



Press Release

Astrium and Air Liquide will create a new company to develop the future Cryogenic Upper Stage Tank for the Ariane 5 Midlife Evolution

- **New tank will be developed and manufactured in Bremen**

Bremen, 28 October 2010 - Astrium, prime contractor for the development of Ariane 5 Midlife Evolution (ME), a European Space Agency programme, and Air Liquide, a specialist in cryogenics for space applications, have agreed to establish a new joint venture, which will, in the future, lead the development and the production of cryogenic tanks for Ariane 5 ME upperstage.

A Memorandum of Understanding (MoU) has already been signed by the two companies. The construction of a purpose-built facility close to Astrium's Bremen site is set to begin in 2011.

The joint venture should generate some 40 new jobs.

Ariane 5 ME is a major ESA programme that will upgrade the current Ariane 5 launcher so it can cater for the market demand for increased launch capacity. The programme was decided at the Space Ministerial Conference in 2008. Germany has significantly increased its participation in the program with 35% of the development budget.

Astrium and Air Liquide, partners for more than 40 years on the Ariane programme, have decided that the best way to deal with this complex project is to pool their competencies and build on their existing Cryospace joint venture in Les Mureaux, France by opening a new site in Bremen, Germany. Cryospace in Les Mureaux, and Air Liquide Advanced Technologies division in Sassenage, France will continue to produce the fuel tanks for the current versions (ECA and ES) of the Ariane 5 launchers.

Astrium in Bremen is the European centre of excellence for the development and production of launcher upper stages. The new cryogenic Ariane 5 ME upper stage, fuelled by liquid hydrogen and liquid oxygen, will be capable of a much more versatile mission profile than the current versions of Ariane 5. It boasts enhanced capacity (12 rather than 10 metric tons of payload), and because of its re-ignition capability, it will be more able to place multiple satellites into orbit or send probes to other planets. By overcoming some major challenges, such as fuel management and the considerable mechanical and thermal demands on the fuel tank, the new upper stage enables the European Ariane launcher to offer the full spectrum of services from satellite launches to special missions.

The first launch of the Ariane 5 ME is scheduled for the end of 2016.

About Astrium

Astrium, a wholly owned subsidiary of EADS, is dedicated to providing civil and defence space systems and services. In 2009, Astrium had a turnover of €4.8 billion and more than 15,000 employees in France, Germany, the United Kingdom, Spain and the Netherlands. Its three main areas of activity are Astrium Space Transportation for launchers and orbital infrastructure, Astrium Satellites for spacecraft and ground segment and Astrium Services for the development and provision of secure and commercial satcoms and networks, high security satellite communications equipment, geo-information products and services, and navigation services.

EADS is a global leader in aerospace, defence and related services. In 2009, EADS generated revenues of €42.8 billion and employed a workforce of more than 119, 000.

About Air Liquide

Air Liquide is the world leader in gases for industry, health and the environment, and is present in over 75 countries with 42,300 employees. Oxygen, nitrogen, hydrogen and rare gases have been at the core of Air Liquide's activities since its creation in 1902. Using these molecules, Air Liquide continuously reinvents its business, anticipating the needs of current and future markets. The Group innovates to enable progress, to achieve dynamic growth and a consistent performance.

Innovative technologies that curb polluting emissions, lower industry's energy use, recover and reuse natural resources or develop the energies of tomorrow, such as hydrogen, biofuels or photovoltaic energy... Oxygen for hospitals, homecare, fighting nosocomial infections... Air Liquide combines many products and technologies to develop valuable applications and services not only for its customers but also for society. A partner for the long term, Air Liquide relies on employee commitment, customer trust and shareholder support to pursue its vision of sustainable, competitive growth. The diversity of Air Liquide's teams, businesses, markets and geographic presence provides a solid and sustainable base for its development and strengthens its ability to push back its own limits, conquer new territories and build its future. Air Liquide explores the best that air can offer to preserve life, staying true to its sustainable development approach. In 2009, the Group's revenues amounted to €12 billion, of which almost 80% were generated outside France. Air Liquide is listed on the Paris Euronext stock exchange (compartment A) and is a member of the CAC 40 and Dow Jones Euro Stoxx 50 indexes.

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