

Pegase Cluster

Pegase cluster is a network of major players in the Aeronautics and Space industry of the Provence-Alpes-Côte d'Azur region. It was accredited as a competitiveness cluster and PRIDES (regional cluster for innovation and mutually supportive economic development) in 2007.

It pools together 200 players involved in the development of a new generation of aircrafts - UAVs, balloons, stratospheric aircrafts..., intended and carried out for specific missions.

Pegase networks industrial companies, research and training organizations, but also clients looking for more efficient aircrafts, air and space services (for example civil protection or fire service representatives ...). The cluster provides them cooperation opportunities and innovation and development tools

KEY FIGURES FOR THE SECTOR

- **35,000** jobs in the sector (total)
- **250** companies (total), among which 8 world-class principals and 180 SMEs
- **1,700** researchers including **700** in the public sector; **13** specialist R&D laboratories
- **13** engineering schools, 16 university technology institutes
- the largest industrial branch in PACA

EXCEPTIONAL ADVANTAGES

- The whole aeronautic field in Provence-Alpes-Côte d'Azur is grouped together around: Eurocopter, the world's No.1 helicopter manufacturer and Thales Alenia Space, the European leader in satellite systems and a major player in orbital infrastructures.
- The region hosts the major national centre for simulation, testing and measurements (flight test center) in the air base of Istres, created in 1950. Its runway extends over 5 km, making it the longest in Europe, and thus suited to U.S. space shuttle emergency landings.



THE CLUSTER'S AXES OF EXCELLENCE

UAVs



Microlight aircraft



Balloons



Space systems



Helicopter



New aerospace segments



Territory surveillance

New cost-efficient and autonomous aircraft, including UAVs, able to supervise industrial, cultural, natural sites.

Site surveillance

Building, work
Industrial & military sites
Cultural & archeological sites
Security and surveillance

Surveying zones

Forest fires [alarm and deterrence]
Fishing zones
Pollution [degassing]
Police [motorways, borders]
High Tension power lines, waterways
Target identification

Monitoring - analysis

Meteorology
Topography
Land-use monitoring
Scientific observation
Tactical situations
Space exploration

Intervention

Aircraft (UAVs, helicopters...) able act rapidly in inhospitable, polluted or unreachable areas.

Emergency assistance

Emergency coordination [natural disasters]
Rescue [any weather, any place]
Fire fighting [forests, buildings, sites]
Accident intervention

Military Operations

Target processing
Minesweeping
Anti-sniper operations
Intelligence
Intervention coordination

Other

Police
Films, photos
Low cost publicity [balloons, UAVs]
Agricultural fertiliser/insecticide spreading
Environnement

Transport

New environmental and cost-efficient means of transport (aeropters, electrically motorized aircrafts) and new possibilities to transport unusually heavy or bulky loads such as pipelines or bridge piles (jumbo balloons).

