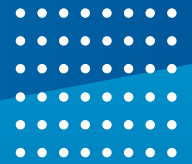




GROW AND ACCELERATE YOUR SMART PROJECTS IN NEW
VALUE CHAINS OF THE EUROPEAN BLUE ECONOMY







INTRODUCTION

The GALATEA project is an accelerator for smartprojects in new value chains of the European Blue Economy funded by the European Union . In fact, GALATEA stands for “Grow and Accelerate your smArt projecTs in nEW value chAins of the European Blue Economy”.

The overall objective is to develop new cross-sectoral and cross-borders value chains supporting innovative SMEs to foster the development of Blue Growth key industries in Europe. This development has been driven by the integration of technologies and know-how from aerospace and ICT sectors to the following domains: ports, ships, shipyards, and maritime surveillance.

GALATEA brings together the cooperation and experiences of 7 ICT, aerospace and maritime cluster and 1 research and technology organisation from 5 European countries: France (Aerospace Valley and Pôle Mer Méditerranée), Greece (Corallia), Romania (Cluj IT), Poland (Baltic Sea and Space Cluster) and Spain (Basque Mobility and Logistics Cluster, Catalan Water Partnership and Eurecat).

During 36 months, GALATEA partners have implemented 3 phases:

- Emergence of challenges: Identification of customer’s needs and societal challenges at stake related to GALATEAs domains.
- Emergence of ideas: Implementation of open space solution for European SMEs, clusters and innovation actors with remote ideation and networking sessions.
- Innovation support and services: Direct financial support to SMEs up to 60,000 € with the launch of 2 open calls for innovative proposals (January & September 2021) and bundle of services provided by GALATEA partners for business model development, technology, internationalization, and funding opportunities support.

GALATEA has directly financed 23 innovative projects involving 42 companies from 5 different countries. More than 2.21 M€ have been distributed.

In addition, 49 services have been provided to 30 SMEs, 4 workshops have been conducted and a guide for funding has been disseminated.

SMART SHIP

SMART SHIPYARD

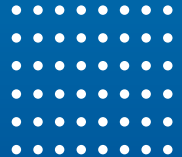
SMART PORT

**MARITIME
SURVEILLANCE**





SMART SHIP





01 → DANUBE DELTA SHIP ON H2 INITIATIVE

SHORT DESCRIPTION

The Danube Delta Ship on H2 Initiative was aiming to conduct a comprehensive feasibility study on the challenges and opportunities of implementing hydrogen fueled recreational transport in the Danube Delta, an area which, according to UNESCO, represents the largest and best preserved of Europe's deltas.

What challenge does your project address?

Alternative fuels have a huge potential for decarbonization of the maritime sector but also on preserving biodiversity and reducing its ecological footprint. In 2022, the EC released the "Hydrogen strategy for a climate-neutral Europe" indicating renewable hydrogen as an essential pillar to support the EU's commitment to reach carbon neutrality by 2050.

In line with this, **the core objectives of our project were to provide an in-depth analysis of the current status as well as future trends of the industry.**

What do you want to highlight to future investors?

The Feasibility Report was completed within the estimated time frame, with highlighting the conclusions for each chapter individually as well as creating a dedicated chapter to summaries, draw the overall conclusions and provide the recommendations. The input, conclusions, and recommendations of the hereby Report are based on own market and technology expertise and database, literature review, meetings and interviews with industry players, technology providers, national and local authorities as well as site visits. This Feasibility report represented the first phase of a long-term project dedicated to the development of the recreational maritime transport in the Danube Delta.

What are the next steps of the project?

Our aim is to design a strategy for the development of the recreational maritime transportation in the Danube Delta using alternative energy generated by the H2. On one hand, we intend to contribute to the development of a more green and sustainable environment and on the other hand we envision to highlight the economic potential of the Danube Delta by emerging the technology into tourism.

SMEs



TRAVEL DELTA STAR
Romania
Maritime Transport



Ivanov Mihai
traveldeltastar@yahoo.com
+40 742 059 695
<https://www.traveldeltastar.ro/>

We are always looking and striving to improve our services for alternative recreational transportation in the Danube Delta.



02



IOT5GWIFI

OPTIMISATION OF ON-BOARD MOBILE/DEVICE CONNECTIVITY USING WI-FI AND 5G TECHNOLOGIES AND IOT5GWIFI

SHORT DESCRIPTION

Study the smart ship connectivity digitisation for onboard information tasks and automated processes via connectivity links to allow the interoperability for newly built and existing vessels among onboard network, 5G cellular & satellite communications through a standardised system.

