IAC 2025

Space Sector Market Report

S Ravi; J Reeves| Nov 2025

www.challengerresearchgroup.com

team@challengerresearchgroup.com

Executive Summary

The International Astronautical Congress 2025 in Sydney marked a turning point for global space investment. Three signals dominate investor thinking. First, the transition from exploration to infrastructure is now the defining driver of growth over the next decade. Second, the Asia-Pacific region has emerged as the centre of gravity for industrial capability and capital formation. Third, commercial readiness, autonomy and sustainability are shaping where funding flows. For institutional and venture investors, Sydney showed that the frontier has become operational and investable, with momentum increasingly centred in the Indo-Pacific.

1. Overview of IAC 2025 Sydney

The 76th International Astronautical Congress (IAC 2025) was held in Sydney, Australia, marking the first time in over two decades that the Congress returned to the country. The event brought together over 7,400 delegates from 80+ nations, highlighting the Asia-Pacific's growing strategic importance in the global space economy.

The theme, *"Sustainable Space: Resilient Earth"* set the tone for cross-sector and cross-regional collaboration, with a clear emphasis on commercialisation, sustainability, and **lunar-cislunar development.**

The exhibition hall hosted over 200 companies spanning launch services, satellite operators, lunar robotics, AI systems, and national space agencies. Notable presences included NASA, ESA, JAXA, ISRO, UKSA, CSA/CNSA, UAESA, the Australian Space Agency, and an expanded commercial showing from startups and industrial suppliers across the Indo-Pacific region. Following a rigorous review process, the **International Programme Committee (IPC)** approved **2,183 oral presentations**, **1,481 interactive presentations**, and **521 reserve papers**, together representing the forefront of international space research and innovation.

Submissions were received from 95 countries across all continents, reaffirming the IAC's role as a truly global platform. The countries with the highest numbers of accepted abstracts are:

- **United States – 548**
- **Australia – 410**
- **China – 347**
- **Italy – 315**
- **Germany – 256**
- **India – 262**
- **Japan – 216**
- **Azerbaijan – 205**
- **United Kingdom – 175**
- **France – 134**

These figures illustrate the strong representation of both established space powers and rapidly emerging participants, reinforcing the IAC's position as a global nexus for collaboration, policy dialogue, and technological advancement.

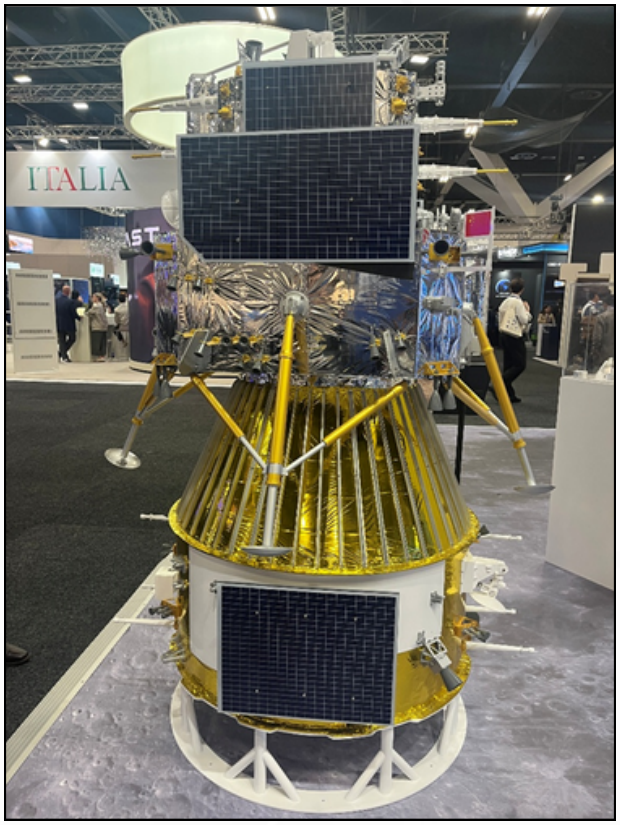

Image: Lunar lander mock-up design

Key Outcomes and Announcements:

- Lunar partnerships intensified: new memoranda signed between ESA, Australia, and Japan for joint lunar logistics and rover development.
- Emerging Asia-Pacific launch capabilities: Australian and South-Korean companies announced micro-launch and reusable-vehicle prototypes targeting 2026–27.
- Rover and mobility innovation surge: commercial rover builders (Lunar Outpost, Astrolab, Mawson Rovers, Crest Robotics) showcased systems designed for lunar construction and ISRU missions.
- AI and autonomy mainstreamed: multiple exhibitors demonstrated onboard autonomy and neuromorphic sensor suites for navigation and decision-making.
- Sustainability commitments: agencies reaffirmed debris-mitigation and end-of-life passivation standards; "Net-Zero Orbit" framework received attention.

