

# Space Development Agency

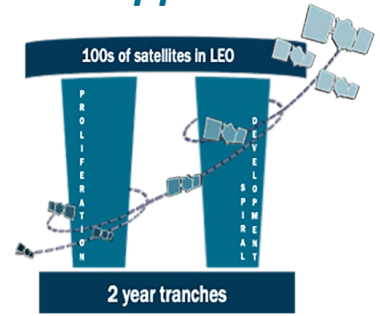


## Mission

**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

	Program / Demo Name	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
<b>Tranche 0 – Warfighter Immersion</b> <b>Periodic Regional Access</b> ▪ Low Latency Data Connectivity ▪ Alternate PNT ▪ Data directly to tactical elements ▪ Data disseminated to theater targeting cells ▪ HGV Detection & Tracking <b>Demonstration:</b> ▪ BLOS Targeting ▪ On-orbit Fusion ▪ MW/MT ▪ Multi-phenomenology sensor fusion	Space Segment	20 SVs 4 SVs	4 SVs			
	Launch	🚀x2	🚀x1			
	MSE&I	👉				
	Ground Segment	👉				
<i>Architecture Adoption</i>						
<b>Tranche 1 - Initial Warfighter Capability</b> <b>Persistent Regional Access</b> ▪ Tranche 0 listed capabilities ▪ HGV Detection & Tracking + ▪ Link 16 tactical data link ▪ Targeting quality data <b>Periodic Regional Access:</b> ▪ Multiple sensing types using mission partner contributions <b>Demonstration:</b> ▪ Multi-phenomenology, on-orbit fusion ▪ MFOV demo in operational system	Space Segment		126 SVs 28 SVs			
	Launch		🚀x1	🚀x5	🚀x4	
	Operations & Integration	👉				
<b>Tranche 2 - Full Warfighter Capability</b> <b>Persistent Global Access</b> ▪ Tranche 1 listed capabilities ▪ UHF & S-band tactical communications ▪ Initial Fire Control Capability <b>Periodic Global Access:</b> ▪ Multiple sensing types using mission partner contributions <b>Demonstration:</b> ▪ Multi-phenomenology, on-orbit fusion	Space Segment				~210 SVs 54 SVs	
	Launch				🚀x1	🚀~11
	Operations & Integration	👉				
<b>PWSA Futures Program (PFP)</b> <b>TnDES (T1DES, T2DES, ...)</b> ▪ Operational demonstration feasibility of future PWSA capability <b>NExT - SDA Experimental Testbed</b> ▪ Evaluates suitability of new payloads & mission concepts, provided by mission partners <b>FOO Fighter (F2)</b> ▪ Fire control demonstration in operational constellation	TnDES			12 SVs (T1DES)		TBD (T2DES)
	NExT			10 SVs (NExT-1)		
	FOO Fighter				8 SVs	
	PFP Ground Integration (PGI)	👉				

**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

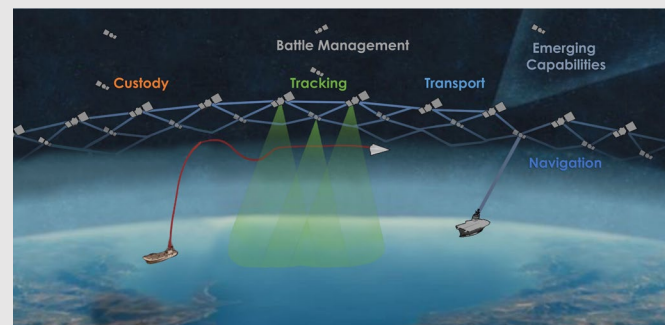
**The Space Development Agency's spiral development model now spans the full spectrum: launching and demonstrating Tranche 0, pivoting from design to build for Tranche 1, acquiring Tranche 2 and planning for Tranche 3**

## Focus Areas

- Mesh network of optically-connected data transport 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

- Assures resilient, low-latency military data and connectivity worldwide to the full range of warfighter platforms
- 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

