

# 2nd

# NEWSLETTER

## METACLUSTER SUPPORT TOWARDS A MORE RESILIENT AEROSPACE AND DEFENCE ECOSYSTEM



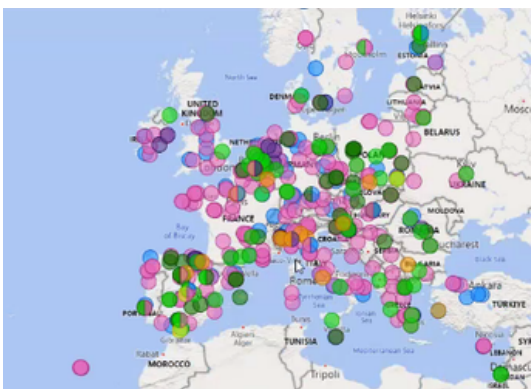
## METASTARS is

an Eurocluster project designed to provide services to boost the competitiveness of SMEs in Aerospace and Defence sector. It also aims at building a sustainable and representative network at the European level.

METASTARS is almost reaching its halfway point and we are very excited to present the results of our Call for Innovation Projects.

Since June 2023, we also benefit from the assistance of our Advisory Board in our activities: supporting innovation projects, mapping of aerospace and defence (ASD) stakeholders and creating a portfolio of cluster services for SMEs.

In the next months, METASTARS will keep supporting the ASD ecosystem offering training and activities to Clusters & Business Networks Coordinators and Project Managers in Europe and we invite you to join our upcoming webinars and activities.



# ADVISORY BOARD'S AREAS OF EXPERTISE

The METASTARS Advisory Board is an associated team of experts who provide non-binding strategic advice to Metastars Project Partners.

They also support the implementation of the project and exploitation of the results.



■ **LAURENT BIZIEAU**  
**SAFRAN / AEROSPACE VALLEY**  
**FRANCE**

Aerospace engineer with a long experience in engines; an expert in sustainable propulsion technologies (hydrogen, electric and hybrid propulsion, sustainable aviation fuels).

■ **MÉLANIE DURTH, PHD**  
**ANDALUCIA AEROSPACE**  
**SPAIN**

Phd in Fluid Mechanics and Rheology; researcher on sustainable technologies for infrastructures, water and energy, materials and processes for the aerospace sectors; supports companies in developing innovative projects.

■ **ATHANASIS POTSIS**  
**HELLENIC ASSOCIATION OF SPACE INDUSTRY**  
**GREECE**

Phd in Electrical and Computer Engineering, with experience in electronics in the Defence sector; supports cooperation between research and industry; consultant to governments supporting local A&D Industries to utilize offset market.

■ **NIKLAS SCHILLING**  
**EACP/HAMBURG AVIATION**  
**GERMANY**

Coordinator of the European Aerospace Cluster Partnership (EACP) which gathers 45 aerospace clusters of 18 countries, and aims at strengthening the European position in the aerospace market.

■ **JAROSŁAW SĘP, PROF.**  
**RZESZÓW UNIVERSITY OF TECHNOLOGY**  
**POLAND**

Prof. of Mechanical Engineering with experience in international projects regarding the development of technologies and skills for the industry, as well as improving manufacturing processes.

# Our activities

## MEETING IN ATHENS - INNOVATION PROJECTS FUNDED!

On the 4-5th of July 2023 our Project Partner - Corallia hosted the 1st METASTARS Steering Committee...



## ALLIANCE MAPPING - COMING SOON

METASTARS is carrying out a mapping of all stakeholders which can support the resilience of the aerospace and defence ecosystem in Europe...



## SUPPORT SERVICES TO SMES - ASSESSMENT

METASTARS invite all ASD clusters to complete our survey to have their services for SMEs registered in our portfolio of services...



## INNOVATION PROJECTS

to be implemented in  
upcoming months!



**11 projects involving 17 SMEs** are laureates of METASTARS Call for Innovative Projects.

These projects will contribute to improving the resilience of the ASD industrial ecosystems by developing value chains interlinkages in the EU.

