

Next Four Galileo Satellites Fuelled for Launch



Europe's next four Galileo satellites have been fuelled at Europe's Spaceport in Kourou, French Guiana, in preparation for their launch on 25 July. The four satellites were placed into their protective containers to be transported from the S1A processing building to the S3B payload preparation building, where they were filled with the hydrazine fuel that will keep the satellites manoeuvrable during their

12-year working lives.

The next step is to fit the quartet onto the dispenser that holds them in place securely during launch and then releases them into space once the upper stage of the Ariane 5 rocket reaches its 22,922km-altitude target orbit. After that, the satellites plus dispenser will be fitted onto the upper stage then enclosed by the two sides of the protective launch fairing – one of which has had the mission logo added to it.

Meanwhile the Ariane 5 for this launch – known as Flight VA244 – has undergone assembly inside the Spaceport's Launcher Integration Building.

The Galileo System began Initial Services on 15 December 2016, and more than 100 million devices are using Galileo today.



Technicians in SCAPE (Self Contained Atmospheric Protection Ensemble) suits to fill Galileo satellites 22-26 with hydrazine fuel. This operation took place in the Guiana Space Centre's S3B payload preparation building on 29 June 2018, in preparation for their 25 July launch by Ariane 5.

Europe's global navigation satellite system

Galileo is Europe's own global navigation satellite system, consisting of both the satellites in space and their associated ground infrastructure.

The definition, development and in-orbit validation phases were carried out by ESA, and co-funded by ESA and the European Commission. This phase created a mini-constellation of four satellites and a reduced ground segment to validate the overall concept, ahead of further deployment.

Success led to the current Full Operational Capability phase, fully funded by the EU and managed by the European Commission. The European Commission and ESA have a delegation agreement by which ESA acts as system design authority and procurement agent on behalf of the European Commission.

Source: ESA.



Europe's Galileo satellite navigation system relies on a full set of 24 satellites, orbiting in three orbital planes in medium-Earth orbit to provide positioning, navigation and timing services worldwide. (Courtesy: OHB System AG)