Secure Spanish satellites start construction

20/12/2021

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The satellites – which are being developed and built by satellite manufacturers Airbus and Thales Alenia Space for satellite operator Hisdesat in Spain – are due to launch in 2023 and 2024. "Likewise, ESA and the Spanish Centre for the Development of Industrial Technology (CDTI) participate in an important way through the Pacis-3 programme, which is a public-private collaboration between ESA and Hisdesat to develop the most innovative elements of the satellite.

Two telecommunications satellites that can be reprogrammed while in space to respond to changing demands on Earth have passed their critical design reviews

The satellites – which are being developed and built by satellite manufacturers Airbus and Thales Alenia Space for satellite operator Hisdesat in Spain – are due to launch in 2023 and 2024.

They will provide secure communications using innovative technologies such as fully reconfigurable active antennas with beam hopping and geolocation capabilities, artificial intelligence, big data and the internet of things.

The programme – called SpainSat Next Generation – builds on ESA's Pacis-3 Partnership Project with Hisdesat, which supports the development and integration of the innovative satellite payload elements.

ESA Partnership Projects de-risk the investments made by partners to meet rapidly changing market needs.

Miguel Ángel García Primo, Chief Executive Officer of Hisdesat, said: "The technical teams of our co-contractors – Airbus and Thales Alenia Space in Spain and France, together with the rest of the subcontractors – are doing an outstanding job, as well as Hisdesat's team, acting as a client.

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Fernando Varela, Director of Airbus Space in Spain, said: "This milestone opens the door to the manufacturing of satellite flight elements, with new technologies developed here in Madrid by Airbus. Our teams are ready to begin the integration of the satellite payload, especially that of the new, fully reconfigurable active antenna with geolocation capabilities."

Stéphane Terranova, Chief Executive Officer of Thales Alenia Space in Spain, said: "The successful critical design reviews and the arrival in Tres Cantos (Madrid) of the structure of the first satellite's communications module marks the beginning of a new transcendental phase of the project. For the first time we are going to carry out the assembly, integration and test of the communications payload of both satellites in Spain, which means a qualitative leap for the Spanish space industry."

Elodie Viau, Director of Telecommunications and Integrated Applications at ESA, said: "The Pacis-3 Partnership Project with Hisdesat has proven to be a catalyst for key technologies. Pacis-3 shows how the European space industry can respond to an emerging global market for secure satellite communications."