INTERIM

Department of the Air Force

CHIEF INFORMATION OFFICER PUBLIC STRATEGY

FY2023 – FY2028

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APPENDICES IN FINAL VERSION

DRAFT

Airmen and Guardians,

The Secretary of the Air Force has outlined priorities for building the Air and Space Force we need for future conflict. In the decades ahead, combat will depend less on individual capabilities than the adaptive, integrated strengths of a robust network of weapons, sensors, and analytic tools applied across warfighting domains.

This CIO Strategy aims to provide clear intent to our partners across the Department of the Air Force, the Air and Space Staffs, and the field. This leadership team includes the DAF CIO, Air Force A2/6, and Space Force CTIO, as well as stakeholders from within MAJCOMs, FLDCOMs, and units in the field to execute and bring this vision to fruition.

Our Lines of Effort were chosen because they directly address the needs of the emerging strategic and technological environment in which we operate. Together, these LOEs provide the digital backbone which will enable the Air and Space Forces to improve both user experience & warfighter effectiveness today and achieve competitive advantage tomorrow. Our digital foundation must be rock-solid: it is used to conduct warfighting, collect and pass data, leverage artificial intelligence, develop standards and manage risk for all our mission and business IT systems.

Partnership with the enterprise and industry is critical to getting this right, recognizing that everything we do is increasingly interconnected. We strive to be outcome-driven, and hope that the LOEs will resonate with our teammates as we work together to build actionable objectives. Our efforts need to be well-coordinated across the DAF and always informed by warfighter requirements. In the near future, we must be ready to execute kill chains in seconds rather than hours.

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CURRENT REALITY

The digital environment in which we live is increasingly complex. This strategy aims to provide unity of effort for the enterprise and decomplicate governance.

WIDE CYBER EXPOSURE DUE TO MASSIVE ATTACK SURFACE	CAPABLE AND WELL-ROUNDED FORCE LACKS THE TOOLS IT NEEDS	STOVE-PIPED SYSTEMS THAT CAN'T SHARE DATA
CHANGES TO THE SECURITY ENVIRONMENT AND DAF'S FORCE POSTURE	LACK OF CLOUD AT THE TACTICAL EDGE	ADAPTIVE AND CROSS-DOMAIN ADVERSARY THREATS
COMMS DISRUPTIONS	INCREASING PACE OF TECHNOLOGICAL CHANGE	INSUFFICIENT AND UNRELIABLE FUNDING

The future digital environment must be interoperable and collaborative, with data-sharing and convergence across domains.

ACCELERATE CLOUD ADOPTION

FUTURE OF CYBERSECURITY

IT PORTFOLIO MGMT. (PFM)

