

SPACE PROGRAM

OVERVIEW OF EARTH OBSERVATION SPACE PROGRAM

CubeSat Project		Ground Station Project	Training program Project
<ul style="list-style-type: none"> Design & Manufacturing Software development Integration & Launch 	<ul style="list-style-type: none"> Operation & Sustainment Data acquisition 	<ul style="list-style-type: none"> Design & Construction Software development Operation & data acquisition 	<ul style="list-style-type: none"> Know-how transfer Training the next generation of Omani space engineers Spreading space culture Space Technologies CoE in Oman

MISSION PARTNERS

Initiator	Spacecraft	Launch service	Data analytics
			

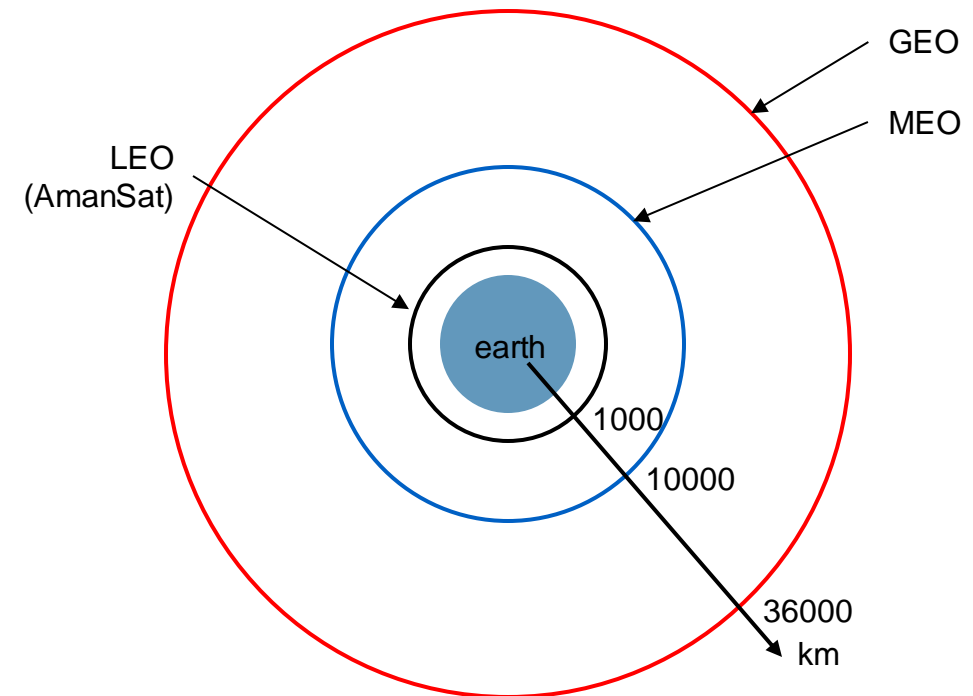


DATA

*Improving urban planning, agricultural, environmental and other needed services.
Opening investment channels between various universities and international scientific institutions.
Opening new horizons for Oman in space and knowledge transfer from the experts to local human capital.*

Satellite Orbits:

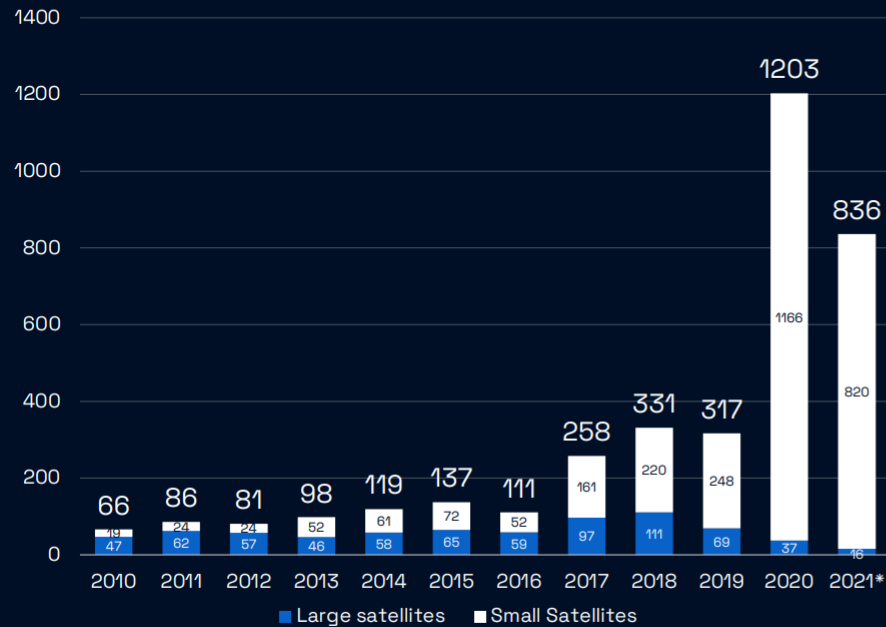
	Distance (km)
Low Earth Orbit (LEO)	<1000
Medium Earth Orbit (MEO)	10000 – 15000
Geosynchronous Earth Orbit (GEO)	38000



