



COMPETITIVENESS CLUSTER

AERONAUTICS, SPACE, DRONES AND EMBEDDED SYSTEMS

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ACTIVITY REPORT 2021-2022

COMPETITIVENESS CLUSTER

AERONAUTICS, SPACE, DRONES AND EMBEDDED SYSTEMS



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EDITORIAL

Dear members and partners,

In the context of this year's report, we would like to thank Yann Barboux for his commitment to Aerospace Valley throughout his term.

We would also like to thank the Cluster's team of full-time and seconded staff who have worked very hard over the last two years to assist members and actively support regional and national actions to help them overcome the unprecedented crisis.

Let us review the main issues which have marked this period of the beginning of the recovery from the crisis:

- **First, the increase in aeronautical production rates:** that of the A320-with a historic goal of 75 planes in 2025 and that of the Rafale in line with commercial successes on export markets.
- **The growth in R&D and industrial modernization projects** funded by regional support schemes and by the France Recovery plan.
- **The ambitions affirmed by France and Europe in space:** the President of the Republic spoke in Toulouse in February on the European space strategy within the framework of the French Presidency of the European Union Council, highlighting the challenges to be met in launchers, satellite constellations, space exploration, and the use of space data to help the planet;
- **The aeronautics sector's serious supply chain issues** exacerbated by the Russian-Ukrainian war and significant recruitment tensions.

Against this background, the Cluster remains more focused than ever on its innovation mission and is proud of achieving major results in its priority work areas:

- **Decarbonizing aviation:** The Cluster has implemented the MAELE initiative bringing together over 270 innovative regional companies and stakeholders in the field of

sustainable, light, green aviation, and has extended it beyond our region with co-writing of the French light aviation roadmap of the CORAC.

- **Industrial transformation:** 2021 was rich in successful projects and equity capital. The health crisis reinforced the need for local, competitive and connected production sources, which is the purpose of acceleration platforms for the industry of the future (PAIF): Pad'OCC in Occitanie and PROPULS in Nouvelle-Aquitaine in which the Cluster has heavily invested and obtained support from the Government.

- **Support for start-ups:** District, the Cluster's customized acceleration service for young innovative companies, has expanded from Space Avenue to the Digital Road, dedicated to digital services and products along with the launch of Green Aero Boulevard, dedicated to the eco-responsible light aviation market and decarbonizing the industry.

- **Access to defense markets:** the expansion of innovation and networking initiatives in this field in collaboration with the General Armaments Division (DGA), the Space Command, and major industrial contractors, offers growth opportunities to our members.

During the year, the Cluster's Board of Directors also approved its purpose, missions and objectives, enabling it to confidently submit its application to Phase 5 of the Competitiveness Clusters for 2023-2026.



BRUNO DARBOUX
President



BRUNO NOUZILLE
Vice-President

KEY FIGURES

Grow contacts, keep abreast of industry news, promote the development of innovative projects, identify technological expertise, finance an R&D project, obtain private funding, grow internationally and on new markets...

AEROSPACE VALLEY SUPPORTS ITS MEMBERS AND BOOSTS THEIR COMPETITIVENESS



17 YEARS
OF EXISTENCE



PRESENT ON
TWO REGIONS



**1ST EUROPEAN
COMPETITIVENESS
CLUSTER**

from the Aeronautics, Space
and Drones sector



OVER 200
EVENT PER YEAR

OVER 830
MEMBERS

including **591 SME**
and a network of more
than **15 000 contacts**

THE ONLY COMMUNITY
in the world which brings together
all of the actors in the value chain
from all segments of
**THE AERONAUTICS AND
SPACE SECTOR**



The Cluster contributes to the
growth of the technical and industrial
capabilities of its
**5 ECOSYSTEMS
OF EXCELLENCE**

SINCE 2005



FOCUS PERIOD

FROM APRIL 1, 2021 TO MARCH 30, 2022



144 PROJECTS
Supported by Aerospace Valley



64 PROJECTS
with €30.5 million in public funding

LES PROJETS

The Cluster contributes to the development and competitiveness of its members through innovation, by promoting collaborative R&D projects, while allowing them to benefit from networking opportunities to work with new partners.

Supporting its members in setting up their collaborative innovation projects is an essential vector for maximizing their chances of obtaining funding.

Finally, the expertise provided by the Division contributes to development, growth, transformation and promotes access to new markets.

+ DE 200 EVENTS

INCLUDING **104** WEBINARS WITH
MORE THAN 7000 REGISTRANTS AND AN
85% AVERAGE PARTICIPATION RATE

NOTE:

A new scheme was needed to be able to propose new 100% digital live events to Cluster members:

- The creation of **Aerospace Digital Days** in May 2021, a 100% digital event recorded in an airplane cabin studio designed especially for the event brought together more than 50 speakers and 507 participants while generating over 260 B2B meetings.
- The live broadcast on Youtube of the **MAELE Hackathon finals** in February 2022 showcased the work carried out by 6 teams who pitched to an audience of 25 experts.

ON THE WEB

CONSTANTLY GROWING SOCIAL MEDIA :



+25%
Linkedin subscribers



+3%
Twitter followers



1 NEW WEBSITE
FOR BETTER FLUIDITY AND
ERGONOMICS



1 NEW CORPORATE VIDEO
PRESENTING THE CLUSTER,
ITS ACTIONS AND MISSIONS



ACTIVITY REPORT

AERONAUTICS

2021: THE TRANSFORMATION OF THE ECOSYSTEM FOR SUSTAINABLE EFFICIENT AVIATION IS UNDERWAY. IT BEGINS WITH LIGHT AVIATION.

2021 was notable for the launch of the MAELE (Light environmentally responsible air mobility) call for expressions of interest and increased recognition of the need to strengthen our local actors' positioning when it comes to developing new decarbonization technologies. The advent of new materials, recycling technologies, eco-design, the circular economy, as well as new industrial processes, are the keys to maintaining world leadership in the supply chain of the Greater Southwest.

ACHIEVEMENTS

The end of the COVID period has given rise to a new **momentum in the aeronautics initiatives undertaken by Aerospace Valley**.

Calls for expressions of interest (CEI) jointly organized with the Nouvelle-Aquitaine and Occitanie regions enabled to support nearly 20 projects involving green aircraft for a total investment of 15 million euros. The engineering aspects addressed within the scope of MAELE projects have driven progress in the technological approach to electric engines, fuel cell power generation, hydrogen tanks introducing new composite materials and polymers, without forgetting the retrofit component, a genuine opportunity for an aeronautics fleet of nearly 6000 aircraft in France and a global market of over 250 000 light planes.

With this initiative over **287 companies** relevant in this field were mapped in both regions (over 500 contacts) representing some **65 skills**.

Against this background, in mid-September 2021, Aerospace Valley organized an event, "**The week of green, sustainable, light air mobility**" in Toulouse in Occitanie and in Jonzac in Nouvelle Aquitaine, bringing together **480 participants and resulting in over 850 B2B meetings**.

Growing recognition of the need for environmentally-friendly innovation in the aeronautics field has led the Cluster to initiate the MAELE **Hackathon** in collaboration with three engineering schools in Nouvelle-Aquitaine. The hackathon focused on two main themes:

- What social challenges for Sustainable and Green Light Air mobility?
- New applications and business models for Sustainable and Green Light Air mobility

The three schools in the competition (ESTIA in Bidart, EIGSI in La Rochelle, and ELISA in Saint-Jean d'Ilac) highlighted the students' dedication and motivation with regard to aeronautics. **And the 30 projects presented reflected the students' imagination and creativity in tackling the challenges ahead.**

Aerospace Valley also participated for the first time in the France Air Expo show in June, 2021, which is the only General Aviation show in France; the Aerospace Valley stand hosted 7 members: AilesX, Air Systems, BOSCH, la Communauté des Communes de la Haute Saintonge, Elixir Aircraft, Segnere and Voltaero.

District, the Cluster's customized acceleration service for young, innovative companies has expanded its reach with the launch in April, 2021 of **Green Aero Boulevard**, dedicated to the Aeronautics sector and notably to the eco-responsible light aviation market and/or decarbonization of the industry.





SELECTION OF WEBINARS AND EVENTS

There were some **30 information events on different support schemes for the aeronautics sector**, new technologies to modernize industrial facilities, synergies between renewable energies and green aeronautics and new materials.

The **CORAC SME** webinar in February identified 30 Aerospace Valley member companies likely to participate in aeronautics support projects to increase the performance of the current production facilities of all actors (contractors and supply chain). The objective is to have industrial facilities ready for the new product platforms of 2025-2030 while anticipating future environmental requirements.

Aerospace Digital Days which took place in May, 2021 was an opportunity to review the sector's strategic challenges and its evolution. Featuring conferences, technical workshops and B2B meetings, this 100% digital event brought together 900 participants over two days and resulted in 850 B2B meeting scheduled.



«Aerospace Valley plays a primary role in leadership of the entire aeronautics ecosystem. We especially appreciate the efficiency and availability of the teams in identifying synergies and possible convergences between aeronautics actors, whatever the size.»

Jérémy Caussade, Co-founder, CEO & Chief Engineer, AURA AERO



OPPORTUNITIES & INITIATIVES

AÉRONAUTIQUE

Restoring the leadership of general aviation to our regions.

The **certification component**, critical for ensuring flight safety, is still a stumbling block that will require taking into account the challenges of the new technologies and their legal frameworks.

INTRODUCTION

The dynamics of decarbonizing aviation is a critical reality which recalls the creativity and ingenuity of the first aeronautics pioneers. There are decarbonization initiatives in France but also some quite aggressive ones in Europe and in the world. In 2022, we will need to organize the **industry's initiatives**, identify weak points and propose the appropriate collaborative partnerships so as not to become easy targets, tomorrow, with the first successes, which would threaten national sovereignty.

The need to replace the existing fleet of aging aircraft by more environmentally friendly planes will involve a new approach in terms of design, industrialization and operations. This approach should be more efficient with a minimal environmental impact. And all of this must be part of a circular economy approach to also preserve raw materials.

The Cluster's participation in the France Air Expo show in June, 2021, highlighted the need to take part in specialized shows to boost the visibility of the rich aeronautics ecosystem of Greater Southwest France and to open up to other possibilities such as **Oshkosh in the United States – the world's leading general aviation market, where the Cluster will present its collective stand with its member companies.**

PROJETS ET ACTIONS EN COURS DEPUIS MARS 2022 ET À VENIR :

Aligned with the MAELE calls for projects, **Aerospace Valley will continue to propose technological themes with support from the Nouvelle-Aquitaine and Occitanie regions.** A coherent consortium approach should be the spearhead of this new generation of projects.

The Nouvelle Aquitaine and Occitanie regions are rich with 23 airports and 90 aerodromes. Airport facilities, to respond to the energy transition, must prepare to accommodate new aircraft with the advent of sustainable fuels, such as electricity or eventually hydrogen in its gaseous and liquid states. Aerospace Valley will support its members to define the best strategies to meet these upcoming challenges.

The creation of the CS23 roadmap (Light Aviation) by CORAC (Civil Aeronautics Research Board) is an opportunity to accelerate the technologies needed to achieve decarbonization within the scope of French aeronautics excellence.



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ACTIVITY REPORT SPACE

A DYNAMIC FAST-CHANGING SPACE SECTOR, THE CLUSTER SUPPORTS ITS MEMBERS TO MAKE THE MOST OF NEW OPPORTUNITIES

The space sector has been undergoing a profound transformation for several years. Business did not slow down with the Covid pandemic. The gradual return to face-to-face meetings has given a new impetus to collaborative work with an upturn in conferences and shows. Aerospace Valley continues to work closely with its members to support their innovation, funding and export projects.

ACHIEVEMENTS

Within the scope of the Cluster's entrepreneurship support actions, it should be noted that **ESA BIC (Business Incubation Centre) Sud France reached the milestone of its 100th start-up supported in mid-June, 2021**, along with the launch of a website: www.esabicsud.fr. Over the period, 27 companies were in incubation, 72 alumni were in operation and over 20 events were organized.

For **DISTRICT, the Aerospace Valley acceleration platform**, the big development was the opening of new paths to broaden the audience of Space Avenue. Notably the Digital Road, dedicated to digital services and products, was created to strengthen the Space sector with Data and AI components. **Digital Road's technological partnership with ANITI** enhances and consolidates the economic development activity that the Aerospace Valley Cluster provides to the latter. The company, Cognitive Design Systems, is the first start-up to be supported in this capacity. Indirect job creation for the companies supported by the District amounts to some thirty people (U-Space, H3, Blue Spirit Aero, Beyond Aero, WaltR, among others).

