
Space Industry in the GCC

CURRENT TRENDS AND PERSPECTIVES

Knowledge Partner



Contributors

Dear Space Enthusiasts,

Welcome to this joint publication by KPMG and SpaceTech in Gulf, dedicated to exploring the space industry across the GCC region. This edition represents the first truly comprehensive overview of the region's space ecosystem, and we are proud to lead the effort in bringing this landmark work to life.

We extend our sincere appreciation to all contributors for their expertise, insights, and unwavering support. Your contributions have been essential in shaping this inaugural edition.

We warmly invite your feedback and perspectives. Your input will be invaluable in transforming this publication into a lasting and meaningful resource for the GCC's rapidly growing space community.

Stay tuned for more!

*Best regards,
Alex Cresniov
CEO and Founder of SpaceTech in Gulf*



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Key findings

Space Industry in the GCC 2025: Current Trends and Perspectives is based on researches conducted throughout 2025. This study aims to provide the most up-to-date and comprehensive overview of the current state of the GCC space industry ecosystem.

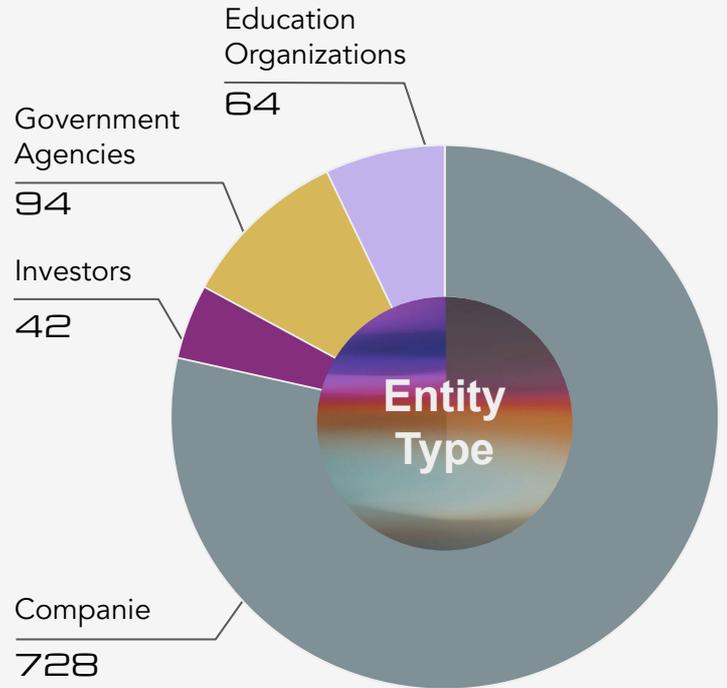
930+

space and defence organizations are currently active in the GCC region

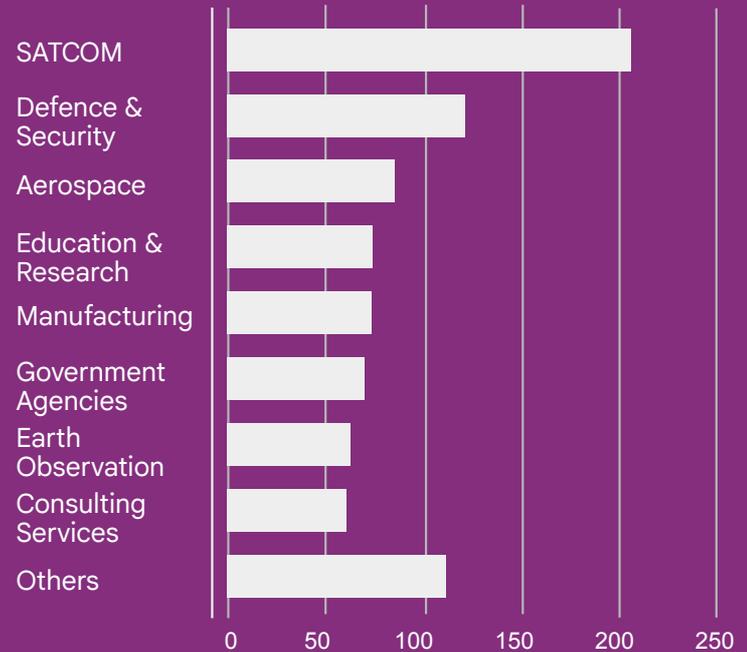
Number of organizations by country



Number of entities by entity type



Number of organizations by industry



Total number of functional satellites in space

UAE	11
Saudi Arabia (Including Arabsat)	9
Kuwait	1
Oman	1
Qatar	2
Bahrain	1



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Foreword

In developing this study, our goal was to build a comprehensive database of organizations, both local and international, that are in some way connected to the GCC space & defence industry. The scope was deliberately broad: it covers government entities, private companies, investors, and academic institutions, including universities and research centers.

We included organizations with varying degrees of involvement. Some play a direct and central role in the space sector, while others are connected more loosely, for example through a memorandum of understanding with a GCC-based organization. This inclusive approach ensures a fuller picture of the ecosystem and the diverse actors shaping it.

The resulting database brings together 930+ organizations. To add further structure, we categorized each organization by industry, ensuring that every entity is represented only once. The categories are: SATCOM, Aerospace, Manufacturing, Consulting, Software Platforms, Education & Research, EO & Geospatial Surveying, and Other/N/A.

All entries were compiled exclusively from open-source information, reflecting our commitment to accessibility, transparency, and visibility as guiding principles in this work. More information about the database can be found via the link: www.data.spacotech-gulf.com

Regional Space Trends in 2025-26

From Demonstration Missions to Sustainable Programs

Shift from prestige-led missions to continuous, commercially viable space operations and infrastructure.

2025 inflection point: UAE's steady launch cadence (THURAYA-4, MBZ-SAT, ETIHAD-SAT, ARAB SATELLITE 813) and Bahrain's Al Munther reflect operational maturity over one-off achievements.

National Space Policies & Long-Term Strategic Visions

Space embedded into national development strategies as an enabler of economic diversification, security, and technological sovereignty.

Saudi Arabia: Vision 2030 positions space as a commercial and strategic sector, executed via NSG and CST. UAE: National Space Strategy 2030 and Space Economic Zones align exploration, EO, comms, and commercialization. Oman: Vision 2040 integrates space through EO, downstream services, and launch infrastructure (Etlaq).

Regional Space Integration (GCC & Arab Cooperation)

Deepening regional coordination through joint missions, shared platforms, and policy alignment.

ARAB SATELLITE 813 as a pan-Arab hyperspectral mission.

MoU between KFAS (Kuwait) and MBRSC (UAE) in November, 2025.

Diversified Global Partnerships

Strategic collaboration with international agencies and private firms to accelerate capability building.

UAE-Thales Alenia Space (Gateway airlock); Space42-Esri-Microsoft (Map Africa); Saudi SpaceUp attracting global startups; OmanSat-1 with Airbus D&S.

Sovereign Earth Observation & Geospatial Control

Building end-to-end EO value chains spanning satellites, analytics, platforms, and decision intelligence.

Saudi Arabia's NeoMaps; UAE's TII EO pipelines and Space42 Foresight Constellation; Oman Lens, ETCO, and Ankaa Space from Oman.

AI-Driven Space Systems & Data Intelligence

Integration of AI, GeoAI, and advanced analytics across satellite operations, EO interpretation, and autonomy.

Bahrain's Al Munther AI-enabled imaging; UAE's GIO Platform; Saudi NeoMaps analytics; Convergence with data centers, LLMs, and emerging quantum technologies. The concept of Data centers in space by Madari Space.

Deep-Space & Science-Led Exploration

Participation in lunar, asteroid, and planetary missions to build scientific capital and global relevance.

Integration into international space collaboration activities. UAE's Rashid-2 rover, Emirates Asteroid Belt Mission, and critical Lunar Gateway participation; KSA's Space Weather CubeSat-1.

Innovation, Startups & Commercialization Engines

Government-backed programs accelerating startups, tech transfer, and downstream space adoption.

Saudi SpaceUp (\$28M in contracts), Oman Space Accelerator (10 startups), and DIFC's EO accelerator anchoring commercialization.

Sovereign Launch Capabilities & Access to Space

Developing independent launch infrastructure and reusable rockets to lower costs and secure autonomous access to orbit.

Oman: Etlaq Spaceport, MENA's first commercial launch facility at 18° latitude. UAE: reusable rocket program with ASPIRE Space and LEAP 71, signaling long-term launch sovereignty; TII's liquid rocket engine tests.

Talent, STEM & Applied R&D Pipelines

Structured human-capital development linking academia directly to mission hardware, analytics, and operations.

UAE's first PhD in space sciences; National Space Academy with EDGE; MBRSC REU programs; Bahrain's GeoAI training; NSG's EO workforce programs.

Multi-Orbit Connectivity, IFC & Near-Space Platforms

Securing resilient communications through GEO/LEO integration, In-Flight Connectivity (IFC), and High-Altitude Platform Systems (HAPS).

Saudi Arabia: NSG–Thai Airways and Uzbekistan Airways IFC deployment. Arabsat as a regional leader. UAE: Space42's AI-enabled multi-orbit architectures and HAPS for in-flight, near-space, and orbital connectivity. Qatar & Oman: Es'hailSat and OmanSat-1 for sovereign communications.

Space Industry in Saudi Arabia



Government Entities

Education & Research

The image displays a comprehensive grid of logos for various entities in the Saudi space industry, organized into four main categories:

- Government Entities:** Includes logos for NEBULA, ASH, DMS, GeoTech, OptimalPV, SWEDTEL, SPACE SOLUTIONS, ABS, Capella Space, ICSAT, LEOSAT, SCOPA, GTO, AWTL, ANEXIA, INTELMATIX, ACES, SALTS, AERIAL IMAGING SAUDI ARABIA, CSLO, mada, ALCON TELECOM, MAPDEV, VIRGINIA, ARIANEGROUP, SAMIFIGEAC, PARSONS, OFFWORLD, HUGHES, AIRSAT, APSTAR, NETGEAR, SAMI, NTC, SBA, Saudi Arabia Centre for Space Futures, and others.
- Education & Research:** Features logos for PIF (Public Investment Fund), Timenschen, Prince Sultan University, KAPSARC (King Abdulaziz City for Science and Technology), Space Innovation Hub, and various academic and research institutions.
- Private Companies:** Lists numerous private sector players such as ICEYE, NORTHSTAR, SPACE TRIT, ASIME, ATSS, FIBERSAT, JASARA, MATECO, ACECO, SAFEROAD, CSFER, NANTA, AWS, and many others.
- Investors:** Shows logos of investment firms and venture capitalists, including NILESAT, SINGTEL, STAR-VISION, and others.

Private Companies

Investors

As of February 2025

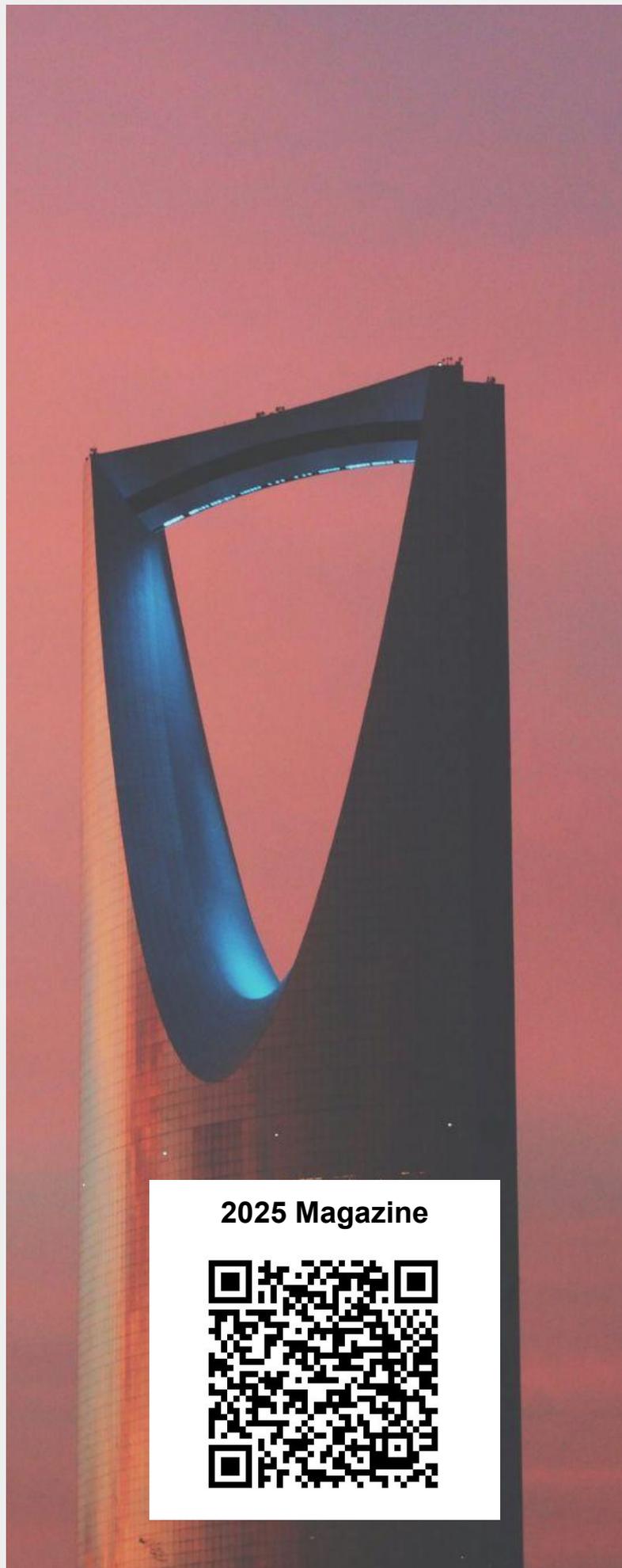
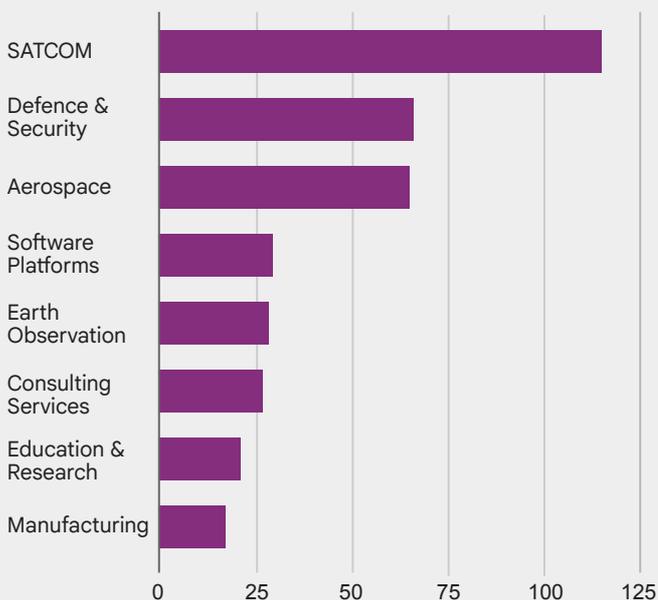
Saudi Arabia is executing the final phase of Vision 2030, transforming its space sector through the Saudi Space Agency (SSA), Communications and Information Technology Commission (CST) and the Neo Space Group(NSG).

