



CNES's space systems R&T budget (external expenditures) is around €20 million a year. Averaged out over the 2011-2014 period, some 26% of this figure was devoted to SMEs, while the Demonstrator and Strategic Components budgets are about €5 million a year.

## CONCENTRATED



**SPACE** Most space activities in France are concentrated in three dedicated competitiveness clusters: Aerospace Valley (Midi-Pyrenees and Aquitaine), ASTech (Paris-Ile de France) and Pegase (Provence-Alpes-Côte d'Azur). An estimated 13,800 people are employed by the space industry in these three regions (13,000, 200 and 600 respectively).

# 1 launcher = how many Airbuses?

AN ARIANE 5 COSTS ABOUT €150 MILLION, 2 to 21/2 times less than an Airbus A380. Ariane 6 aims to cut costs by 40% to make it the average price of an Airbus A320. Note that the cost of launching a telecommunications satellite amounts to less than 3% of the revenues generated by the space telecommunications sector as a whole.



with a GNSS positioning system. This is a huge market, since an estimated 2.8 billion downloads concern phone apps using such a system. In addition, 35% of GNSS receiver models support Galileo.

175

Amount allocated to space innovation in the PIA future investment programme. This includes SWOT (KaRIN instrument), Myriade Evolutions and the PFgeoNG/NEOSAT projects to equip the EOR bus and E172B telecommunications satellite with electric propulsion. It doesn't include the Ariane 6 project, classed as an industrial innovation.



### OHBS

EVERY YEAR. CNES ISSUES CALLS FOR IDEAS FOR R&T AND DEMONSTRATORS. THESE CALLS ALWAYS DRAW A BIG **RESPONSE. IN 2014, 300 PROPOSALS WERE RECEIVED FOR** LAUNCHER TOPICS AND 684 FOR ORBITAL SYSTEMS, FROM WHICH 234 WERE DOWN-SELECTED.

CNES is in the Top 50 patent applicants in the rankings compiled by INPI, France's national industrial property institute. In 2014, it ranked 33<sup>rd</sup> with 41 patents filed.



**OF JOBS SUSTAINED** by the space sector in Europe are in France.



trades. More than 50 different trades are employed at the Guiana Space Centre (CSG), while space sustains 1,700 direct jobs, 2,500 jobs at subcontractors and 5,000 indirect jobs.

### **OULOUSE**

Every year, 30 to 40 new hires join the engineering department at the Toulouse Space Centre (CST).



### **CLS, THE CNES SUBSIDIARY**

that markets the Argos data collection and location system, has acquired six companies in the last six years. From 25 employees at its inception, today it has grown to 540 people around the globe-a 21-fold increase-and revenues this year are set to exceed €100 million.