They will also contribute to the EU strategic autonomy by developing innovative products and services.

Both Low-Risk (10 month duration) and High-Risk projects (12 month duration) kicked-off in September 2023. All projects will be interviewed by a dedicated mentor of the Advisory Board; the High-Risk projects will be reviewed in February, 2024 while the Low-Risk projects in April, 2024. After submitting their Final Report (in July and September 2024, respectively), all projects will be assessed and validated regarding their proper implementation and the balance payment.

Now, discover the laureates!

# “High risk” projects (TRL 2-5)

from technology concept formulated to  
technology validated in relevant environment  
(industrially relevant environment)



## Accelerating Testing of an Air Breathing Electric Propulsion Satellite (ATAB)

**Kreios Space & Pulsar Labs** will design and test a coil for electric propulsion systems, enhancing expertise in advanced propulsion and promoting sustainability by creating a fully electric engine for satellites.

## Nano-AM In-Space green thruster (InSpaceAM)

**AENIUM Engineering & Delta Orbit** will develop a high-performance satellite propulsion system using non-toxic green propellants.

## Tamper-proof of Satellite Images (TAPSAT)

**Bitrezus & Prisma Electronics** aim at specifying, designing and verifying an embedded hardware that will tamper-proof satellite imagery. This will be integrated into satellites and on earth, as a digital twin.

## Air Plasma Engine Xperiment (APEX)

**SYLPHAERO** will test a proof of concept and gather data to develop the world’s first electric plasma-based jet engine.

## Microsatellite – compatible Solar Array Rotary Actuator (microSARA)

**Revolv Space** aims to develop an innovative Solar Array Drive Assembly (SADA) tailored to European microsatellite platforms.

# “Low risk” projects (TRL 5–7)

from technology validated in relevant environment to system prototype demonstration in operational environment



## DIGISURF – DIGItization of the SURFace treatment

**Titania Ensayos y Proyectos Industriales** will digitize the surface treatments line of an R&D area in order to extrapolate the results to the production line in future projects.

## Collision Avoidance System Incorporating Visual Environment Recognition (ACS-VR)

**Infinite Orbits & Ecosmic** will develop an ‘In-Space’ autonomous Collision Avoidance (CA) System for satellites to predict collision probabilities with unprecedented accuracy.

## IDEAMAP

**RESPIBIT & Geosense** will develop an integrated drone system that will be capable of measuring the local concentrations of gases and dispersed entities at a specific time and determine local fluxes.

## Actuated CMC Air Inlet and Flap for Aerospace (ACAIF)

**NABLA WAVE & Walter E.C. Pritzkow Spezialkeramik (WPS)** will focus on the design, manufacturing and testing of an air inlet that will operate in the extreme space re-entry environment, which includes very high speeds, temperatures and vibrations.

## High temp testing equipment

**Salloytech Aero Group** will develop high-temperature resistant materials, which are crucial for the aerospace sector, aiming to reduce dependency on limited suppliers and enhance strategic autonomy in high-temperature equipment production.

## Reusable masking

**Salloytech** aims to develop a groundbreaking technology for silicone and polyurethane masking, which is reusable. The main goal is to increase production efficiency, reduce costs, and enhance safety at work.

# What is next to come?

## WEBINARS



for **Clusters & Business Networks Coordinators, Project Managers** and **European Clusters' Personnel**



### ■ **1st WEBINAR: Keys to attract talent from Europe and the rest of the world**

**AGENDA:** online job posting - collaboration with universities and research centers - participating in trade shows and events - online branding - networking - retention programs - diversity and inclusion strategies - continuous evaluation and Improvement of talent attracting strategies



**27th of October, 2023**



**14th of November, 2023**

### ■ **2nd WEBINAR: Communication and persuasion techniques**

### ■ **3rd WEBINAR: Negotiations**



**Coming soon**

See you there and visit us on



Metastars Team



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