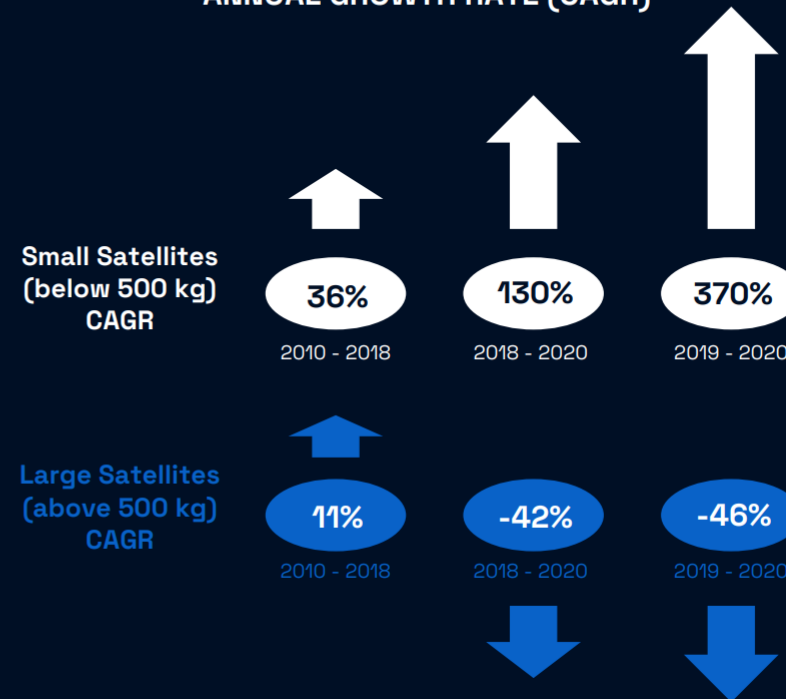
SMALLSAT MARKET IS BOOMING RIGHT NOW

In 2020, there have been more satellites launched than cumulatively in last 5 years. driven by decreasing cost of launch service

**NUMBER OF OPERATIONAL SATELLITES
(SMALL AND LARGE) LAUNCHED IN LAST 10 YEARS¹**



MARKET TRENDS AS COMPOUND ANNUAL GROWTH RATE (CAGR)



AMAN SATELLITE

Spectral bands	RGB+NIR
Image resolution	5 metres
Mass	5 kg
Size	3 units
Products	Hosted Payload Missions On-board processing Data & analytics



SPACE ECOSYSTEM



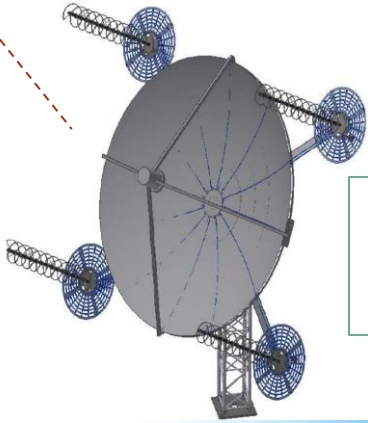
Satellites Constellation in Low/Mid orbit

WE USE SATELLITES TO HELP SOLVE THE GREATEST CHALLENGES OF OUR TIME: RESOURCE UTILIZATION & OPTIMIZATION

					
PRECISION AGRICULTURE	INFRASTRUCTURE MONITORING	ENERGY ASSETS MONITORING	DEFENCE & INTELLIGENCE	LOGISTICS & TRANSPORTATION	ENVIRONMENTAL MONITORING



Ground station to communicate with the satellite



Capture, clean and send data to DA



AI Big data Analytics & Data Scientists



Plans:

- Providing Oman, the opportunity to actively participate in planning and running space mission of launching nanosatellite.
- Build local capabilities:
 - Enabling Oman to obtain skills to design, manufacture, launch and operate a satellite independently
 - AMAN sat Launch failed, but the journey will continue. Manufacturing of new satellite is on-going, launch will be planned after that.