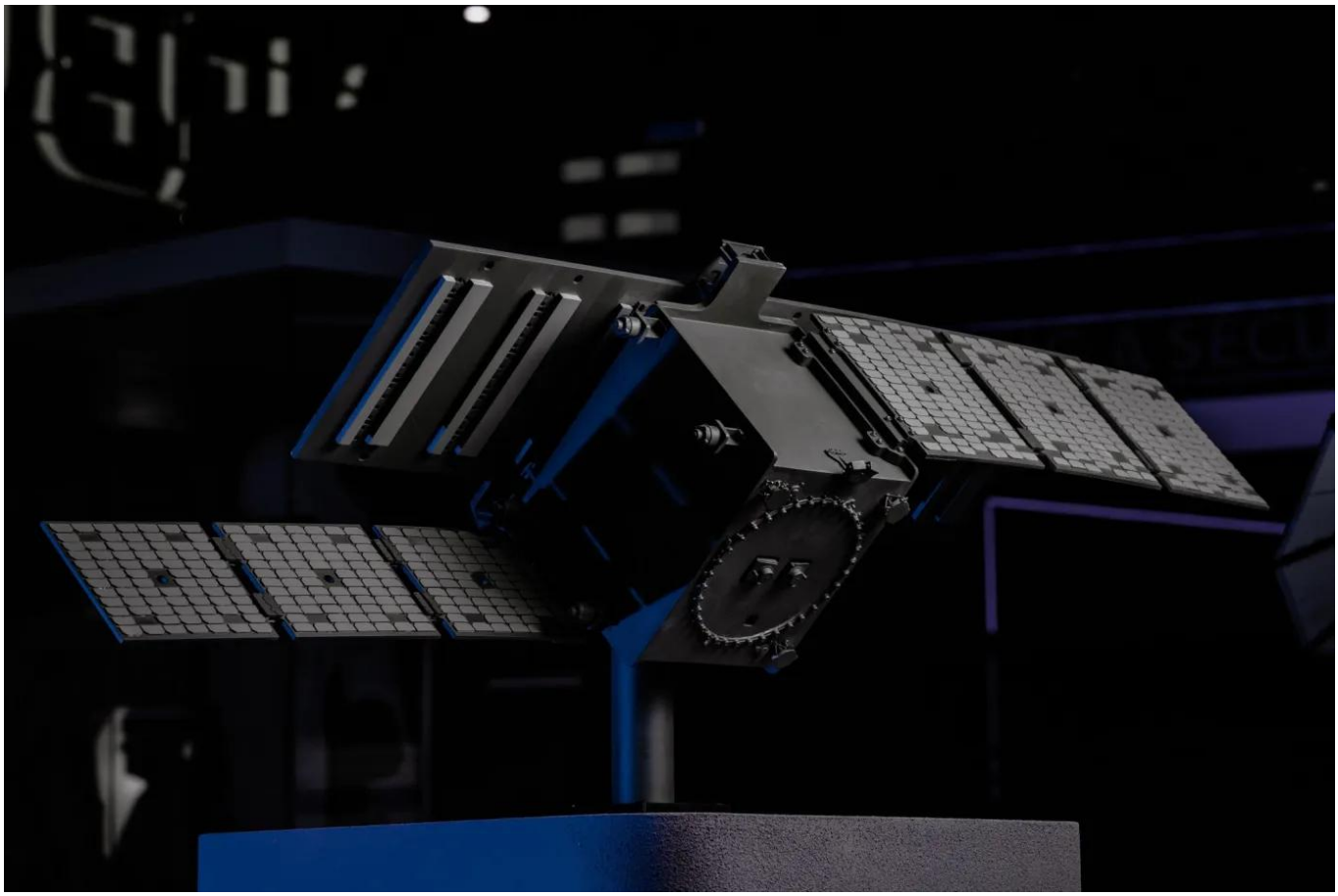
The UAE's Sirb-1 Programme Completes Critical Design Review and Enters Assembly Integration & Testing Phase



- *Critical Design Review validates the design of Sirb-1, the first satellite of the national synthetic aperture radar constellation*
- *Sirb-1 to proceed to manufacturing, assembly, integration and testing, with SAR payload AIT activities to be localised in the UAE at Orbitworks' and TII's facilities*
- *Programme delivered by a national consortium developing UAE expertise, intellectual property and industry in radar satellite technology*

Abu Dhabi, UAE: The UAE Space Agency and EDGE, through its space entity FADA, have completed the Critical Design Review (CDR) for Sirb-1, the first satellite of Sirb, the UAE's National Synthetic Aperture Radar (SAR) satellite programme. The review validated the satellite's design and cleared it to proceed to manufacturing, assembly, integration and testing (AIT).