What challenge does your project address?

The project addresses Smart Ship industry challenges, focusing on IoT development and technology transfer aiming at: a. Optimising onboard mobile/ device connectivity using WIFI endpoints for safety, environmental and quality task management; b. Improving architecture and examine implications of 5G technology and VSAT for data transfers through onboard WIFI and 5G endpoints; c. Addressing short sea shipping market in the short term; and d. Offering recommendations on the data API endpoints for AI modelling.

What do you want to highlight to future investors?

Our IOT5GWIFI project, which was successfully implemented, brought us the necessary know-how on our vision for a wireless network onboard using cost-effective technology. Future investments towards the development of a prototype would be mostly welcome.

What are the next steps of the project?

1. Application for a provisional patent on our IoT wireless private network.
2. Partnership with Virtual Maritime Services to continue our collaboration.
3. Off the shelf solution procurement for the IoT CO2 sensor and hardware certification for ships.
4. Prototype with a local shipping company in Greece.
5. Application for competitions on IoT nationwide and overseas.
6. Application to Smart Freight Center.

SMEs



MaritimeAPI

**MARITIMEAPI TECH
SINGLE MEMBER IKE**

Greece
ICT



Ioannis Priovolos
gianis@maritimeapi.co
+30 69 70 84 21 99
www.maritimeapi.co

MARITIMEAPI is an international team with expertise in shipping, data science and business with the vision to integrate maritime data and create digital sustainable solutions.



03



HYDROGEN FUELED WATER TRANSPORT IN DANUBE DELTA

SHORT DESCRIPTION

Through the H2D project, we are determined to make a decisive step towards the introduction of a more sustainable and environmentally friendly transportation method within the Danube Delta. In this regard, we are looking into renewable hydrogen fueled boats for recreational navigation.

What challenge does your project address?

The H2D project aimed to develop a comprehensive Business Plan analyzing all relevant aspects of introducing this sustainable mobility solution in an area which represents the largest and best preserved of Europe's deltas. The project took into account two, horizontal dimensions of the Ecological transition: **ecological transition and circular economy**.

This initiative contributes to the bigger picture, in the context of the EC commitment to large-scale deployment of clean hydrogen.

What do you want to highlight to future investors?

The H2D project is a continuation of the feasibility study started previously, which together seed the ground for future initiatives in the Danube Delta.

Our vision is to develop a long-term project focused on recreational transportation in Delta using hydrogen by adapting the boats to the new existing technologies. At the ecosystem level, our approach is citizen-centered, as we are looking into creating new job opportunities and professional reconversion for the interested people.

What are the next steps of the project?

The Business Plan will be a support instrument in the approaching of potential business partners, financial

institutions and develop applications for national and European non-refundable grants for investments in this sector. Additionally, the Business Plan will be used as a means to convince local and national authorities on the benefits but also challenges of the business and explain the needs for fiscal and legislative/permitting support.

SMEs



**TRAVEL DELTA
STAR**
Romania
Maritime Transport



Ivanov Mihai
traveldeltastar@yahoo.com
+40 742 059 695
<https://www.traveldeltastar.ro/>

We are always looking and striving to improve our services for alternative recreational transportation in the Danube Delta.



04



NEPH2AIR PROJECT

SHORT
DESCRIPTION

The project conducted by NepTech, H2Pulse and Caponnetto Hueber aims at enhancing the operational performances (speed and range) of hydrogen-powered passenger vessels thanks to a breakthrough air-injection system.

What challenge does your project address?

The project tackles the challenge of offering a naval mobility solution that combines zero-emission propulsion and high level of performance. The objective of the project is to demonstrate that advanced hydrodynamics and high-end energy management system enable a zero-emission vessel to equal or exceed the performances (range, speed, OPEX, CAPEX) of a diesel powered vessel whereas the additional weight and volume of the hydrogen propulsion system is considerable.

What do you want to highlight to future investors?

NepTech's vessels, thanks to the technologies developed by NepTech and the consortium have much better performances in terms of speed (x1.5) and range (x2) compared with other zero-emission vessels. In addition the air injection technology is viable for urban shuttles but also for all flat-bottomed vessels - such containers ships and river barges. The market addressed by this technology is then huge and this approach is perfectly aligned with IMO objectives to cut emissions of the maritime transport industry.

What are the next steps of the project?

