



Multi-Mission LEO Satellite Constellation for
Precision Navigation and Communication
(NAV-COM Satellites)

Direct-to-Device. Anywhere. Anytime



Building INDIA's 1st
LEO based
NAV-COM
Satellite Constellation

Multi-Mission

Software-Defined

Direct-to-Device

The State of Today...

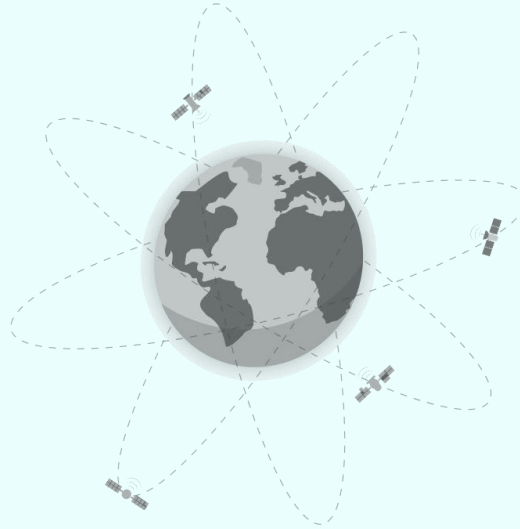
Current PNT systems are:



Vulnerable



Precision PNT - Localised & Expensive

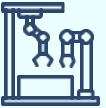


Communications (IoT/M2M) are:

Fragmented



Not Designed for Machines



Demand by 2035



www.sanyark.com

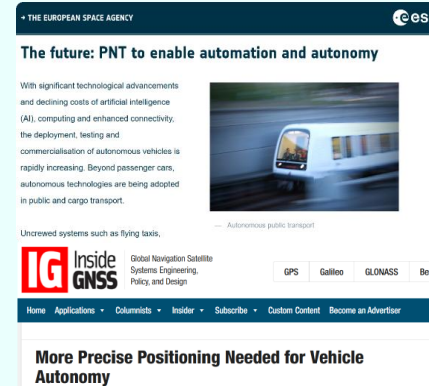
The State of Today...



Vulnerable



Precision PNT - Localised & Expensive



Unreliable PNT = Navigation Errors = Real-World Risks

The State of Today...

Current PNT systems are:



Vulnerable



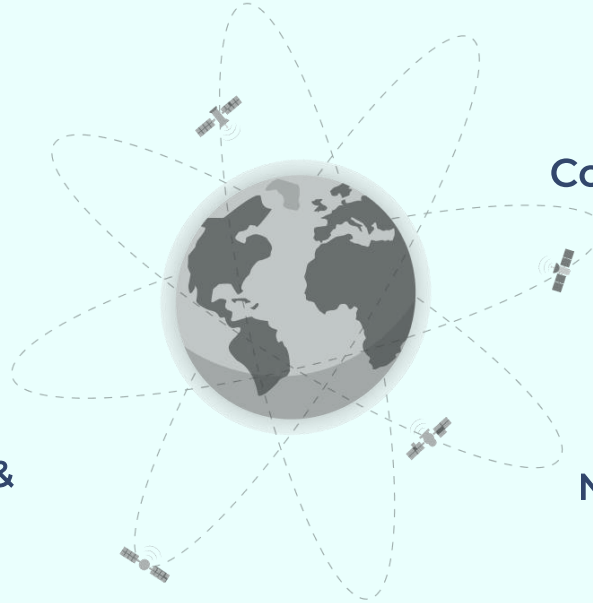
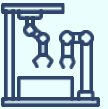
Precision PNT - Localised & Expensive

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The State of Today...

Fragmented



Not Designed for
Machines



Autonomous driving

Connected vehicles need satellites and 5G for communication

2024-07-22 · A guest post by Raffaele Sabatino* | Translated by AI · 8 min Reading Time ·

Home > News > Driving the future: How non-terrestrial networks are revolutionising automotive connectivity

Industry Voices

Driving the future: How non-terrestrial networks are revolutionising automotive connectivity

18 March 2025 · 4 minutes

The global connected car market is projected to reach \$597 billion by 2033, underscoring the industry's rapid expansion and the increasing demand for seamless connectivity. However, traditional networks often struggle in remote areas, leaving vehicles disconnected and limiting critical data access.