CORE IT & MISSION-ENABLING SERVICES

DATA & AI

WORKFORCE
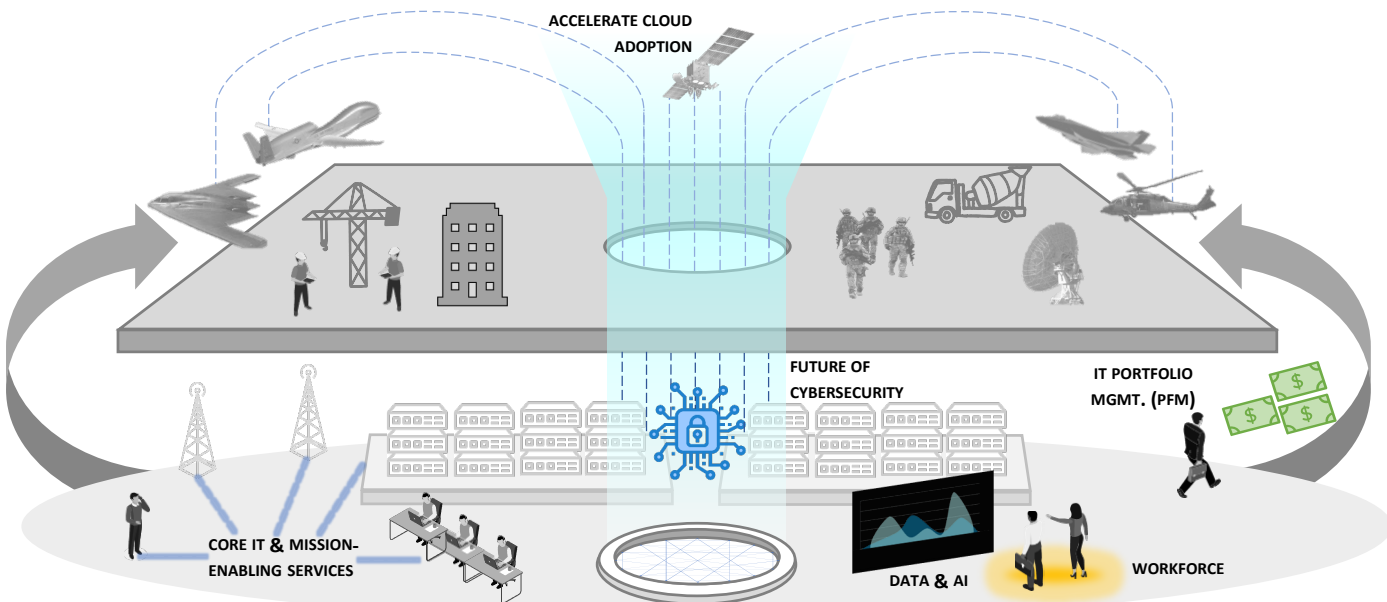
Figure 1: Future DAF Environment supported by DAF CIO Lines of Effort (LOEs)

ROBUST INTERNET OPERATIONS PLATFORMS	REIMAGINED APPLICATION AND DATA DEFENSE	
INCREASED MISSION READINESS	INTEGRATED DAF SYSTEMS THAT COMMUNICATE WITH EACH OTHER	SURVIVABLE C2 & LPI/LPD COMMUNICATIONS
SEAMLESS INTEROPERABILITY WITH THE JOINT FORCE COALITION	AGGREGATE DATA TO PROVIDE TIMELY RELEVANT INFORMATION TO DECISION MAKERS	

STRATEGIC NEEDS TO SUSTAIN FUTURE ADVANTAGE

In the decades ahead, combat will depend less on individual capabilities than the adaptive, integrated strengths of a robust network of weapons, sensors, and analytic tools applied across warfighting domains.

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Mission: Provide the foundation for a secure, digital, and data-centric Air & Space Force on which our competitive advantage relies.

Vision: Deliver decision advantage. Shorten the kill chain.

We aim to adopt these values when addressing all efforts supporting the IT enterprise:

WARFIGHTER EFFECTIVENESS
We will take a mission-focused approach to ensure priorities and capabilities increase warfighter experience, effectiveness, and lethality.

ACCOUNTABILITY & METRICS
We will establish oversight mechanisms with our partners and streamline the delivery environment by having clear roles & responsibilities, clear accountability outcomes, and measuring what matters.

GUIDING PRINCIPLES

TRANSPARENT GOVERNANCE
We will use a governance model to enable quick decisions through repeatable processes that emphasizes strategic alignment, validated requirements, and transparent stakeholder engagement.

VALUE-DRIVEN INVESTMENTS
We will have clear visibility & understanding into the DAF's portfolios to ensure we make informed, data driven strategic decisions regarding current & future IT investments to drive maximum value.

OPERATIONAL EXCELLENCE
We will ruthlessly attack manual processes and intentionally adopt agile processes to drive throughput and quality of service for all IT and network operations.
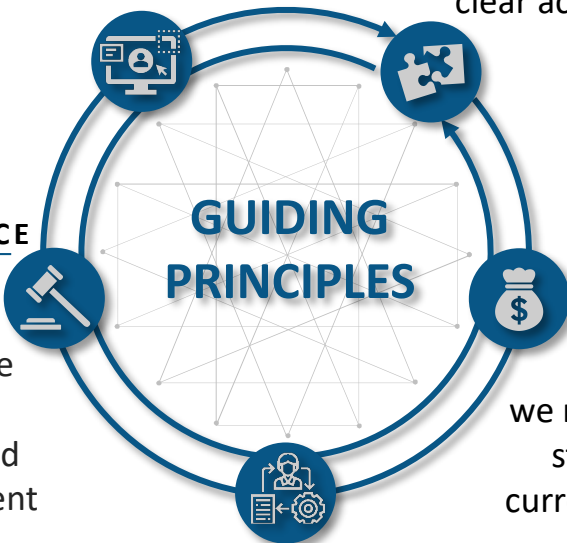
These Lines of Effort (LOEs) are informed & influenced by the following areas, with specific references throughout this document and the Appendix.