The Saudi Space Ecosystem

Saudi Arabia Ecosystem (Local + International)	Number
International Entities	177
Saudi Arabian Entities	253

Saudi Arabia’s ecosystem is locally driven but internationally dependent, with 253 domestic entities alongside 177 international organizations. The local market is largely populated by distributors and resellers of international space products and services, reflecting limited indigenous manufacturing and technology ownership at this stage. SATCOM (115) dominates, followed by Defence and Security (66) and Aerospace (65), reinforcing the focus on connectivity and national security. Software Platforms, Earth Observation, and Consulting indicate early downstream growth, while Manufacturing and Education & Research remain underdeveloped. Overall, the ecosystem is infrastructure- and security-led, with localization still concentrated on distribution and integration rather than core technology development.

Industry Segment by Number of Organizations



2025 Magazine



Space Industry in the UAE



Government Entities

Education & Research

The image displays a comprehensive grid of logos for various entities in the space industry, categorized into four main groups:

- Government Entities:** Includes logos for major aerospace and defense companies like Airbus, Boeing, Lockheed Martin, and ST Engineering, as well as government agencies such as NASA, ESA, and the UAE Space Agency. It also features logos for various international space organizations and research institutions.
- Education & Research:** Features logos for academic and research institutions, including the American University of Sharjah, Khalifa University, and various international universities and research centers.
- Private Companies:** Lists numerous private space companies and startups, such as SpaceX, Virgin Galactic, Blue Origin, and various regional and international space tech firms.
- Investors:** Shows logos for various investment firms and venture capitalists, including Space Ventures Investors, and other financial institutions.

Private Companies

Investors

As of October 2025

The United Arab Emirates: Innovation and Exploration Hub

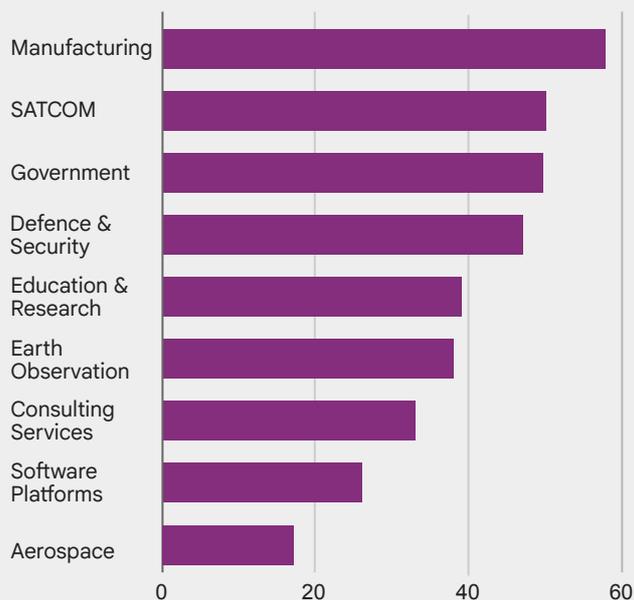
The UAE is the regional leader in space exploration, characterized by the National Space Strategy 2030 and a robust AED 20 billion investment.

The UAE Space Ecosystem

UAE Space Ecosystem (Local + International)	Number
International Entities	195
UAE Entities	215

The UAE ecosystem is highly internationalized, with 215 local entities and 195 international organizations, reflecting an open market where many local players act as distributors and integrators of global space products, alongside a growing base of domestic technology developers. Manufacturing (58) leads the ecosystem, setting the UAE apart regionally and highlighting its focus on industrialization and upstream capabilities. SATCOM, Government, and Defence & Security follow closely, indicating strong public-sector demand. A solid presence of Education & Research and Earth Observation supports long-term innovation, while Investors, Consulting, and Software Platforms point to a more mature commercial and downstream environment. Overall, the UAE market is diversified and comparatively mature, combining manufacturing, R&D, and services, while remaining strongly connected to international partners.

Industry Segment by Number of Organizations



2025 Magazine

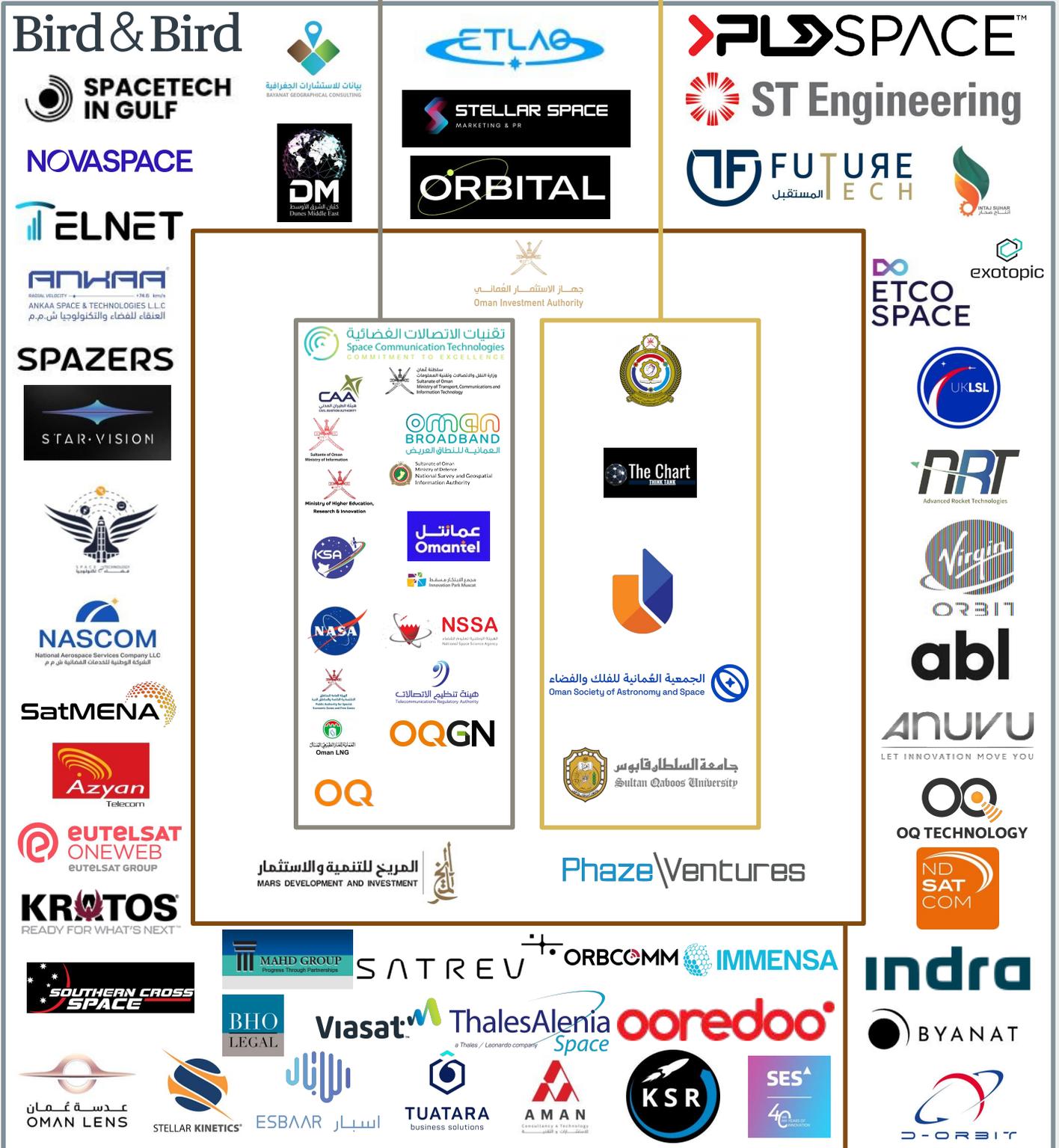


Space Industry in Oman



Government Entities

Education & Research



Private Companies

Investors

As of May 2025

Oman: The Gateway to Orbit

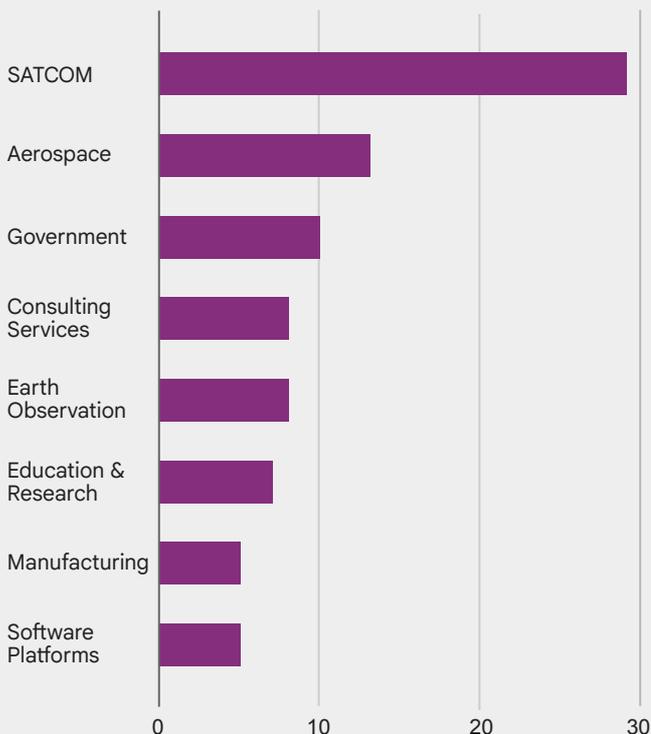
Oman's strategy centers on its unique geography at 18 degrees north latitude. The Etlaq Spaceport in Duqm offers a streamlined 45-day approval cycle, positioning it as an agile global alternative for commercial launches.

The Omani Space Ecosystem

Oman Ecosystem (Local + International)	Number
International Entities	42
Local Organizations	53

Oman's ecosystem is growing, with 53 local entities and 42 international organizations. The market is largely made up of distributors and service providers for international space solutions, with limited domestic technology development. SATCOM (29) dominates, driven by government and connectivity needs, followed by Aerospace and Government. Other segments remain modest, while Manufacturing and Software Platforms are minimal. Overall, the ecosystem is application-focused and state-led, with gradual growth driven by government initiatives and supported by international partnerships.

Industry Segment by Number of Organizations



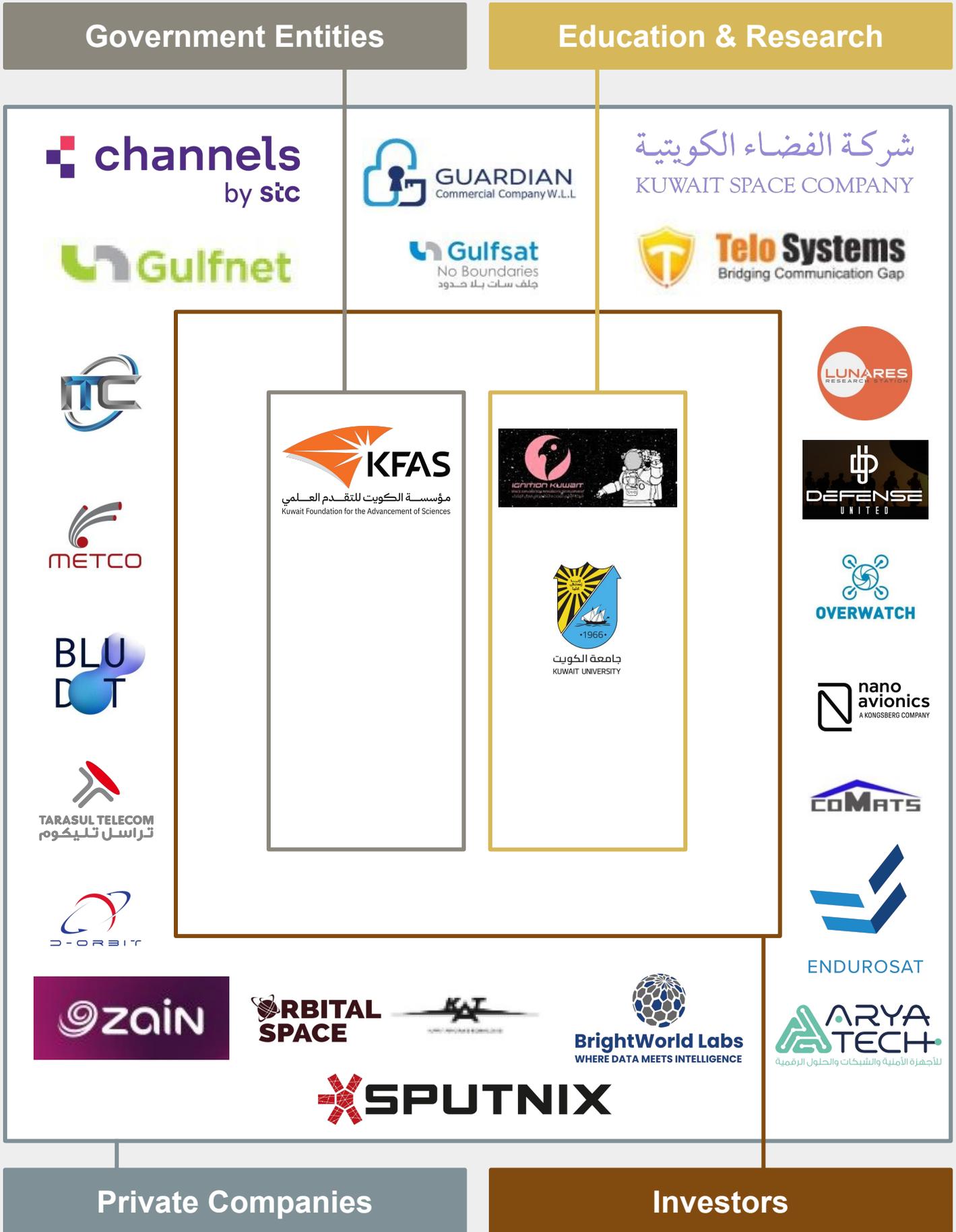
Space Industry in Bahrain



Space Industry in Qatar



Space Industry in Kuwait



Emerging Hubs: Qatar, Kuwait, Bahrain

The combined ecosystems of Qatar, Kuwait, and Bahrain remain small and fragmented, with 58 local organizations and only 10 international entities, indicating limited market depth and selective foreign participation.

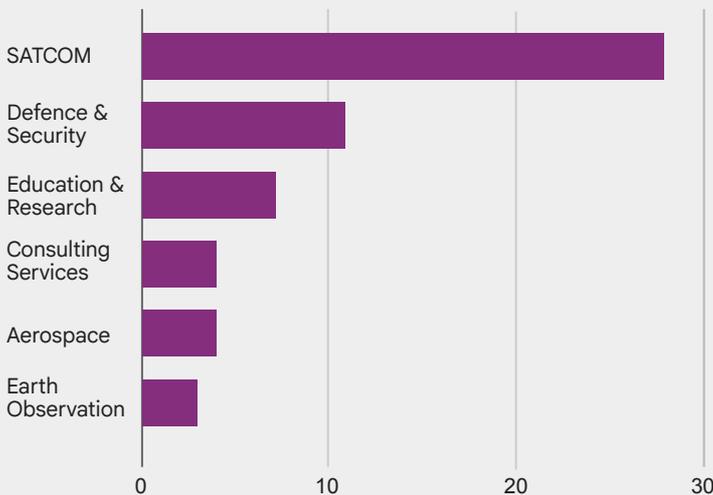
Local activity is concentrated in government, education, and a small number of investors, reflecting early-stage institutional involvement rather than broad commercial development. SATCOM (28) dominates across all three countries, driven by connectivity and government needs, followed by Defence and Security (11). Other segments - Education & Research, Consulting, Aerospace, and Earth Observation - remain small, highlighting low diversification and minimal downstream commercialization. Overall, these markets are nascent and government-centric, with space activities focused on basic services and strategic use cases, and limited ecosystem maturity compared to Saudi Arabia, the UAE, and Oman.



