

A satellite with large solar panels and a white dish antenna is shown in orbit against a starry background.The logo of the European Union, featuring twelve yellow stars arranged in a circle around the letters 'EU' in white.

EU

# Horizon Europe Programme

**GEO Space Object Mapping & Surveillance System**

EIC Accelerator Stage 1 – Short Proposal

Pitch deck

Centaur Space Inc. June 2025



# EXECUTIVE SUMMARY

## EU: “Sentinel of GEO Space”



### PATENTED INVENTION

Centaur Space Inc. patented  
GEO Space Object Mapping  
and Surveillance System  
(Patent: US 12,250,259 B1)

### PROVEN TECHNOLOGY

Flight proven TRL 9 payload  
sensors. Provides 100% object  
tracking and surveillance



### THE GEO SPACE CORRIDOR

Over 650 operational satellites,  
representing more than 40 nations,  
reside in GEO. Centaur Space has a  
solution to provide risk mitigation and  
Space Situational Awareness (SSA)

### THE TIME IS NOW

The need for SSA has never been greater. The  
EIC and Centaur Space will lead the way.





# CHALLENGES / TRANSFORMATION

## CHALLENGE

- **Inadequate Debris Mapping**
  - 4% of objects catalogued
  - Threat: Collision
- **Absence of Space Situational Awareness (SSA)**
  - Limited defense only implementation
  - Threat: Signal intelligence gathering, jamming, spoofing, and other
- **Limited Inspection & Anomaly Resolution**
  - Limited imaging of GEO satellites for inspection and failure investigation
  - Threat: Anomalies and failures unresolved



