

Spectratime to Supply Advanced Atomic Clocks for Galileo's First 14-Satellite System

Neuchâtel, April 14th 2010 – SpectraTime, a company of the Orolia Group (NYSE Alternext Paris – FR0010501015 – ALORO), today announced it has received an Authorization to Proceed (ATP) to supply advanced atomic space clocks, including Crystal oscillators, Rubidium Atomic Frequency Standards, and Passive Hydrogen Masers, for the first 14 Full Operational Capability (FOC) satellites and the ground mission segment (GMS) of the Galileo global navigation satellite system. SpectraTime expects this ATP to lead to a contract valued at about €20 million. The different clocks are scheduled to be delivered over the next 2 or 3 years.

Galileo satellite test beds: GIOVE & In-Orbit Validation (IOV) satellites

After the successful test of Spectratime's Rubidium and Passive Hydrogen Maser clocks on board GIOVE-A & GIOVE-B, validating the performance of the world's most precise atomic clock system in orbit, four In-Orbit Validation (IOV) Galileo satellites are due to be launched early 2011. The critical elements of an IOV satellite include its two passive hydrogen-maser clocks, which are jointly supplied by SpectraTime and Selex Galileo Avionica, coupled with the Rubidium and Crystal clocks, providing together the ultimate performance of the Galileo system. Once the IOV phase is completed, the remaining satellites will be launched for FOC deployment. The first 14 FOC Galileo satellites will be placed in orbit by the end of 2012.

SpectraTime Atomic Clocks: the heart of the system

The principle of navigation by satellite is based on the transmission to the users of signals coming from at least four satellites. To get one-meter-level positioning and navigation data, these signals must be synchronized to a billionth of a second. The extremely precise time reference provided by the atomic clocks on board each satellite is thus a central condition to make the system operate properly: *"You basically have to protect very complex mission-critical clocks from any tiny source of perturbations such as magnetic fields, shock, vibration or thermal environmental factors"* explains Fabien Droz, VP Space of SpectraTime. *"This new contract confirms our leading position in supplying state-of-the-art clock performance and technologies for the space industry"*.

Press Contact : Elodie Cally
elodie.cally@orolia.com
Tél. +33(0)1.64.53.39.80