As part of Booster Nova, Aerospace Valley has significantly contributed to the operational implementation of Part C of the recovery plan dedicated to space applications. Some fifty letters of support have been written and the Cluster has accompanied some twelve award-winning projects. Again within the scope of Booster Nova, Aerospace Valley is involved in the France 2030 Space Plan Task Force, which defines the outlines of the next space sector trends with in addition to

mini and micro launchers, a focus on in-orbit operations, space surveillance, space debris management and data valorization; all in a space that is now clearly identified as a potential theatre of military operations.

The Cluster continues to work closely with the **Space Command (CDE)** and in particular with **the Laboratory of space innovation of the Space Command armies (LISA)** with premises in Toulouse.

Aerospace Valley in collaboration with the **CNES** within the scope of the **"Caroline Herschel"** program has proposed events to foster theme-focused meetings. The goal: to encourage new partnerships and project creation. To be noted: Copernicus day was organized for cities resilient to catastrophes and major risks in November, 2021 in Nimes, as well as a Copernicus workshop on renewable energies in December, 2021 at the Energaïa show in Montpellier.

The Cluster is pursuing its actions to develop the use of space in **climate and environmental services** notably with the SCO (Space Climate Observatory), the Nouvelle-Aquitaine Region (to support NeoTerra objectives), and via working groups with Toulouse Métropole.

The Cluster is supporting exports via two European projects, SMEs AFRICA (Copernicus and climate change adaptation) and Space2Waves (space and blue growth) notably by accompanying nine Cluster member SMEs in target countries including Ethiopia, Senegal, South Africa, Gabon, Australia, Canada and the UAE. In addition, the **Newspace Factory, one of the Cluster's mutual actions aimed at supporting the NewSpace market and stimulating the industrial sector and which includes 9 talented SMEs**, participated in the Space Tech Expo show in Breme, Germany in November, 2021.

The European projects with cascade funding, **UFO** (small flying objects such as nanosatellites) and **Galatea** (blue growth) are ongoing to support the development of new value chains: some thirty projects have been supported including over 70 companies with some twelve Aerospace Valley members.

Aerospace Valley organized the French edition of **Hackathon Cassini** in November, 2021 on the theme, "Connecting the Arctic" with the aim of developing solutions based on using GNSS data and Copernicus.





SELECTION OF WEBINARS AND EVENTS

A conference, « **Innovative solutions for the sustainable, intelligent city: what levers for facilitating public procurement?** », was held in May, 2021 within the scope of Aerospace Digital Days.

The launch event of the European project, SMEs Africa in June, 2022 with the guest of honour, Dr Tidiane Outtara, Program coordinator of "GMES and Africa" at the African Union and the participation of some forty people.

The event « Let's celebrate our 100 start-ups! », organized by **ESA BIC Sud France**, in July 2021 in Toulouse gathered some sixty people with Candace Johnson (Founder/ Co-founder SES, Seraphim Space Fund) as keynote speaker and a roundtable on «Evolutions and ambitions of the space sector startup ecosystem».

Journée Copernicus for resilient cities facing catastrophes and major risks in November, 2021 in Nimes in partnership with Nimes Métropole and the CNES (within the scope of FPA Copernicus) welcomed 50 participants and resulted in 40 B2B meetings.



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« *Joining the Aerospace Valley Cluster enabled Gisaïa to be more visible, develop quality contacts within the space ecosystem, benefit from advice, information, and key messages about the sector, actors, funding, projects, and local, regional and national strategies. In addition, the excellent support provided by the Cluster fosters meetings between all public and private stakeholders who are pertinent for us, collaborators and potential clients, while enabling us to take part in relevant European projects, notably to favour export growth.* »

Laurent Dezou, CEO, GISAÏA



OPPORTUNITIES & INITIATIVES

SPATIAL

The space industry is in turmoil with strong national and European ambitions facing fierce global competition and the consequences of the Ukrainian crisis.

United States in April and by the decision to open to new members made at the governance meeting in June.

INTRODUCTION

The Aerospace Valley Cluster continues to support the economic development of its members, access to national and European funding, as well as the defense and climate markets in particular. Export activities have picked up through European projects and the Newspace Factory label. Aerospace Valley continues to actively pursue its mission of providing information against a backdrop of strong national ambitions with the France 2030 program, reusable launchers and the development of Newspace and startups.

Aerospace Valley is expanding its cooperation with the Space Command. A second European edition of the **DefInSpace** Hackathon took place in June with 48 teams and 246 registrants from three countries who, with support from over 90 experts, faced off in challenges to help the CDE imagine tomorrow's defense space solutions. Support for the Space Innovation Laboratory continues. The Cluster is accompanying the CDE at delegation visits and shows such as the **Global Aerospace Summit** in Abu Dhabi in the UAE in May.

The focus is on **artificial intelligence** with the creation of a joint A14Space roadmap with key actors in the field and participation in the **Future Intelligence** business convention next October.

PROJECTS AND ACTIONS UNDERWAY SINCE MARCH 2022 AND TO COME:

In 2022 **ESA BIC Sud France**, which counts 128 start-ups incubated to date, will celebrate ten years of existence.

The Cluster is expanding its actions in the field of **environmental and climate services thanks to the use of space data**: winning of the European **PROTECT PROJECT** (preparation of a European public procurement contract for using Earth Observation data for climate management) and development of the commercial component of members active in the field.

The **Space Avenue of the District** saw the departure of the company, U-SPACE, to occupy its own premises owing to its expanding staff and the arrival of the French subsidiary of the Barcelona company, PANGEA AEROSPACE developing launchers and space propulsion systems.

The Cluster in collaboration with the CNES continues to promote **Copernicus** data, proposing conferences such as Space4Agri in Agen in April, Space4Ports in Bordeaux in May and Space4Insurance in Toulouse in June. Other events focusing on energy, mobility, and blue growth are upcoming.

ActInSpace, the flagship space hackathon organized by CNES and ESA, with support from Aerospace Valley, is back. It will be launched at the IAC in September in Paris and will take place in November, 2022 with finals scheduled in Cannes in February, 2023.

The Pole will participate in the **IAC 2022** celebration by accompanying its members to Paris in September at an Aerospace Valley stand in the France zone.

The **Newspace Factory** has gained new momentum thanks to participation in the SpaceSymposium in Colorado Springs in the



ACTIVITY REPORT DRONES

FOCUS ON PROMOTING RECOVERY OF THE ACTIVITY.

2021 was marked by a return to a "new normal" where spare part and component supply issues went hand in hand with an accelerated revival in sales activities. Our members focused on winning new markets at the expense of innovation projects with a return to export missions and contracts in Africa for some of them. **The creation of a project to strengthen the link between the academic world and industry to develop new research projects was also approved within the scope of the Drones Strategic Committee.**

ACHIEVEMENTS

Engaged in over 100 actions in support of its members (twice as many compared to 2020), **the Aerospace Valley strategic drone sector has become the leading European community with over 220 members** (156 in 2020). Nearly 75% of the actions carried out are now linked with strategic road maps in Nouvelle-Aquitaine (Plan Maryse Bastié, NAQ Rebond, NeoTerra) and Occitanie (ADER 4, aeronautics recovery plan...).

As part of its actions to promote the ecosystem, the Cluster has been extensively involved in the UAV Show, the only national UAV show operated from Bordeaux. As a member of the show's steering committee, the strategic drone sector contributed in several ways: providing expertise and support, networking, prospects and content, with the following results:

- **Participation au stand collaboratif européen** partagé par Aerospace Valley (FRA), CURPAS (DEU) et Silesian Aviation Cluster (POL) mais aussi la conférence atelier sur l'European Drone Cooperation (L'EDC : groupe informel composé de 9 clusters européens drones visant à renforcer les liens entre leurs membres pour monter des projets duaux d'innovation collaborative).
- **Participation in the European collaborative stand shared by** Aerospace Valley (FRA), CURPAS (Germany) and Silesian Aviation Cluster (POL) as well as the workshop conference on the European Drone Cooperation (EDC: informal group of 9 European Drone clusters with the objective of fortifying the links between their members to create dual collaborative innovation projects).
- **Over 30** visits to the stand with 3 collaborative drone projects identified.
- Presence at the Nouvelle-Aquitaine region stand within the « **Team Drone Nouvelle-Aquitaine** ».
- Workshop with the COBATY association on the theme: **drone and construction**
- Brief at the **Drone EDF Seminar** to present Aerospace Valley members and their contributions to the electric sector

- Roundtable organized by the Aeronautics and Astronautics Association of France (3AF), on the topic of **urbain air mobility**
- Smart city conference: **TINDAIR project presentation**

Within the scope of efforts to advance the innovation of its members on the regional, national and European scale, a few notable actions include:

During the call for expressions of interest, « **aeronautics and aero-terrestrial innovations for crisis and catastrophe management** » launched in December, 2021 by Aerospace Valley and Nîmes Métropole, the strategic drone sector was asked to participate as a jury assessor for 5 drone applications including the Carto-Nuit project. Developed by 2 members (Boreal – Magellium) and supported by the Cluster and Nîmes Métropole, this project will show usage of a drone to provide accurate surveillance mapping of a fire zone.

In June 2021, another collaborative project DEFFHY drone - H2 liquid drone demonstrator was supported with regard to funding and partner identification aspects.

In the development field, the priority was given to College 2 (SMEs) members to enable them to benefit from the acquisition of drone market studies at a negotiated group rate.

In June 2021, ten drone manufacturers and Aerospace Valley members teamed up with their peers from other French regions to create a national professional organization of Drone manufacturers: **l'ADIF -Association des Drones de l'Industrie Française**. In this challenging period for equipment and parts supply, the Cluster has proposed to put the ADIF in contact with members likely to become their future suppliers. Presentations of our members on key components that can be pooled were created for ADIF members (actuators, optronic load...)

In the defense field, the Aliénor technical innovation Cluster of the DGA Technical Directorate in Nouvelle-Aquitaine launched in 2021 a call for an expression of interest with 2 topics focusing on Drones: convertible, rechargeable VTOL Drone & Firefighting assistance Drone. The Cluster has contributed to the publication of the call for expressions of interest as well as providing support with applications at the request of our members. Finally, the sector showcased its expertise within the scope of a challenge on interactions between air and land drones at the request of a defense manufacturer.

FOCUS ON

Support for the **INEMAR** project – Inspections of offshore wind turbines by robust automated drones Launched in June, 2022, INEMAR aims to develop an automated solution to inspect offshore wind turbines. Supported by the Occitanie Region, this project brings together 3 cluster members out of its 5 participants: DIODON Drone Technology, Donecle et ISAE-SUPAERO. The Cluster provided assistance in the form of a letter of support as well as by facilitating contacts with end-users.





SELECTION OF WEBINARS AND EVENTS

The first webinar series dedicated to regulatory and standardization requirements

May 21 - Webinar on standardization for drones via the EC label

October 21 - Webinar on drone regulations in Europe: specific category

Strengthening ties with national stakeholders

Participation in awareness days organized by l'Union Nationale des Exploitants et des Professionnels de l'Aéronautique Télépilotee in regions. The Cluster's participation in this event enabled to meet new regional actors some of whom have become Cluster members.

European action continues

June 21 – Drone Innovation webinar, organized by the Belgian Drone Federation and the Professional Civil Drone Federation (FPDC) within the scope of an inter-regional project, «Drone Future» France-Wallonie-Flandres.



Crédit : © ENAC

« Aerospace Valley Cluster, with its excellent knowledge of the aeronautics sector and the related industrial stakes is a major asset for the ADIF (Association of Drones of French Industry). The Cluster provided ADIF with a complete ecosystem, both industrial and academic, which is critical for our still young sector to mature, along with expertise and proven methods in the aeronautics field. For its part, through its dynamism and the new technological issues raised by drones, ADIF offers new challenges and promising development opportunities to aeronautics sector actors, especially in light of the strategic issues that drones represent today.»

Bastien Mancini, President of l'Association des Drones de l'Industrie Française (ADIF)



OPPORTUNITIES & INITIATIVES

DRONES

Enabling drone Dynamics due dual use.

INTRODUCTION

The war in Ukraine shows that drones can potentially change the course of a conflict, driving the development of innovation projects involving operational drones. Drones help people to take care of themselves and the planet. We have seen an increase in medical drone experiments as well as new services for renewable energies (non-destructive testing, visual inspection, load transport...), the fight against forest fires and pollution.