⭐ **STRATEGIC ENVIRONMENT**

⭐ **SECAF GUIDANCE (OIs & MIs)**

⭐ **DAF IT ROADMAPS**

⭐ **DOD / DAF GUIDANCE**

⭐ **DAF VALUES**

⭐ **FEDERAL LAW**

DAF CIO STRATEGY

6 Actionable Lines of Effort

- CORE IT & MISSION-ENABLING SERVICES
- ACCELERATE CLOUD ADOPTION
- FUTURE OF CYBERSECURITY
- IT PORTFOLIO MGMT. (PfM)
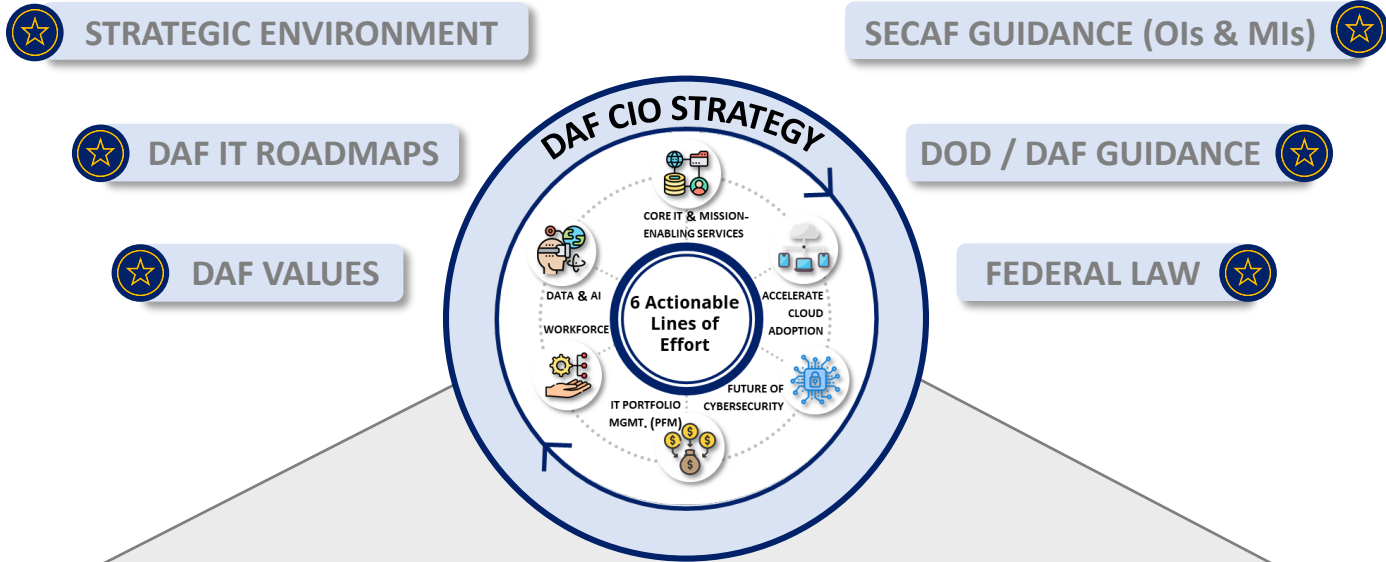- WORKFORCE
- DATA & AI

LOE 1: ACCELERATE CLOUD ADOPTION

"CLOUD FOR THE WARFIGHTER FROM THE ENTERPRISE TO THE EDGE"

Evolve cloud capabilities to support agility, resilience, and quality of mission applications from our bases to the tactical edge or an expeditionary environment.