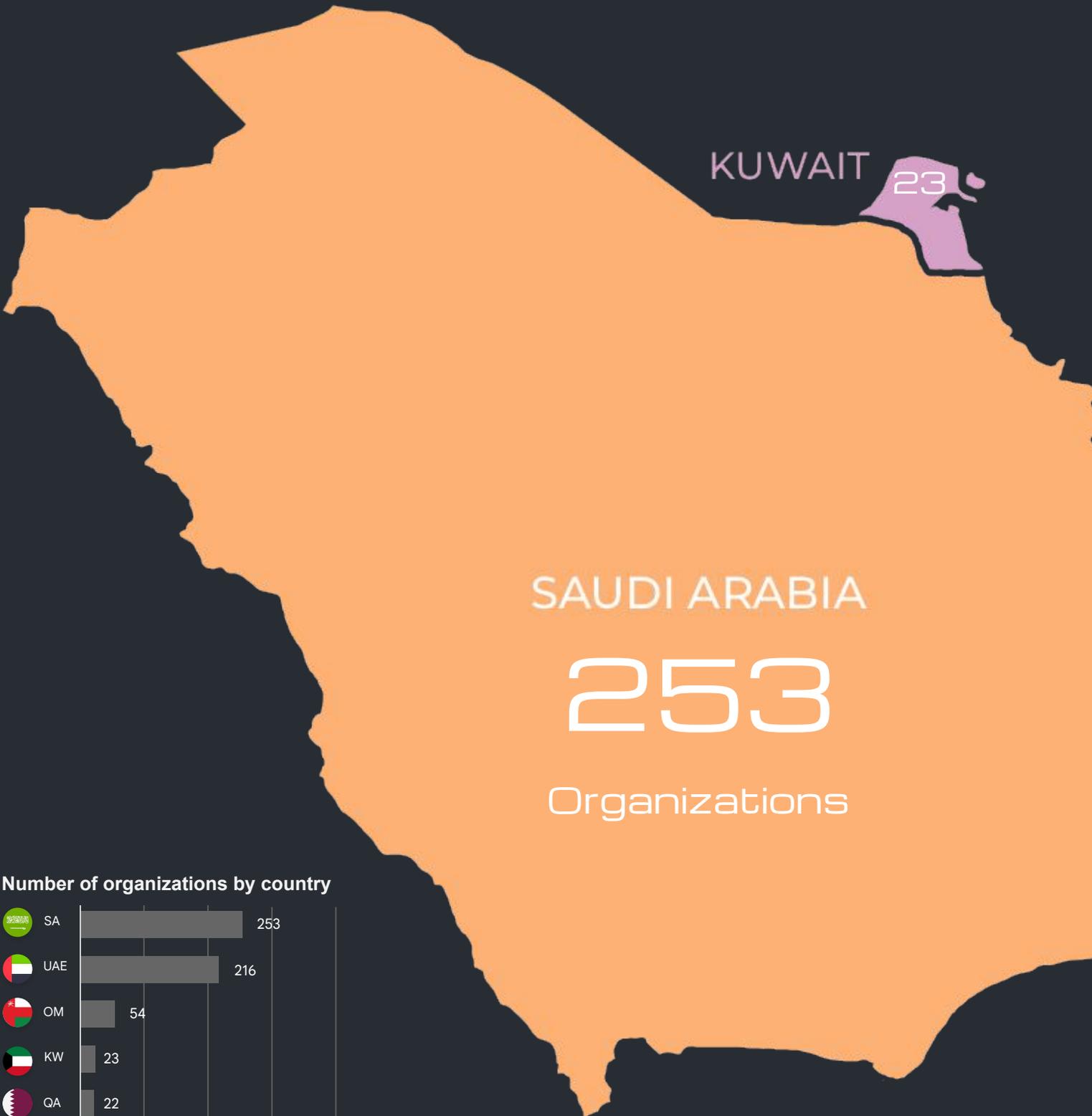
The Qatar, Kuwait and Bahrain Space Ecosystem

Entity Statistics (Qatar, Kuwait, Bahrain)	Number
International Entities	10
Local Organizations	58

Industry Segment by Number of Organizations



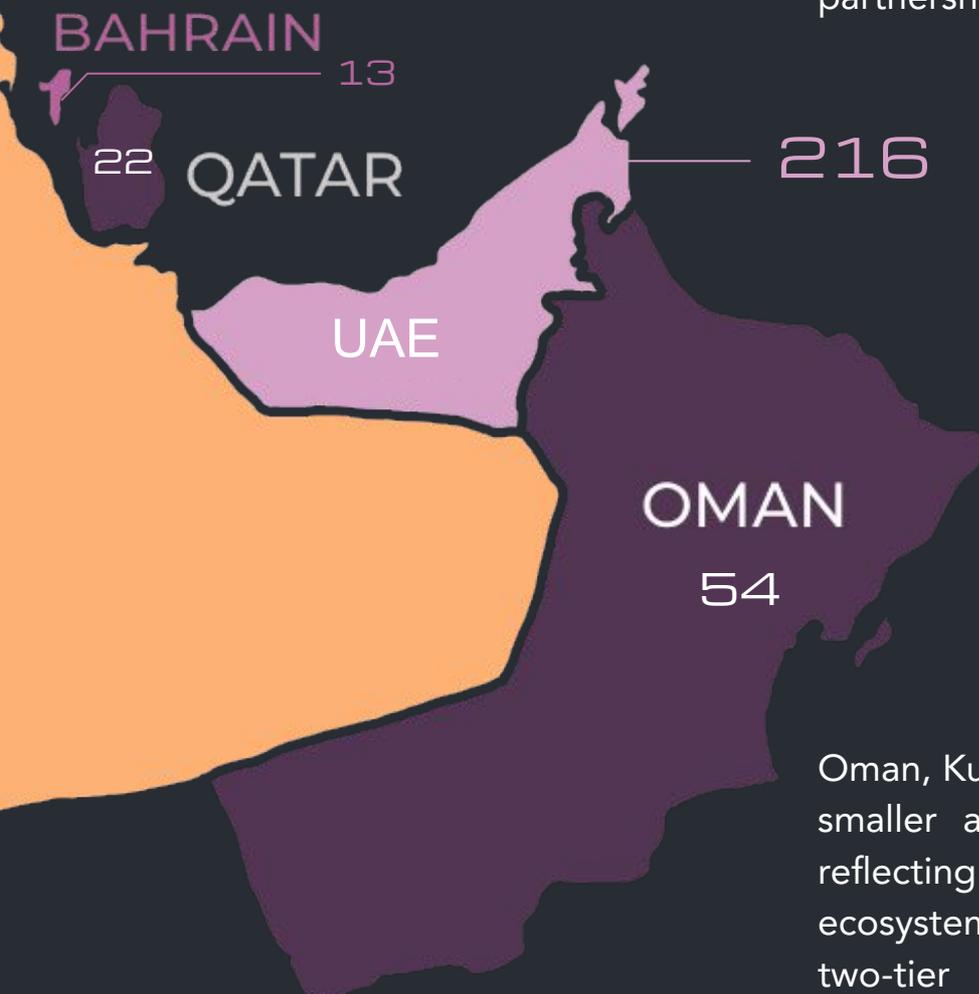
Geography Distribution



Number of organizations by country



A total of 930+ organizations are identified across the ecosystem. The data shows a clear concentration of activity in Saudi Arabia and the UAE, which together host nearly half of all entities, confirming their role as the region's primary hubs. The large number of international organizations highlights the GCC's strong reliance on global partnerships and external expertise.



Oman, Kuwait, Qatar, and Bahrain remain smaller and more specialized markets, reflecting earlier-stage or project-driven ecosystems. Overall, the region follows a two-tier structure: dominant hubs in Saudi Arabia and the UAE, supported by international players, and a second tier of emerging national ecosystems.

Regional Satellites in Orbit — 2025

Total number of functional satellites in space

 UAE	11
 Saudi Arabia (Including Arabsat)	9
 Kuwait	1
 Oman	1
 Qatar	2
 Bahrain	1

Satellites launched in 2025

THURAYA 4

MBZ-SAT

ETIHAD-SAT

THE ARAB SATELLITE 813

Foresight-2 or ICEYE X44 (not included in our list)

ALMUNTHER

THURAYA 4

UAE

Jan 4, 2025



Space42's Thuraya-4 (T4-NGS) is a advanced, next-generation L-band mobile communication satellite built by Airbus.



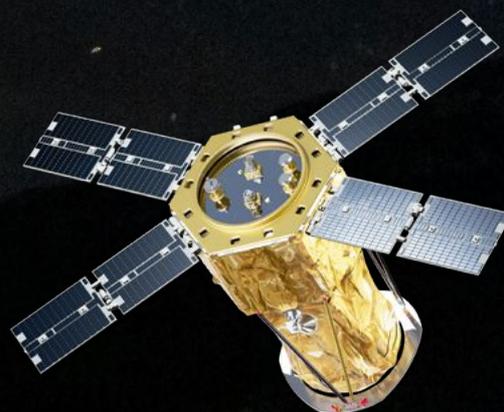
MBZ-SAT

UAE

Jan 14, 2025



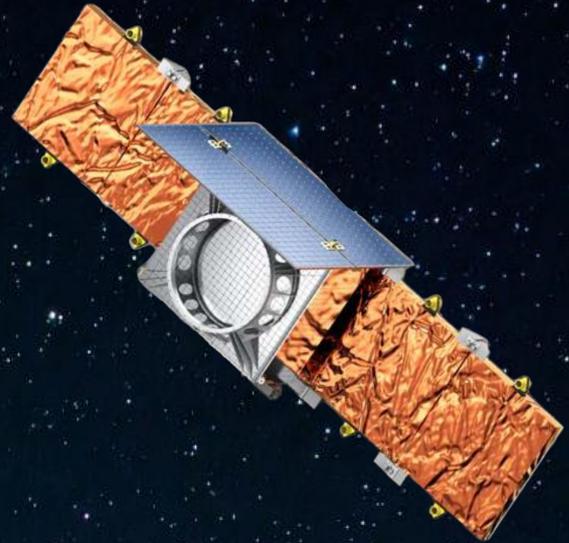
MBZ-SAT is the UAE's most advanced imaging satellite, developed by the Mohammed Bin Rashid Space Centre (MBRSC). It is a 750 kg Earth-observation satellite designed for high-resolution imaging to support environmental monitoring, disaster management, and urban planning, featuring double the imaging accuracy and 10x the imagery production of its predecessors.



ETIHAD-SAT
UAE
Mar 15, 2025



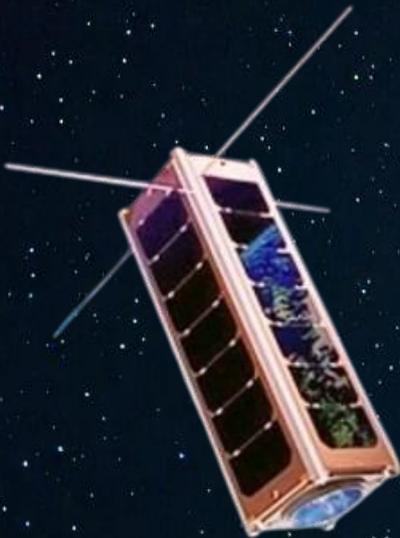
Developed by the MBRSC in partnership with South Korea's Satrec Initiative. It is the UAE's first satellite to use radar technology (SAR), allowing it to "see" through any conditions. Ideal for detecting oil spills, tracking maritime ships, and monitoring floods or disasters 24/7.



ALMUNTHER
Bahrain
March 15, 2025



Al Munther is Bahrain's first fully homegrown 3U CubeSat nanosatellite, developed by the National Space Science Agency (NSSA). It features advanced AI-powered image processing, a medium-resolution camera, and a cybersecurity payload. It also broadcasts the national anthem and a message from the King.



THE ARAB SATELLITE 813
UAE
Dec 10, 2025



Developed by the UAE's National Space Science and Technology Center (NSSTC), this advanced hyperspectral imaging satellite aims to monitor environmental changes, manage resources, and foster regional space cooperation.



Articles



Dr. Mohamed E. Al-Aseeri
CEO of Bahrain Space Agency

وكالة البحرين للفضاء
BAHRAIN SPACE AGENCY



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Dr. Saoud Humaid Al Shoalli
Head of the National Space Program
Ministry of MTCIT (Oman)

وزارة النقل والاتصالات وتقنية المعلومات
Ministry of Transport, Communications
and Information Technology



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**Communications, Space &
Technology Commission (CST)**



هيئة الاتصالات والفضاء والتقنية
Communications, Space &
Technology Commission

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UAE Space Agency

وكالة الإمارات للفضاء
UAE SPACE AGENCY

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Patrick Walthuis

Director, Defense and Security
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Arjun Sreekumar

Associate Director Defense, Space and Aerospace
KPMG Middle East



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Alexei Cresniov

CEO of SpaceTech in Gulf



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Dr. Mohamed E. Al-Aseeri

Chief Executive Officer
Bahrain Space Agency

2025 stands as a pivotal year in Bahrain's space journey, marked by sovereign achievements in space segment development, impactful downstream applications, and strengthened international leadership. From AlMunther's successful deployment, to Bahrain's inaugural hosted payload (Aman) and contributions to Satellite-813 and lunar exploration, BSA expanded its upstream footprint while delivering 25+ EO-driven solutions across climate, urban, and resource sectors. The inauguration of the national ground station solidified infrastructure independence, while robust R&D output, capacity-building programs, and high-level global representation underscored Bahrain's rising influence. Looking ahead, 2026 will build on this momentum - scaling outreach, deepening technical expertise, enhancing data infrastructure, and advancing collaborative missions in sustainability, security, and lunar science. Through integrated upstream-downstream strategies and sustained investment in human capital, BSA is positioning Bahrain not just as a regional space actor, but as a responsible, innovation-driven contributor to the global space ecosystem, aligned with national priorities and the UN's Sustainable Development Goals.

The Bahrain Space Agency (BSA), formerly the National Space Science Agency (NSSA), was established by Royal Decree in 2014 as the national authority mandated to lead, coordinate, and advance Bahrain's space activities. The following outlines key space-related initiatives and milestones for 2025:

Space Segment

- AlMunther Nanosatellite (Mar 2025): Bahrain's first satellite with nationally developed payloads and onboard AI for real-time image processing—successfully launched, operated, and celebrated nationally. The mission advances Earth Observation (EO) objectives aligned with Bahrain's Sustainable Development Goals (SDGs).
- Satellite-813: BSA contributed technically to this landmark Arab joint EO mission (launched late 2025), supporting environmental and resource monitoring.
- Aman Payload (Q4 2025): Deployed via UNOOSA/MBRSC's Payload Hosting Initiative—Bahrain's first hosted payload, featuring advanced space cybersecurity.
- AI Cloud-Masking Algorithm (Q3 2025): Validated in orbit via rideshare program—BSA's first flight-proven AI model, enhancing EO data quality and efficiency.