PROJECTS AND ACTIONS UNDERWAY SINCE MARCH 2022 AND UPCOMING:

Three areas have been investigated with an expanded drone team and the objective of making drones:

MORE HUMAN

Several innovative collaborative projects were submitted to the Cluster to organize projects **tacking sea rescue, protection of protected marine areas and humanitarian transport** in disaster-stricken areas. The aim is to transform these initiatives into collaborative projects validating an economically viable market. These initiatives have consolidated the Cluster's contribution to climate change adaptation and other health situations.

PLUS EUROPÉENS

• **TINDAIR** : Very large-scale demonstrations for the summer of 2022. Aerospace Valley is one of 11 Tindair partners. Tindair is a European project the aim of which is to test in real conditions air traffic management services for autonomous air vehicles, U-space services. Through four demonstrations (planned for the summer of 2022), consortium partners will test the service for avoiding in-flight conflicts created during the project. The flights will take place in the Bordeaux and Toulouse regions

and they will involve a range of flying vehicles including diverse drones, a helicopter and an air taxi. Aerospace Valley is in charge of the project's communication and outreach operations.

• **UAM Plaza Accelerator**: to support the development of the urban air mobility sector. Launched in 2022, it could continue to be supported by **EIT Urban Mobility** through 2024. The aim of the project is to become self-financed by participants to ensure the long-term sustainability of the acceleration program.

• **SESAR 3 ATM** : The flagship R&D single European sky program aimed at reshaping air traffic management in the single European sky, the SESAR program entered its 3rd phase in December, 2021. Bringing together the European Union, Eurocontrol and over 50 organizations covering the entire aviation value chain, this new European partnership, in which **drones are an integral part**, will invest over 1.6 billion euros by 2030 to accelerate through research and innovation.

AND AT THE SAME TIME MORE SOVEREIGN

In the certification field, the Cluster is supporting its members to help bring about the inception of **the first accredited drone laboratory in the Greater Southwest**.

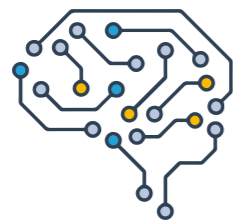
As called for under EU regulations 2019/947 and especially 2019/945 Crédit: ©TINDAIR an accredited drone laboratory should carry out compliance testing (mechanical and vibration..) with industrial standards on behalf of manufacturers. The Cluster's main actions will focus on the development of this laboratory including:

- Identification of needs from public authorities and standards bodies
- Pre-identification of stakeholders in the territory,
- Helping members to complete applications within the scope of the recovery plan



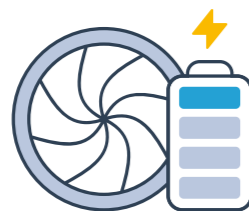
ECOSYSTEMS OF EXCELLENCE

The objective of the 5 Ecosystems of Excellence (E²) is to contribute to the development of our members' activities, their technological and industrial capabilities, and skills along with the deployment of innovative products and services to serve their strategic sectors (Aeronautics, Space and Drones).



EDIA

Data Economy and Artificial Intelligence



PEE

Propulsion and Embedded Energy



SEC

Embedded and communicating systems



SMP

Structures, Materials and Processes



SUF

Solutions for the Factory of the Future



EDIA

Data Economy and Artificial Intelligence

USING AI TECHNIQUES FOR OPERATIONAL PERFORMANCE

ACHIEVEMENTS

The purpose of this ecosystem is to bring together and increase the visibility of the skills of Aerospace Valley members in the digital field at two levels: **supporting the digital transformation of the sector** for all members and **leading the digital community as such**.

The latter counts some 195 members divided between digital technology suppliers (and in particular AI) and integrators of these technologies for their own products and services. The operational excellence of companies, a critical factor of competitiveness and resilience, is increasingly based on insightful use of the company's data and the mobilization of its knowledge: EDIA aims to connect these companies with solution providers, digital services or laboratories developing appropriate techniques in the field.

EDIA has also been appointed to lead the **economic development aspect of ANITI**, the 3IA Toulouse company. Within this scope, it organizes sessions to transfer ANITI results which can be directly used by the Cluster's companies and beyond.

EDIA also contributed to the construction of the **Tuples European Project** aimed at building explicability solutions for intelligent planning.

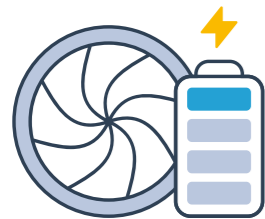
LOOKING BACK:

EDIA has made it a priority to educate economic actors in digital transformation and the responsible implementation of AI techniques:

- Organization of seminars with other E² in the Cluster on applied AI topics : man/machine collaboration, AI for corrosion, the electrification of aeronautics functions etc.
- Contribution to the dissemination of AI for SMEs / ETI in the Defense field
- Presentation of regulatory and strategic issues in AI from public authorities
- Decrypting European programs in AI for members
- Seminars and webinars to promote gender equality in AI

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PEE

Propulsion and Embedded Energy

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TOWARDS A DECARBONIZED SKY

In the current situation the aerospace industry has had to reinvent itself in the context of **climate change, the health crisis and energy independence**.

The PEE ecosystem strives to support Cluster members to develop and rapidly market new propulsive and energy solutions for operation of low carbon aircraft. To do this, PEE provides its technological expertise in three of the Cluster's strategic sectors (Aeronautics, Space and Drones).

Since the launch of the **MAELE initiative (Environmentally responsible Light Air Mobility)** supported by the Nouvelle-Aquitaine and Occitanie Regions for the development of decarbonized light aviation), Aerospace Valley has accompanied its members in the CS23 phase of the Aeronautics strategic sector to accelerate the maturity of new propulsive architectures.

The MAELE community brings together 287 members and reinforces the positioning of the Greater Southwest in the international aeronautics sector. **SMEs, ETI or Start-ups have the opportunity to innovate, grow their skills, and expand on aeronautics markets via collaborative projects** while gaining access to regional, national and European funding schemes.

ACHIEVEMENTS

In 2021, 2 calls for expression of interest were launched within the scope of **MAELE on the theme of new propulsive architectures**. 12 projects earned funding for a total amount of 6 million euros. In the start of 2022, a new bi-regional call for expression of interest was organized focusing on hydrogen propulsion technologies, embedded storage, reduction of propellor noise and the impact on infrastructures. 15 applications were submitted and are being examined.

Also within the scope of the **France 2030 national plan**, BPI France is running the Call for Projects, Low carbon aircraft, with an envelope of 100 M€. in addition to the applications filed by members at BPI, Aerospace Valley is providing its support by labelling projects that are considered to be the most relevant in the PEE sector.

To accelerate the development of these new technologies, the PEE ecosystem will **initiate technical exchanges with other clusters in France to develop synergies with other mobility sectors**.

LOOKING BACK:

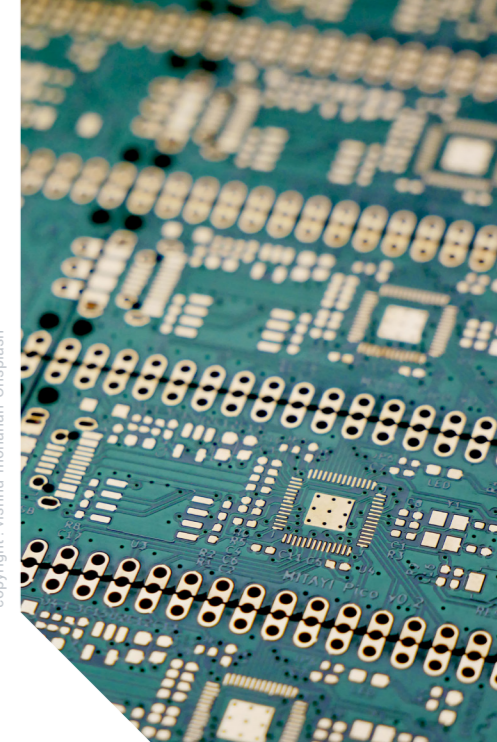
- The Webinar on March 23, 2021 kicked off the MAELE Call for Expression of Interest and brought together over 100 participants
- Following the success of the MAELE week organized in September, 2021 in Toulouse and Jonzac which welcomed over 480 participants and led to more than 850 BtoB appointments, the 2022 event will take place on October 4th in Bordeaux and on November 29th and 30th in Toulouse.
- The critical link with future generations was realized at the end of 2021 with a Hackathon involving 3 schools in Nouvelle-Aquitaine (EIGSI, ELISA, ESTIA) on the topic of decarbonized light aviation. More than 100 students took part in the event.



SEC

Embedded and communicating systems

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STIMULATING INNOVATION IN CRITICAL FUNCTIONS ENSURING SYSTEM SAFETY AND AUTONOMY

ACHIEVEMENTS

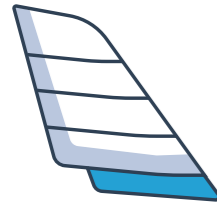
Many actions stimulated the E²SEC community over the period including: **the development and leadership of the community** on the Connect collaborative platform which had 131 contacts registered out of 268 members, **consolidation of the community of leaders and experts** (17 active members) and running of **7 technical workshops and webinars**: the Impact of AI on Embedded Systems, Human Autonomy Teaming, Helicopters of the future, Screens of the future, DevSecOps, Obsolescence, presentation ITS2022. The ecosystem participated in **internationally renowned shows**, including: Aerospace Tech Week (Toulouse), UAV show (Bordeaux), Cyber'OCC and CyberCercle NAQ, and the **creation of the electronics NAQ roadmap**, along with **the regional innovation strategy on « sustainable intelligent mobility » OCC**.

In line with actions carried out by the two pilots of the ecosystem, the actions of deciphering the calls for proposals have continued: in particular the EU and AID calls. The E²SEC ecosystem took part in identifying eligible projects for the CORAC PME and supported members with the Call for Expression of Interest on the usage of drones in operating theaters.

Throughout the year E2 SEC supported the **labelling of projects** filed by Cluster members. The **« interclustering »** actions have continued with the Alpha RLH cluster for the Pharos action, the TOTEM Cluster for mobilities and TEAM2 for the circular economy applied to embedded systems.

LOOKING BACK:

On the occasion of **Aerospace Digital Days** in May 2021, E2 SEC was asked, along with I'E² EDIA, to run the workshop, **"Impact of AI on Embedded Systems"**



SMP

Structures, Materials and Processes

COMPETITIVENESS THROUGH TECHNOLOGICAL INNOVATION

ACHIEVEMENTS

The SMP ecosystem of excellence strives to identify and promote materials and manufacturing processes for mechanical components and their assemblies, surface treatments and coatings, and the associated skills to contribute to the competitiveness of tomorrow's aerostructures, thrusters, launchers and satellites.

In 2021-2022, the missions of the SMP Ecosystem focused on three areas:

- Continuing to develop the **AddimAlliance** roadmap (metallic additive manufacturing), the coordination and networking of composite, surface treatment and recycling ecosystems
- **Diversification** and identification of contacts in new companies in the fields of aeronautics, energy, naval, rail, defense, etc...
- **Innovation financing** with the launch of « innovation » or « modernization » projects (via recovery plans or other funding schemes), repositioning of SMEs at other more appropriate sources (PSPC Région, regional projects, EIT Manufacturing...) and support for the Cluster's collaborative (national, European) or labelling projects.

LOOKING BACK:

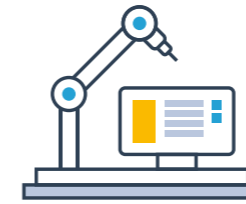
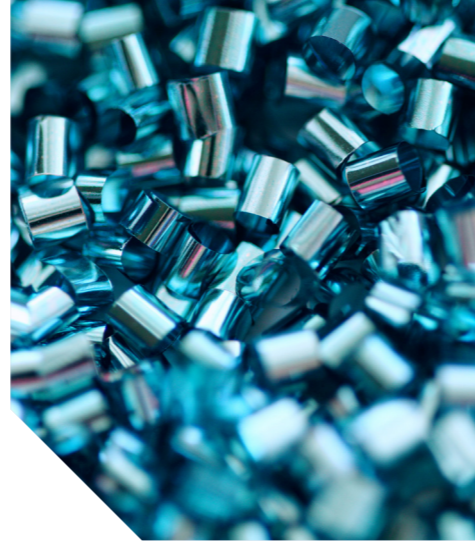
E² SMP organized different events to **build, connect and promote innovation in materials and processes notably through:**

- A technical day on «**Thermoplastics in aeronautics, what market for SMEs**» at ESTIA (Bayonne)
- **Two AddimAlliance scientific days**, at IMT Mines Albi
- Co-organization of the **Aerospace Additive Manufacturing Summit** at MEETT (Toulouse)
- A technical day, «**High-tech textiles and innovative components** » at la Cité (Toulouse)

E² SMP also contributed to the **labelling of different projects** focused on a range of technological issues:

- Laser-material interaction
- Metal-epoxy interface
- Development of a thermomechanical model
- Gigacyclic fatigue properties
- The properties of carbon composites and thermoplastic applications
- Laser shock impact simulation
- Additive technologies for satellite radio-frequency systems and components

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SUF

Solutions for the Factory of the Future

OUT OF THE HEALTH CRISIS ... FOCUS ON ACTION IN THE FIELD !