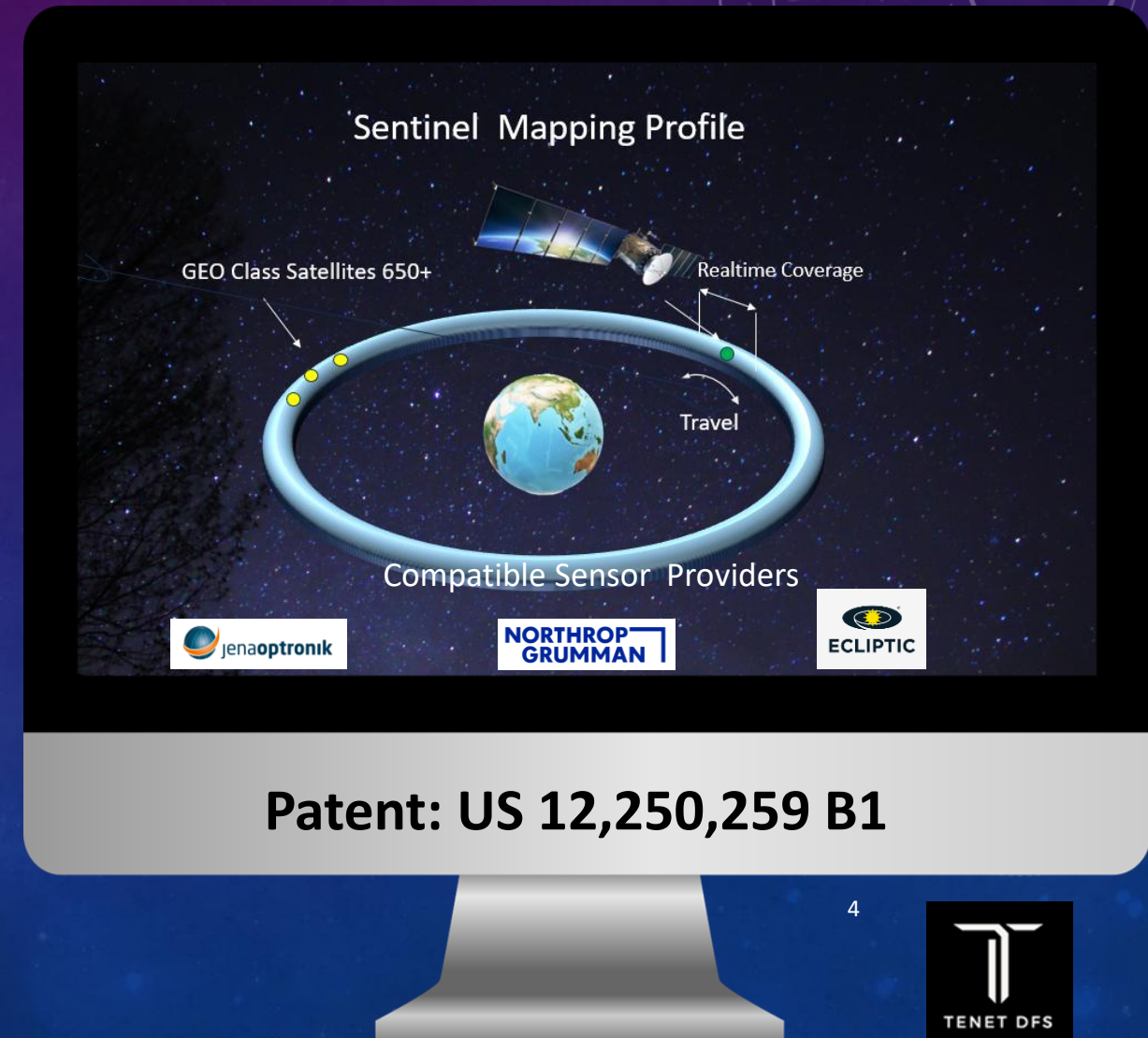
## TRANSFORMATION

- **EU leads in sustainability: 100% Object tracking and catalogue**
- **EU leads in SSA: reduced reliance on US assets**
- **EU leads in GEO imaging: Real-time imaging on demand**

