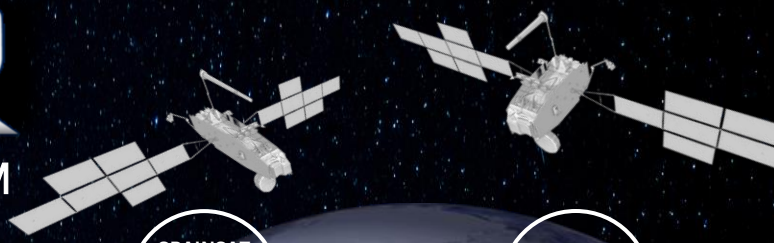
XTAR

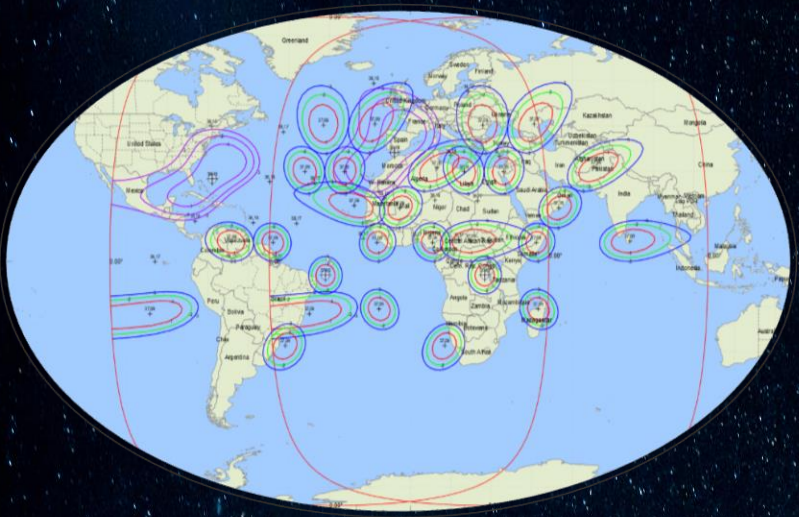
NATO Allied Next-Generation MILSATCOM



- **XTAR-EUR-NG (29°E)**
  SPAINSAT-NG1
- **XTAR-LANT-NG (30°W)**
  SPAINSAT-NG2

SPAINSAT NG-I Launched in January 2025 29ºE

SPAINSAT NG-II Launch by 2025Q3 30ºW



Sample X-band coverage (additional mil-Ka coverage not depicted)

Key Program Features

- ✓ NATO CP-130 MILSATCOM Compliant
- ✓ HANE Nuclear Hardening / Operates in SAL-3 Warfighting Environments
- ✓ Secure Communications in X, mil-Ka, UHF bands

Key Operational Capabilities

Phased Array (X-band) Parabolic (mil-Ka) Coverage Options

Fully flexible software-defined payload (bandwidth, power and coverage) **in X-band provides near-instant beam shaping and resizing capabilities, ranging from 2.2º to satellite FOV. 6 parabolic antennas and 1 semi-global mil-Ka horn per satellite provide additional combat-ready coverage *and* frequency options.**

Bi-Directional X-/mil-Ka Cross-Banding

X and Mil Ka bands are fully interconnected by an on-board digital processor, **maximizing capacity** and **enhancing spectrum management**. Supports mil-Ka users by using existing weather-stable X-band ground infrastructure.

Advanced Anti-Jam Features

On-board processing coupled with several dual sensors enable robust, near-instant anti-jam capabilities including geolocation/nulling (X-band), and RF muting (X- and mil-Ka bands), with automated carrier frequency reassignment options available for affected users.

Digital Channelizers

Flexible, **on-demand coverage** is achieved by dynamically allocating bandwidth to specific regions and users. Channels can be sized from 312.5 kHz to 500 MHz, easily supporting DoD's most advanced waveforms.

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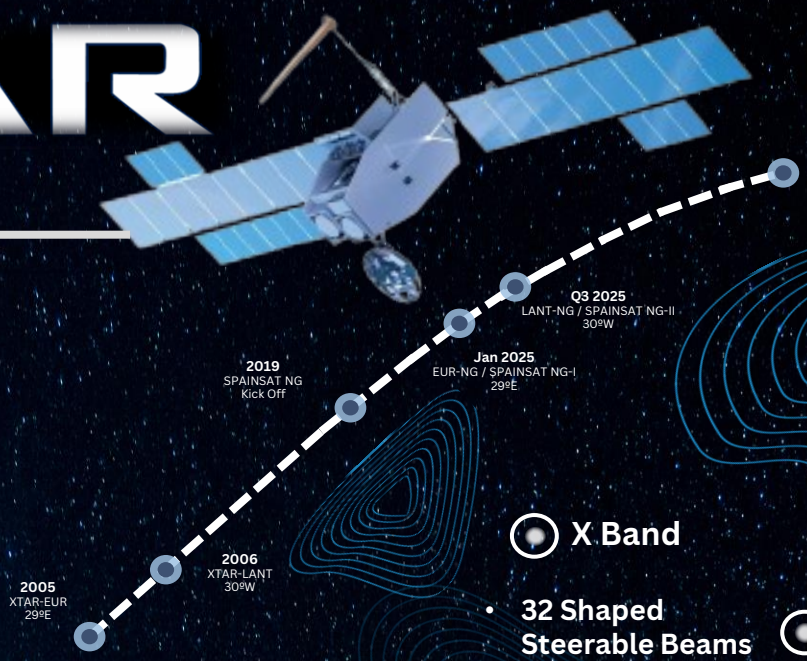
NG PROGRAM

Sovereign, Secure and Interference-hardened communications. The NextGen satellites provide the US Department of Defense, NATO Allies, and partners with unmatched connectivity, delivering resilient and interference-proof communications for defense and government operations.