ACHIEVEMENTS

E2 SUF is the ecosystem of tomorrow's industry which takes into account cultural, digital and environmental transformations. It provides solutions to this industry's need to make it more human, more attractive, more agile, more competitive and more eco-responsible, thereby enabling its development.

Following the health crisis, the need to meet in person is stronger than ever, which is why E2 SUF decided to focus on answering this need with in-the-field actions including:

- **The E2's participation in 3 regional shows** : SIANE (Industry), ALINA (Agro), NAIA-R (AI & Robotics) meeting business and diversification objectives, while showcasing members
- An increase in meetings on the **PRACTICE 4.0 demonstrator** created in 2021 (193 meetings, 1193 visitors, including 50% industrial participants in 2022)
- Creation of a breakthrough event, in partnership with Digital Aquitaine and the local ecosystem, « **green innovation** » which brought together 130 participants from Nouvelle-Aquitaine and Occitanie and which enabled participants to learn about the circular economy and its contribution in production, energy and transport
- Identification of sites in Occitanie & Nouvelle-Aquitaine enabling to create, with local ecosystems, new demonstrators like bricks of the **PAD'OCC** and **PROPULS platforms**

In addition:

- **The analysis of 29 project applications** by the ecosystem for technical recommendations & support
- **The exploitation of ≈ 8000 lines of recommendations** following the Factory of the Future Regional assessments.
- Creation of five webinars and 4 workshops
- **Support, remotely, for 3 members selected at the pitch contest of the CES in Las Vegas**

LOOKING BACK:

E2 SUF highlighted the difficulty exacerbated by the Covid situation of retaining **core knowledge** in companies and tried to provide some solutions via the webinar, "How to prevent knowledge loss – knowledge management".

As the digital twin attracted considerable interest and raised questions, the E2 acquired a "transportable" demonstrator enabling to inform stakeholders accommodate closer to the need.

Since the creation of the factory of the future acceleration platforms, **PAD'OCC (Occitanie) and PROPULS (Nouvelle-Aquitaine)**, E2 has handled the promotion of these platforms as well as contributing to the development of services in response to the needs of Cluster members.

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ACTIVITY REPORT DEFENSE

THE CLUSTER CONTINUES TO ACT TO IMPROVE THE COMPETITIVENESS OF ITS DEFENCE MEMBERS.

Access to defense markets is the fruit of the ongoing engagement of the Aerospace Valley Cluster alongside the DGA (Directorate General of Armaments) and the major industrial contractors. One of the Cluster's critical missions is supporting members in defense innovation: this is an area where investment is required to equip forces and prepare for the future.

Faced with a constantly changing defense procurement market, and in a particular geopolitical context, Aerospace Valley continues to work to preserve expertise, and to support, alongside the DGA, the development of defense manufacturers, notably SMEs.

ACHIEVEMENTS

The privileged access of Aerospace Valley Cluster members to the DGA has been strengthened. This reflects the commitment of the Ministry of the Armed Forces to work with companies to facilitate access to its markets as sub-contractors and to its schemes within the scope of the SME Action plan.

By fostering the development of new projects to advance defense innovation, Aerospace Valley is following the 12 priority themes from the Etats-Majors, Divisions and Services to guide open innovation. The construction of European Defense is also a key objective of the defense policy. To this end, Aerospace Valley has continued to support its members in relation to the European Defense Fund to participate in the construction of European strategic autonomy: in addition to putting its members into contact with Thalès, Nexter, Safran, and Naval Group to participate in the major European tenders, 8 SME projects were presented to the DGA in 2021-2022.

Defense innovation in the Nouvelle-Aquitaine and Occitanie regions was the focus of intense activity : Aerospace Valley participated in the 3rd ALIENOR call for an expression of interest in December, 2021 with the identification of 5 operational needs of the armies-40 proposals were filed to meet them. In the Occitanie region, the scope of action of the CI-AILE (now called IDEA3) defense technical innovation cluster has been expanded to include the challenges of availability, safety, and operational performances of aeronautics equipment and aircraft. A first IDEA 3 call for expression of interest was launched in April 2022, including 9 requirements of the DGA and the French Air and Space Force.

A FEW CRITICAL ACTIONS:

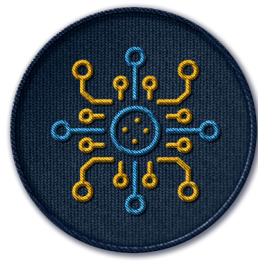
- The presence of the Cluster at the stand of the Conseil Régional Nouvelle-Aquitaine at **SOFINS 2021** and the support provided to 7 member companies.
- The Cluster's organization of the **La Journée Annuelle de la Défense (Annual defense day)** in September, 2021 at which 120 people attended including representatives from the Ministry.
- The involvement of the Cluster in the organization of the **PME TOUR DGA** run by the Occitanie and Nouvelle-Aquitaine regions in April, 2022 which notably brought together 160 participants (including 100 SMEs and 4 defense companies)
- The organization of the joint webinar with AID, «**the stakes of Artificial Intelligence for the benefit of Defense**» in October, 2021 as well as the joint webinar with the DGA «**European Defense Funding 2022** » in February, 2022 (90 participants).



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« Within the scope of its partnership with the DGA to foster the development of SME&ETI defense sub-contractors, the Cluster has fully respected its commitments. It is an important aspect of the Ministerial regional action policy on behalf of the base of defence industry »

DGA/S2IE/SDPME



ACTIVITY REPORT

INDUSTRY OF THE FUTURE



IN 2021, THE CLUSTER MADE ITS PROJECTS A REALITY...

2021 was rich in successful projects and equity capital. **The Cluster's objective is still to help our companies initiate the industrial transformations critical to their sustainability.**

The COVID pandemic, reinforced the need for local, competitive, connected production sources, which are the very purpose of the acceleration platforms to the industry of the future (PAIF) in which the Cluster has heavily invested.

ACHIEVEMENTS

For Nouvelle-Aquitaine, the Cluster moved closer to the teams of **ADI, CCI, REGION, PROPULS** and **ECOSYSTEME**, to co-build a monthly seminar program (operational since January 2022) for project managers who cover the region, to enhance their tool box for the factory 4.0 and help them to better grasp each requirement encountered in the field.

This collaboration also enabled to share anonymous data (8000 lines) from several hundred Factory of the Future assessments (usages) in order to define the priority topics to be developed as well the technological responses to be implemented in parallel

Finally, the development of meetings bringing together industrial companies, suppliers and academics, with support from institutional bodies, with a focus on complementarity and coherence, enabled in just a few months to significantly increase (+100%) the flow of visits and the emergence of topics to be transformed into projects.

For Occitanie the Pad'Occ acceleration platform project was realized with Government accreditation in December, 2021 and an agreement with the BPI in June, 2022; hiring has begun and after an exhibition at the SIANE show in October, 2022, the investment program which will enable to equip this platform with a 4.0 full-size factory will be launched in order to open to companies in the second half of 2023.

Pad'Occ will be a scale 1 factory within a university (Maison de la Formation Jacqueline Auriol – MFJA) enabling to bring together in the same place students, teachers, and CEOs, and to showcase the technologies and organizations of the future, but also to tailor training to supply companies with the required skills.

A mixed reality center is also under construction alongside the PAIF with the same commissioning date. The goal is to inject these new technologies into companies and teaching.





2022, INTERNATIONAL ACTIVITIES RESUME

In the wake of a complicated one and a half years due to the health crisis, the year that has just ended showed signs of positive recovery concerning Bricks' international activities.

ACHIEVEMENTS

Some of Bricks' major achievements during the period include:

The recovery of face-to-face activities with notably the hosting of 3 Angolans from the Telecommunications Ministry, 2 Pakistani military staff members, and 2 Malaysian military staff members in Bricks by Aerospace Valley's **Induction Program** within the scope of Airbus Defence and Space and Airbus Helicopters contracts. The induction program is a two week immersion program during which the aeronautics and space ecosystem, French culture and local heritage are presented including conferences and visits. Bricks teams are also in charge of assisting the Malaysian and Pakistani families through the **Bricks Relocation** service.

The continuation of activities associated with the **Bachelor in Aeronautics Maintenance** that Bricks has co-developed in Vietnam with USTH with support from Airbus. Over the course of the year, the Bachelor program celebrated its first graduating class.

The project carried out for **Bolivia** also resulted in an air force officer obtaining his engineering degree from INSA Lyon. 6 other officers and sergeants are continuing their training at the UTC in Compiègne.

Bricks strengthened its collaboration with the **Space Command** thanks to the secondment of a part-time customer relations manager to Bricks. The mission consists in supporting the CDE with organization of in-house training.

Bricks proposes its expertise in **international project management** within the scope of European projects such as Space2waves (export support of 30 European SMEs on the blue growth theme), **NovExport** (export support for Latin America of European SMEs in data, space applications, the environment, agriculture...) or **SMEs for Africa** (supporting 15 European SMEs which are developing products and solutions using Copernicus data and which are looking to internationalize, in particular in Africa).

Finally, Bricks has taken advantage of this first year of membership in the Aerospace Valley Cluster **to get closer to its ecosystem** by stepping up meetings with startups, PMEs, research institutes, and training institutions in Occitanie and Nouvelle-Aquitaine to identify potential synergies and efficient support schemes for Cluster members.

OPPORTUNITIES

Bricks by Aerospace Valley is involved in two actions for the **Campus des Métiers (CMQ) Aéronautique Occitanie** within the scope of PIA 3. This project includes the **creation of a digital platform** dedicated to foreign students and professors from a CMQ member educational institution along with the **creation and organization of cultural awareness workshops** for foreign students to help them have a better understanding of French culture. These actions have been stepped up this year and 2022 should see the first tangible achievements.

LOOKING BACK:

Two webinars were organized for the **Bricks alumni community (Bricks Community)**. These webinars brought together some fifty foreign professionals who benefited from a Bricks training program and/or human support services developed by Bricks. The success of this event is a powerful testimony of loyalty to Bricks Community and the positive experience that Bricks has been able to create for its clients foreign partners.

REPRESENTATIONS IN OUR REGIONS

The Cluster has stabilized its presence in the Occitanie and Nouvelle-Aquitaine regions, reinforcing its "offices" in the communautés d'agglomérations that are very involved in the development of our sectors in their employment areas.



ROCHEFORT : The first of the offices created in the Nouvelle-Aquitaine Region, after the historic one in Bordeaux, within the Technopole Arsenal (near Airbus Atlantique) and in close collaboration with Communauté d'Agglomération de Rochefort Océan (CARO), continues to pursue a dynamic policy of welcoming companies and fostering their development, with the recent inauguration of a FabLab and a support organization for young companies.



PAU : the Cluster is delighted to be able to host staff seconded by a large neighbouring group within the Technopôle HélioParc, a hub of entrepreneurship and innovation in the capital of the Bearn region, which in June this year celebrated its 35th anniversary by hosting the actors of the RETIS network.



BAYONNE : Staff numbers are growing at Techno-Cité. The person in charge of Defense has joined the official representative that the Cluster has shared with the University of Bordeaux for two years. The renewal of the agreement that binds the Cluster to la Communauté d'Agglomération du Pays-Basque (CAPB) underway, reflects the commitment to expanding the presence of Aerospace Valley in an area important for the ASD sector. The latter is equipped with critical tools to face the future, such as Compositadour, Addimadour, and tomorrow, Turbolab, a unique testing facility for rotating machines.