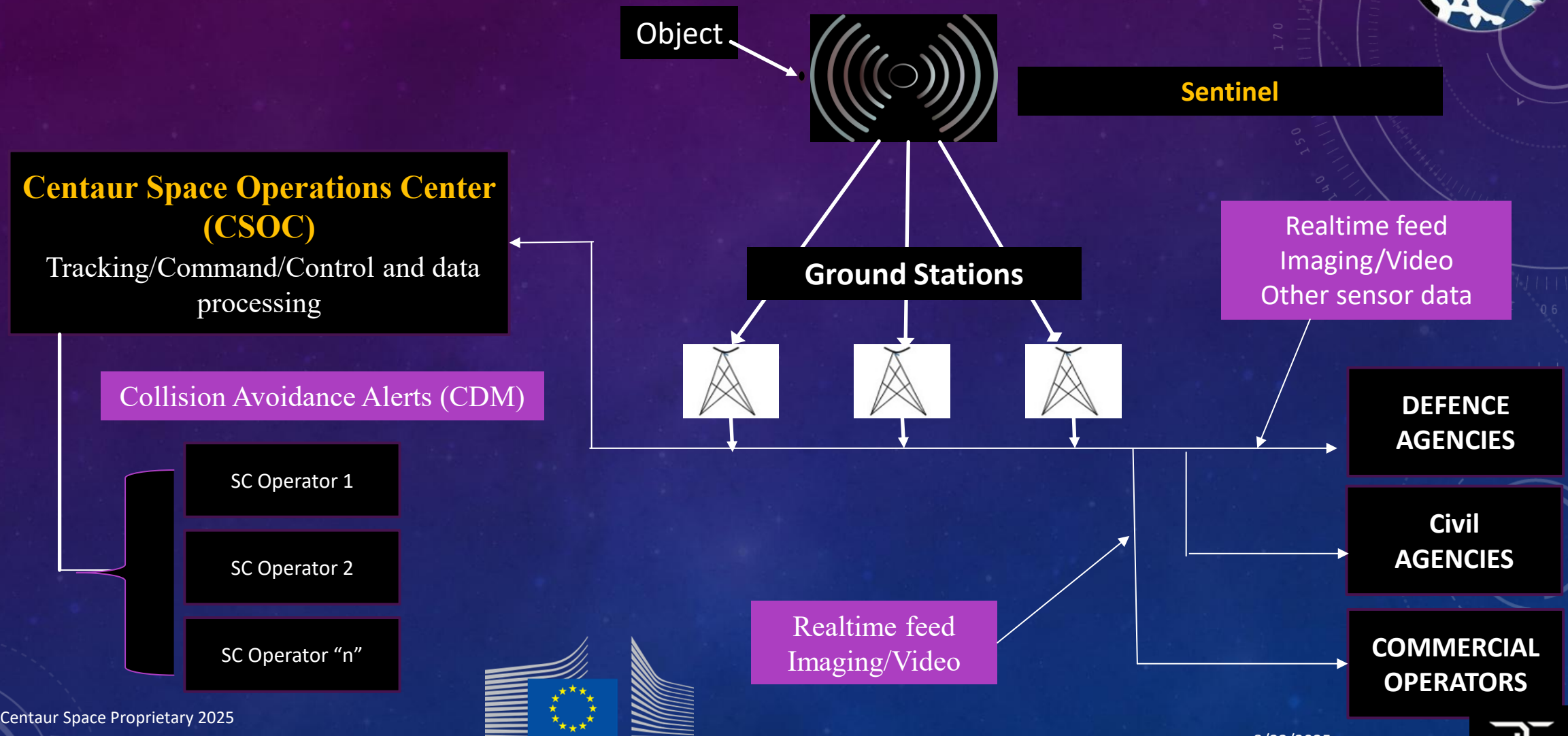


# SOLUTION METHOD

- Mapping/surveillance mobile satellite TRL 6 located in GEO class orbit configured with TRL 9 detection and imaging sensors (Radar/LIDAR/cameras)
- Station keeping inhibited: no propellant required for mapping operations
- Propellant reserved for SSA operations
- Super-synchronous orbit provides westward drift
- Our primary tracking innovation lies in the implementation of radar antennae on the east and west satellite panels and multi-spectrum sensors for surveillance



# MAPPING AND SURVEILLANCE ARCHITECTURE





# TARGET MARKET/INVESTMENT

## Target Strategic investors

Space Development Agency, UK (In work)  
Government entities (e.g., SEPI, ISDEFE)  
Satellite Operators (e.g. Hispasat, SES)  
Space agencies (e.g. Spain, EU)  
Contractors (e.g. Airbus, Thales Alenia, Sener)  
Corporate Investors (e.g., Indra, Bharti)  
Insurance Broker (e.g. Willis, AON)

## Investment banks

Spain (e.g. Santander, Arcano)  
EU (e.g. SNCI, HSBC)

## Target Market

All allied GEO satellite operators (500+ satellites)  
- E.g. SES, VIASAT, Intelsat, Eutelsat  
All allied defense agencies  
- E.g. EDA, Spain Mod, USSF  
All allied space agencies  
- E.g. ESA, NASA, JAXA, ISRO



