

Space Development Agency

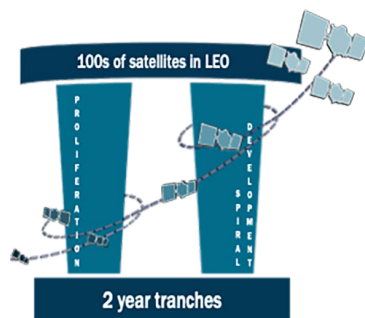


Mission
















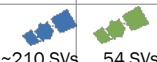










Speed. Delivery. Agility.

As DoD's constructive disruptor for space acquisition, SDA will quickly deliver needed space-based capabilities to the joint warfighter to support terrestrial missions through development, fielding, and operation of the Proliferated Warfighter Space Architecture – a constellation of hundreds of satellites in low Earth orbit. SDA capitalizes on a unique business model that values speed and lowers costs by harnessing commercial development to achieve a proliferated architecture and enhance resilience. SDA will deliver a minimum viable product—on time, every two years—by employing spiral development methods, adding capabilities to future generations as the threat evolves.

Two Pillar Approach



High-Level Schedule

High-Level Schedule		Program / Demo Name	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Tranche 0 – Warfighter Immersion Periodic Regional Access <ul style="list-style-type: none">Low Latency Data ConnectivityData directly to tactical elementsHGV Detection & Tracking Demonstration: <ul style="list-style-type: none">BLOS TargetingMW/MT <ul style="list-style-type: none">Alternate PNTData disseminated to theater targeting cellsOn-orbit FusionMulti-phenomenology sensor fusion	Space Segment	 20 SVs 4 SVs	 4 SVs		<div> Transport</div> <div> Tracking</div> <div> Other</div> <div> Space Vehicle Launch</div>		
	Launch	 x2	 x1				
	MSE&I						
	Ground Segment						
Architecture Adoption							
Tranche 1 - Initial Warfighter Capability Persistent Regional Access <ul style="list-style-type: none">Tranche 0 listed capabilitiesLink 16 tactical data link Periodic Regional Access: <ul style="list-style-type: none">Multiple sensing types using mission partner contributions Demonstration: <ul style="list-style-type: none">Multi-phenomenology, on-orbit fusionMissile defense demo in operational system	Space Segment		 126 SVs 28 SVs				
	Launch		 x1  x5  x4				
	Operations & Integration						
Tranche 2 - Full Warfighter Capability Persistent Global Access <ul style="list-style-type: none">Tranche 1 listed capabilitiesInitial missile defense capability Periodic Global Access: <ul style="list-style-type: none">Multiple sensing types using mission partner contributions Demonstration: <ul style="list-style-type: none">Multi-phenomenology, on-orbit fusion	Space Segment				 ~210 SVs 54 SVs		
	Launch				 x1  x12  x6		
	Ground, Management & Integration						
PWSA Futures Program (PFP) <ul style="list-style-type: none">TnDES: Operational feasibility demo of future PWSA capabilityNExT-SDA Experimental Testbed: Evaluates suitability of new payloads & mission concepts, provided by mission partners.	TnDES			12 SVs (T1DES) 		TBD (T2DES) 	
	NExT			10 SVs (NExT-1) 			
Advanced Fire Control (AFC) <ul style="list-style-type: none">FOO Fighter (F2): Fire control demonstration in operational constellation., on-orbit fusionAFC Ground Infrastructure (AFCGI) and AFC Mission Integration (AFCMI) to support F2 and follow-on AFC efforts.	FOO Fighter (F2)					8 SVs 	
	AFCGI						
	AFCMI						

BLOS: Beyond Line of Sight

HGV: Hypersonic Glide Vehicle

MW/MT: Missile Warning and Missile Tracking

SV: Space Vehicle

TnDES: Tranche n Demonstration and Experimentation System

FOO Fighter: Fire-control On Orbit-support-to-the-war Fighter

*And other advanced missile threats

*Architecture adoption for Tranche 1 and onward

The Space Development Agency's spiral development model now spans the full spectrum: demonstrating Tranche 0, building Tranche 1, acquiring Tranche 2, and planning for Tranche 3

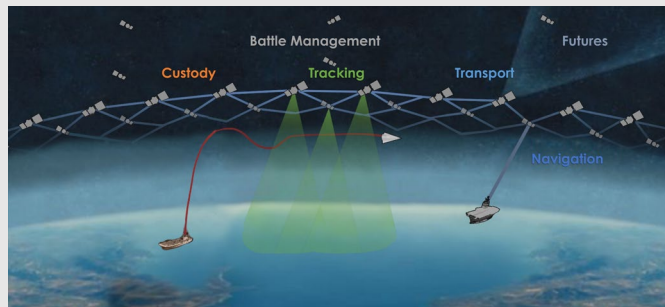
Focus Areas

Mesh network of optically-connected satellites to enable:

- Tracking and targeting for advanced missiles in flight
- Beyond-line-of-sight (BLOS) targeting for time-sensitive targets, or mobile targets

Resilient Layered Architecture Approach

- Threat-driven capabilities informed by warfighter needs
- Assures resilient, low-latency military data and connectivity worldwide to the full range of warfighter platforms
- Integrates with Space Warfighting Analysis Center force design and DOD-wide missile defense mission
- Serves as the Joint All-Domain Command and Control (JADC2) backbone in space



Space Development Agency



Acquiring Capabilities at Speed and Affordable Cost

SDA is on pace to deliver initial space transport capabilities on the agency's originally advertised schedule at a per satellite price point once deemed unachievable.

\$14M 

Approximate average cost of SDA Transport satellite

63 

During FY2023, SDA made 63 awards totaling ~\$2B

111 

Average days between solicitation and contract or award

29 

Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards for ~\$37 million in FY2023

Delivering Capabilities at Speed The First Five Years