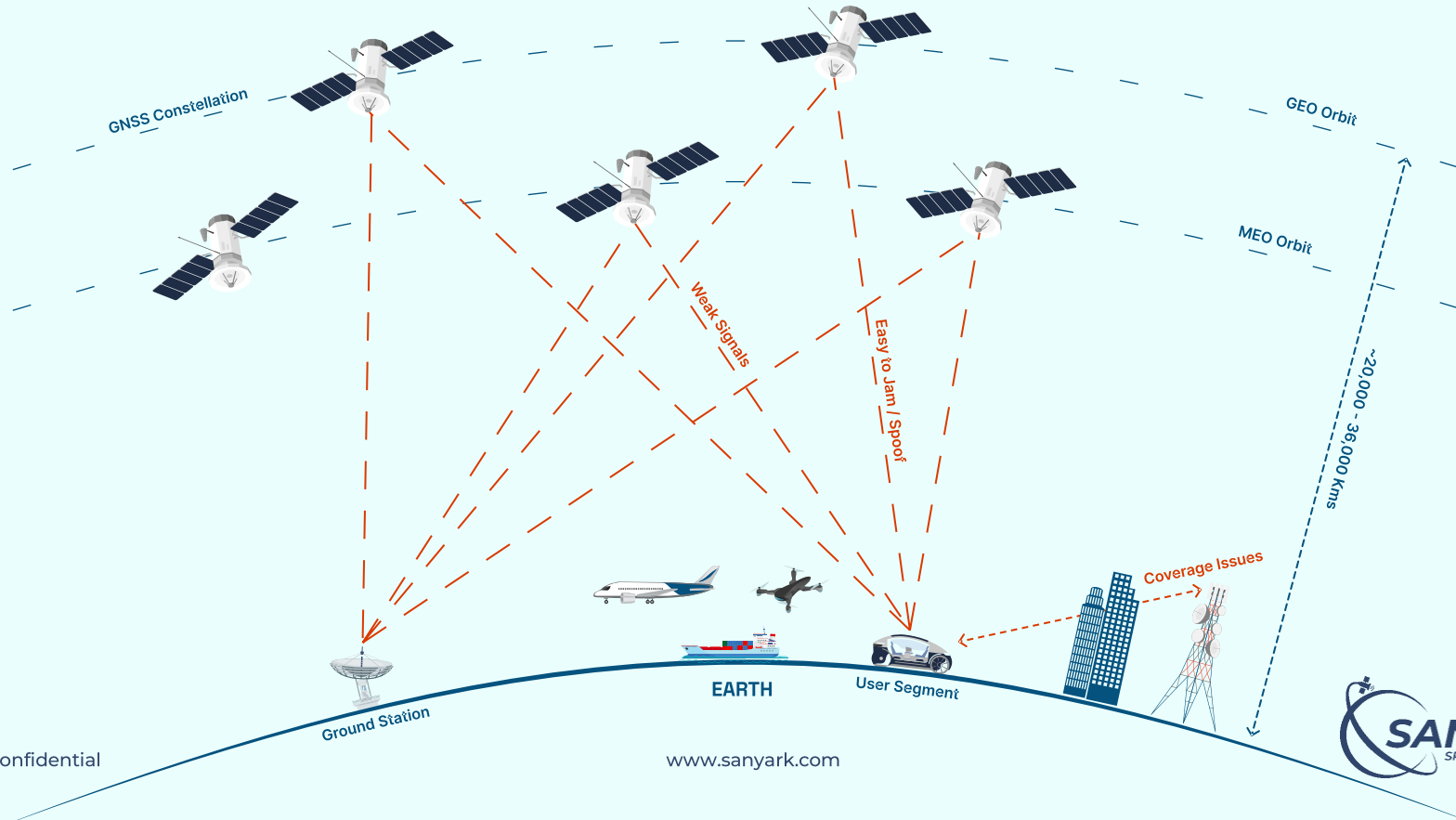
Satellite IoT: How Non-Terrestrial Networks Extend Global Coverage

