

# Vega on track to meet 2007 deadline

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There are just under three years to go to the first launch of a new European launcher - Vega. Last week representatives of over 20 European space industries met at ESA's European Space Research Institute, ESRIN, just outside Rome in Italy, to discuss progress on this new small-scale launcher.

“The preliminary project stage is now completed,” said Stefano Bianchi,

responsible of the Launch Vehicle Development Programme. “We are now moving from the drawing board to the construction of the launchers, by building and testing systems and the motors. This is decidedly the most critical phase of the development.”

Vega, comparatively small at only 30 m compared to the 53 m Ariane 5 ECA, will be capable of placing payloads weighing from 300 to 2000 kg into the polar and low-Earth orbits used for many scientific and Earth observation missions. This should enable it to play a significant role in the global market for launching small satellites.

“Arianespace, the society that will commercialise Vega, have confirmed that there are already at least three to four potential clients for Vega,” says Bianchi. “This is a fantastic opportunity for Europe to enter a new market which is why we must be ready for the first qualification launch, sometime towards the end of 2007.”

One of Vega’s strong points will be its flexibility and this, together with its low cost, should make it popular with small businesses, research institutes and European universities. Vega will give Europe for the first time the possibility of placing satellites into orbit at a relatively low cost.

These low costs have been made possible by the Vega strategy. This is to use, whenever possible, technology already developed for the Ariane 5 programme, leading to an important reduction in initial costs. In turn, new elements developed for Vega can be used by the next generation of Ariane 5 launchers. One example is the P80 first stage motor, specially developed for Vega using low-cost technology, which could be used for an Ariane 5 booster engine.

A similar strategy has been used to adapt existing launch infrastructure at Europe’s Spaceport in French Guiana. Savings have been made by adapting the ELA 1 site, used for the very first Ariane launch in 1979, instead of building a new launch site.

“To win the challenge of meeting the first launch date in 2007,” says Bianchi, “we need a well coordinated industrial team, we can’t allow ourselves to miss this deadline.”

The first firing test of Vega’s Zefiro solid rocket motor will take place this year in Sardinia. At Kourou, work on preparing the launch site for Vega is proceeding to plan.

Altogether seven ESA Member States are contributing to the Vega programme. Italy is providing 65% of the costs and France around 15% while the remainder is being met by Belgium, Spain, Sweden, Switzerland and the Netherlands.

Source: ESA

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