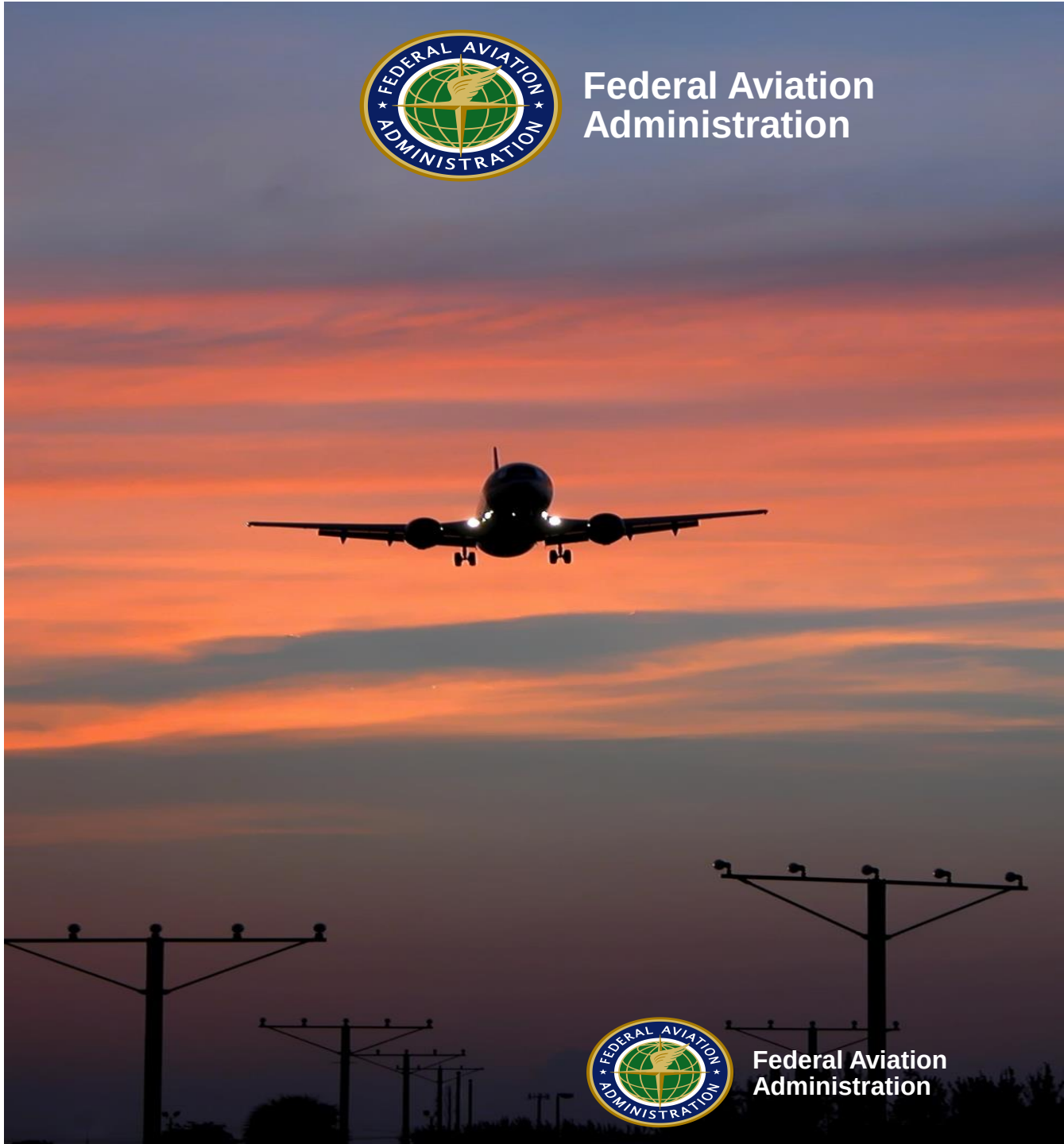
