

# Dozen Galileo Satellites in Orbit after Successful Launch of Latest Pair



The pace of deploying Europe's own satellite navigation system continued to increase with the launch of the latest pair of Galileo satellites, doubling the number of satellites in space within nine months. Galileo 11 and 12 lifted off together on Thursday, 17 December.

This sixth Galileo launch was a textbook operation: all Soyuz stages performed as planned, culminating in the Fregat upper stage deploying the twin satellites into orbit close to a 23,500 km altitude, around 3 hours and 48 minutes after lift-off.

With today's launch, Europe has doubled the number of its Galileo satellites in orbit in just nine months, commented Jan Wörner, director general of ESA. Along with the ground stations put in place around the globe, this brings Galileo's completion within reach. Initial

Galileo services are scheduled to begin within the next year, which proves the importance of this wise investment.

## Worldwide providers

The excellent performance of these satellites, as measured on the ground, allows Europe to join the club of the worldwide providers of satellite navigation services, said Didier Faivre, ESA's director of Galileo and navigation-related activities. Production, testing and launch of the remaining satellites are now proceeding on a steady basis according to plan. Then, after the summer break in 2016, the tempo of deployment will increase further with the first of three customised Ariane 5 launchers that will carry four rather than two satellites into orbit each time, Faivre continued.

This month will see the 10th anniversary of the launch of Europe's very first navigation satellite: GIOVE-A, on 28 December 2005. It secured the frequencies set aside for Galileo, gathered data on the medium-altitude orbit environment and flight-tested hardware for the working system.