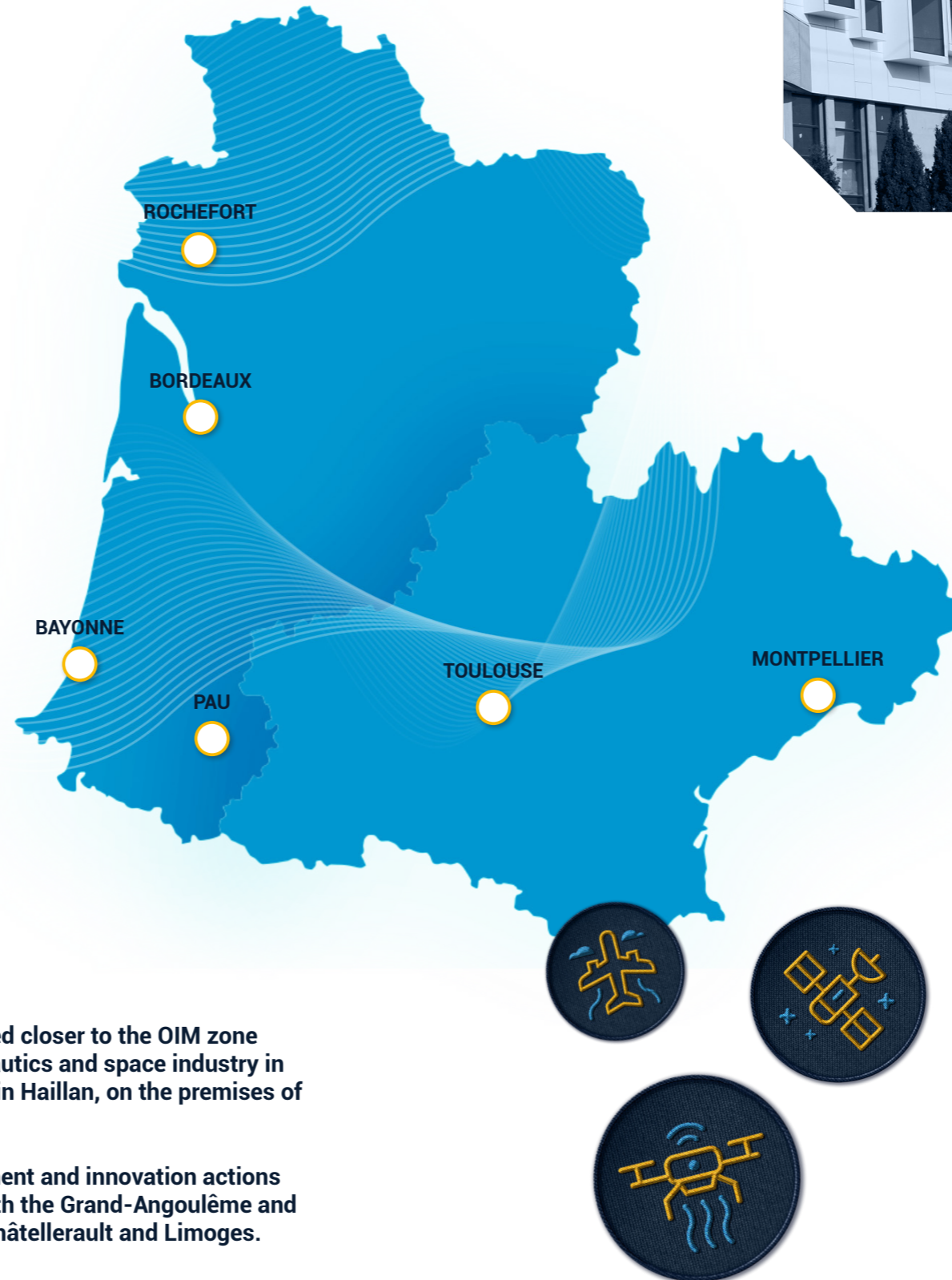


BORDEAUX : More than one year ago the team moved closer to the OIM zone Bordeaux AéroParc, the historic center of the aeronautics and space industry in Bordeaux, with its offices located rue des satellites in Haillan, on the premises of Bordeaux Métropole (PTO/Startway).

Finally, the Cluster continues to engage in development and innovation actions throughout the area, in the Sud Charentes region with the Grand-Angoulême and the Technopole EurekaTech (partners), in Poitiers, Châtelleraut and Limoges.



TOULOUSE



MONTPELLIER : The work and partnerships initiated by Aerospace Valley and Nîmes Métropole have enabled the development and support of 5 projects selected at a call for expression of interest, "Aerial and airborne Innovations for risk and catastrophe management". 3 of these projects were presented at the Aerial Fire Fighting Europe 2022 to professionals from all over the world in aerial firefighting.

Moreover, Aerospace Valley, with the goal of creating an innovative ecosystem in the crisis and catastrophe management sector, is supporting and many companies and operational actors with the development of products and services for tomorrow's emergency response services. Finally, Aerospace Valley is working in close collaboration with Nîmes Métropole to set up a civil security excellence center on the Nîmes Garons air base. This site will be an innovation hub and a training and test center for actors in the European firefighting sector.

With support from its public funders,

The Cluster is carrying out many common actions to support SMEs with, notably, support for digital transformation, funding of studies, organization of calls for expressions of interest, the creation of hackathons, and international support thanks to a cumulated aid budget of over 1.2 million euros allocated from 2015 to 2022.

Thanks to support from the Occitanie and Nouvelle-Aquitaine regions, the action Perfin PME 2 will continue over 3 years with a total grant of 1.2 M€.



PER IN PME - PERFormance et Innovation dans les PME

Action co-financed by the European Union European Union with the «FEDER» fund

EXAMPLES OF EUROPEAN PROJECTS

The Cluster supports its members' innovation projects by enabling access to European public funding.

TUPLES PROJECT

Trustworthy Planning & Scheduling with Learning and ExplanationS



Partners:

ANITI, Université Fédérale de Toulouse Midi-Pyrénées
 Université Catholique de Louvain (BE)
 Université de Saarland (DE)
 Université de Bologne (IT)
 Airbus (FR)
 Optit SRL (IT)
 SciSports (NL)

Project cost : 3 986 k€

Project duration : 3 years

Funding scheme :

Horizon Europe, Cluster 4 Digital program

Planning and scheduling, critical areas for Artificial Intelligence, require a high level of transparency, robustness, and explainability for wide-scale deployment. TUPLES uses hybrid AI to improve AI technologies for these two fields, across 5 use cases: aircraft assembly line, flight assistance, logistics, energy and environmental services, recruitment and performance in sports.

SCHÉMA EXPLICATIF DU PROJET

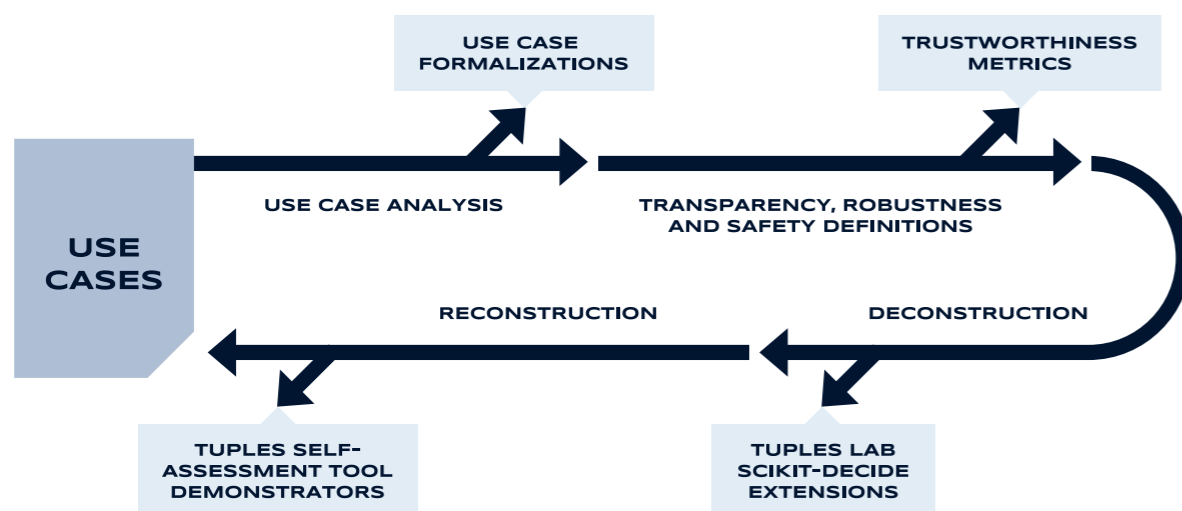


Figure 1 : use-case driven development process

KEYBOTICS PROJECT



Shifting manually intensive work to a collaborative human centric robot

Partners:

Aerospace Valley - Coordinateur
 CEA List (FR)
 Isybot (FR)
 LISI Aerospace (FR)
 Voestalpine (AT)
 AMA-Tech (AT)

Project cost : 1 669 k€

Project duration : 2 years

Funding scheme :

EIT Manufacturing

KeyBotics is developing a new generation of collaborative robots specialized in challenging surface operations such as trimming and polishing, on different types of parts, notably for aeronautics applications. The project is coordinated by Aerospace Valley with partners including Isybot which designs and manufactures collaborative robots and the CEA List which develops the robot's end effectors and control system.



The principle is in the validation stage on real use cases at LISI Aerospace (French end user) and Voestalpine (Austrian end user) in partnership with AMA-Tech (Austrian integrator).

PROJET GAZELLE ACCELERATOR



Accelerator of start-ups and SMEs in the industry of the future

Partners:

Aerospace Valley - Coordinateur
 ROBOHOUSE (NL)
 LINPRA (LT)
 LABORATORY FOR MANUFACTURING SYSTEMS (GR)
 ATOS (BE)
 FONDAZIONE GIACOMMO BRODOLINI (IT)
 FAST TRACK ACTIONS (PT)

Project cost : 567 k€

Project duration : 12 months (2nd edition)

Funding scheme :

EIT Manufacturing

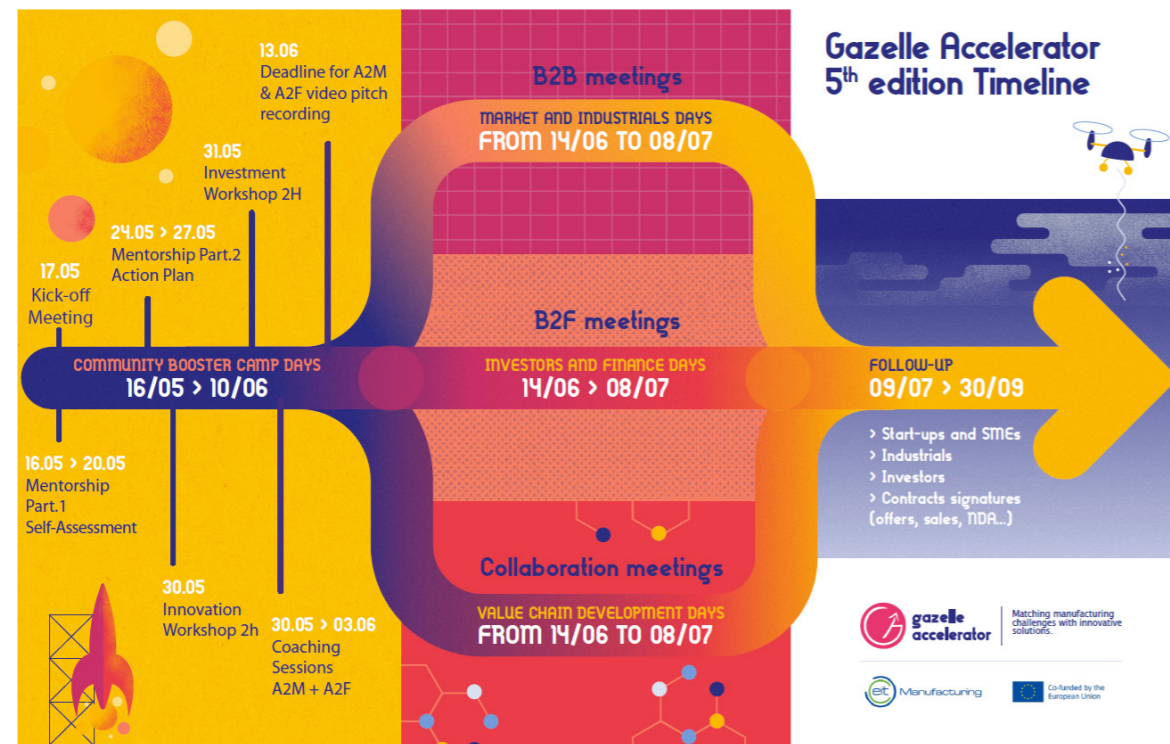
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GAZELLE ACCELERATOR PROJECT FOLLOW-UP

The Gazelle Accelerator program supports start-ups and SMEs in the industry of the future to accelerate their growth and development on European markets. This is divided into three parts:

- The « Community Booster Camp Days » with training programs, coaching sessions and workshops.
- « Meetings » with industrial companies, investors and start-ups.
- « Follow Up » sessions to monitor the evolution of the different meetings.