Satellite IoT: Rethinking market segmentation

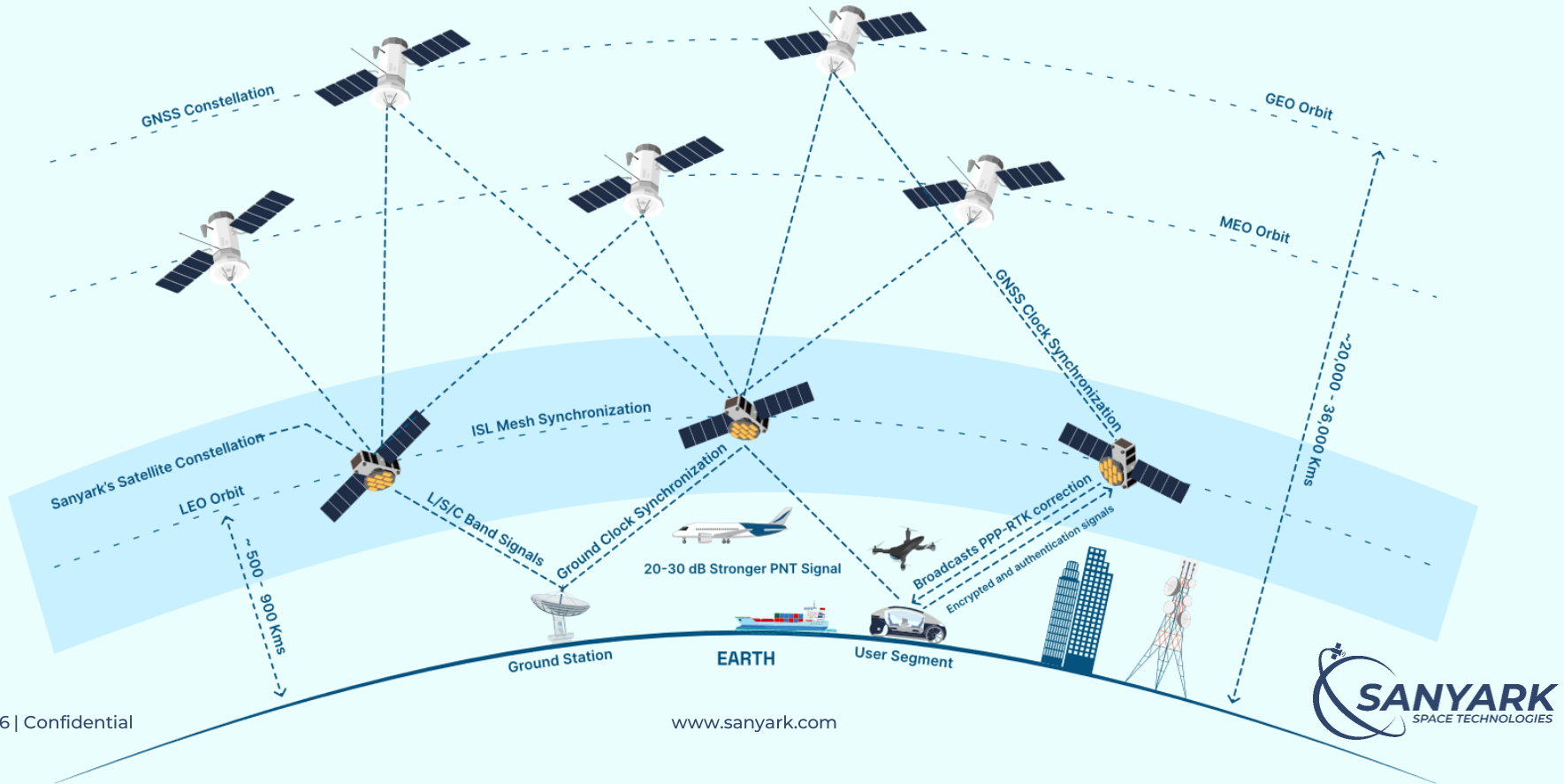


Fragmented Connectivity = Disconnected Devices = Broken Autonomy

The State of Today : PNT & Communications Ecosystem



Sanyark Space : LEO based NAV-COM Satellite Constellation



Redefining the Future to address the gap...



Automotive, Drones & UAVs



Defense, Aviation &
Maritime



Industrial Robots &
Smart Infrastructure