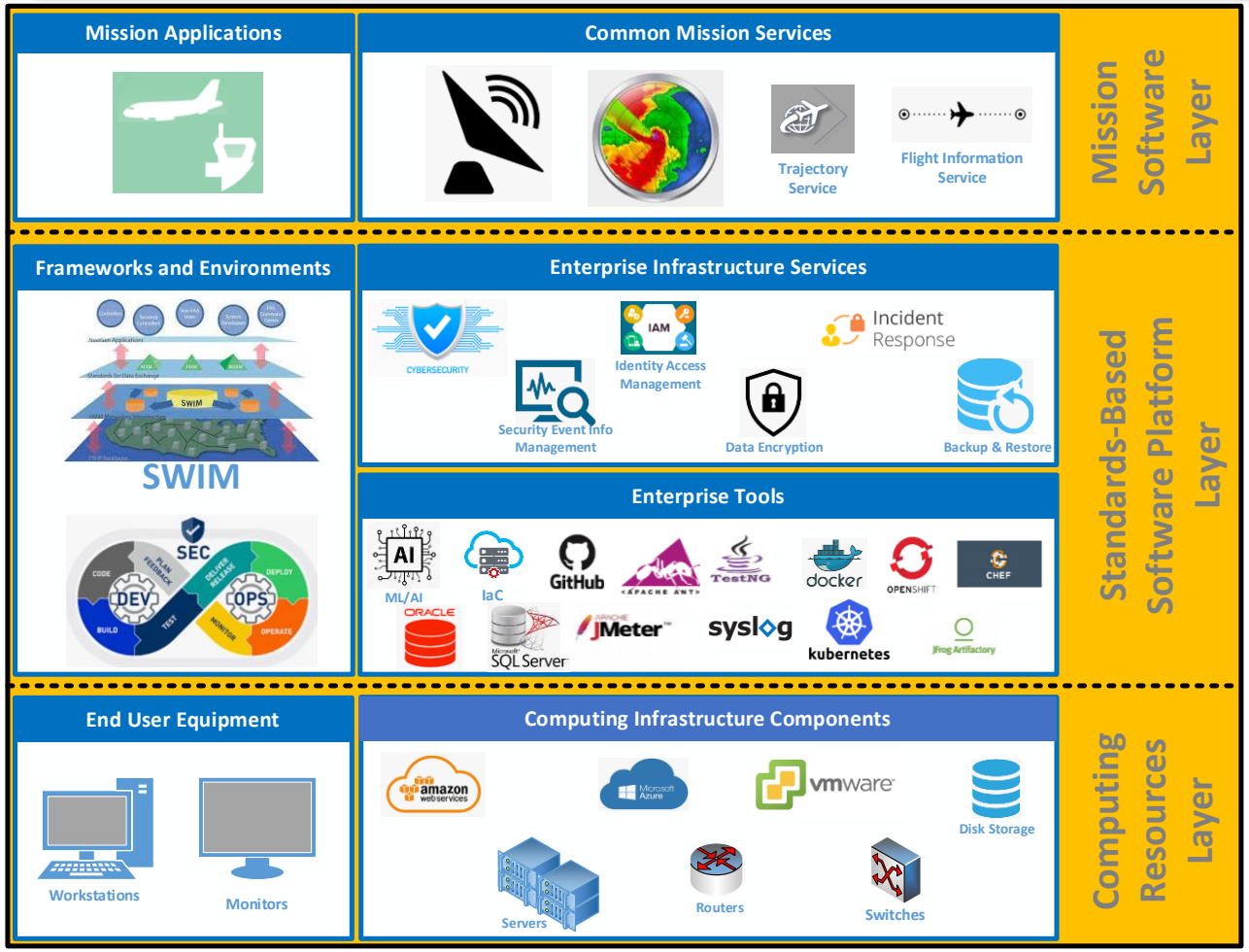