With the aim of creating beneficial connections, the Cluster has identified upstream industrial problems in order to identify and source innovative solutions to their needs.



In all, of the 5 last cohorts, 97 innovative start-ups and SMEs were accelerated including 43 French ones. Out of the last edition, as of 1st semester 2022, 8 French start-ups were accelerated including 3 Cluster members:

TÉMOIGNAGES

« Gazelle Accelerator helped us to increase our visibility on the European scale and resulted in successful meetings with clients and investors. Super initiative to support start-ups, scale-ups and SME organized by a very professional team. »

Eric CARIOU, CEO, UWINLOC



« The Gazelle Accelerator program challenged us internally in many aspects. This helped us to mature and gave us visibility with industrial actors as well as European investors. This enabled us to expand our network, thanks to the team that continues to support us and inform us about opportunities within the EIT Manufacturing network. »

Anka SEYRAC, CEO, Etseme



« As its name indicates, this program helped us to accelerate the constitution of certain critical documents for start-ups (pitch, business plan, etc.) and to tailor them to a specific public, industrial or investor. This represents one month of efforts closely supported by d'Aerospace Valley. This program entirely answered the needs of StatInf. »

Adriana GOGONEL, CEO, StratInf



CASCADE FUNDING : A SPRINGBOARD TO EUROPE

Examples of projects from UFO and GALATEA

Aerospace Valley is coordinator of the UFO project (small flying objects technologies, small sat or drones..) and partner with the GALATEA project (Digital and Aerospace serving blue growth), which are both financed by the INNOSUP-01 program (Horizon 2020) of the European Commission. The aim of these initiatives is to support innovation projects with grants, selected on a competition basis at the European scale (since 2020, a total of 48 projects have been subsidized for a total of 5.3 million euros). These cascade funding grants facilitate the access of SMEs to European funding.

Two examples of projects won by Aerospace Valley members illustrate these schemes:

UN UFO PROJECT : FLYCAIR

Surveillance of air quality by drones



Partners: WaltR (FR)
GeoSense P.Co (GR)

funding scheme: UFO

Project cost: 115 k€

Project duration: 1 year



copyright: ©Flycair

FLYCAIR, is a demonstration project selected by UFO to study the air quality from a drone. The objective is to collect high resolution data from multispectral and heat cameras; FLYCAIR's goal is to have the camera-equipped drone fly above Thessaloniki, in Greece, and to show the importance of new applications in air preservation.

A GALATEA PROJECT : SAFSEA360

360° Surveillance and Crisis Management Collaborative Platform

Partners: Interdrones Services (FR)
NUUK Technologies (ES)

funding scheme: GALATEA

Project cost: 120 k€

Project duration : 1 year



copyright: ©Interdrones Services

The SafeSea360 project involves the development of a software platform destined for port environments enabling the connection of existing data sources (security cameras, gas probes, weather) and other types of dynamic sources (drone imagery, embedded probes) and their distribution and display at different command levels deployed during crisis management.

EXAMPLES OF REGIONAL PROJECTS

The Cluster supports its members with their innovation projects by facilitating access to public funding.

ROBOTIC ARM PROJECT

Feasibility study of a 6 axis robotic arm with miniature embedded camera for gripping objects.



Project owner: ISP Aquitaine	Funding scheme: Bpifrance, dans le cadre de l'Appel à Manifestation d'Intérêt Innomat
Project cost: 99 k€	Project duration: 6 months

The project objective is to assess the market potential and feasibility of an autonomous 6 axis robotic arm, equipped with an innovative embedded miniature vision unit on the last axis, controlled by an AI vision algorithm and a position feedback. The aim is to assess the possibility of embedding this intelligence as closely as possible to the tool in the PLC, enabling greater agility of the entire embedded system. This system is an intelligent brick which can be integrated in many robotic systems, which will result in more accurate, self-calibrating devices.



WATERWATCH

Satellite monitoring of bodies of water.



Project owner: PIXSTART	Funding scheme: Plan de relance Espace, Volet C
Project cost: 100 k€	Project duration: 1,5 years

The goal of Waterwatch is to complete a project to monitor bodies of water by satellite (eutrophication, presence of toxic algae). These have been impacted for several years by the development of cyanobacteria which is growing stronger every year due to rising temperatures. The project shows the possibilities of detecting the occurrence of cyanobacteria upstream of in-situ detection, and to accurately measure their quantity through an AI analysis of Sentinel-2 products. WATERWATCH consists in expanding the monitoring indicators of the quality of the water measured, to increase the applicability of the measurement, and to improve the user interface.



SIC INDUSTRIE 3D PROJECT



Procédé de fabrication 3D SiC

Project owner: 3DCeram-Sinto	Funding scheme: i-Démo (Bpifrance - PIA)
Project cost: 2250 k€	Project duration: 3 years

The project involves the development of an innovative 3D manufacturing technology for the production of silicon carbide parts which could be used in the medical, defense, aeronautics and space sectors. The objective is to a quality of the SiC (silicon carbide) material that is appropriate for high performance markets, while limiting the manufacturing steps (notably machining) while reducing the number of defects/rejects and enabling innovative architectures.



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MANGABHY PROJECT

Long endurance hydrogen drone



Partners: DELAIR (project owner) ISAE (Institut Supérieur de l'Aéronautique et de l'Espace) HYCCO PRAGMA INDUSTRIES	Project cost: 1970 k€
	Funding scheme: Region
	Project duration: 3 years

The project aims to develop an easy to deploy hydrogen powered electric drone and a specially designed fuel cell. The hydrogen system which powers this drone is 100% French. Developed from the start taking into account the hydrogen system's constraints, the drone will be equipped with unprecedented endurance for its category without compromising its discretion thanks to its silent operation.



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FINANCIAL REPORT

Since March 2016, Aerospace Valley has achieved the private/public financial balance objective defined by the financial backers in its performance contract.

SOURCE OF FINANCIAL RESSOURCES

IN K€

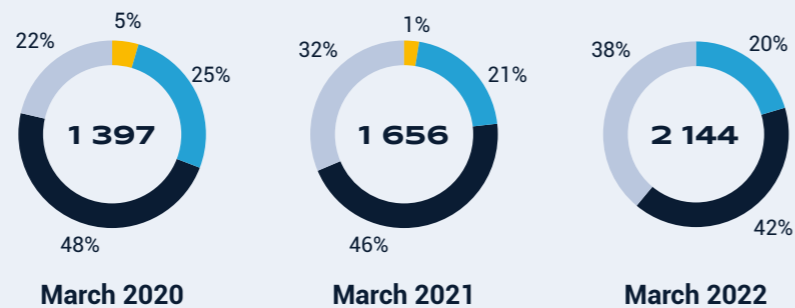
- Share private funding
- Performance contract engagement



PRODUCTS OF COLLECTIVE ACTIONS AND EUROPEAN PROJECTS

IN K€

- Government
- Regions, Métropoles, Agglomérations
- Europe
- Services (private and public)

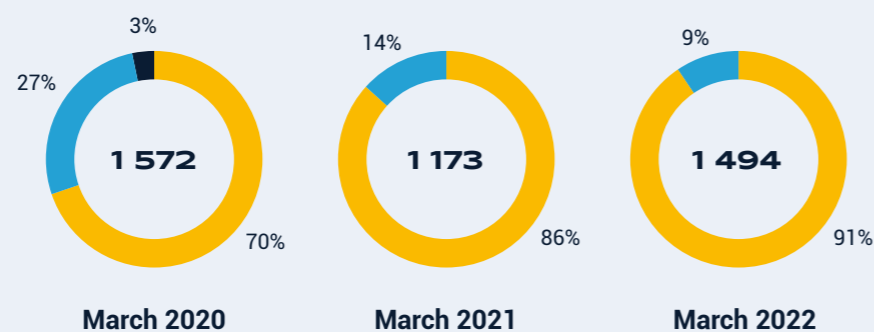


VALUATION OF PRIVATE AND PUBLIC CONTRIBUTION

IN K€

The valuation of volunteer experts made available by private companies is more than 1.4 million euros. This critical resource for the Cluster represents 19 000 hours of expertise or 14 full time experts over twelve months.

- Mises à dispositions de permanents
- Experts bénévoles E2- S²
- Technical workshops



BALANCE SHEET

IN K€

	March 2022	March 2021	Variation
PRODUCTS AND OPERATIONS	6 129	4 665	1 464
Contributions	882	836	46
Services and products	1 105	416	689
Grants	1 826	1 498	328
EU projects and other co actions	2 144	1 656	488
Reversal of provisions	172	259	-87
OPERATING RESULT	51	2	49
Exceptional results & financial	-34	3	-37
Corporate tax	0	0	0
NET INCOME	17	5	12

	March 2022	March 2021	Variation
OPERATING EXPENSES	6 078	4 663	1 415
Animation	3 592	2 624	968
EU projects and other co actions	2 144	1 656	488
Other charges	92	98	-6
Allocation to provisions	202	239	-37
Depreciation and amortization	48	46	2



BALANCE SHEET ACCOUNT

IN K€

ASSETS	March 2022	March 2021	Variation
Net fixed assets	154	173	-19
Customers	1 153	995	158
Other receivables	148	4 823	-4 675
Receivables > grants	3 338	3 480	-142
Investments	3 499		3499
Cash on hand /European projects	1 465	2 754	-1 289
Cash in hand	940	1 527	-587
Prepaid expenses	205	179	26
Total	10 902	13 931	-3 029

LIABILITIES	March 2022	March 2021	Variation
Association funds	2 092	2 092	
Reserves	1 815	1 810	5
Income	16	5	11
Provisions R&C	448	377	71
Financial debts	257	805	-548
Operating debts	1 080	1 840	-760
Other liabilities	1 480	2 819	-1 339
Deferred income	3 714	4 183	-469
Total	10 902	13 931	-3 029

GLOBAL FUNDING PLAN

BUDGET 1ST 1ST APRIL 2022 - 31ST MARCH 2023 IN K€

REVENUES (IN K€ VAT)	Missions A-B	Missions C-E	Missions D	TOTAL 22-23
Government (DGA or PIA)	60		89	149
Nouvelle-Aquitaine Region	440	213		653
Nouvelle-Aquitaine Region (par état)	146			146
Occitanie Region	440	178		618
Occitanie Region (par état)	124			124
Toulouse Métropole	200			200
Bordeaux Métropole	115			115
Montpellier & Nîmes Métropoles & CARO	45			45
TOTAL PUBLIC	1 570	391	89	2 050
Europe	110	651		761
Dues	780			780
Services	420	55	1 361	1 836
Deferral or private resources	150			150
Bricks equity funds			45	45
TOTAL PRIVATE	1 460	706	1 406	3 572
Sub total	3 030	1 097	1 495	5 622
Variation private contributions	1 000	400		1 400
TOTAL RESOURCES	4 030	1 497	1 495	7 022

EXPENSES (IN K€ VAT)	Missions A-B	Missions C-E	Missions D	TOTAL 22-23
Full-time & seconded	2 048	890	746	3 684
Purchases studies & services	228	107	467	802
External services (ex : operating)	265	16	128	409
Other external services (including hono, promotion)	267	30	96	393
Mission expenses	150	44	33	227
Taxation & taxes	72	10	25	107
Sub total	3 030	1 097	1 495	5 622
Variation private industrial contributions	1 000	400		1 400
TOTAL EXPENDITURES	4 030	1 497	1 495	7 022