Thanks to the results obtained through the GALATEA process, the consortium team was able to calibrate the technology to make sure that the combination of key elements - such as the shape of the hull, the mechanical integration of the system and its interface with the energy propulsion system - works well. This calibration was made through lab testing and scaled model. The next step will be to test this technology on a full-scale prototype.

SMEs



NEPTECH
France
Naval Architecture
and Engineering



Tanguy Goetz
tanguy@neptech.co
+33 658 127 659
<https://neptech.co/en/home>

NepTech is a design office specialized in hydrodynamics and naval innovation. NepTech's vessels are hydrogen powered, efficient and intelligent.



H2PULSE
France
Hydrogen R&D
Design Office



Cyril Gagnepain
contact@h2pulse.com
<https://h2pulse.com>

H2PULSE's vocation is to serve its customers from the definition to the achievement of their expectations, thanks to the know-how of its Doctors and Engineers, specialists in Hydrogen.



**CAPONNETTO
HUEBER SL**
Spain
Naval Engineering &
CFD Computation



Francis Hueber
info@caponnetto-hueber.com
+34 963 224 224
<https://caponnetto-hueber.com>

H2PULSE's vocation is to serve its customers from the definition to the achievement of their expectations, thanks to the know-how of its Doctors and Engineers, specialists in Hydrogen.



05



PYCHARGE

SHORT DESCRIPTION

PyCHARGE is a project led by PYTHEAS Technology, Notilo Plus and FEAC, to develop a docking and recharge station for AUVs powered by marine currents.

What challenge does your project address?

The project aims to develop AUVs recharging station powered by marine currents, placed underwater and fully autonomous. They are performing underwater tasks without connection to a surface vessel, carrying instruments & sensors that monitor, inspect, survey underwater environments for various activities (security, aquaculture, offshore windfarms, military operations). AUVs are less expensive and safer than traditional methods, but batteries' power capacity keeps their missions limited in range & duration.

What do you want to highlight to future investors?

As mentioned previously, the technology has a large range of applications. The project demonstrated the feasibility and performance of the system through experimental tests of a reduced scale model. It also showed the scalability of the system to high power through numerical simulations. Finally, the expertise of the different partners was combined to obtain a fully integrated system, from the power generation system to the drone charging platform.

What are the next steps of the project?

The design of a full-scale demonstrator needs to be finalized and the demonstrator then needs to be manufactured to perform tests at sea, in representative conditions. This will require strong manufacturing efforts on the drone, docking station and power generator sides, as well as simulation efforts to adapt to the currents available at the test site considered. In parallel to these tests, an economic assessment of the whole system will be conducted, thanks to the feedback from manufacturing the first full-scale demonstrator.

SMEs



PYTHEAS TECHNOLOGY
France
Piezoelectric Materials



Vincent Alcaniz
vincent.alcaniz@pytheas-technology.com • +33 620 275 126
<https://pytheas-technology.com>

PYTHEAS Technology develops innovative piezo-electric devices for a large range of applications (renewable energies, underwater acoustics, Air&Space...).

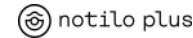


FEAC ENGINEERING P.C.
Greece
Multiphysics Simulations & Digital Twins



Sotiris Kokkinos
sotiris.kokkinos@feacomp.com
+30 69 48 36 25 76
<http://www.feacomp.com>

Specialized in Simulation Driven Product Development & physics-based Digital Twins, develops simulation software & consulting services, to solve challenging & complex engineering problems.



NOTILO PLUS
France
Underwater Systems Conceptions



Budan Pierre
pierre@notiloplus.com
+33 602 076 228
www.notiloplus.com

Notilo+ designs and markets autonomous underwater drones & software solutions for the monitoring of ship hulls, the study of aquatic ecosystems, search & rescue, aquaculture, defense.



06



SEAREBBEL APP

**SHORT
DESCRIPTION**

Searebbel creates AI-driven technology for recreational boating. With Galatea's help, Searebbel has developed an application with a 3D viewer that supports easy, safe and shared navigation.

What challenge does your project address?

Searebbel has the technological challenge of automating navigation from the perspective of extreme simplification for the user. The main challenge for our app development is directly related to the large amount of data embedded in the maps to implement the 3D immersive experience and maritime environment awareness. This poses a technological challenge, which must be addressed by optimized code and software interfaces. Another important challenge is to involve the users in a community, so they share qualitative data about their navigation experience.

What do you want to highlight to future investors?

