Hylas gets green light for spaceport trip

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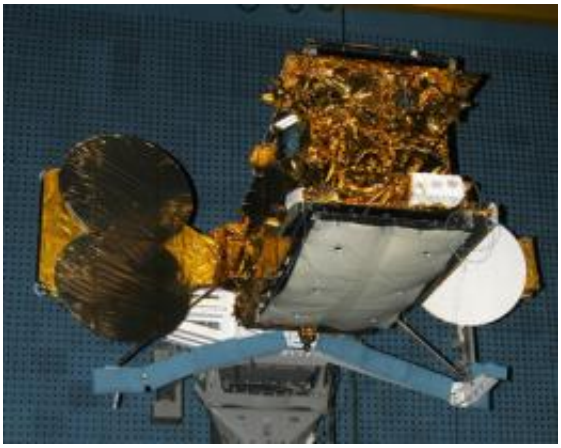


Hylas-1 during qualification testing at the Compact Antenna Test Facility (CATF) at ISRO's Bangalore satellite centre. Credits: ISRO

(PhysOrg.com) -- Following extensive testing in India, the Hylas-1 telecommunication satellite has been given the go-ahead for shipping to Europe?s Spaceport in French Guiana for its November flight.

The Hylas-1 mission, a public-private partnership between ESA and Avanti Communications in the UK, will target the high demand for broadband services in Europe. The Agency's advanced communications payload will deliver broadband services to hundreds of thousands of European customers on a flexible basis, shifting bandwidth between regions in line with demand.

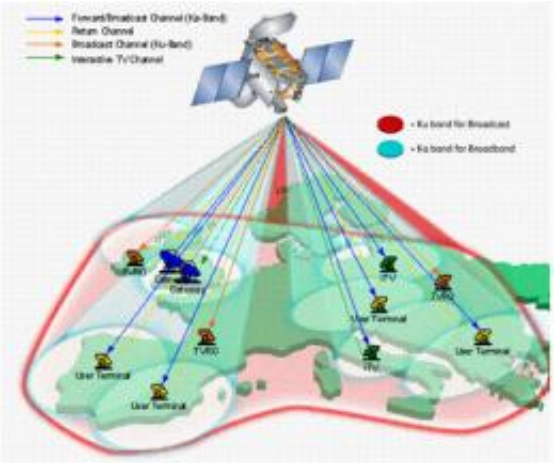
EADS Astrium is the mission prime contractor, with the satellite

platform coming from Antrix Corporation, the commercial arm of the Indian Space Research Organisation. Satellite assembly and qualification testing were performed in Bangalore, India.

Other European and Canadian companies including TESAT, ComDev, and Casa Espacio provided essential equipment for the communication payload.

The satellite's readiness to begin its scheduled launch campaign was assessed in Bangalore on 18 September. Senior officials from Avanti, ESA, Astrium and ISRO/Antrix studied the results of Hylas-1's tests before giving the green light.

"There is a great sense of fulfilment today," said Andrea Cotellessa, ESA's project manager. "We have completed the work in less than four and a half years from contract signature. Considering the advanced payload we have aboard Hylas-1 and the performances measured so far, everybody involved in this project should feel very proud."



Hylas-1 operates in Ku-band and Ka-band, which are adjacent portions of the microwave spectrum: Ku-band often used for television broadcasting and Ka-band being increasingly employed for broadand internet services. Hylas-1's wide

Ku-band beam covers the whole of Europe. Its Ka-band antenna generates eight closely focused 'spot beams' for optimal frequency reuse, each one providing coverage to a key European market. Bandwidth and power can be redistributed between beams to fulfil the changing needs of the market. Credits: Avanti

A Russian Antonov-124 aircraft will carry Hylas from Bangalore to Kourou in early October, along with all the support equipment.

Launch is planned for November on Europe's Ariane 5 ECA, shared with another telecommunication satellite.

The Hylas 1 ESA programme is an example of a successful public-private partnership; a creative fast track for demonstrating satellite technology as part of an operational mission.

Hylas will be followed in the next two to three years by two further satellites developed in partnership programmes with satcom operators: Alphasat, developed with Inmarsat with Astrium as prime contractor, and HAG-1, developed with Hispasat with OHB as prime contractor.

Provided by European Space Agency

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