MEMBERS OF THE BOARD OF DIRECTORS

COLLEGE 1 LEADING COMPANIES

PERMANENT	Denis ALLARD Serge BERENGER Patrick CORBEAU Bruno DARBOUX Pascal DAURIAC Gilles FONBLANC Pierre-Olivier GARROS Jean-Marc HELLER Yann JUANEDA Gilles LUNET DE LAJONQUIERE Bruno NOUZILLE	THALES ALENIA SPACE LATECOERE SA DASSAULT AVIATION AIRBUS SAS SAFRAN HELICOPTER ENGINES ARIANEGROUP ROCKWELL COLLINS France CONTINENTAL AUTOMOTIVE FRANCE SAS LIEBHERR-A & T. SAS AIRBUS ATLANTIC THALES AVIONICS	OCCITANIE OCCITANIE NOUVELLE-AQUITAINE OCCITANIE NOUVELLE-AQUITAINE NOUVELLE-AQUITAINE OCCITANIE OCCITANIE OCCITANIE NOUVELLE-AQUITAINE NOUVELLE-AQUITAINE
	DEPUTY	Trang PHAM Jean-Frédéric REAL Agusti CANALS Alexandra BEAUDOUIN Laurent FOUCHER Jean-Bernard RODRIGUEZ Renaud HANUS	THALES DMS France SCALIAN CS GROUP MATHWORKS AUBERT & DUVAL CGI ACTIA GROUP

COLLEGE 2 SMALL AND MIDDLE SIZED COMPANIES

PERMANENT	José ALCORTA Joël CASTETS Christine DAVID Auréli DEHOUC Christophe CHAPUT Arthur LEOPOLD-LEGER Alice MEMANG Benoît MOULAS Etienne POIRIER Grégory PRADELS	RESCOLL AGENIUM WEATHER FORCE I-SEA SAS 3DCERAM ELIXIR AIRCRAFT DELFOX AGORA INDUSTRIES SERMA INGENIERIE HEMERIA	NOUVELLE-AQUITAINE OCCITANIE OCCITANIE NOUVELLE-AQUITAINE NOUVELLE-AQUITAINE NOUVELLE-AQUITAINE NOUVELLE-AQUITAINE OCCITANIE OCCITANIE OCCITANIE
	DEPUTY	Richard BARRE Philippe BECEL David HELLO Dominique MELKI-DELCASSE Jean-Michel PETOLAT Alexandre TISSERANT	PIXSTART STIVENT INDUSTRIE TERRANIS BA France (ex MT-TECHNOLOGIES) ALGO TECH KINEIS

COLLEGE 3 EDUCATIONAL INSTITUTIONS

PERMANENT	Christophe DERAİL Roland FORTUNIER Olivier LESBRE Thierry PARRA Marc PHALIPPOU Pierre-Jacques LIOTIER	UNIVERSITE DE PAU ET PAYS DE L'ADOUR ISAE-ENSM ISAE-SUPAERO UNIVERSITE TOULOUSE III PAUL SABATIER BORDEAUX INP IMT ECOLE DES MINES ALES	NOUVELLE-AQUITAINE NOUVELLE-AQUITAINE OCCITANIE OCCITANIE NOUVELLE-AQUITAINE OCCITANIE
	DEPUTY	Lionel LUQUIN	IMT ECOLE DES MINES ALBI-CARMAUX OCCITANIE

COLLEGE 4 RESEARCH ESTABLISHMENTS

PERMANENT	Stéphane BILA Henry DE PLINVAL Catherine LAMBERT Eric PAPON Caroline LAURENT Nicolas ROUSSEL	UNIVERSITE LIMOGES - XLIM ONERA CERFACS CNRS - UNIVERSITE DE BORDEAUX CNES INRIA	NOUVELLE-AQUITAINE OCCITANIE OCCITANIE NOUVELLE-AQUITAINE OCCITANIE NOUVELLE-AQUITAINE
DEPUTY	Sébastien BARRE Olivier DURAND Laurent DUSSEAU Michael TOPLIS	CEA CESTA CTTC FONDATION VAN ALLEN OBSERVATOIRE MIDI-PYRENEES	NOUVELLE-AQUITAINE NOUVELLE-AQUITAINE OCCITANIE OCCITANIE

COLLEGE 5 LOCAL AUTHORITIES AND ECONOMIC DEVELOPMENT ORGANIZATIONS

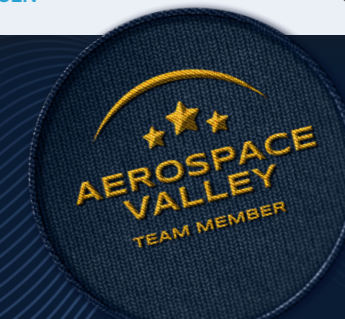
PERMANENT	Jean-François CLEDEL Anne-Laure CHARBONNIER Jean-François REZEAU Patxi ELISSALDE Agnès PLAGNEUX-BERTRAND Vincent BOST Jalil BENABDILLAH Bernard PLANO Alain ROUSSET Marie RECALDE	CHAMBRE DE COMMERCE ET D'INDUSTRIE NOUVELLE-AQUITAINE INCUBATEUR MIDI-PYRENEES CCIR OCCITANIE ESTIA TOULOUSE METROPOLE ADI NOUVELLE-AQUITAINE CONSEIL REGIONAL OCCITANIE AD'OCC REGION NOUVELLE-AQUITAINE BORDEAUX METROPOLE	NOUVELLE-AQUITAINE OCCITANIE OCCITANIE NOUVELLE-AQUITAINE OCCITANIE NOUVELLE-AQUITAINE OCCITANIE OCCITANIE NOUVELLE-AQUITAINE NOUVELLE-AQUITAINE
	DEPUTY		

COLLEGE 6 FINANCIAL ORGANIZATIONS

PERMANENT	Bernard ESTIENNE Yan CHAMARY	AQUITI Gestion TIKHAU ACE CAPITAL	NOUVELLE-AQUITAINE OCCITANIE
DEPUTY			

COLLEGE 7 CROSS DISCIPLINARY SKILLS AND PROFESSIONAL ORGANIZATIONS «CTOP»

PERMANENT	André BENHAMOU Christophe CHAMBRAS	JIMM MIDI-PYRENEES CPK Consult	OCCITANIE NOUVELLE-AQUITAINE
DEPUTY	Gilles PLACE	AMEXSEN	OCCITANIE



MEMBER LIST

123

10x-tech

1A3I

2MATECH

2MoRO

3ABDI Formations

3D AEROSPACE

3D New Print

3DCeram-Sinto

3DIS TECHNOLOGIES

3DiTex

3M FRANCE

4D PIONEERS

5A Solutions

A

ABBIA GNSS TECHNOLOGIES

ABE - ADVANCED BUSINESS EVENTS

ABE TRANSFORMATION

ABELIO

ABMI Groupe

ACDC PARTNERS

ACEMIS FRANCE

ACIME TECHNOLOGY

ACPI Sarl

ACRI-ST

ACTEMIUM TOULOUSE ROBOTIQUE & AUTOMATION (groupe VINCI Energies)

ACTIA Automotive

AD INDUSTRIES HYDRAULICS

ADACORE

ADAGOS

ADAIAQ/CFAI AQUITAINE

ADAXIS

ADDIUM

ADF

ADHETEC

ADIAL

ADS TOULOUSE

ADVALUP

ADVISORY PARTNERS

AD-WAIBE

AER

AerialMetric

AERIX SYSTEMS

AERO COMPOSITE SERVICES - ACS

AERO COMPOSITES SAINTONGE

Aéro Pyxis SAS

AERO SUD OUEST

AEROCAMPUS AQUITAINE

AEROCAPTURE TECHNOLOGIE

AERODYNE WORLDWIDE

AEROLYCE

AERONAUTIQUE MECANIQUE

CHAUDRONNERIE PRECISION

Aéronefs Services

Aéroport de Béziers Cap D'Agde

AEROPORT TOULOUSE

BLAGNAC ATB

AEROPROTEC

AEROSCOPIA

AEROSERVICES GUEPARD

AEROSOFT France SAS

AEROSPACELAB SA

AEROSPLINE

AERTEC SOLUTIONS ENGINEERING

AES - Automatismes Etudes Services

AEVA

AFNOR DEVELOPPEMENT

AGECE

AGENCE AD'OCC

AGENCE DE DEVELOPPEMENT ET D'INNOVATION DE LA NOUVELLE AQUITAINE (ADI-NA)

AGENCE SMART INDUSTRY

AGENIUM

AGGLOMERATION D'AGEN

AGILEA

Agileo Automation

AGUILA TECHNOLOGIES

AHG - ATELIERS DE LA HAUTE GARONNE

AILESX

AIO

AIR COST CONTROL

Air Hydro Atlantic

AIR MARINE

AIR SYSTEMS

AIRBUS ATLANTIC

AIRBUS DEFENCE AND SPACE

AIRBUS DEVELOPPEMENT

Airbus Flight Academy Europe

Airbus OneWeb satellites SAS

AIRBUS OPERATIONS SAS

AIRBUSINESS ACADEMY SAS (ABA)

AIRMEMS

AIRSEAS S.A.S

AIRUDIT

AIRVOLIA

AIRWAYS AVIATION ACADEMY

AK GROUP SAS - ABSISKEY

AKEROS

AKIRA TECHNOLOGIES

Algo Tech Informatique

ALL PRECISION SYSTEMS (APS)

ALLIANCE CAOUTCHOUC

ALLIANTECH

ALMECA

ALPHA MECA

ALPHA RECYCLAGE COMPOSITES

ALPhANOV

ALPHITAN

ALSATIS

ALSTOM TRANSPORT SA

Altair Engineering France

ALTEN SUD OUEST

ALTERKRAFT LAB SAS

ALTISPOT

ALTITUDE AEROSPACE FRANCE

AMETRA INGENIERIE

AMEXSEN

ANDQO SERVICES

ANEMOS Technologies

Annealsys

ANYWAVES

APEM

APSYS An Airbus Company

AQPRIM

AQUALINES

AQUITAINE ANALYSE DE STRUCTURES

AQUITAINE ELECTRONIQUE

AQUITI GESTION

ARCK SENSOR

ARIA ELECTRONIQUE

ARIANE GROUP

ARTEC AEROSPACE

AS INDUSTRIES

Ascendance Flight Technologies

Ascent Integration SAS

ASMAN Technology

ASSISTANCE AERONAUTIQUE & AEROSPATIALE

ATECA

ATECHSYS

ATELIERS BIGATA

ATMOSPHERE

ATOS France

ATR - AVIONS DE TRANSPORT REGIONAL

ATRON METROLOGY / CERAP

AUBERT & DUVAL

AUDACIA

AUNIS PRODUCTION INDUSTRIE

AURAMEMS

AURA AERO

AUROCK

AVANTIS PROJECT

AVEL ROBOTICS

AVION DEFENSE SERVICE - AvDef

AVIONS MAUBOUSSIN

AVL France

AXSENS bte

AXYAL

AYDYNG SAS

AzurIA

B

BA France

BAC BOBINAGE

BARRE LAFORGUE

BASSETTI

BAYAB Industries

BDR Industrie

BEENETIC Systems SAS

Beltoise eTechnology

BEYOND AEROSPACE

BEYOND THE SEA

BLACK SWAN TECHNOLOGY SAS

Blue Spirit Aero

BNP PARIBAS

BORDEAUX INP

BORDEAUX METROPOLE

BORDEAUX TECHNOWEST

BRUNO LEVRIER EXPERTISES

BT2i Group

BUSBY METALS

C

C3 Technologies

CA RESSOURCES HUMAINES

CAB INNOVATION

CAGIRE CONSULTING

CAISSE D'EPARGNE ET DE PREVOYANCE MIDI PYRENEES

CALLISTO

CALYSTEAU

CANOE - Centre Technologique Nouvelle-Aquitaine Composites & Matériaux Avancés

CAPAERO

CAPGEMINI ENGINEERING

CAPLASER

CAPTELS

CARBON WATERS

CARTOL

CATALA ASSURANCES

CAZENAVE ETS SA

CCI DU GERS

CDA DEVELOPPEMENT

CEA CESTA (Centre d'études scientifiques et techniques d'Aquitaine)

CENTRALE DU TRI PAR EXTRUSION - CENTRIEX

CEPADUES EDITIONS

CEPRESY INFORMATICS

CERAMIC COATING CENTER

CEREMA

CERFACS

CESER - CONSEIL ECONOMIQUE SOCIAL ET ENVIRONNEMENTAL REGIONAL OCCITANIE

CESI SUD OUEST

CETIM Sud-Ouest

CETIOS

CFAI MIDI PYRENEES

CGI FRANCE

CGR CRISTIN

CGx AERO in SYS

CHALLENGES ET OBJECTIFS

CHAMBRE DE COMMERCE ET D'INDUSTRIE NOUVELLE

AQUITAINE (CCI NA)

CHAMBRE DE COMMERCE ET D'INDUSTRIE OCCITANIE (CCI OCCITANIE)

CHCARRIERE

CHROME DUR INDUSTRIEL MC16

CIC SUD OUEST

CIMPA SAS

CIRTEM

CISTEME

CITE DE L'ESPACE (SEMECCCEL)