LOE 2: FUTURE OF CYBERSECURITY

"A SECURE AND RESILIENT DIGITAL ENVIRONMENT"

Enable a digital warfighting environment based on zero trust that protects our data and critical assets from near peer adversaries, equips cyber defenses, enhances governance, and leverages threat-informed security models for rapid deployment of capabilities.

LOE 3: WORKFORCE

"EMBRACE & EMPOWER TALENT"

Build a unified talent management strategy to empower our Total Force Airmen and Guardians with world-class resources, training, and the tools they need to further their professional skills for today's digital environment.

LOE 4: IT PORTFOLIO MANAGEMENT (PfM)

"DELIBERATE & TRANSPARENT STEWARDSHIP OF IT FUNDING"

Robust oversight and management of digital investments to maximize value on every dollar and ensure awareness of total cost of ownership including best use of personnel resources.

LOE 5: EXCELLENCE IN CORE IT & MISSION-ENABLING SERVICES

"DELIVERING PRODUCTIVITY AND MISSION-CAPABLE SOLUTIONS TO THE WARFIGHTER"

Providing warfighters with reliable and resilient connectivity, devices, digital tools, and data they need to fight & win in any environment.

LOE 6: DATA & AI

"OPERATIONALIZING DATA FOR DECISION ADVANTAGE AND AI/ML READINESS"

Advance and operationalize data and AI to speed our OODA loop, take advantage of machine-driven insights, and enable rapid flow of decision-quality data to shorten every kill chain and improve business effectiveness.

See Appendix F for more details around this strategic guidance.

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LINE OF EFFORT #1: ACCELERATE CLOUD ADOPTION

Desired Operational Impact: Globally distributed cloud computing enables rapid deployment and strong performance of business and mission capabilities from the enterprise to the edge, including disconnected ops. An effective hybrid cloud ecosystem improves cybersecurity and resiliency, enables rapid data sharing, and drives simplicity and transparency for operators. Reducing stove piped data centers and legacy applications enables investment in modern capabilities. Theses are critical to our Airmen and Guardians' ability to establish and maintain warfighting superiority.

Hybrid and Edge	Optimized, mission-informed data processing and storage to enable Agile Combat Employment and JADC2. Strategically incorporate multi-vendor and multi-level security elements.	OI2 OI4 OI7 MI5
Accelerate Adoption	Standardize data models, enable consumability, and incentivize cloud migration and adoption across the DAF in a cost-effective manner.	OI7 MI2 MI5
Unified Cloud Offerings	Modernize enterprise cloud offerings to simplify migration, enhance consumability, and maximize interoperability for JADC2.	OI2 OI7 MI5
Modernize On-Premise Compute & Store	Reduce expensive on-premise compute and store requirements in favor of cloud-hosted solutions.	OI2 OI4 OI5 OI7 MI5
Mission Partner Environment for Cloud	Securely enable DAF and mission partners to work collaboratively and effectively at all classification levels.	OI2 OI4 MI5 MI11

LEGEND: ⬡ SECAF Operational Imperatives   ▰ SECAF Management Initiatives

LINE OF EFFORT #2: FUTURE OF CYBERSECURITY

Desired Operational Impact: Create and continuously enhance a secure and resilient digital environment that protects our data and critical assets from adversaries. Equip our operators with Sensoring and data integration to see our environment, easily act, and maneuver. All systems are designed up front with threat-informed cybersecurity in mind. Enable Cybersecurity processes that improve cyber posture, provide a transparent view of cyber risk, and enable rapid deployment and update of capabilities.

Cybersecurity Awareness & Resiliency	Promote cybersecurity awareness and resiliency across the USAF and USSF Total Force. Define and train entire workforce on foundational risk posture for entirety of the USAF and USSF enterprise.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI4
Automated Visibility & Instrumentation	Identify, interrogate, and automate vulnerability management of all assets. Rapidly detect and manage cybersecurity incidents.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI4
Modernize Risk Management	Adopt a threat-informed risk management approach that emphasizes continuous monitoring, rapid updates, and Continuous Authority to Operate. Maximize automation and simplify the RMF process to enable capability development.	OI7 MI2 MI4
Zero Trust and ICAM	Implement a Zero Trust architecture that protects data in a cohesive way across multiple classification levels. This includes the foundational identity (ICAM) elements that manage users, credentials, and the access risk based upon the sensitivity of the resources being protected.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI4 MI5
Resilient Cyber Defense	Drive cryptographic agility and resiliency across the enterprise. Modernize and innovate to strengthen critical infrastructure resiliency. Incorporate robust automated cybersecurity defenses and equip our cyber defenders to see and defend their terrain.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI2 MI4 MI5

