# Ariane 6

## Renewed European collaboration

#### FAIRING

Houses the payloads as they journey through the atmosphere before separating in outer space. Built by Beyond Gravity, Emmen.

#### **ARIANE DUAL LAUNCH SYSTEM**

Transports 2 satellites, the first flying on top of the capsule and the second inside it. Built by ArianeGroup, Les Mureaux.

### Start of Ariane 6 development

From the boosters to the fairing, no less than 600 companies, including 350 SMEs from 13 European countries, are involved in the Ariane 6 project. With ArianeGroup as prime contractor, this industrial network is organised into centres of excellence spread out across Europe. Ariane 6 flies technological innovations such as 3D printing, friction stir welding plus latest-generation electronics and informatics systems.

2014



#### **PAYLOAD ADAPTER**

Provides the launcher-satellite interface. Built by Airbus Defence & Space, Madrid.

#### **UPPER STAGE**



Transports and deploys the satellites into the target orbit.

- Propellants: 30 t liquid hydrogen (-253°C)
- and liquid oxygen (-182°C).
- Assembled by ArianeGroup, Bremen.

#### **VINCI ENGINE**

8 t thrust cryogenic engine, re-ignitable, for different orbits and atmospheric re-entry so as not to pollute outer space. Assembled by ArianeGroup, Vernon.

#### **INTER-STAGE STRUCTURE**

Provides the interface between the stages. Built by Airbus Defence & Space, Madrid and Sevilla.

#### LOWER STAGE



Upper composite



Rotterdam

Upper stage



Bremen

#### to the Guiana **Space Centre**



#### stage



Boosters

Lé Havre

sub-assemblies from MT-Aerospace/Augsburg and Airbus Defence & Space/Leiden, notably.

#### P120C BOOSTERS



Solid-propellant boosters delivering a total 250 t of thrust, essentially the thrust required on lift-off. Built by Avio/Colleferro and ArianeGroup/Bordeaux before being assembled at the CSG by Europropulsion.

#### **VULCAIN 2.1 ENGINE**



Cryogenic engine delivering 135 t of thrust. It powers the lower stage as from lift-off and through to its separation from the upper stage. Assembled by ArianeGroup/Vernon.





Livorno

#### versions of Ariane 6

• A62 with 2 boosters • A64 with 4 boosters

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