- CO₂SAT Engineering Model (Q1 2025): Completed with UK partners; targets high-resolution CO₂ emission monitoring for climate action.
- Lunar Payload Development: Advanced Bahrain's first lunar navigation camera suite (for rover deployment) and co-developed an AI-enabled hyperspectral imager with EgSA for lunar water/ice detection onboard a lunar orbiter.

Earth Observation (EO) Applications:

Delivered 25+ EO solutions across 8 sectors including climate, urban planning, water, agriculture, security for 32+ national stakeholders—using AI/ML, GIS, and multi-source data. Key studies: air quality, urban heat islands, mangrove carbon mapping, marine monitoring, solar irradiance analysis, and health impact assessments.

Also, BSA was active in UNOOSA Space4Water, leading projects on groundwater recharge (with Brazil) and hydrocarbon contamination mapping (with Nigeria). National EO Capacity Building: Mentoring university and high school students by presenting them with real-world challenges and equipping them with the practical skills needed to address them. This initiative effectively connects their knowledge in geospatial analysis and remote sensing with their respective fields of study.

Infrastructure & Operations:

Inaugurated BSA's first national ground station—enabling sovereign TT&C and data downlink for AlMunther and future LEO missions.

Strengthening Scientific Output through Structured Research Governance:

- Published 23 peer-reviewed papers (30.4% international co-authorship); established internal Research Publications Committee.
- Executed 70+ outreach initiatives: hackathons, competitions, space camps, school visits, and workshops (e.g., Space Medicine with ESA, ISESCO, AGU).
- Advanced talent pipeline via PhD/MSc sponsorships, international training, and internships.

Global Engagement & Leadership

Signed MOUs with JAXA and ASI; maintains membership in 7+ international bodies (UNOOSA, IAF, COPUOS, ASCG, etc.). Held leadership roles:

- IAF Vice President (2024–2027)
- COPUOS Second Vice-Chair (2025)
- Chaired ASCG Strategic Planning Committee (2025–2026)

Represented Bahrain at 50+ forums, including IAC 2025 (Sydney); submitted bid to host IAC 2028. Mentored young professionals (IAF IPMC, SGAC); contributed to WEF space governance foresight tools.

2026 Space Activities

In alignment with the BSA Strategic Plan (2024–2028) and national and global space priorities, the following outlines BSA’s planned space activities for 2026. These initiatives are designed to strengthen national space capabilities, advance research and innovation, enhance public engagement and human capital development, and deepen regional and international cooperation. Collectively, they support the sustainable growth of Bahrain’s space ecosystem while ensuring that space-derived data, infrastructure, and expertise deliver tangible value to national development objectives and global challenges.

Public Engagement & Space Literacy

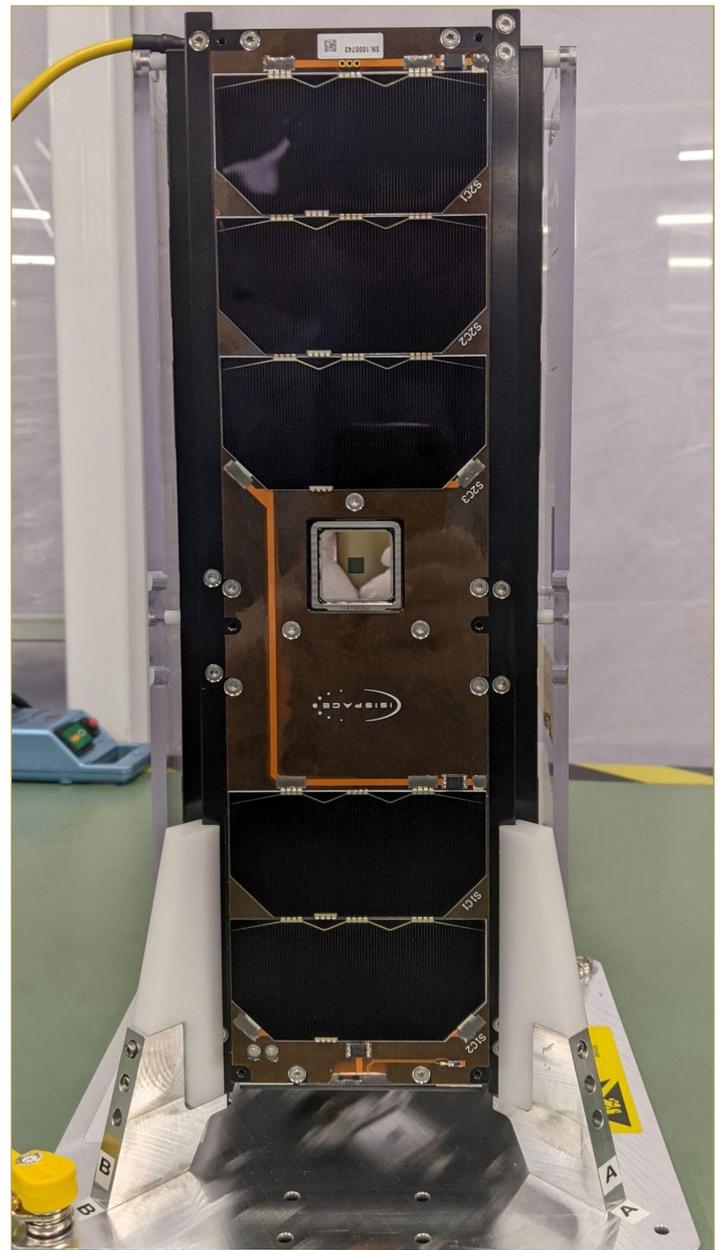
Scale outreach, engaging schools, universities, and the public via exhibitions, talks, and hands-on activities, showcasing national missions (e.g., *AlMunther*).

Human Capital & Technical Capacity

BSA will strengthen in-house technical expertise through targeted capacity-building initiatives aligned with upcoming mission needs. This includes specialized technical training, and structured internship programs focused on priority domains such as satellite systems engineering, mission operations, onboard AI, data analytics, and ground segment operations, ensuring sustainable growth of national capabilities.

R&D & Innovation

- Launch joint research projects with international partners—focusing on EO analytics, small sat systems, and space sustainability.
- Foster innovation through challenge-based programs (e.g., participation in NASA Space Apps).
- Continue publishing peer-reviewed research and case studies at leading international forums (e.g., International Astronautical Congress).



Al Munther Satellite



First satellite imagery of the Kingdom of Bahrain, captured by the Al Munther Satellite.

Foundational Infrastructure

BSA will continue operating the AlMunther satellite, ensuring stable mission performance, data continuity, and operational readiness.

In parallel, the Agency will expand its ground station and data-processing infrastructure to support multi-mission operations, higher data rates, automation, and redundancy, positioning BSA to accommodate upcoming national, hosted, and collaborative satellite missions.

Data & Analytics for National Priorities

BSA plans to strengthen partnerships with key stakeholders to embed space-based data into policy and decision-making cycles.

The organization will also conduct applied studies using open-source datasets and AlMunther’s capabilities to address stakeholder needs, including environmental monitoring and urban planning.

Regional & International Partnerships

Pursue membership or deeper engagement in global space bodies.

Advance upstream and downstream collaborations:

- Hosted-payload initiatives (e.g., AI-enabled maritime surveillance payload)
- Joint mission development (e.g., continued contribution to Lunar Rover mission)
- Space4Sustainability and Space4Water initiatives
- Joint working groups with UAE Space Agency and Mohammed Bin Rashid Space Centre (MBRSC).
- Co-organize workshops and technical exchanges with regional and international partners.
- Maintain and actively contribute to memberships in key space organizations and working groups including key positions.



Al Muthers Satellite Launch



Dr. Saoud Humaid Al Shoaili

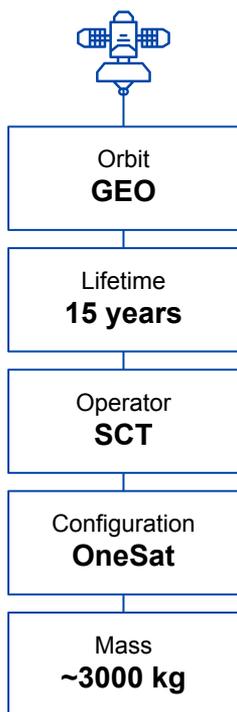
Head of the National Space Program
Ministry of Transport, Communications
and Information Technology (MTCIT)



The Ministry of Transport, Communications and Information Technology affirmed that 2025 marked a pivotal milestone in the development of the space sector in the Sultanate of Oman, through the implementation of a set of flagship and high-impact projects aimed at strengthening the Sultanate’s position as a regional hub for space downstream applications, in line with the objectives of the Omani National Space Policy and its Executive Program (2023–2033) and in alignment with Oman Vision 2040.

This momentum comes within the broader framework of building a space economy driven by innovation and knowledge, enhancing national capabilities, supporting environmental sustainability, and enabling national sovereignty and security through the deployment of space applications and technologies. Recognizing the importance of partnerships in achieving these strategic objectives, the Ministry has adopted a collaborative approach with a range of local and international stakeholders, with a focus on developing the sector’s foundational infrastructure and unlocking investment opportunities for investors from within the Sultanate and abroad.

OmanSat-1



The “OmanSat-1” project is the first Omani communications satellite, aiming to enhance digital sovereignty and ensure the continuity of telecommunications and data transmission services. The contract for design, manufacturing, and launch was signed with Airbus in November 2025. The satellite will be based on Airbus’s OneSat platform, featuring full digital flexibility and in-orbit reconfigurability. Its coverage will include the Sultanate of Oman, including its exclusive economic waters, as well as the Middle East, East Africa, and Asia. The satellite will be operated by SCT, with commercial operations expected to commence in May 2029.

The Oman Space Accelerator Program (OSAP) is the first national program dedicated to accelerating space-sector startups in the Sultanate of Oman.

It aims to localize space-based services and applications for both the local and regional markets. The program contributes to enhancing innovation and entrepreneurship, creating high-quality jobs, increasing the contribution of the space sector to GDP, and building a sustainable national space ecosystem.

The program supports 10 startups through an intensive 15-week program that includes advanced technical and commercial training, as well as professional mentorship from local and international experts, within a stimulating innovation environment. This enabled participating companies to develop prototypes and connect directly with investors. The startups presented their solutions to a jury and investors, showcasing innovative applications in areas such as satellite communications, remote sensing, geospatial data analytics, artificial intelligence, Internet of Things (IoT), and unmanned aerial vehicles (drones).

The Middle East Space Conference (MESC 2026) represents the second edition of this leading regional event, following the success of its inaugural edition in 2024. The conference and its accompanying exhibition are part of the initiatives under the Omani National Space Policy and its Executive Program (2023–2033). The event is organized by the Ministry of Transport, Communications and Information Technology, in partnership with Novaspace, and will take place from 26 to 28 January 2026 at the Oman Convention and Exhibition Centre in Muscat.

The conference aims to highlight the Sultanate of Oman’s position as a regional gateway for space services and applications supporting economic diversification, and to provide a platform that brings together senior leaders and pioneers of the space sector at both regional and international levels. It also seeks to transfer and localize knowledge, build national capabilities, enable entrepreneurship and startups, and enhance societal and academic awareness of space sciences. The conference is expected to welcome more than 40 international leaders and executives, alongside 500 participants and over 80 high-level speakers.

Over the course of three days, the conference will address a range of strategic themes through an interactive program, including national space policies, space agency strategies, satellite program development, ground-segment ecosystems, financing mechanisms, and international cooperation frameworks, while highlighting the evolving space landscape in the Sultanate of Oman.

The program will also focus on the practical impact of space technologies, particularly in satellite communications and Earth observation, and their role in supporting connectivity, urban development, energy, climate resilience, environmental sustainability, and critical infrastructure protection.

The conference will conclude with dedicated sessions on enablers, bringing together regulators, investors, startups, incubators and accelerators, and academic institutions to discuss regulatory frameworks, innovation ecosystems, venture capital financing, and talent development.

The Duqm Launch Project is one of the strategic investment opportunities stemming from the Omani National Space Policy and its Executive Program (2023–2033). The project envisions the establishment of a spaceport that provides the necessary infrastructure and ground facilities for launch service operators, along with integrated logistical support. The project is being developed by the National Space Services Company (NASCOM) in cooperation with a number of international partners in the space launch domain.



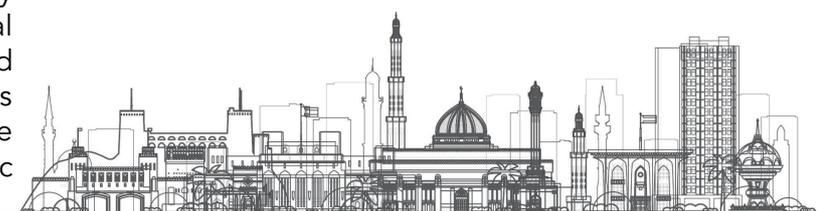
The project aims to develop a national spaceport for launching experimental and suborbital space vehicles, paving the way for the provision of commercial launch services by 2027. A major milestone was achieved with the successful first experimental launch of the “Duqm-1” rocket in 2024, in addition to the “Duqm-2” mission, which involved the launch of the KIA-1 vehicle operated by Stellar Kinetics (an experimental suborbital vehicle) without ignition. This mission contributed to the collection of critical operational data, the activation of safety protocols, and the development of national capabilities in launch systems and associated infrastructure, thereby enhancing the attractiveness of the Sultanate of Oman as a regional hub for space launch services and supporting economic diversification.

The Space Technology and Science Corner at the Children’s Museum is one of the awareness-raising and educational initiatives under the National Space Program. The project is being implemented in collaboration with the Ministry of Culture, Sports and Youth, with funding from private sector companies. It aims to develop an interactive educational and tourism-oriented space that leverages space exploration to inspire children and youth, and to enhance their interest in space science and technology and STEM fields.



The corner will feature a space-simulated environment and tools, in addition to a virtual reality capsule that simulates a space vehicle. The project contributes to promoting science tourism, nurturing scientific hobbies, innovation, and entrepreneurship among youth, and supporting the national economy through sustainable knowledge-based initiatives.

The National Capacity-Building Program in the Space Sector (2024–2027) is one of the strategic programs developed by the Ministry in implementation of the Royal directives. The program aims to qualify and empower national talent to contribute effectively to achieving the objectives of the National Space Policy and its Executive Program, by preparing a new generation of young leaders equipped with the skills and competencies required to foster innovation, actively support the local market, and advance the development of the space sector. The program also focuses on knowledge transfer and localization of relevant space technologies, including satellites and their applications.



The program is implemented through a series of training workshops covering a wide range of areas, including space applications and remote sensing, policies and strategies, entrepreneurship and financing, artificial intelligence and deep learning for geospatial mapping, the use of Earth observation data and cloud computing in disaster management programs, as well as the development of experimental space projects. It targets government employees, entrepreneurs, students, and researchers through integrated professional, academic, and commercial pathways. Since its launch in 2023, the program has benefited more than 200 participants.