# REVENUE GROWTH STRATEGY

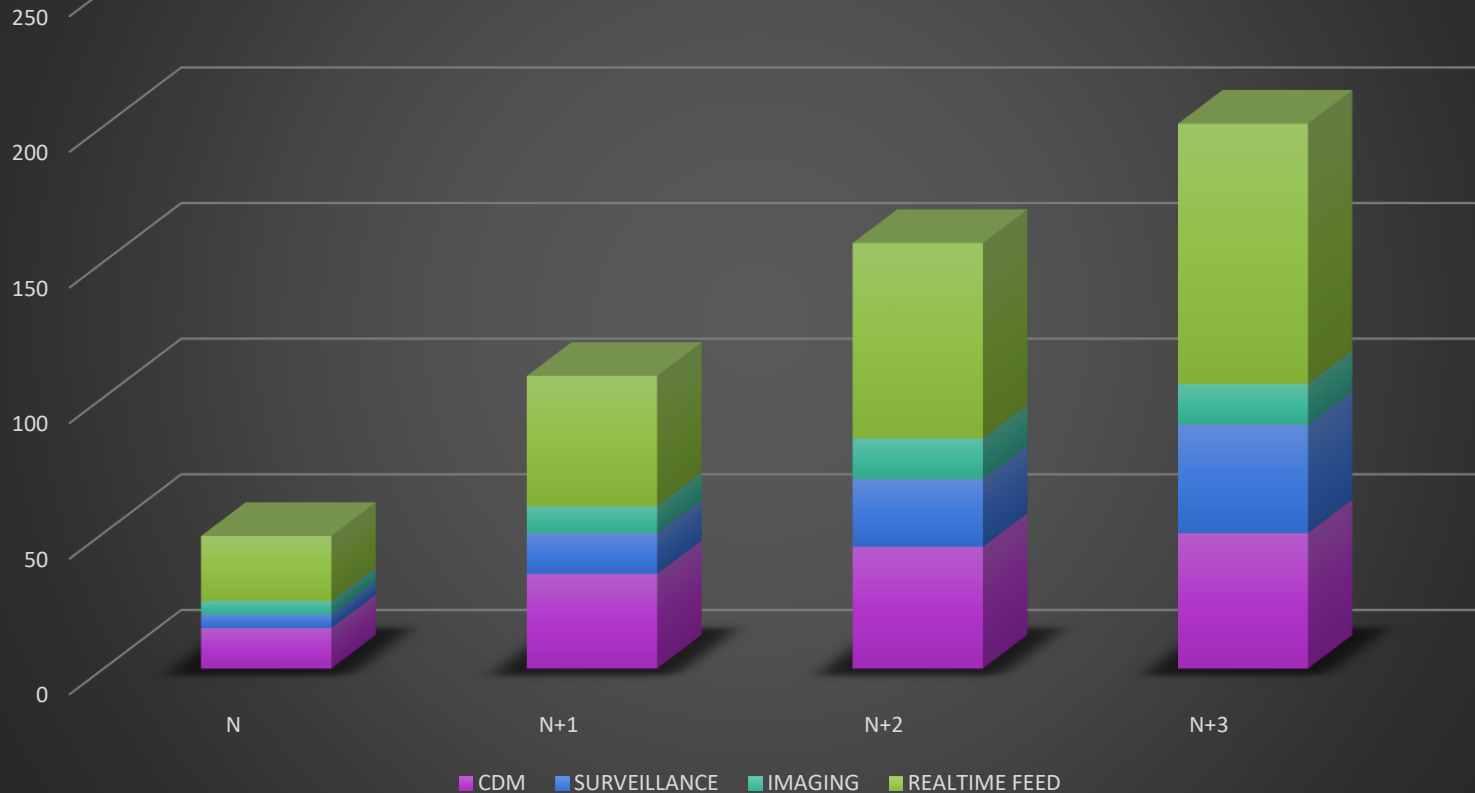


- **COLLISION AVOIDANCE : REMEDIATION**
  - Strategic partnership with the Space Data Association (SDA) provides 250+ satellites: Growth to 500+
- **SPACE SITUATIONAL AWARENESS (SSA)**
  - Establish a customer base during grant phase
  - Utilize in-orbit case studies to grow
- **IMAGING**
  - Establish a customer base during grant phase
  - Utilize in-orbit imagery and case study to grow
- **SECONDARY PAYLOAD**
  - Accommodation of a secondary payload will provide either a significant reduction in program cost and/or a revenue stream



# REVENUE PROJECTION

REVENUE (€ x 1,000,000)



## SERVICES

- Tracking/catalogue/CDM
- Threat assessment
- Deterrence
- Intel gathering
- Imaging
- Inspection
- Anomaly investigation
- Secondary payload

SDA partnership provides 250+ satellites with growth to 500+ Strategic partnerships / clients established during grant phase Growth through leveraging case studies



# ORGANIZATION & RESPONSIBILITIES



## STRATEGY & FINANCE (SF)

Tenet DFS

Aldebaran Partners Inc.

- Vision
- Decision making
- Strategy
- Finance
- Customer confidence



## BIZ DEV (BD)

- Investors
- Partners
- Pricing
- Finance



## MARKETING

- Promotion
- Communication
- Plan development
- Plan execution



## ENGINEERING

Aerospace Corporation

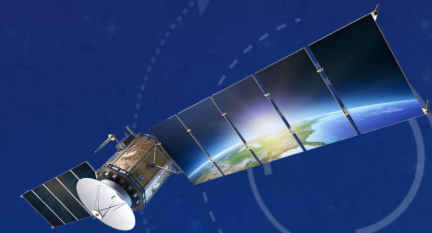
- Specification
- RFPs
- Contractor evaluation

BD and marketing report to the SF team  
SF & Engineering report to the CEO

# SUMMARY

## EU: “Sentinel of GEO Space”

- GEO Space is an extremely valuable asset, yet sustainability and security are threatened
- GEO MapSat provides a solution for services including collision avoidance, SSA; threat assessment, deterrence, intel gathering imaging, inspection and anomaly investigation
- The mobile platform provides the foundation for a comprehensive SSA constellation
- The E U is expanding its space situational awareness (SSA) program and pushing toward greater use of commercial capabilities, the latest move in a long-term push for “strategic autonomy” that could free the continent from much of its dependency on American space tracking capabilities. Centaur Space Inc. is at the forefront of this effort.







EUROPEAN  
UNION

**Thank You!**

# Introducing GEO MapSat

GEO Mapping/Surveillance Satellite

## Point of Contact



James "Jim" Bonner, President  
[jim.bonner@centaurspace.com](mailto:jim.bonner@centaurspace.com)

[www.centaurspace.com](http://www.centaurspace.com)

[James Bonner | LinkedIn](#)



333 White Dove Dr  
Hubert, NC 28539

34C Valerio Rd Ranchos De Taos,  
NM, 87557-7810 United States



CENTAUR SPACE. INC  
+1 (610) 545-9535