LEGEND: ⬡ SECAF Operational Imperatives ⬢ SECAF Management Initiatives

LINE OF EFFORT #3: WORKFORCE

Desired Operational Impact: Enable our DAF workforce to meet future digital challenges and adapt quickly to adopt and operationalize technology and processes that will drive competitive advantage. Empower and equip talent, incentivize performance, and ensure every person has a chance to succeed at the part of our mission where they can drive the most impact and take pride in their contribution."

Strategy, Policy, & Governance	Develop a Joint Workforce Strategy in conjunction with key USAF and USSF stakeholders for military and civilians mature the workforce, capitalizing on emerging technologies and retention of key digital talent.	OI7 / MI5
Talent Management	Define enterprise approach to capture specialized experience and training in order to meet cyberspace, IT and functional missions needs and realize return on investment of interoperability of manpower, personnel systems, training tools and career broadening opportunities.	OI7 / MI2
E-Learning	Identify, assess and leverage all available cybersecurity training sources for cyberspace personnel while maintaining relevance with industry standards and practices.	OI7 / MI2
DCWF Alignment	Educate workforce to ensure the purpose and intent are understood as well as key stakeholders understood their roles, responsibilities, and investment. Revise and update position descriptions to capture applicable DCWF codes and proficiency levels.	OI7 / MI4
Workforce of the Future	Ensure personnel are trained and proficient with today's foundational IT concepts as well as equipped to support tomorrow's emerging technologies.	OI7 / MI2

LEGEND: ⬡ SECAF Operational Imperatives   ▰ SECAF Management Initiatives

LINE OF EFFORT #4: IT PORTFOLIO MANAGEMENT (PfM)

Desired Operational Impact: Efficiently spending every penny to deliver capabilities our warfighters need for mission success. This means sunsetting expensive, redundant capabilities and shrewdly negotiating enterprise agreements that balance cost, consumability, and enable choice for high performing teams.

Strategic Alignment	Align IT Portfolio services with business capabilities, focusing on DAF strategic goals. Develop roadmaps to inform IT investments that will achieve desired mission outcomes.	OI2 OI4 OI5 OI7 MI5
Financial Stewardship	Develop a repeatable approach to capture and track the DAF-wide enterprise IT spend to gain and maintain full transparency into the total DAF IT Portfolio ownership.	MI2
Portfolio Optimization	Identify and reduce redundant and inefficient IT spend, incentivize migration to enterprise-wide acquisition vehicles, and standardize and consolidate commodity IT solutions.	MI5
Policy & Governance	Assess existing policies and track the identification, development, and coordination of IT policies to address known gaps of IT management, to include strategic revision of policies, regulations and guidance.	MI5
Category Management	Leverage industry to strategically combine services with streamlined acquisitions to meet DAF requirements into business segment, enabling focused opportunities for consolidation and efficiency.	OI5 OI7 MI5 MI6 MI7

LEGEND: ⬡ SECAF Operational Imperatives   ▰ SECAF Management Initiatives

LINE OF EFFORT #5: EXCELLENCE IN CORE IT & MISSION-ENABLING SERVICES

Desired Operational Impact: Airmen and Guardians can rely on their networks, devices, and the digital tools and data they need for mission success with 99.99+% consistency. Leaders at all levels are confident these services will be there when they need them and provide the capability they need to win.