The Space Engineering Laboratory Project is a flagship initiative developed in collaboration between the Ministry of Transport, Communications and Information Technology (MTCIT) and Sultan Qaboos University, under the National Space Policy and the Executive Program for the Space Sector. The project aims to establish a Space Engineering Laboratory at Sultan Qaboos University, implemented in multiple phases during 2024–2027. Following the successful completion of Phase One with the establishment of a ground station, Phase Two focuses on developing the laboratory infrastructure and providing advanced equipment. The project seeks to build national capabilities in CubeSat design, manufacturing, and applications, stimulate research, development and innovation, support space startups, and enable technology and knowledge transfer to local academic and industrial talents.

The Youth Astronauts Camp Project is one of the awareness and inspiration initiatives in the space sector, targeting school students aged 7–15 as part of efforts to build early national capacity. Recognizing the importance of private sector engagement, the camp is implemented by the Global Space and Technology Company, with the aim of inspiring the younger generation about the importance of space science and technologies through a balanced mix of simplified theoretical learning, hands-on experimental activities, and interactive experiences.

In 2025, the program is expected to reach approximately 80 participants, distributed across four cohorts, through a series of training workshops held in several governorates of the Sultanate of Oman. The initiative contributes to enhancing scientific awareness and nurturing a passion for space science and technology among youth.

The Omani Space Sector Private Companies Mapping Project is one of the strategic initiatives aimed at identifying and classifying private-sector companies operating in space services and applications, while linking them to global markets on one hand and to local beneficiaries and institutions on the other. This contributes to the systematic promotion of the national space sector and strengthens its economic presence.

The project has demonstrated sustained growth in the sector since the launch of the National Space Policy in January 2023, supported by key indicators including an increase in the number of companies, investment volumes, and employment opportunities. The 2025 update showed an increase in the number of companies to more than 25, compared to 21 companies in 2024, alongside the expansion of national capabilities, with the number of employees in both the public and private sectors exceeding 400 professionals. In addition, the launch of two satellites (OL-1 and Aman-1) by Omani companies reflects the broadening base of the local space economy.

The Ministry's participation in organizing the NASA Space Apps Hackathon, in cooperation with the University of Technology and Applied Sciences, which is held annually, comes as part of its initiatives aimed at promoting a culture of innovation and building capacity in the space sector. The Ministry is keen to play an active role in the hackathon, represented by the National Space Program team, through participation in panel discussions and accompanying activities, as well as coordination with private sector companies by organizing introductory workshops to discuss opportunities for support and engagement. The hackathon aims to enhance awareness of space science and technologies, and to provide a platform that brings together students, researchers, entrepreneurs, and experts, while leveraging educational and training opportunities to develop participants' skills and stimulate innovation in space application.





هيئة الاتصالات والفضاء والتقنية
Communications, Space &
Technology Commission

Communications, Space & Technology Commission (CST): Achievements in 2025

By CST

SpaceUp Competition

In collaboration with the Saudi Space Agency, CST launched the SpaceUp Competition, aimed at strengthening space entrepreneurship, supporting local companies specialized in space technology solutions, attracting global startups and SMEs, and encouraging the adoption of space technologies to address real-world challenges in critical sectors such as the environment, infrastructure, and agriculture.

The competition was designed to connect entrepreneurs worldwide (supply side) with demand partners from the public and private sectors (demand side) across six key tracks, developed in collaboration with national partners including the Saudi Green Initiative, the Ministry of Municipal and Rural Affairs, the Ministry of Environment, Water and Agriculture, the Quality of Life Program, the Riyadh Infrastructure Projects Center, and the Weqaa Center.

Winners of the competition were offered contracting opportunities totaling approximately USD 28 million across all tracks, in addition to direct engagement with end users, support for technology localization, and linkage with key stakeholders to enable the deployment of proposed solutions.

Space Technologies Track In Entrepreneurship World Cup 2025

CST launched the Space Technologies Track as part of the Entrepreneurship World Cup 2025, one of the world's largest global startup competitions. The track aimed to empower entrepreneurs locally and globally to develop innovative solutions addressing challenges in four critical sectors: crowd management, smart construction, public safety, and mining, through the use of advanced space technologies.

The competition targeted entrepreneurs and SMEs across various startup stages, from early-stage ventures to growth-stage companies, competing for total prizes valued at USD 1.5 million. The competition witnessed strong global participation, with more than 10,000 applicants from around the world. As a result, 100 entrepreneurs from over 45 countries were qualified to compete in the Entrepreneurship World Cup 2025 finals.

The Space Technologies Track concluded with four winning companies, each receiving USD 100,000 across the categories of crowd management, smart construction, public safety, and mining.



The launch of this track reflects the Kingdom's continued efforts to stimulate innovation, support startups, and develop advanced technological solutions, contributing to a knowledge-based economy and strengthening Saudi Arabia's competitiveness in the global space sector.

Launch of the Earth Observation Platform

CST launched the Earth Observation (EO) Platform with the objective of attracting major global value-added service providers and positioning the Kingdom as a regional hub for EO-based innovation. The number of companies providing Earth Observation data on the platform is expected to grow to more than 50 companies by 2030, while the number of value-added service providers is projected to reach 80 companies, making the platform the leading developer ecosystem in the region.

Through the platform, CST is working to enhance the comprehensiveness of space activities and support sector growth, establish a thriving and effective EO data marketplace, enable space startups by providing access to EO data, and link space activities with government, private, and economic sectors. The platform also contributes to meeting public and private sector demand for EO-based products through governed, reliable mechanisms, while defining stakeholder obligations, safeguarding user rights, and ensuring the integrity of data sharing and retention.

Space Sector Regulations and Guidelines (Public Consultation)

In December 2025, the Communications, Space & Technology Commission (CST) published a public consultation on the "Space Sector Regulations and Guidelines" document, aimed at stimulating space-sector activities and ensuring their effective implementation. This consultation forms part of CST's established practice of engaging the public, service providers, and investors when developing and refining its regulatory frameworks.

The consultation seeks to enhance transparency in licensing and permitting procedures for space activities, foster an attractive investment environment in the Kingdom of Saudi Arabia, and encourage research, development, and innovation in the space domain.

The document introduces a comprehensive regulatory framework and guidelines covering a wide range of space activities, including space object operations, crewed and uncrewed space flights, spaceports, space resources, space surveillance and tracking, sustainability requirements, insurance obligations, and the national registry of space objects. This milestone reflects CST's commitment to establishing a robust, forward-looking regulatory environment aligned with international best practices.

Investor Awareness and Engagement Initiatives

CST, in collaboration with the Saudi Venture Capital & Private Equity Association (VCPEA), launched a series of investor awareness and engagement initiatives aimed at stimulating private-sector investment in space technologies such as, "Space Investment Awareness Workshop" and "Saudi Space investments, history, opportunities, and enablement's Panel". These initiatives included a structured program of workshops and networking events that brought together local and international investors, government entities, and space companies.

The program focused on increasing awareness of space business models, market opportunities, and the regulatory landscape in Saudi Arabia. It contributed to strengthening investor understanding of the space sector and supported ongoing efforts to increase private investment participation in the national space ecosystem.



Plan for 2026

In 2026, the work plan focuses on advancing the legal framework for space sector activities in Saudi Arabia, building on the public consultation launched in December 2025 on the Space Sector Regulations. Efforts will continue to refine and operationalize the regulatory framework to empower space companies through clear, predictable, and innovation enabling regulatory tools that support long-term sector growth.

CST also plans to build on the success of its space entrepreneurship initiatives through a tentative second edition of SpaceUp, aimed at further stimulating innovation, attracting high quality startups, and supporting the adoption and localization of space technologies to address national priorities.

Investor engagement will remain a priority in 2026, with continued efforts to enhance awareness of space investment opportunities, improve understanding of space business models, and encourage increased private-sector participation in the Saudi space ecosystem.

In parallel, CST will continue working with relevant national entities to support space entrepreneurs and startups, strengthen ecosystem collaboration, and contribute to the development of a sustainable and competitive space sector in the Kingdom.

Public Consultation on
Space Sector Regulations and Guidelines
Document

About the Document
Provides an inclusive regulatory framework on space activities, while setting out the detailed rules for every activity

Goals

- Stimulating Space-sector activities and ensure their efficient implementation
- Promoting transparency in the procedures for granting licenses and permits to conduct Space activities
- Fostering an attractive investment environment in the Kingdom
- Encouraging research and innovation in the field of space

The deadline for submitting comments is March 2026 24

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Shaping the Future of Space: The UAE Space Agency's 2025 Achievements and 2026 Vision

By the UAE Space Agency



Shaping the Future of Space: The UAE Space Agency's 2025 Achievements and 2026 Vision

In 2025, the UAE Space Agency reinforced its position as a leading space actor in the region through a series of remarkable achievements that spanned Earth observation, deep-space exploration, and global engagement. These accomplishments reflected the maturity of the UAE's national space ecosystem and its commitment to fostering regional and international collaboration.

One of the defining achievements of 2025 for the UAE's rapidly advancing space sector was the successful launch of several satellites, including Thuraya-4, MBZ-SAT, Al Ain Sat-1, and HCT-SAT1, significantly strengthening the nation's communications and Earth-observation capabilities. On the regional front, the launch of Arab Satellite 813 in December 2025 was a particularly historic milestone, symbolising regional cooperation and providing a platform to cultivate Arab talent in space science while promoting joint contributions in Earth observation.

As a strategic partner of the 19th Dubai Airshow, the UAE Space Agency unveiled the event's largest-ever Space Pavilion, underscoring the nation's growing leadership in space. Over two days, a dedicated Space Conference offered insightful panel discussions, interviews, workshops, presentations, and networking sessions. The exhibition also served as a platform for the UAE Space Agency to sign strategic agreements with both national and international entities, strengthening partnerships and cementing the UAE's role as a hub for space innovation.

Continuing to push the boundaries of space science, the Emirates Mars Mission (Hope Probe) delivered remarkable results, producing valuable scientific data and advancing the nation's deep-space aspirations.



The Emirates Mars Mission (Hope Probe)

In 2025, the probe remained fully operational in orbit around Mars, generating up to 9 terabytes of data thus far. This data was shared in 16 releases with over 200 research institutions worldwide, contributing to global studies of Martian atmospheric dynamics, seasonal variations, and climate processes, and underscoring the UAE's growing role in international planetary science.

The Emirates Mission to the Asteroid Belt (EMA) marked a significant leap forward in the UAE's deep-space ambitions, successfully completing the Critical Design Review of the MBR Explorer spacecraft. Conducted with the participation of Emirati and international experts, the review confirmed the mission's readiness to move into the Assembly, Integration, and Testing (AI&T) phase, where conceptual designs will be transformed into flight-ready hardware. The mission also hosted the Planet X Challenge during the Dubai Airshow, inspiring youth and startups in STEM to engage directly with the EMA and explore new opportunities in space innovation.

Recognising that human capital is a fundamental pillar of a sustainable space programme, the UAE has invested significantly in developing national talent. In 2023, the National Space Academy proudly graduated 77 participants from the first and second phases of its Space Exploration Program. These graduates now play vital roles across various agencies, contributing to national space missions and advancing the UAE's space ambitions. In 2025, the Academy expanded with its second and third cohorts. Through collaborations with leading industry players like Space42 and EDGE Group's subsidiary, Fada, the Academy provides top-tier education and hands-on training to young Emiratis.

In 2025, the UAE Space Agency further strengthened its international leadership.



The Emirates Mission to the Asteroid Belt



The UAE Space Agency Team at the Dubai Airshow 2025

During the UN Fourth Committee meetings, the Agency reaffirmed the UAE’s commitment to the peaceful and responsible use of outer space and highlighted the nation’s proposal to establish an International Expert Group on Space Situational Awareness, approved during the 68th session of COPUOS. Representing the UAE at the First Committee on the Control of Disarmament in Outer Space, the UAE Space Agency emphasised the importance of responsible behaviour in space to ensure its sustainability and safety for future generations. The Agency also highlighted the peaceful use of outer space as a key driver of scientific advancement, sustainable development, and global security.

The UAE’s international presence was further amplified at the 76th International Astronautical Congress in Sydney, where the UAE Space Pavilion brought together leading space entities. The pavilion showcased pioneering projects and innovative initiatives, reinforcing the UAE’s position as a global leader in space exploration. During IAC, the UAE Space Agency co-chaired the Artemis Accords annual meeting alongside NASA and the Australian Space Agency, presenting outcomes from the historic Abu Dhabi Workshop and exploring new collaborations to tackle challenges such as space debris management.

Looking ahead, 2026 is set to be a transformative year for the UAE Space Agency. The Sirb programme, a constellation of three advanced synthetic aperture radar (SAR) satellites, is poised to complete its Critical Design Review—a crucial milestone that will signal the next stage of development, including assembly and integration. Meanwhile, the Emirates Mission to the Asteroid Belt (EMA) will enter its Assembly, Integration, and Testing (AI&T) phase, transitioning from conceptual designs to the construction and rigorous testing of the spacecraft and its instruments, a vital step on the path to its planned 2028 launch.

At the same time, Arab Satellite 813 will move from orbit into full operational use, as the UAE activates its data utilisation across the Arab Space Cooperation Group (ASCG). This step will establish the necessary frameworks, systems, and collaborative processes to enable Arab countries and institutions to harness the satellite’s Earth-observation data for research, policymaking, and sustainable development initiatives. The National Space Academy will continue to nurture the next generation of Emirati space professionals, offering cohorts in Space Applications and Space Mission and Satellite Engineering, alongside a new course scheduled to be announced in the second quarter of 2026.



By aiming to double the returns of the space economy, the new strategy sets a clear path to position the UAE among the world's top 10 space economies by 2031.

Public engagement and global dialogue will also feature prominently, with preparations underway for the Abu Dhabi Space Debate (ADSD) 2026, aimed at addressing pressing challenges facing space policymakers and promoting responsible space activities.

ABU DHABI SPACE DEBATE

حوار أبوظبي
للسفراء

The UAE Space Agency will continue to implement its new strategic approach for the space sector, focusing on positioning the UAE as a hub for an agile, investment-friendly space ecosystem, establishing global leadership in partnerships and market access, and providing competitive space infrastructure and facilities. This strategy reaffirms the UAE's commitment to developing an advanced space ecosystem built on robust infrastructure and effective collaboration with the private sector. The active participation of companies in national projects reflects confidence in the country's economic and legislative environment and demonstrates the UAE's ability to cultivate a space sector that drives development and diversifies the economy. By aiming to double the returns of the space economy, the new strategy sets a clear path to position the UAE among the world's top 10 space economies by 2031.

Together, the achievements of 2025 and the ambitious plans for 2026 highlight a UAE space ecosystem that is collaborative, visionary, and strategically positioned to shape the future of space exploration regionally and globally.

Readiness for Space in the Middle East: From Dependence to Sovereign Capability

Executive summary

Space in the Middle East has gone beyond experimental infrastructure. It is already embedded in national security, economic resilience, and state competitiveness. This changes the leadership agenda.

FROM DEPENDENCE TO SOVEREIGNTY

We are already depending on space capabilities. Is readiness good enough to move to sovereign space capabilities?