The CDR is the final major design review prior to the manufacture of flight hardware. The review assessed Sirb-1's satellite design and performance against mission requirements, including verification and validation plans, interface controls, mission assurance, risk

assessments, technical and programmatic readiness. It also confirmed the readiness to proceed to manufacturing, assembly, integration and testing (AIT), as well as its plans for launch and mission operations, with adequate technical and programmatic margins.

His Excellency Eng. Salem Butti Al Qubaisi, Director General of the UAE Space Agency, said: “Sirb represents a new approach to delivering national space programmes, one that places UAE companies and national talent at the centre of developing advanced space capabilities. By combining government investment and strategic direction with the expertise of our national industry, we are building a sustainable, competitive space sector where Emirati companies take the lead in developing and delivering complex missions. The successful completion of Sirb-1’s Critical Design Review demonstrates the strength of this model and brings us closer to the ambitions of the National Space Strategy 2031. Beyond this milestone, our focus is on building lasting industrial capabilities, expanding opportunities for UAE companies and establishing a national space ecosystem that can compete globally. I congratulate our teams and partners across the consortium on this important achievement.”

Waleid Al Mesmari, President of Advanced Sensing at EDGE, said: “The CDR demonstrates the exceptional speed and efficiency with which Sirb-1 engineers are developing advanced radar imaging. Through multi-tiered collaboration with domestic and international partners, we are developing a fully integrated supply chain for SAR technologies within the UAE. Our mission is strengthening sovereign control over space systems and ensuring the UAE’s global standing in Earth observation systems.”

Mohsen Al Awadhi, Director of the Space Missions Department at the UAE Space Agency, said: "The validation of the Sirb-1 design moves the programme into its most demanding phase, in which every subsystem must be built, integrated and tested to the standards required for operation in space. The Agency's engineers along with experts from other entities formed the review board that assessed the design, and we will continue our programme oversight as Sirb-1 moves through manufacturing and testing. FADA's and TII’s engineers worked alongside our international partners throughout the review, and the experience they gain on Sirb-1 will be applied directly to the remaining satellites in the Sirb constellation, which is how knowledge transfer becomes lasting national capability."

Strategic Importance of the Sirb Programme

The Sirb programme addresses two national priorities: access to reliable Earth observation data under all conditions, and the development of a domestic industry capable of providing it by enabling the private national space sector.

Unlike optical satellites, SAR satellites transmit their own radar signals, enabling them to capture imagery of the Earth’s surface by day and night and through cloud, haze and dust. This capability supports a broad range of applications, including monitoring for environmental, agricultural and maritime needs, infrastructure management, and disaster response.

The programme is also building national expertise in SAR technology, developing intellectual property and strengthening the UAE’s domestic supply chain. As part of this effort, Sirb-1’s radar payload will undergo assembly, integration and testing at Orbitworks and the Technology Innovation Institute (TII) facilities in the UAE. This marks an important step in localising advanced space capabilities and equipping UAE companies to develop radar satellites and deliver data services to domestic and international markets.

A National Consortium

Led and funded by the UAE Space Agency, the Sirb programme is being delivered by a national consortium led by FADA, EDGE's space entity, as prime contractor, alongside the Technology Innovation Institute (TII), Orbitworks and other partners. Established in 2023, the consortium brings together national expertise and industrial capabilities to support the programme's development and delivery.

Sirb-1 completed its Preliminary Design Review in April 2026, laying the groundwork for the successful completion of its Critical Design Review.

The programme will now proceed to the manufacturing, assembly, integration and testing of Sirb-1, including the assembly, integration and testing of its SAR payload in the UAE, ahead of its targeted launch in 2028.