Agenda

- What is Automation Evolution Strategy (AES)?
  - Vision
  - Scope
  - Strategic Objectives
- How are we doing it?
  - Focus Areas
- What's next?

AES VISION

Create a NAS composed of automation capabilities that utilizes layered enterprise components and reusable services which can be developed, acquired, and sustained independently



Software developers can focus on providing aviation-specific applications and services

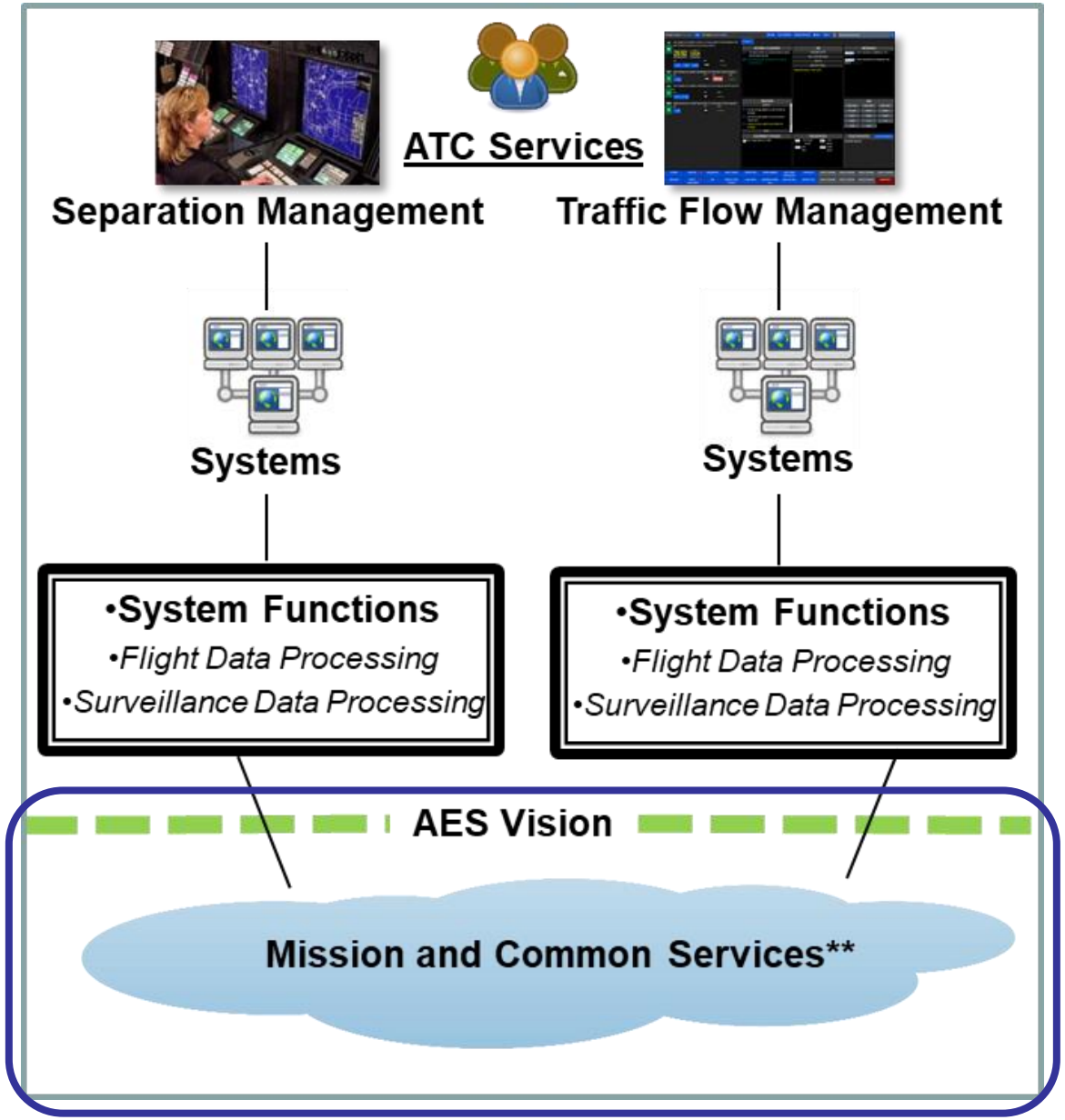
A set of Enterprise Services and Tools are made available to maximize reuse, accelerate development and deployment of capabilities as well as expand the vendor base

