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Regions of interest around the world that Venµs will be watching over. Combining high spatial resolution with frequent revisits, this mission will collect data on plant growth and other terrestrial processes impacted by environmental and human factors. Venµs is a joint mission of France and Israel.

NEW MILITARY SATELLITE MAKES THREE



INTERNATIONAL COOPERATION IS IN RESEARCH SCIENTISTS'

DNA. What matters most is science value, so pooling of expertise, experience and results is a must. That's why CNES conducts most of its science missions with international partners and data are most often made available to the wider scientific community, for example through data and service hubs. This emphasis on collaboration is also reflected in the fact that nearly one in five doctoral and post-doctoral CNES grantees comes from abroad, plus the international symposia the agency organizes and attends, like the 41st **COSPAR Scientific Assembly set to** take place from 30 July to 7 August in Istanbul, Turkey.

Antennas

Natal, Libreville, Jeju, Lucknow... This network of downrange ground antennas retrieves information on launcher health and status up to orbit injection. Dotted around the globe along the launcher's flight path, their data are centralized and interpreted in real time. CNES's Ground Developments Sub-directorate is tasked with deploying this network and employs its diplomatic talents in negotiating the intergovernmental accords authorizing the construction of a station or leasing of an existing antenna. The downrange tracking network currently comprises 17 stations

With MUSIS, Belgium, Germany, Greece, Italy, Spain and France are planning the replacement of their current reconnaissance satellites¹. This joint project will comprise an optical space component (CSO), for which France is the lead nation, and two radar components from Germany and Italy. France had previously launched construction in 2010 of two identical satellites to fulfil complementary missions in separate orbits. A cooperation agreement signed with Germany in 2015 has now brought this number up to three, with the goal of boosting the performance of Helios 2 with better resolution and a significant increase in daily imaging capacity.

1. Helios, Pleiades, SAR-Lupe and COSMO-SkyMed.



28 cities in 14 countries are organizing this year's ActInSpace competition. Teams will have 24 hours to solve one of 50 challenges involving the everyday use of space technologies.

Federation

THE COSPAS-SARSAT INTERGOVERNMENTAL ORGANIZATION operates a satellite-based search-andrescue system that responds to distress calls around the world. Today, it federates no fewer than 40 nations and 2 organizations.

Employees

THE GUIANA SPACE CENTRE IS A HIGH-TECH INDUSTRIAL FACILITY OPERATED BY THE COMBINED TALENTS OF SOME 1,700 EMPLOYEES FROM ALL OVER EUROPE. providing coverage for all missions.

NO FEWER THAN

ATTENDEES ARE EXPECTED FROM EUROPE AND AROUND THE WORLD at the Toulouse Space Show 2016, from 28-30 June. This leading event devoted to development of space infrastructures, technologies and applications has this year invited India as its guest of honour.

MILLIMETRE



CNES and NASA have been working together since the 1990s to measure ocean topography, signalling the advent of operational space oceanography. Since it all began back with TOPEX/ Poseidon, the forerunner of the Jason series, measurement accuracy has come on in leaps and bounds and is now close to one millimetre.

GALILEO SATELLITES launched from the Guiana Space Centre in 2016: two on Soyuz and, for the first time, four on Ariane 5.