Space matters! The strategic question that comes with it, is whether national space ecosystems are governed, resilient, and controlled well enough to justify strategic dependence, under stress, at scale, and over time.

Sovereignty is not achieved by owning assets alone. It is achieved when decision rights, continuity, and upgrade pathways are controlled in the national interest.

- Assurance: priority missions receive guaranteed service levels.
- Resilience: disruption does not force dependency decisions under pressure.
- Control: tasking, data, cryptography, and upgrades remain sovereign where required.
- Value creation: the ecosystem compounds economic advantage rather than exporting rent.

Readiness is the bridge between dependence and sovereignty.

This paper suggests a practical readiness model for the space sector in the Middle East. One that aligns national sovereignty outcomes with economic scale and investment attraction.

What follows is deliberately a governance and economics narrative: how to turn dependence into assured capability, and how to measure readiness in a way that changes decisions.

Readiness is the right lens

The Middle East is scaling space capabilities in parallel with defense modernization, critical infrastructure expansion, and economic diversification. Space therefore sits in a dual role: (1) strategic dependency; and (2) growth market. Managing both requires a measurable readiness lens.

Capability vs. readiness

Capability answers: "Can we do this today?"
Readiness answers: "Can we depend on this tomorrow and under stress, at scale, and over time?"
The difference is far from academic. It is the difference between a functioning program and a true sovereign utility.

Compliance vs. readiness

Compliance is necessary, but backward-looking. Readiness is forward-looking. It tests whether service continuity, control, and upgrade capacity exist before disruption forces decisions.

Most ecosystems measure fragments: projects, assets, and individual performance indicators.

- Readiness measures coherence: whether the system can sustain outcomes when conditions change.
- Systems fail at seams, not at the center.
- Self-reported readiness creates confidence; evidence-aware readiness creates trust.
- The cost of measuring readiness is small; the cost of assuming it is national.

A sovereignty-first definition of space readiness

Space readiness is the sustained ability of a national space ecosystem to support existing dependence on space services while progressively reducing unacceptable external reliance through assured control, resilience, and value creation.

This definition is outcome-anchored. It avoids two common traps: (1) equating sovereignty with ownership; and (2) equating growth with readiness.

Four outcomes that prove readiness

- 1 Assurance:** Priority missions receive predictable, contractable service levels (availability, latency, integrity).
- 2 Resilience:** The ecosystem absorbs shocks and recovers without mission collapse (cyber, electronic, supply-chain, space weather).
- 3 Control:** Decision rights exist where dependence would otherwise become strategic vulnerability (tasking, crypto, data policy, upgrades).
- 4 Value creation:** Space translates into measurable productivity, jobs, exports, and investable private-market growth.

Readiness across the space value chain

Readiness must be evaluated end-to-end. Sovereignty risk often sits in a different segment than where spending is concentrated. This is particularly true where downstream activity accelerates while upstream dependencies remain strategically sensitive.

Upstream readiness: sovereignty by design, not ownership

Upstream readiness is not a choice between “build everything” and “buy everything.” It is selective sovereignty: defining what must be controlled, what can be partnered, and what must be diversified. Key levers include tasking authority, cryptography and key management, qualification pathways, and upgrade/end-of-life control.

Midstream readiness: where missions become services

Ground systems and data pipelines determine whether missions translate into dependable services. Readiness here requires modern, multi-mission architectures; secure processing; auditable data governance; tested continuity-of-operations; and enforceable SLAs between operators and priority users.

Downstream readiness: adoption, not pilots

Downstream readiness is proven by persistent operational use, not demonstrations. If space data does not change decisions in priority operations, i.e. maritime security, border management, energy monitoring, logistics optimization, then the ecosystem is not ready, regardless of satellite count.

The Space Readiness Framework

Readiness cannot be represented by a single metric. It is a system property and must be assessed across interdependent domains. Progress in one domain does not compensate for weakness in another when sovereignty and continuity are at stake.

Readiness domain	What “ready” looks like
D1. Strategy and prioritization	Explicit sovereign outcomes, national strategy alignment, disciplined mission portfolio, and clear make/partner decisions.
D2. Governance and accountability	Named accountability for readiness outcomes, decision cadence, and independent assurance.
D3. Demand and adoption	Anchor users, operational SLAs, and evidence that space data is embedded into daily decisions.
D4. Upstream industrial base	Selective localization, qualified suppliers, QA/QC, certification, and export/dual-use governance.
D5. Ground and digital infrastructure	Modern ground architecture, secure processing, interoperable standards/APIs, lifecycle toolchains.
D6. Workforce and knowledge	Competency frameworks, operator certification, university-to-industry pipelines, applied R&D/test.
D7. Regulation and space law	Licensing, spectrum, SSA/debris readiness, data policy, procurement rules enabling competition.
D8. Finance and commercialization	Bankable models, blended finance, long-term service contracts, insurance/launch risk management.
D9. Security and resilience	Cyber-by-design, anti-jam/spoof posture, incident response, quantum safe encryption, supply chain security, exercises.

National governance readiness

Space ecosystems do not fail because of technology. They fail because governance does not match criticality. The highest-risk posture is implicit dependence without explicit governance.

Five governance moves that materially increase readiness

1. Single accountable authority for readiness outcomes across government and industry.
2. Evidence-aware measurement that combines economic transparency with operational readiness reporting.
3. Assured demand and contracting models that procure outcomes and continuity—not only assets.
4. Regulatory clarity that enables competition and interoperability without eroding national control.
5. Institutionalized resilience: cyber, electronic protection, supply chain security, and regular stress-testing.

GOVERNANCE IS THE MULTIPLIER

Sovereign space capability emerges when dependence is intentional, transparent, and reversible.

A nation may function while depending on external systems.

A nation is sovereign when it can sustain priority outcomes without unacceptable external decision leverage.

Sovereignty is a governance achievement, not an engineering milestone.

Measuring readiness: indicators that change decisions

A readiness model matters only if it is measurable, repeatable, and decision-relevant. The goal is not to create another maturity label. The goal is to establish a management system that highlights risk concentration and guides investment sequencing.

Indicator families: some examples

Assurance and continuity

- Service availability/latency vs SLAs for priority missions
- Validated recovery metrics for ground and data systems
- Quality of contingency modes and redundancy coverage

Sovereign control

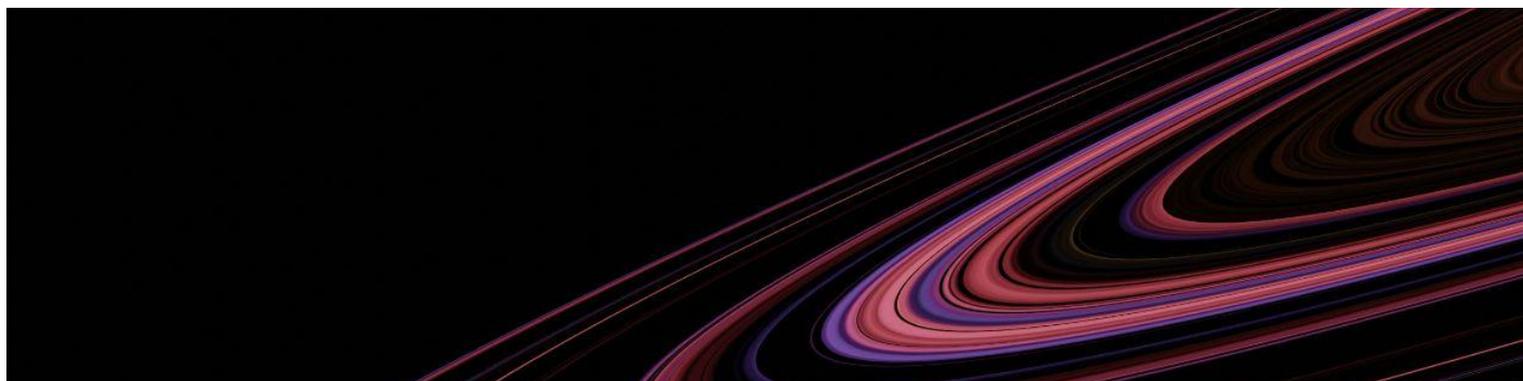
- Decision rights: tasking authority, crypto/key management, upgrade approvals
- Data rights and auditability across the pipeline
- Supplier concentration and geopolitical exposure of mission-critical dependencies

Market and economic health

- Space economy growth, exports, and private investment signals
- Number of active firms by value-chain segment and competitiveness
- Workforce depth: certified operators/engineers and retention metrics

Platform maturity

- Interoperability adoption (standards/APIs) and vendor lock-in risk
- Cyber assurance coverage and independent verification
- Upgrade cadence and lifecycle discipline



Priority agenda for 2026–2030

The next phase in the Middle East should shift to ecosystem scaling. The differentiator will be assured services, disciplined governance, and investable commercialization. Ambition with action creates reality, announcements do not count.

A. Procure assured services, not only assets

Procure against sovereign outcomes with long-term SLAs and technology refresh clauses.

Engineer redundancy where mission-critical: diversified providers, multi-orbit where justified, continuity-of-operations sites.

Make independent mission assurance and red-teaming standard procurement gates.

B. Build downstream demand engines

Establish anchor-user pipelines with named owners and operational KPIs (not pilots).

Mandate interoperability and data standards to reduce fragmentation and lock-in.

Build exportable sector products (maritime, energy, logistics, climate) rather than bespoke one-offs.

C. De-risk localization and talent

Localize selectively with qualification pathways tied to real missions and flight heritage.

Invest in testing, certification, and systems engineering discipline as national enablers.

Implement competency frameworks and retention mechanisms; align university-to-industry pipelines.

Closing perspective

Space readiness is not achieved at launch. It is proven over time, under stress, and across institutions.

The Middle East has moved decisively into the space domain. The next differentiator will not be ambition or technology. It will be readiness—and the discipline to govern dependence into sovereignty.

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Patrick Walthuis has over 30+ years of experience across industry, military and business consulting, with extensive knowledge of the space and aerospace industry. Prior to joining KPMG, he worked as Business Development Manager in Airbus Defense and Space for seven years, responsible for downstream innovation from space-based information and was involved in business development and account work for earth observation and new technology development, such as laser satcom and AI analytics. Patrick started his career as officer in the armed forces, and gained extensive defense operational and staff experience over fifteen years. Within IBM Advisory, he worked on leveraging exponential technology to best serve defense and security industries, as well as military operations and intelligence, surveillance and reconnaissance (ISR). Within KPMG's Defense and Security team, he is responsible for its space and aerospace practice. Patrick is based in Riyadh.



New Frontiers, New Influence: The GCC's Space Playbook

A new space age is dawning in the Middle East. Over the past five years, Gulf countries have poured resources into space initiatives for economic diversification, and strategic autonomy. The United Arab Emirates, Saudi Arabia, Qatar, and Oman are leading this charge, collectively transforming the GCC into an emerging hub of space innovation. This commitment is already yielding results: in 2025 a UAE-led team launched "Arab 813," the first jointly built Arab Earth-observation satellite, to serve the region's needs.

This regional push has been fueled by a mix of cooperation and competition. On one hand, countries are coming together on projects (Arab 813 was a collaboration of engineers from across the Arab world) and signing onto international agreements like NASA's Artemis Accords to signal peaceful ambitions. On the other hand, each nation is eager to outdo the others and claim leadership. The UAE and Saudi Arabia, in particular, are racing ahead – embedding space goals into their national agendas and investing heavily to build domestic expertise. Meanwhile, smaller states Oman and Qatar focus on niche areas to join the space club on their own terms. Each country's journey is unique, but they all share a clear message: the Middle East is serious about space.

Leading by Doing: The UAE's Bid to Anchor the Arab Space Ecosystem

The UAE stands out as the Arab world's space pioneer. It made history in 2021 with the *Hope* probe at Mars, becoming the first Middle Eastern nation to reach the Red Planet. In 2023, Emirati astronaut Sultan Al Neyadi performed a spacewalk outside the International Space Station – the first ever by an Arab astronaut. These headline-grabbing feats underscore the UAE's ambitions.

The UAE's approach is distinguished by its bold vision and global partnerships. It has embraced goals like the Mars 2117 Project, a futuristic plan to develop a Martian city within a century. Such long-range visions are coupled with pragmatic steps to build capacity today. The UAE's approach is distinguished by its bold vision and global partnerships. It has embraced goals like the Mars 2117 Project, a futuristic plan to develop a Martian city within a century.

Such long-range visions are coupled with pragmatic steps to build capacity today. The UAE works closely

with established space agencies – signing agreements with NASA (it was an original Artemis Accord signatory) and inking deals with agencies in Europe, Japan, and elsewhere. It has demonstrated that contracting international expertise (as with the Mars probe) can fast-track know-how transfer to local engineers. At the same time, the leadership invests in education and STEM initiatives to cultivate an indigenous talent pipeline. The new Space Economic Zone in Masdar City and incubators for space startups reflect a drive to spur a domestic space industry in the private sector. As a result, the UAE has started exporting its expertise regionally – for example, leading the development of the Arab 813 satellite as a key contribution to the Arab Space Cooperation Group. It also doesn't shy from unconventional partnerships; a UAE-built rover is slated to ride on China's Chang'e-7 mission, highlighting an agile, non-aligned strategy to achieve its goals.

Space42 is one of the crown jewels of the UAE space program. In 2024 and early 2025 it began building real "orbiting muscle," launching the Foresight synthetic-aperture radar program—Foresight-1 (August 2024) followed by Foresight-2 (15 January 2025)—to deliver day-night, all-weather Earth observation that feeds AI-driven geospatial products. To scale from a couple of satellites to an enduring capability, Space42 and ICEYE announced a UAE-based joint venture in December 2024 to localize SAR satellite manufacturing and accelerate constellation growth toward a planned 2027 completion. While it was hardening its technology stack, it was also hardening its market position: in December 2024 it secured a 17-year AED 18.7 billion UAE government contract for secure satellite capacity and managed services through 2043, tied to next-generation Al Yah 4 and Al Yah 5 satellites slated for 2027 and 2028. Looking ahead, Space42 is steering toward a future where denser Earth-observation constellations and next-gen secure connectivity are paired with partnerships like the 5-year Map Africa Initiative with Microsoft and Esri — so its satellites don't just circle the planet, they become infrastructure for how the planet is understood and protected.

With over \$12 billion earmarked for space sector development in coming years, the UAE will likely expand its launch agreements, perhaps even move toward hosting regional launch sites or space tourism ventures. In sum, the UAE's balanced emphasis on

flagship exploration missions, capacity-building at home, and international collaboration positions it to remain a driving force in Middle Eastern space endeavors. Its success has already set a benchmark that is spurring neighbors to elevate their own space ambitions.

From Vision to Velocity: Saudi Arabia's Rapid Space Mobilization

Saudi Arabia has reenergized its space program as part of Vision 2030, the Kingdom's sweeping plan to diversify the economy and develop high-tech sectors. Although Saudi Arabia was an early regional space participant—it hosted the Arab world's first satellite organization (Arabsat) and sent an astronaut on the Space Shuttle in the 1980s—its modern program took shape around 2018–2020. In late 2018, the Saudi Space Commission (now the Saudi Space Agency) was established, and by 2020 the government earmarked \$2.1 billion for space initiatives under the Vision 2030 roadmap.