Allows for rapid availability of infrastructure and improved resiliency

Enterprise services and tools depicted in the diagram are examples of capabilities that can be available within the AES architecture

AES Scope

AES proposes a Service-Based Architecture* that encompasses ATC Separation Management and Traffic Flow Management Services



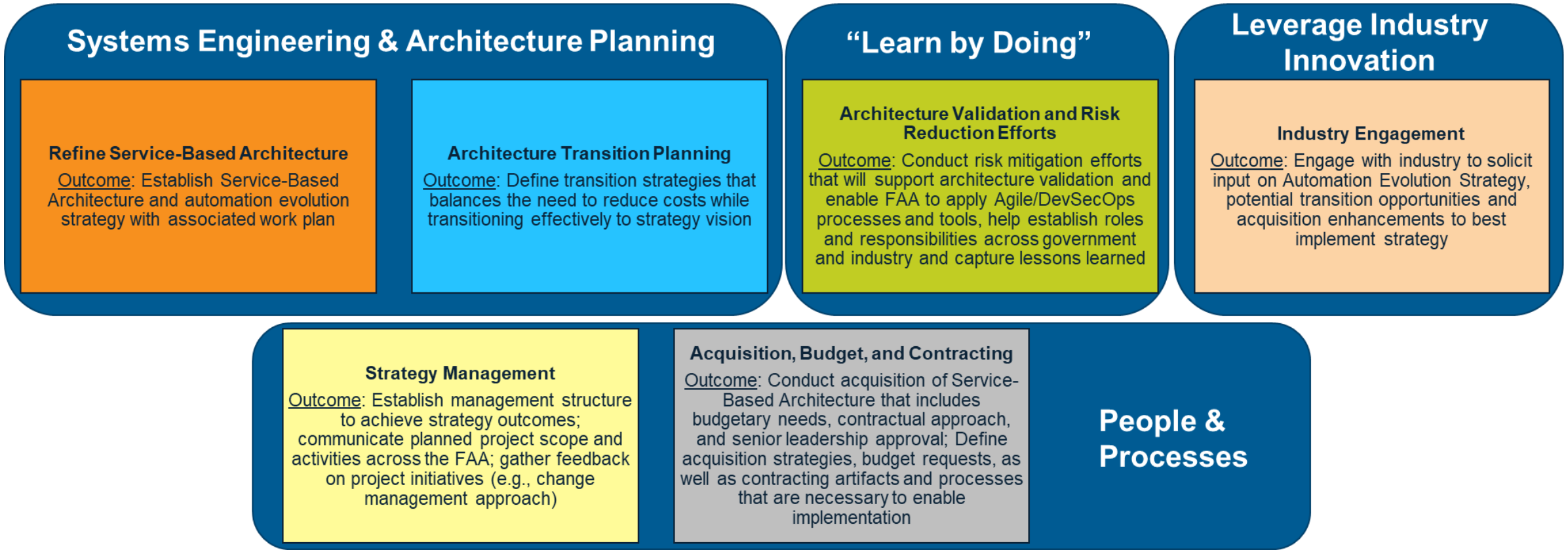
* Service-based Architecture is an architecture framework in which different parts of a system-of-systems interoperate by exposing and accessing data and processing functions as services that can be accessed over a network.

** Mission services are software components that provides FAA with mission-specific data (e.g. flight data) and computation functions (e.g. tracking, conflict probe). Common Services are mission services intended for use by multiple consumers.