Connectivity & Transport	Establish modernized, secure accessibility utilizing Zero Trust strategies and technology to include SD-WAN, IPv6, and robust space-based and mobile communications as we move toward a multi-level security warfighting environment with nearly ubiquitous connectivity.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI5
End User Productivity & Collaboration	Identify and provide the hardware and software our Airmen and Guardians need to work effectively and succeed in their missions. Streamline end user device issuance, software requirements and license mgmt.	OI5 OI7 MI2 MI5
Voice Services	Design and implement automated governance controls to enforce standards, mandatory use vehicles, shared services and compliance with prior approvals for IT acquisition plans, IT spend plans, and the IT budget certification.	OI5 OI7 MI5
NOC/SOC	Deliver a single Network Operations Center and Security Operations Center for the enterprise with integrated and effective automation. Develop next generation monitoring and response capabilities to balance user experience, security, and resilience.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI2 MI4 MI5
DevSecOps & Application Support	Enable DevSecOps services for internal and external teams to have a clear path to production and ability to deliver rapid capabilities to the warfighter, maximizing shared resources and code.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI4 MI5

LEGEND: ⬡ SECAF Operational Imperatives   ▰ SECAF Management Initiatives

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LINE OF EFFORT #6: DATA & AI

Desired Operational Impact: Airmen and Guardians are able to easily access the data they need to make decisions and take action at all levels. Data drives decisions and continuous improvements. Training quality data at scale for algorithm training and analytics. Automation, analytics, and AI designed into all systems from the start.

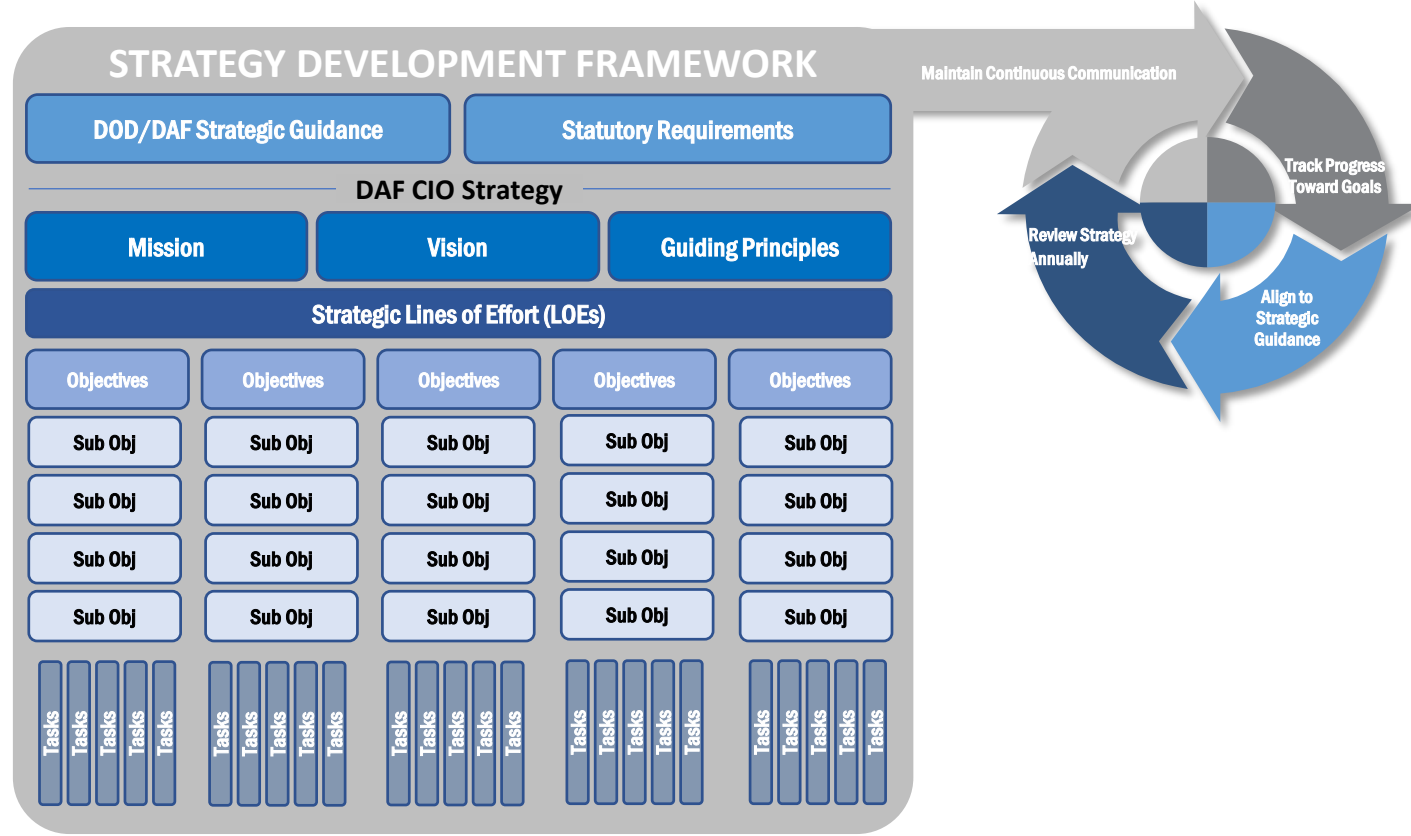| **Data-Driven Operations**	Codify data policy and governance to direct data investments and resources toward capabilities which augment interoperability and prioritize data integrity and quality, while also maintaining confidentiality, privacy, and security.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI2 MI4 MI5 MI7
Application and Platform Integration	Entrench AI/ML training-data and algorithmic models which are compliant with OSD's six tenets for responsible AI implementation across all echelons of the DAF.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI2 MI4 MI5 MI7
AI/ML Readiness	Establish a federated data ecosystem overlaid integrated with DAF weapon systems & theater operations to ensure DAF data is visible, accessible, understandable, linked, trustworthy, interoperable, and secure across the force.	OI1 OI2 OI3 OI4 OI5 OI6 OI7 MI2 MI4 MI5
Innovative Data Solutions	Leverage data, AI/ML, and their emerging technologies to solve to DAF challenges related to DAF business enterprise efficiency, mission operations integration, and greater warfighting capacity.	OI2 OI4 OI7 MI4 MI5