In 2024, the Public Investment Fund created Neo Space Group, to kick-start a domestic space industry. This move, backed by the kingdom's deep capital reserves, is intended to accelerate technology transfer and nurture local expertise in satellite manufacturing and downstream sector development. Thanks to sustained public and private investment, Saudi Arabia's space economy reached an estimated value of \$8.7 billion in 2024, with projections pointing to significant growth by the mid-2030s—underscoring the market potential being actively cultivated.

Saudi Arabia also made headline-grabbing progress in human spaceflight and applications during this period. In May 2023, the Saudi Space Agency launched its first astronaut mission in decades—and its first ever on a non-governmental flight—under the Human Spaceflight Program. Saudi astronauts flew to the International Space Station on a private mission, marking the first Saudi woman in space and the kingdom's return to human spaceflight since 1985. During their 10-day stay, they conducted 11 scientific experiments across areas such as human cell science and microgravity fluid dynamics, while also engaging more than 12,000 Saudi students through live educational events. The mission served both scientific and inspirational objectives, raising public interest in STEM fields, and was positioned as the beginning of a sustained national astronaut program.

On the civil space front, Saudi Arabia has pursued international partnerships to build credibility and technical depth. In 2025, the Saudi Space Agency signed an agreement with NASA to launch the first dedicated Saudi space weather and climate satellite as part of the Artemis II mission.

This initiative integrates a Saudi research payload into a High-profile lunar flyby mission, reflecting Riyadh's intent to participate in advanced exploration efforts. In parallel, the kingdom has aligned itself with major international frameworks while continuing collaboration on Earth observation projects. Domestically, Saudi Arabia has prioritized space applications that directly support national needs, particularly satellite communications, Earth observation, and navigation services.

In line with Vision 2030's push for tourism and entertainment, Saudi Arabia has also entered the emerging space tourism sector. The Saudi Space Agency partnered with HALO Space to develop near-space balloon tourism, aiming to carry civilians to the stratosphere. Uncrewed test flights took place in 2024, with the first crewed flights planned 2026-2027. The kingdom aims to host around 100 high-altitude balloon flights annually, positioning itself as a regional hub for space-related tourism experiences. This initiative complements broader efforts to project a modern, innovation-driven national image.

On the commercial side, Saudi startups are emerging across the space value chain, supported by accelerator and incubation initiatives. The Saudi Space Accelerator Program was launched in December 2022 and offered financial support alongside training from international experts and one-on-one mentorship. The program highlighted areas including geospatial analytics and satellite-related domains such as communications and imagery. Also, the SpaceUp Competition, launched by the Communications, Space and Technology Commission (CST) and the Saudi Space Agency (SSA), is a global startup challenge designed to accelerate space-based solutions across key sectors such as agriculture, urban livability, infrastructure, and environmental sustainability. It brought together local and international startups and SMEs, offering about \$28 million in contractual opportunities, direct access to end-users, and pathways to implement and localize technologies that address real-world challenges using space data and services.

Strategically, Saudi Arabia's posture is to close the gap with regional peers and eventually emerge as a leading spacefaring nation in its own right. The 2020–2025 period laid the foundation through new governance structures, substantial funding commitments, international collaboration, and early flagship missions. While other countries had a head start, Saudi Arabia has signaled its intent through rapid execution, dual-use capability development, and large-scale investment.

By 2025, space had become a clear pillar of national development and strategic influence, with ambitions spanning satellite manufacturing, secure connectivity, Earth observation, and human spaceflight over the coming decade.

Access over Orbit: Oman's Niche in the Gulf's Space Architecture

Oman is a newcomer to the space arena, but quietly laid the groundwork to make a unique mark. Unlike the UAE and Saudi Arabia, which jumped into ambitious deep-space missions, Oman's strategy has centered on building launch infrastructure and niche technical capabilities. In 2020, the Sultanate established a National Space Program under its Ministry of Transport, Communications & IT, aligning with Oman's Vision 2040 economic plan. By 2023, Oman unveiled plans for Etlaq Spaceport – the first spaceport in the Middle East – aiming to create a domestic launch site to propel satellites into orbit. Oman chose this path to leverage its natural advantages: the country's location near the equator gives rockets an extra boost into space, allowing them to reach orbit more efficiently with less fuel. The initial focus is on small suborbital and orbital rockets, but Oman envisions steadily expanding Etlaq into a full-fledged commercial spaceport with rocket assembly halls, testing facilities, and multiple launch pads. The logic is clear – if Oman can offer lower-cost launches in a safe, interference-free zone, it could attract international rocket companies and satellite clients looking for alternative launch sites. If this bold venture succeeds, Oman would transform into a regional hub for the "upstream" space sector, nicely complementing its Gulf neighbors who are more focused on satellites and deep-space exploration.

In parallel with the spaceport project, Oman has pursued other foundational space activities to build its capabilities. The Sultanate established one of the GCC's most advanced satellite monitoring and control stations, which became operational in recent years.

This facility allows Oman to manage satellite communications and track signals, strengthening its technical know-how in space operations and offering services to other regional satellite operators. Oman is also moving to acquire its first national satellite – likely an Earth observation satellite – to address domestic needs such as environmental monitoring, urban planning, and disaster management.

Regionally, Oman is making sure it isn't left behind: it joined the Arab Space Cooperation Group and contributed engineers to the Group's 813 satellite project.

Muscat has also signed cooperation agreements with neighbors – for instance, partnering with the UAE to train Omani engineers and to share satellite data. All these efforts ensure that Oman remains part of the Gulf's emerging space community, even as it forges its own path.

Oman's success in space will hinge on how well it can turn its plans into reality in the coming years. If the Etlaq Spaceport truly takes off and manages to host regular launches, Oman could become a small but significant player in the global launch market by the late 2020s. Realistically, Oman will likely start with suborbital research rockets and small satellite launchers – possibly in partnership with established small-launch companies from Europe or Asia that are eager for an equatorial launch site. Over time, we might see Oman's launch capacity grow to medium-lift rockets, which would really put the country on the map. Domestically, having a spaceport could spark new industries and opportunities – from ground support equipment and telemetry services to even space tourism. On the satellite side, Oman is expected to get its first home-grown satellite into orbit within the next couple of years, either via an international launch provider or perhaps even aboard an early Etlaq rocket if the timing aligns. Once that satellite is up, Oman can start directly harnessing space data for its development needs. The nation's pragmatic strategy – invest where it can compete and partner where it cannot yet – is likely to continue.

Strategic Use, Secure Signals: Qatar's Space Agenda

Qatar's foray into space during the past five years has been measured and strategic, aligning with its vision of a knowledge-based economy and its pursuit of international prestige.

Unlike its Gulf neighbors who have sent probes to Mars or contemplated building their own rockets, Qatar has zeroed in on satellite technology, communications services, and using space for societal benefit. The Qatar Space Agency was established to drive this agenda, and by 2023 the country had enacted a National Space Policy to guide the sector's growth. One of Qatar's proudest achievements to date is its Es'hail series of satellites. Es'hail-1 and Es'hail-2 are communications satellites that, among other things, broadcast television and provide secure government communications. These satellites gave Qatar a sovereign capability in communications and even carried international payloads. Building on this foundation, Qatar invested heavily in satellite technology and services through the early 2020s.

By 2024, Qatar's civil space investment had reached around \$220 million, roughly 5% of total regional space spending, underscoring Doha's commitment despite its smaller size. Key developments in Qatar from 2020 to 2025 have emphasized practical applications. Qatar prioritized remote sensing and geospatial analytics to address national needs like urban planning, environmental monitoring, and security. One standout project was its collaboration with NASA to develop a satellite to map underground aquifers beneath Qatar's deserts – a critical issue in a water-scarce region. Simultaneously, Qatar invested in education and human capital. Universities in Doha launched programs in satellite engineering and astrophysics, often partnering with Western institutions. Scholarships and internships placed young Qataris in space agencies abroad, preparing them to operate and analyze satellite data. On the infrastructure side, Qatar upgraded its satellite control and data-receiving facilities. It also signed agreements with international agencies to enhance training and collaboration. On the security front, Qatar entered into a Space Situational Awareness agreement with the U.S. military, gaining access to real-time orbital data. It hosted the first CENTCOM Space Symposium in 2023, signaling its desire to be a hub for regional space security dialogue.

Commercially, Qatar's satellite operator Es'hailSat has expanded its portfolio. In 2025, it formed a strategic partnership with a satellite communications provider to enhance regional connectivity. There are also signs Es'hailSat plans to move beyond communications and into Earth observation, either through acquiring imaging satellites or joining a constellation program. These steps show Qatar steadily building a space ecosystem rooted in data and connectivity.

Qatar is expected to maintain its steady, incremental path in space. The launch of Es'hail-3 is likely in the coming years, with potential enhancements like broadband internet. An Earth observation satellite is also on the horizon—possibly through an international partnership or direct procurement. Qatar may also explore investment in foreign constellations to secure dedicated data access.

Not Just Watching the Skies: Gulf Nations as Shapers of the Space Domain

As 2026 unfolds, space is no longer a curiosity in the Gulf — it is a pillar of national ambition. What began as cautious interest has matured into a region-wide surge of activity, shaped by each country's strengths, strategies, and sense of purpose.

The UAE blazed the trail. From Mars to Earth observation, it fused audacity with pragmatism, not only reaching distant worlds but also building lasting institutions at home. Its space program now a miniature agency of the future—part explorer, part exporter, part industry anchor.

Saudi Arabia took a different route: bold, determined, and deeply capitalized. What it lacked in head start, it made up for in velocity. In just five years, it moved from drafting policy to sending astronauts, launching national programs, and incubating a homegrown commercial sector. Its message was clear: we may be late, but we don't plan to follow.

Oman charted a quieter course. It didn't aim for the stars but for the infrastructure to help others reach them. In Etlaq, it sees not just a launch site, but a strategic asset: a way to turn geography into leverage, and space into a business. Its bet is that being the region's gateway to orbit may matter as much as being in orbit itself.

Qatar, always the careful strategist, positioned itself as the Gulf's operator and analyst of space. It focused on applications over headlines, on satellites that serve its people and protect its interests. Its strength lies not in spectacle, but in systems—ones that quietly enhance security, sovereignty, and science.

These paths may differ, but they now intersect. Together, the Gulf states have moved from space consumers to space contributors, each adding a piece to the region's emerging orbital mosaic.



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Arjun has led programs aligned with national defense priorities, including indigenous industry development, localization and offsets, capability enhancement, and go-to-market strategy. Known for translating complex strategy into clear, actionable outcomes, he is a trusted advisor to leadership teams navigating a rapidly evolving global defense landscape. He is based in Abu Dhabi.

From Ambition to Architecture: How the GCC Is Building Sovereign Space Power

In 2025, the GCC countries reached a pivotal moment in their journey into space, transforming ambition into tangible achievements. What began as pioneering, nationally driven initiatives matured into a region-wide strategic posture, with each GCC member state contributing a distinct chapter to a shared narrative of sovereign space capability. Space is no longer pursued as a symbol of prestige alone; it has become a core pillar of national power, where commercial logic, technological autonomy, data sovereignty, and infrastructural independence converge into strategic advantage.

This transformation did not begin with a rocket launch, but with boardroom decisions and institutional design.

Saudi Arabia's Strategic Geospatial Push

In 2025, Saudi Arabia positioned itself as a linchpin of regional space capability, transitioning from aspiration to actionable leadership in sovereign geospatial intelligence and data infrastructure. At the center of this evolution is Neo Space Group (NSG), the national space company wholly owned by the Public Investment Fund (PIF), tasked with anchoring the Kingdom's space sector within the broader goals of Vision 2030. In a defining move, NSG completed its acquisition of UP42, a leading cloud-native Earth observation (EO) and geospatial analytics platform formerly part of Airbus Defence and Space. This acquisition instantly brought world-class geospatial infrastructure under Saudi sovereign control and signaled a deliberate strategic shift toward data-centric space capability.

By August 2025, NSG had launched Saudi Arabia's first Earth Observation Marketplace, powered by UP42, providing streamlined access to high-resolution satellite imagery and advanced analytics for government, industry, and international users. Hosted on secure national infrastructure, the platform supports sectors ranging from infrastructure development and resource monitoring to agriculture and environmental resilience.

The main event of 2025 in Saudi Arabia was the SpaceUp Competition, organised by the Communications, Space and Technology Commission (CST), the Saudi Space Agency, and Neo Space Group, brought together global and local startups across six challenge tracks focused on applying space technologies to real-world problems in sectors like environment, infrastructure, and urban planning. Offering around USD 28 million in contractual opportunities and direct engagement with end users, the competition aimed to accelerate the adoption of space solutions and support localisation of technology development.

Saudi Arabia also introduced a Space Technologies Track as part of the Entrepreneurship World Cup 2025, one of the world's largest startup competitions, attracting thousands of global applicants. Four startups received awards for innovations in crowd management, smart construction, public safety, and mining, further expanding the Kingdom's role in global space entrepreneurship.

Building on this digital foundation, NSG unveiled NeoMaps, a fully national geospatial intelligence platform developed, hosted, and operated by Saudi talent. NeoMaps provides a unified gateway for exploring, visualizing, and analyzing diverse satellite data streams, significantly strengthening digital sovereignty and strategic decision support across security, economic planning, and resource management.

Together, these advancements reflect a broader strategic doctrine: sovereignty in space is increasingly defined by digital infrastructure, analytical capability, and secure national platforms that deliver operational insights across civil and defence domains.

The UAE's Multi-Pillar Space Agenda

In 2025, the UAE's trajectory was defined by large-scale capability building, deep-space science, sovereign technology development, and international partnerships.

A key partner in this ambition has been the Technology Innovation Institute (TII), the applied research arm of Abu Dhabi's Advanced Technology Research Council. TII's Earth Observation team exemplifies the UAE's multidisciplinary approach to space science and technological innovation. By combining expertise in remote sensing, photonics, artificial intelligence, and geospatial analytics, TII has built sophisticated end-to-end pipelines that integrate satellite imagery from optical, multispectral, SAR, LiDAR, and other sensors into unified analytical frameworks. These systems support critical national and international projects, empowering stakeholders with timely, accurate, and decision-ready data across domains ranging from environmental monitoring to infrastructure stability.

TII's work impacts how Earth is observed and understood at scale. Its pipelines ingest diverse sensor data—optical imagery for surface mapping, SAR for all-weather insight, and LiDAR for high-resolution topography—transforming raw inputs into fused geospatial intelligence that supports national planning, hazard response, and strategic situational awareness.

In parallel, the UAE Space Agency launched the next generation of the GIQ Analytics Platform in October 2025. Designed to fuse data from more than 300 satellites worldwide, GIQ enables users to task, retrieve, and analyze imagery with machine efficiency—supporting applications from environmental management to infrastructure monitoring and strategic situational awareness. GIQ's integration with space data sources and AI tools reflects the UAE's approach to democratizing access to high-value geospatial intelligence.

In Earth observation operations, UAE space strategy also includes indigenous satellite capabilities. Space42, the UAE-based AI-powered SpaceTech company formed through the merger of Bayanat and Yahsat, continued to expand its Foresight EO Constellation, including multiple Synthetic Aperture

Radar (SAR) satellites that provide persistent, all-weather imaging for climate monitoring, emergency response, and national security. For this reason HURAYA 4 was launched in January 2025. Space42 also leads international partnership initiatives. Notably, it joined with Esri and Microsoft to launch the Map Africa Initiative, a five-year program to develop accurate and accessible base maps for all 54 African countries. In this collaboration, Space42 provides satellite imagery and geospatial expertise, Esri contributes GIS workflows and GeoAI tools, and Microsoft supplies scalable cloud infrastructure.