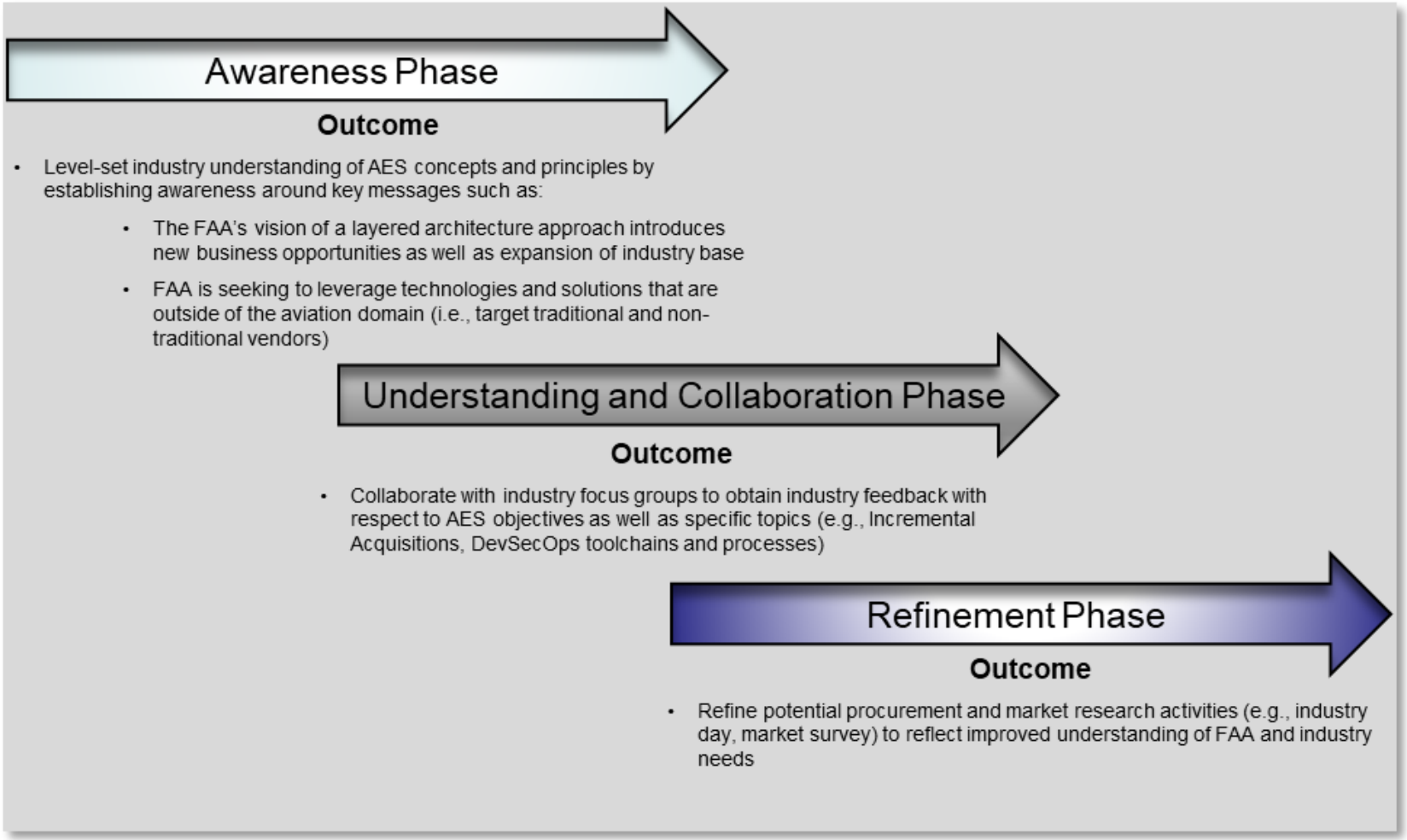
AES Strategic Objectives

- Seek efficiencies for developing, operating, and sustaining NAS automation systems/services
- Reduce time to develop, integrate, and deploy new capabilities
- Leverage commercial industry best practices
- Establish broad industry base to support the FAA across a range of development and deployment capabilities
- Establish a scalable, flexible, secure, and resilient architecture

AES Focus Areas



What's Next



- **Defining overall industry engagement activities to:**
  - Improve industry awareness of AES
  - Leverage industry innovations
  - Help shape strategy vision and address key challenges
  - Identify future pathfinder and transition opportunities
- **The FAA is targeting more industry engagement in 2022**