CKP ENGINEERING

CLIX Industries

CLOUDSKEYES

CLS - COLLECTE LOCALISATION SATELLITES

CLUB GALAXIE

CMA INDUSTRY

CMJ Test Systems

CMP COMPOSITES

CNES - CENTRE NATIONAL D'ETUDES SPATIALES

CNIM AIR SPACE

CNRS - CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

COBRATEX SAS

CodEUrope

CODRA INGENIERIE INFORMATIQUE

COFIDUR EMS

COGNITIVE DESIGN SYSTEMS - (CDS)

COMAT

Communauté Agglomération Pays Basque

Communauté d'agglomération du Grand Cahors

COMMUNAUTE D'AGGLOMERATION DU GRAND MONTAUBAN

COMMUNAUTE D'AGGLOMERATION Tarbes-Lourdes-Pyrénées

Communauté de Communes de la Haute Saintonge

COMPOSITES DISTRIBUTION/ GROUPE GAZECHIM

COMWORXX

CONESYS EUROPE

CONNECTIV-IT

CONSEIL ET TECHNIQUE

Conseil Régional Nouvelle Aquitaine

CONSTRUCTION STRUCTURES AERONAUTIQUES

CONSULTAERO

CONTINENTAL AUTOMOTIVE FRANCE SAS

Copelectronic

CoreTechnologie Vente

CORIMA Technologies SAS

CORIOLIS COMPOSITES

CORSO MAGENTA

COUSSO MECANIQUE

CPK CONSULT

CREATIQUE TECHNOLOGIE

CREUZET AERONAUTIQUE

CRISICALL

CRITT TJFU

CS GROUP

CSQUARE CONNECTING KNOWLEDGE

CT INGENIERIE

CTTC (Centre de Transfert de Technologies Céramiques)

D

DACHSER FRANCE

DACTEM DEVELOPPEMENT

DAES France

DAHER AEROSPACE

DAK-MEKATRONIK-AEROSPACE

DARK

DASSAULT AVIATION

DB & DEGREES

DCO2

DEEP CONCEPT

DELAIR

DELFOX

DELMON GROUP - SOCAT

DELTA Automatisme

DELTY

DEPARTEMENT DES LANDES

DERICHEBOURG AERONAUTICS SERVICES

DESCARTES UNDERWRITING

DIAB SAS

DIGITAL PRODUCT SIMULATION

DIODON DRONE TECHNOLOGY

DIOTA

MEMBER LIST

HIMA NEWS
HIONOS
HIVENTIVE
HSP EXTRUSION CONSULTING
HUGUET INGENIERIE
HUMAN DESIGN GROUP - HDG
HUPI SAS
Hybrid Propulsion for Space
HYDRO SYSTEMS France
HYPERLOOP TRANSPORTATION TECHNOLOGIES FRANCE SAS

I
I.S.I.T. - ISIT
ICAM
ICM INDUSTRIE
ID3D
IDC Alternatives Composites
IDEA LOGISTIQUE
IDEATEC
IDGEO
iD-Product
IFTS - INSTITUT DE LA FILTRATION ET DES TECHNIQUES SÉPARATIVES
IGE-XAO GROUP
IGN - INSTITUT GEOGRAPHIQUE NATIONAL
IGO
IMACS
IMMERSION
IN'COM
INEO SENSE
INEOSURF
Infinite Orbits
INGELIANCE
INGENICS SAS
INGENUITY I/O
INNOV'ATM
IN'PREV (ALTEA Solutions)
INRIA - Centre de recherche BORDEAUX - SUD-OUEST
INSA
INSIGHT SAS
INSTITUT POLYTECHNIQUE DES SCIENCES AVANCEES - IPSA
INTERAC
INTERDRONES SERVICES
INTRASPEC TECHNOLOGIES
IONBIRD
IRDI CAPITAL INVESTISSEMENT
IRT SAINT EXUPERY
ISAE - INSTITUT SUPERIEUR DE L'AERONAUTIQUE ET DE L'ESPACE
ISAE ENSMA
I-SEA
I-SEE
ISI MIDI PYRENEES
ISP AQUITAINE
ISP SYSTEM

ITECA
I-TECHDRONE
iTekway
ITHPP
IV Consulting
IXARYS
J
JEDO TECHNOLOGIES
JEROME ALLOUCHE
JUNCA & ASSOCIÉS

K
KALLISTO
KEDGE Business School Bordeaux
KINEIS
KPL Industries
KRATOS COMMUNICATIONS SAS
KUKA SYSTEMS AEROSPACE

L
LA TELESCOP
LABORATOIRE ECCI
LAM LHA
LAROUCHE INDUSTRIES
LASELEC SA
LATECOERE Groupe
LAUAK GROUP
LE MURETAIN AGGLO
LEAD TECH SRL
L'ELECTROLYSE
LEMMA
LEXCO - Société d'Avocats
LGM Groupe - Direction Sud-Ouest
LIEBHERR-AEROSPACE & TRANSPORTATION SAS
LIEGES HPK SAS
LIMATECH SAS
LISI AEROSPACE ADDITIVE MANUFACTURING
L'OBSERVATION DE LA TERRE APPLIQUEE
Loft Orbital Technologies
LUCHARD DECALCOLUX
LUOS
LYCEE PIERRE PAUL RIQUET
LYCEE SAINT-EXUPERY
LYNXDRONE
LYNXTER

M
M2Quality
MAGELLIUM GROUPE ARTAL
MAKINA CORPUS
MAKINO SAS
MAPAERO SAS
MARION TECHNOLOGIES
MARLIER SA
MARSH SA

MATHWORKS
MATRA ELECTRONIQUE
MCP3A - MECAPOLE
MECA AERO CONSULTING
MECADAQ GROUP
MECAFORM
Mecanic Vallée
MECANO ID
MECAPROTEC INDUSTRIES
MEDES-IMPS
MEOSS
MERCATOR OCEAN
MERSEN BOOSTEC
MES France
METAL CHROME
MEWS GROUP
MGA (Groupe ARM)
MGH
MICHEL PIOCH SARL
MICRO USINAGE LASER
MICRONOR
MICROSEMI POWER MODULE PRODUCTS
MICROTEC Electronics
MILTON
MINCO S.A
MIURA SIMULATION SAS
MPQ ELECTRONIQUE
MSC SOFTWARE - HEXAGON MANUFACTURING INTELLIGENCE
MultiTech 3D
MURMURATION
MUTAERO
MYDIGITPLACE - GA MA NEGOCE
MYRIAGONE CONSEIL

N
NEED TO DEV
NEHIA
NEOGY
Neometsys
NEUSTA SAS
NEXEYA
NEXIO
NEXTEAM GROUP
NEXTEPP
NEXTER SYSTEMS
NICOMATIC
NIKON METROLOGY
NIMBLE ONE
NIMESIS TECHNOLOGY
NIMROD INDUSTRIES
NINJALAB SAS
NMS SOUTH EUROPE
NOBRAK
NORIMAT
NOVAE SERVICES
NOVALYNX

NOVATEM
NOVELTIS S.A.S.
NOVPOWER
NTN-SNR
NUBBO (l'incubateur)
NUMALIS
NXP SEMICONDUCTORS FRANCE SAS

O
OBSERVATOIRE MIDI PYRENEES
OLIKROM
OMEGA SYSTEMES Aquitaine
ONERA
ONSEN Conseil
ON-X Group
OP2 Drugs
OPENAIRLINES
OpenIndus
OPEO
OPT'ALM
ORME
OSMEA
OTONOMY AVIATION

P
Pangea Aerospace France
PARADOX
PAU BEARN PYRENEES COMMUNAUTE D'AGGLOMERATION
PAUL BOYE TECHNOLOGIES
PCM ENGINEERING
PELICO
PHILOTECH
PIKA
PIXSTART
PL CONCEPTION
PLANETOBSERVER
PLAXTIL
PMTL
POLE STAR
POLLEN AM
POLYMEREXPERT
POLYTEC FRANCE
PRAGMA CONSULT
PRAGMA INDUSTRIES
PRECIS 2000 - (DLF INDUSTRIE)
PredExIA
PRESTIGE FINANCES
PROMETHEE
PROOFTAG SAS
PSD
PYTHEAS TECHNOLOGY

Q
QFE
QoS Design
QUADRIUM

QUANTCUBE TECHNOLOGY
Queen Cassiopeia

R
R TECH
R&D VISION
R&R CONSULTING
RAKON FRANCE SAS
RAPIC
RATIER-FIGEAC
RDnano
RECAERO
RECHERCHE & REALISATIONS REMY (3R)
REFLET DU MONDE (PRDML)
Région Occitanie - Pyrénées Méditerranée
RENAULT SW LABS SAS
RESCOLL, SOCIETE DE RECHERCHE
REUNIWATT
Righteous Spirited Entrepreneurs - RISE
RMG
ROCHETTE INDUSTRIE
ROCKWELL COLLINS FRANCE
ROXEL FRANCE

S
SABENA TECHNICS
SAFETY
SAFRAN ELECTRICAL AND POWER - DIVISION POWER
SAFRAN HELICOPTER ENGINES
SAFRAN POWER UNITS
SAFRAN VENTILATION SYSTEMS
SAFT
SAKOWIN
SARL DEFIMECA
SAS LOPEZ PAUL
SATCONSEIL
SATYS SURFACE TREATMENT TOULOUSE
SCALIAN
SCASSI CONSEIL
SCE
SCHLEIPFER SAS
SDTech Micro
SDTS (ARES Aviation)
SECM-FRANCE
SEFEE «AN AMPHENOL COMPANY»
SEG Dielectriques
SEGNERE
SEIYA CONSULTING
SELARL DAL CIN & ASSOCIES
SELAS ALTIJ
SEMEXONE
SEMIDIAS
SERMA INGENIERIE
SERMA TECHNOLOGIES
SERMATI
SETFA (Société d'Exploitation Aéroport Toulouse Francazal)
SEVEN SHAPES
SHARE MY SPACE

Shark Robotics
SIBI - GROUPE KEP TECHNOLOGIES
SICOVAL
SIER
SIGMEO
SIGSCAN
SII SUD OUEST
SILINA
SKIPPER NDT
SkyBirdsView
SKYDRONE ROBOTICS
SKYTED SAS
SLOW SENSE
SN SECOM
SOBEN
SOCIETE TECHNIC SERVICES
SOCODIT
SODITECH
SOFIMAG
SOGECCLAIR
SOLVAY LABORATOIRE DU FUTUR
SOMOCAP SAS
SONIMAT
SONOVISION
SOPEMEA
SOPHIA
SOPRA STERIA GROUP
SOTEREM
SOTIMECO
SOTIP SAS
SOTREM SEO
SOVAMEP
SPACE
SPACE NETWORK SERVICES
SpaceAble
SpaceSeed
SPECIFIC POLYMERS
SPHEREA
SPI AERO
SPIX INDUSTRY
SSG-AERO
ST GROUP
STACK LABS
STAERO
STAR ENGINEERING
STATINF
STEEL ELECTRONIQUE
STI France
STIVENT INDUSTRIE
STRADOT
SUD PROJET
SUDAERO
SUMMOP 86
SUPAERO JUNIOR CONSEIL
SURFEO
SURVITEC SAS
SYLPHAERO
Syndicat Mixte du Pays Sud Charente
SYNDICAT MIXTE PYRENIA
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SYRLINKS
SYSMECA Ingénierie
T
TAMAN
TAMAPLACE
TARMAQ - Cité des Savoires Aeronautiques et Spatiaux
TBS EDUCATION
TDM INGENIERIE
TECALEMIT AEROSPACE
TECHFORM
TECHNACOL
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THANKS OUR OFFICES

The successes of the Aerospace Valley Cluster are the product of the efforts and hard work of a team of full-time staff, employees from the **Compétences Plus Employers' group** and seconded employees from companies, all experts in their fields and whom we would like to thank for their dedication, (Airbus, Airbus Atlantic, Airbus Defence and Space, ArianeGroup, Atos, Capgemini Engineering, CNES, Collins Aerospace, Commandement de l'Espace, Continental Automotive, Dassault Aviation, Engie Green, Latécoère, Safran Helicopter Engines, Safran Power Units, Sopra Steria, Telespazio France, Thales AVS, Thales DMS et Université de Bordeaux).

WE WOULD LIKE TO THANK ALL OUR MEMBERS FOR GIVING US THEIR TRUST AND THE ENTIRE AEROSPACE VALLEY TEAM !

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