Together, this initiative aims to strengthen geospatial capacity across Africa, underlining how GCC space actors are extending their impact into global development and governance infrastructure.

On the exploration front, the UAE's lunar ambitions progressed from planning to rigorous engineering validation. The Rashid 2 rover, destined for the Moon's far side in 2026, completed environmental testing replicating the vacuum, temperature cycles, and radiation exposure of deep space. These tests, critical for mission success, demonstrate how the UAE has built systems engineering expertise with crossover relevance to defence applications requiring autonomous and ruggedized platforms.

Simultaneously, the Emirates Asteroid Belt Mission passed its final design review for a multi-target deep-space expedition, reflecting the UAE's long-term commitment to scientific discovery and advanced propulsion technologies. Both missions underscore the UAE's transition from regional contributor to a globally ambitious actor in exploration science.

Perhaps the most strategically consequential development of 2025 was the UAE's embedded role within the NASA-led Lunar Gateway program. Through a deepened partnership with Thales Alenia Space, the Emirates secured responsibility for developing and operating the Crew and Science Airlock, ensuring Emirati engineers remain integral to sustained operations at humanity's first permanent lunar orbital outpost. This multi-decade engagement embeds the UAE within critical architecture shaping future exploration and international space governance.

Reinforcing these ambitions was a surge in human capital development. The National Space Academy, in partnership with the EDGE Group, expanded programmes that moved students from classroom theory directly into subsystem design, testing, and mission operations, building a sustainable pipeline of engineers crucial for long-term sovereign capability.

Operationally, the UAE consolidated its orbital presence with the launch of four major satellites in 2025: the THURAYA 4 mobile communications platform; MBZ-SAT, an advanced optical Earth imager; ETIHAD-SAT, an all-weather radar satellite; and the pan-Arab hyperspectral mission ARAB SATELLITE 813, each reinforcing connectivity, EO, ISR coverage, and cooperative data-sharing across the Middle East and beyond.

Oman's Infrastructure-First Approach

Oman, meanwhile, pursued a partnership-driven path to space sovereignty in 2025 with the signing of a definitive agreement for OmanSat-1, developed with Airbus. As the Sultanate's first dedicated telecommunications satellite, OmanSat-1 represents a strategic step toward sovereign control over vital communications infrastructure for government, commercial, and maritime operations—strengthening national resilience in an increasingly contested spectrum environment.

One of Oman's key achievements in 2025 was the Space Accelerator program, led by Ankaa Space and supported by the Ministry of Transport, Communications and Information Technology. The initiative guided 10 startups through an intensive 15-week mentorship and training program, providing both technical and commercial expertise from local and international specialists to accelerate the development and deployment of innovative space solutions.



Bahrain's Craftsmanship and Institutional Maturation

Bahrain authored a story of disciplined craftsmanship and capability realization with the successful launch of Al Munther, the Kingdom's first fully domestically built satellite. Designed and engineered by Bahraini scientists, and equipped with AI-enabled imaging systems, the mission showcased that even smaller GCC states could achieve technological self-reliance through focused investment in human capital and institutional development.

BSA also celebrated its first hosted payload, Aman, deployed through the UNOOSA/MBRSC Payload Hosting Initiative, marking Bahrain's entry into international collaborative space operations. Contributions to Satellite-813 and lunar exploration missions further expanded Bahrain's upstream footprint, demonstrating growing technical maturity and ambition.

2025 also saw the inauguration of Bahrain's national ground station, securing sovereign command, telemetry, and control (TT&C) capabilities for AlMunther and future LEO missions. Meanwhile, R&D and capacity-building programs strengthened the domestic talent pipeline, mentoring students and young professionals in geospatial analytics, AI, and satellite systems engineering. BSA's global engagement included leadership roles in the IAF, COPUOS, and ASCG, and participation in 50+ international forums, positioning Bahrain as an emerging regional and international space actor.

Qatar and Es'hailSat's Strategic Continuity

In neighboring Qatar, space strategy has prioritized operational resilience and communications sovereignty. A leading force in this ecosystem, Es'hailSat, the Qatar Telecommunication Company, has built a fleet of communications satellites (Es'hail-1 and Es'hail-2) that ensure secure broadcasting, government connectivity, and regional digital infrastructure, reinforcing the nation's strategic autonomy in space-based services. With services that extend direct-to-home television and high-capacity data links, Es'hailSat's operational focus underscores the strategic value of dependable space infrastructure in supporting national security communications, emergency response, and digitally enabled economies.



Conclusions

Taken together, the developments of 2025 reveal a clear and unified trajectory: the GCC is no longer a peripheral participant in the global space domain—it is an active architect of its future. From Saudi Arabia's data-centric sovereign platforms to Bahrain's engineering achievement; from the UAE's multi-layered space strategy and international partnerships to Qatar's communications resilience and Oman's infrastructure-focused collaborations, each nation is pursuing a distinct yet complementary path.

These predictions suggest that GCC nations must continue investing in human capital, sovereign data infrastructure, and cross-border regulatory frameworks to maximize strategic returns. Defence and economic planners should anticipate an environment where space-derived intelligence becomes integral to national security, disaster response, and economic planning, and where regional collaboration will define resilience against global technological disruptions.

In short, space is no longer an aspirational frontier for the GCC—it has become a strategic domain of power, collaboration, and global influence. By 2030, the Gulf's constellation of satellites, analytics platforms, and exploration initiatives will not only underpin national sovereignty but also reshape the region's role in the global space order.



Alex Cresniov

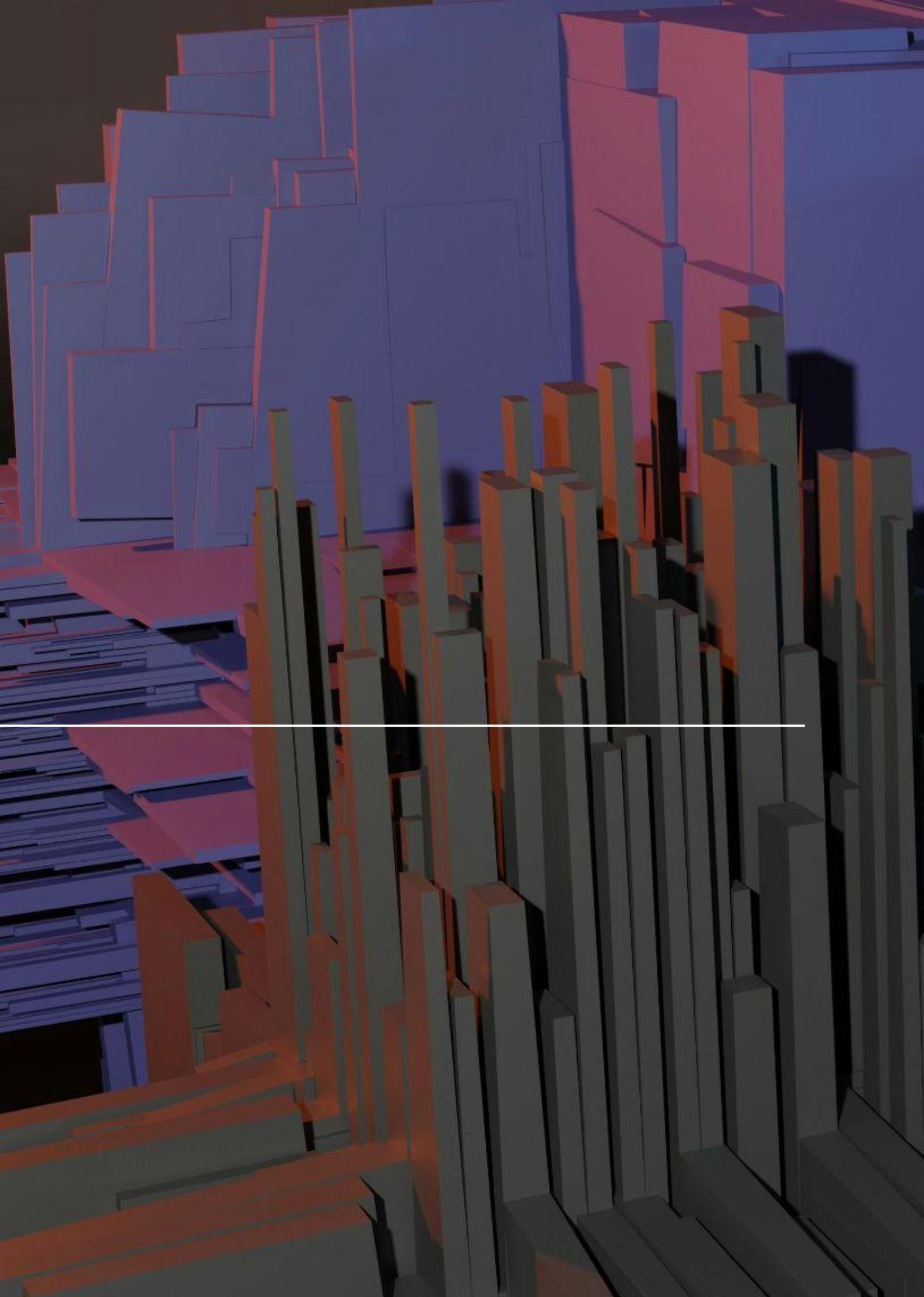
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SpaceTech in Gulf has solidified its position as the leading analytics and space market intel company in the Middle East and North Africa (MENA) specializing in strategic communications and market intelligence within the space domain.

With a particular focus on the MENA region, the company offers expertise and insights into the unique challenges and opportunities that exist within this rapidly evolving sector. By leveraging its extensive knowledge and network, SpaceTech in Gulf helps its clients navigate the complexities of the SpaceTech landscape and develop successful business strategies that drive growth and innovation.

Contact us to learn more about how we can help you achieve your goals in the SpaceTech industry.

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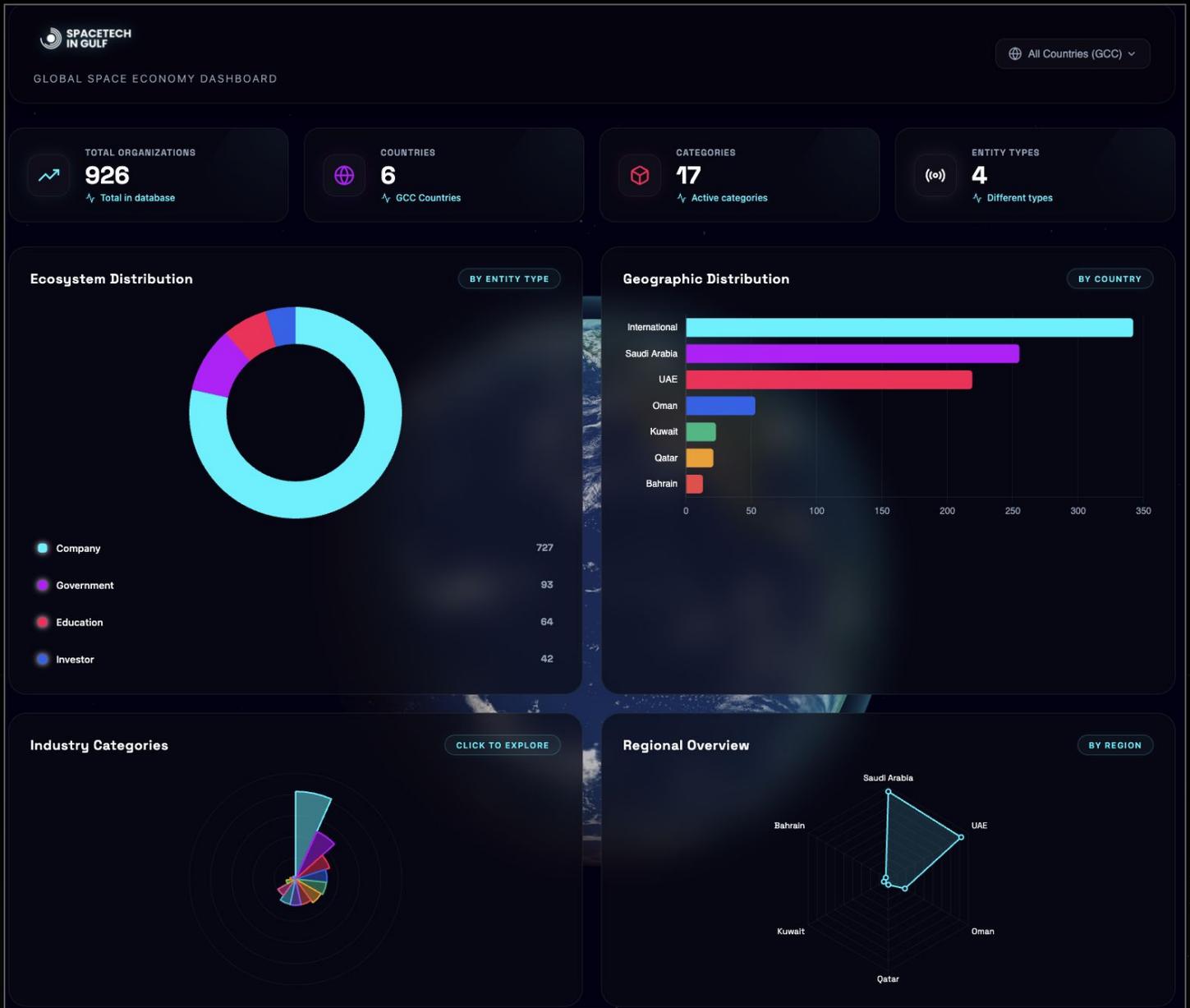


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KPMG brings its team of dedicated Defense and Security experts to lead the discussions on defense integration, innovation and localization under Vision 2030 – along many other themes. As Saudi Arabia advances toward the ambitious goals of Vision 2030, the localization of defense industries is becoming a strategic priority. This transformation is about building national capabilities, supporting local talent, empowering SMEs, and fostering innovation. WDS 2026 will showcase cutting-edge technologies, bring together global and local leaders, and spark the collaborations needed to accelerate the Kingdom's defense and industrial ambitions. At KPMG, we are proud to support this transition and to integrate technology and capability development.



The new high ground



Leveraging space investments to drive national growth

“The only way to discover the limits of the possible is to go beyond them into the impossible,” said Arthur C. Clarke, renowned science fiction author and the first to propose geostationary satellite communications in 1945, capturing a mindset that continues to shape the space sector today. What was once the domain of state-led exploration is now a fast-evolving, innovation-driven economy spanning new launch solutions, satellites, orbital logistics, lunar infrastructure, and creative downstream applications.

While engineering and technological innovation chart the course, it is a braided capital and funding stack that enables progress, bridging the gap from concept to deployment and accelerating real-world impact. From sovereign space budgets and strategic government grants to venture funding, corporate partnerships, and sovereign wealth interventions, each plays a critical role in turning space ambition into scalable enterprise.

This paper sets out to assess the global state of affairs in space financing, where it is initiated from, how it is allocated, and what the spin-off effects for the wider economy can be.



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