Precision Resilience Autonomy

Sanyark Space : LEO based NAV-COM Satellite Constellation

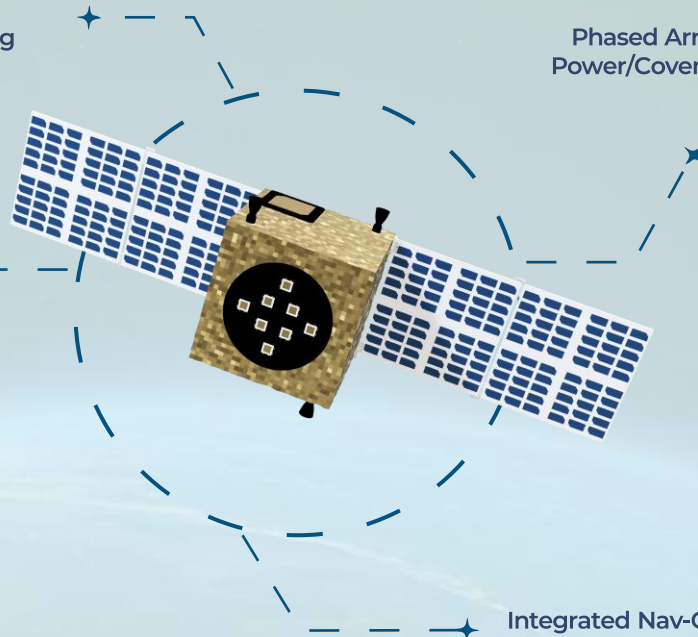
Software-defined, Multi-Mission Satellite Constellation from Low Earth Orbits

Centimeter-level Precision
Navigation augmenting existing
GNSS with High Accuracy
Correction Services

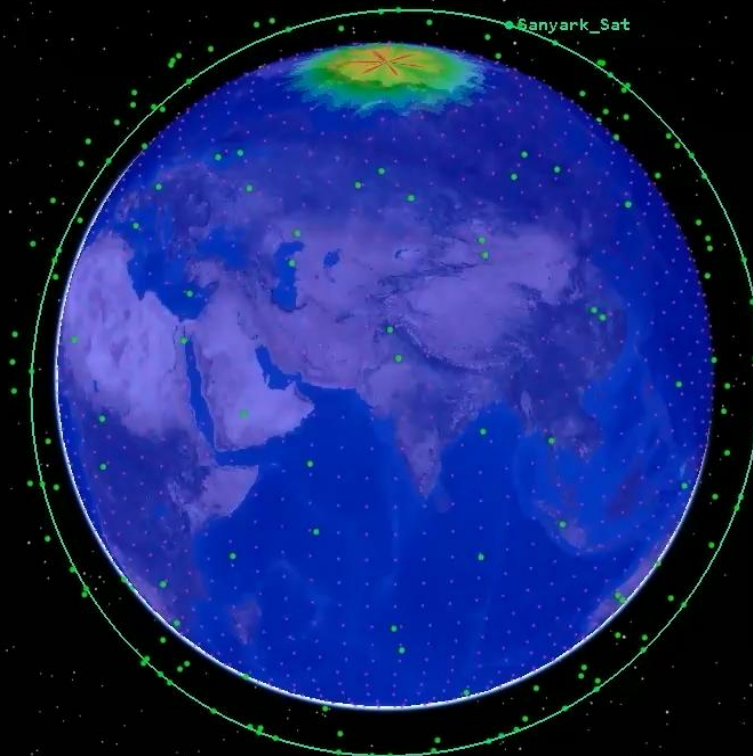
Phased Array Antennas for
Power/Coverage Optimization