Major Global & Regional Trends

IAC 2025 consolidated the transition from exploration to infrastructure. The focus is now on building operational cislunar capabilities through:

- Commercial lunar surface access services (CLPS-style models in Asia-Pacific).
- In-situ construction using robotic fabrication.
- Integration of Earth-observation AI with planetary missions for real-time data fusion.
- Regional collaboration in supply chains and testbeds, especially Australia-Japan and India-UAE alliances.
- These figures illustrate the strong representation of both established space powers and rapidly emerging participants, reinforcing the IAC's position as a global nexus for collaboration, policy dialogue, and technological advancement.

1.1 Awards: Indicators of Industry Priorities

The IAF World Space Awards at IAC 2025 offered a clear reflection of what the global space community now considers most consequential: technological self-sufficiency, geopolitical reach, and the sustained expansion of commercial space infrastructure.

IAF World Space Award 2025 – Team Category: China's Chang'e-6 Mission

The Chang'e-6 mission, led by the China National Space Administration (CNSA), received the IAF's highest team honor for returning 1,935 grams of lunar material from the far side of the Moon—the first such achievement in human history. This milestone validated China's growing mastery of complex autonomous operations and precision sample return technologies, with future missions already planned (**Figure 1**).

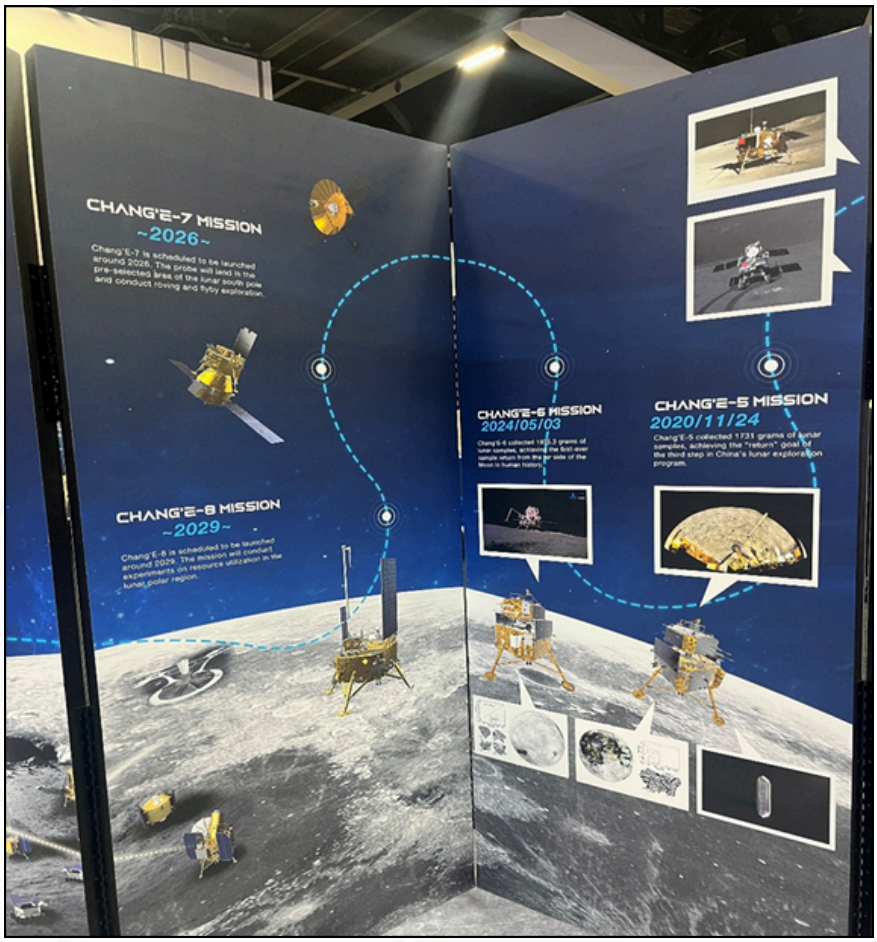

Figure 1: Chang'e future mission objectives.

IAF World Space Award 2025 – Individual Category: Jeff Bezos

Jeff Bezos was recognized in the individual category for his long-term leadership in advancing commercial spaceflight, reusable launch systems, and sustainable infrastructure through Blue Origin. The company's work on the New Glenn heavy-lift vehicle, Blue Moon lunar lander, and participation in NASA's Artemis program has established it as a cornerstone of the emerging cislunar economy.