- **Guaranteed communication capacity** in zones lacking infrastructure.
- **Ensures effective command and control** of the Armed Forces in 2/3 of the Earth.
- **Provides secure government communications i**n any operating environment.
- **Delivers strategic space capabilities** for Allied and partner nations.

6x Current Capacity

In X, Mil Ka and UHF bands

UHF Band

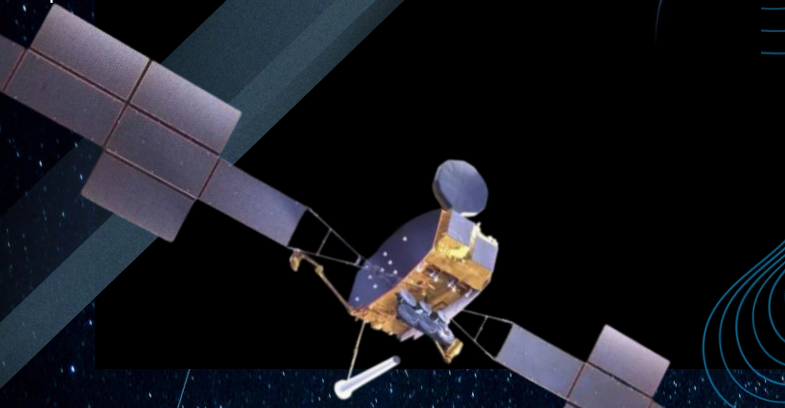
- Global Coverage
- 18 UHF Channels

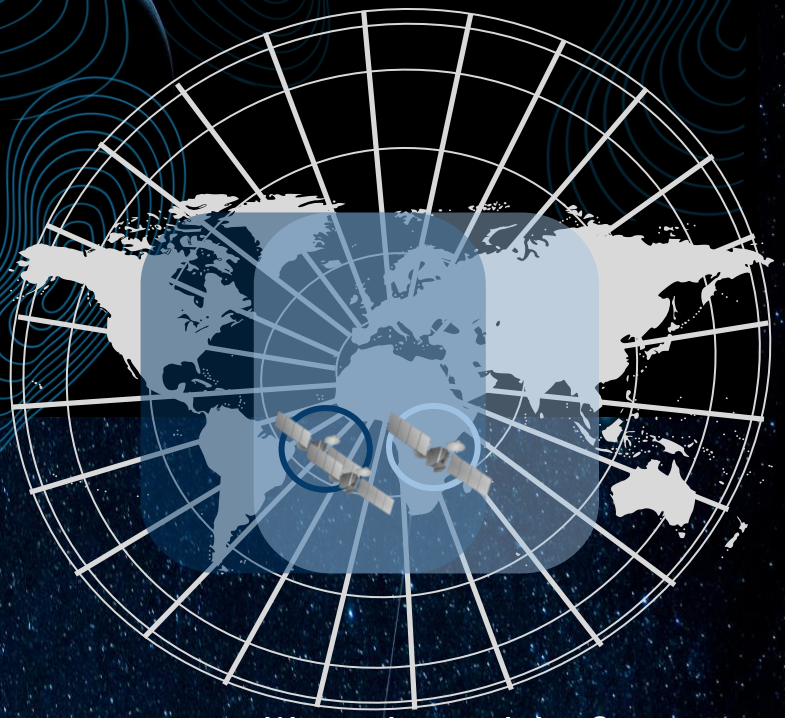
X Band

- 32 Shaped Steerable Beams
- Interference Geolocation
- Nulling
- Beam Forming
- Beam Hopping
- Interconnected with Mil-Ka Band
- Up to 12000 MHz by frequency reuse and polarization

Mil Ka Band

- 12 Steerable Beams
- Adaptable in Power
- Interconnected
- with X band
- Up to 4000 MHz by frequency reuse





Extensive World Coverage...

XTAR-NextGeneration satellites, located at 29ºE and 30ºW on the GEO orbit, provide an extensive coverage area spanning from the the eastern half of the **United States and all Latin America, to the Middle East as far as Singapore on the Asian continent - and thus includes all of Europe and Africa as well.**

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... readily adaptable for any scenario.

- **Active antenna technology with in-orbit reconfiguration capability** for a flexible software-defined satellite (bandwidth, power, coverage).
- An **on-board digital processor interconnects Mil X and Ka bands** payloads enabling cross banding.