ISL Links for reduced
Ground Station
Dependence

Integrated Nav-Com Sensor
fusion engine for user segments



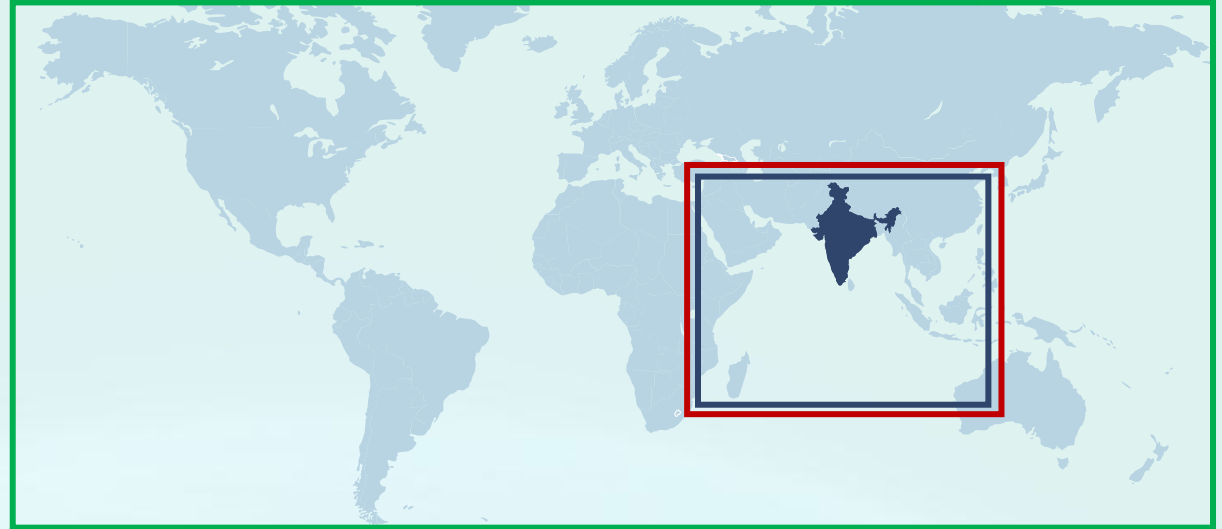
LEO NAV-COM: Space Segment



**SANYARK's
Full-scale LEO
Satellite Constellation**

NavIC/GNSS + Sanyark's LEO-PNT

	Constellation	Accuracy
■	NavIC / GPS	5-6 m
■	NavIC + Sanyark HAS	<30 cm
■	GNSS + Sanyark HAS	<30 cm



**Build for Bharat
&
Build from Bharat for Global**

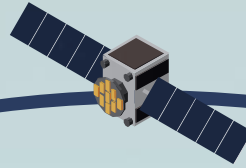
Planned Missions

Q1 2027
POC 1



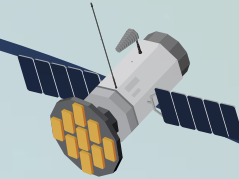
- LEO-PNT Demonstration (High Accuracy Services)

Q4 2027
POC 2



- Nav-Com (PNT + NTN) Services Demonstration
- GNSS Interference Monitoring Services

2028 Onwards
Commercial Launches



- Multi Mission Nav-Com Satellite Constellation

Why Sanyark Space...?



India's First NAV-COM
(Integrated PNT + NTN
Payload)



Sovereign LEO-PNT
System



First to Augment NavIC
from LEO & Operate
Globally

**Build for Bharat
&
Build from Bharat for Global**



THANK YOU

Get in Touch:

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