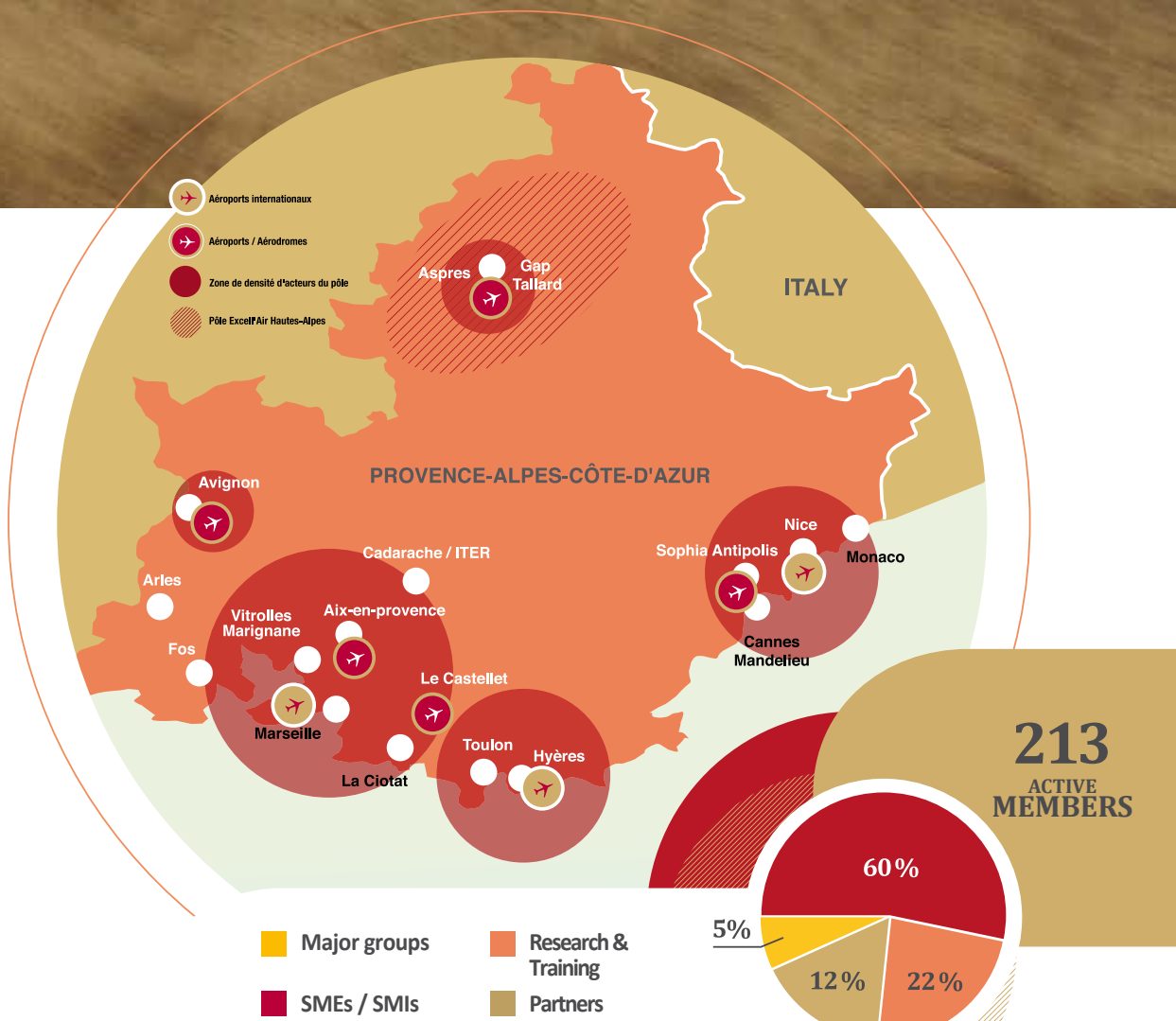
People and all conditions

Passengers [economical]
Troups [deployment anywhere]
Tourists [visits, pleasure]
Ambulances [any time and place]

Freight any load-any place

In hostile environments [including space]
In the absence of infrastructures
Economic site to site
Heavy loads [> 500 tons]

75 APPROVED PROJECTS, FOR A TOTAL AMOUNT OF 206.8 MILLION EUROS



Among the clusters' active members:

- **4 industrial groups which are founder members** : Eurocopter, Areva TA, Dassault Aviation, Thales Alenia Space.
- **R&D centers** : Ecole Centrale Marseille, Arts & MétiersPARISTech, I3S, IAE Aix-en-Provence, INRIA Sophia Antipolis, LMA, LSIS, Unimeca, ONERA, Paul Cézanne University and UNSA
- **Air training schools** : EALAT, École de l'Air, Hélicsim, IFAERO ...
- **Technological University Institutes, "aeronautics" field** : Gap, Aix-en-Provence, Salon-de-Provence.

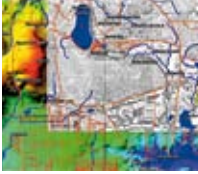
PARTNERSHIPS

- with other regional clusters, that developed expertise on key technologies for the aeronautics and space industry: Optitec (optics - photonics), SCS (information technology), Mer PACA (technologies of the sea), Capenergies (future energies), Risques (risk management).
- with other French clusters in the aeronautics field: Aerospace Valley (Midi-Pyrénées and Aquitaine regions) and Astech (Ile-de-France region), through a tripartite alliance.

INTERNATIONAL STRATEGY

- To develop industrial and trading posts in Mexico, Brazil and Morocco, target countries for Pegase's members, in order to approach contractors, to set up technological partnerships, to network with these countries' clusters.
- To structure the European aeronautics cluster network (EACP - European Aerospace Cluster Partnership, network of 29 European clusters).
- To implement innovative solutions with foreign partners, as part of European Union projects (Framework Programme, Eureka, ERA-Net ...).
- To attract new international contractors to Provence-Alpes-Côte d'Azur.

EXAMPLES OF INNOVATIVE PROJECTS



« **GYROVISION** » : A new airborne watching and detecting system: high definition, stabilized, multi-spectrum, virtual reconstitution of an object. Project managed by ATE Group, in association with Coreti, Dronexplorer, I3S and Nexvision.
Co-label: Optitec competitiveness cluster.



« **SHARE** » : Pilot station for UAV missions: general-purpose, piloting by the mission, reduction of operator numbers. Project managed by OPERA Ergonomie that pools together Eurocopter, Thalès Alenia Space, Adetel, RFTronic, ONERA and LSIS.



« **DROP** » : An automated detection system for objects lost on landing strips, developed with astrophysics technologies. Project managed by Aéromecanic, in association with Astriane, Cegelec, Marseille-Provence Airport, LAM, ONERA and LAOG.
Co-label: Optitec competitiveness cluster.

EVENTS

- Le Bourget Air Show
- Toulouse Space Show
- ICAS 2010

CONTACTS

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