LEGEND: ⬡ SECAF Operational Imperatives   ▰ SECAF Management Initiatives

The DAF CIO Strategy serves as the starting point for each LOE and should inform the development of a follow-on, actionable Implementation Plan to map a path to achieve each Objective's desired ends.

STRATEGY DEVELOPMENT FRAMEWORK

DOD/DAF Strategic Guidance	Statutory Requirements

DAF CIO Strategy

Mission	Vision	Guiding Principles

Strategic Lines of Effort (LOEs)

Objectives	Objectives	Objectives	Objectives	Objectives
Sub Obj	Sub Obj	Sub Obj	Sub Obj	Sub Obj
Sub Obj	Sub Obj	Sub Obj	Sub Obj	Sub Obj
Sub Obj	Sub Obj	Sub Obj	Sub Obj	Sub Obj
Sub Obj	Sub Obj	Sub Obj	Sub Obj	Sub Obj
Tasks	Tasks	Tasks	Tasks	Tasks

Maintain Continuous Communication
Track Progress Toward Goals
Align to Strategic Guidance
Review Strategy Annually

IMPLEMENTATION PLAN

This document is intended to drive next steps through an Implementation Plan with key stakeholders. This will link Ends, Ways, and Means, building on this strategy to implement the Objectives included within each LOE.

LOEs & OBJECTIVES

We will continue to refine these LOEs and Objectives as budget conditions, technology, and the security environment call for. Each Objective will have an OPR to manage its progress with representatives from relevant organizations.

RISKS, REQUIREMENTS & PRIORITIES

We must identify risks, requirements, and priorities informed by the strategic landscape, effectively leveraging the DAF's corporate structure to plug into the Planning, Programming, Budgeting, and Execution (PPBE) process.
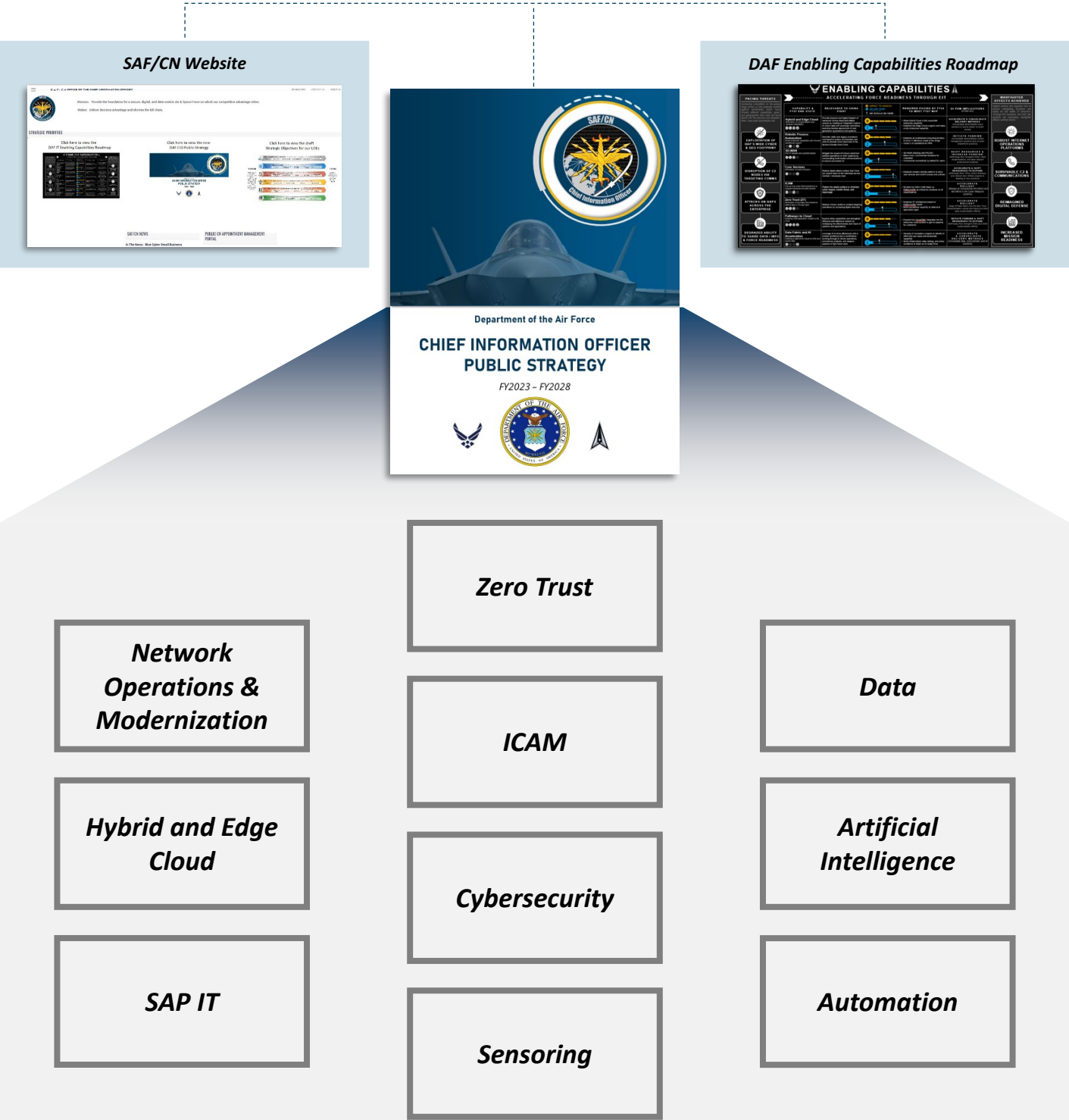
Strategy is meant to be **adaptive** and **iterative**. We expect this document to change as priorities, resourcing, industry trends, and standards allow.

Additional guidance within the Enterprise IT umbrella will be shared here when published, as this document cannot comprehensively address all challenges. Future publications will use this DAF CIO Strategy as an anchor to guide their development & progress.

SAF/CN Website

DAF Enabling Capabilities Roadmap

Department of the Air Force

CHIEF INFORMATION OFFICER PUBLIC STRATEGY

FY2023 – FY2028

Network Operations & Modernization

Hybrid and Edge Cloud

SAP IT

Zero Trust

ICAM

Cybersecurity

Sensoring

Data

Artificial Intelligence

Automation

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