Searebbel aims to create navigation systems that break through the barriers to entry of current systems. Having advanced technology to achieve more autonomous navigation no longer requires high installation costs or aggressive mounting systems for vessels. We create plug & play technology in the marine sector that no longer requires specialized labor.

Together with our innovative technology systems, our social app will help create a community where it is easy and safe to share and create navigation routes. SeaRebbel positions itself as a disruptive digital player in the traditional navigation electronics industry.

What are the next steps of the project?

We want to integrate the developed application with the Galatea project as a visual and graphical complement to our control system. The objective is to provide all the relevant information when navigating complemented by our autopilot as a control system.

At the beginning of 2023 Searebbel is planning the first round of external investment with shareholders from the American market and the market launch of the autopilot is planned for the end of 2023.

SMEs

SEAREBBEL S.L.
Spain
Technology
Development for
the Marine Industry



Juan Herrera
jherrer@searebbel.com
+34 629 518 766
<http://www.searebbel.com>

SeaRebbel's mission is to promote more autonomous and fun navigation through technological innovation and artificial intelligence developing universal systems, easy to use and accessible to all sailors.

07



SMATCON - BLOCKCHAIN IN SMART CONTAINERS USING SATCOM

**SHORT DESCRIPTION**

The scope of SMATCON was to face the problem of logistic losses and complications in maritime sector. Our idea makes use of technologies as IoT, 5G, SatCom aiming to answer sector's needs and requirements.

What challenge does your project address?

Since operational systems differ from port to port, accidents, delays or unexpected situations arise from bad planning. Moreover, when these systems get hacked, with, e.g., corrupted container manifests, these attacks reflect to both home port and port of call, requiring unplanned manual inspection, which in the past has blocked the busiest shipping ports from operating for two weeks. Further challenges to be addressed are the demanding need of handling the huge amount of data in an optimised way.

What do you want to highlight to future investors?

It is going for a solution with high market potential. The total available market for the service consists of all container owners, depot operators, port authorities, ship owners, cargo companies, Telecommunication companies. Moreover, the market also consists of ship associations/ unions and other relevant stakeholders. The technology is already matured to be integrated on that solution and therefore the risk is in low level.

What are the next steps of the project?

- **System Design phase**
 - System requirements
 - Service and system validation
 - Operational scenarios definition
- **System Development**
 - Software/ Hardware development
 - Services integration
 - Overall system integration
- **Pilot service phase**
 - System operations in the framework of pilot tests
 - Live tests on the selected test site
- **Fully operational system**
 - Operational system and products modifications/updates
 - System monitoring and maintenance
 - Dissemination

SMEs

TERRA SPATIUM SA
Greece
Geoinformation
& SatCom



Vassilios Stathopoulos
v.stathopoulos@terraspatium.gr
+30 21 06 74 85 40
www.terraspatium.gr

Terra Spatium is a Greek SME with expertise in the field of Geoinformation, Remote Sensing, Satellite Communication and Satellite Ground Station Support.



08



KTMS

SHORT
DESCRIPTION

The kite traction project, straight from the Kitesurf technology aims to use the wind as the sole source of energy. Beyond the Sea®, created 2014, is a resolutely innovative project in the purest respect for the environment.

What challenge does your project address?

The need of an automatic control system of the kite to improve safety, to make the project scalable, commercial and to optimize the wind usage, brings to the table the need of expertise from different sectors. To meet the mentioned requirements, KTMS consortium, between Beyond the Sea, a company with expertise in developing new sailing solutions, and INLOC ROBOTICS, specialized in development of robotic solutions for the industry and inspection tasks and automatic control systems, makes it possible.

What do you want to highlight to future investors?

There is no carbon taxation applicable to day to maritime transport. It is now the only sector that does not have market-based measure to address the climate impact of international shipping. This could change in the future years and result in a higher price of fuel. The significant and immediate gain in reducing consumption will provide a quick return on investment for ship owner and operators. The solution directly offsets high oil prices and the likelihood of new taxes on polluting emissions.

Our solution is quickly refundable, sparing up on average 20 % and up to 50% of fuel consumption.

What are the next steps of the project?

The partnership with Inloc Robotics has enabled us to unblock situations, particularly on sensors and on the measurement sensors chain. This allowed us to develop the autopilot and its precision for the system sold to our Belgian beta tester.

We have built up a regional network of subcontractors and partners capable of helping us develop all the facets of our system, and we are contributing to the establishment of a sector in this field and to the maintenance and creation of jobs.

SMEs

beyond the sea®
by Yves Parlier

BEYOND THE SEA
France
Kite Vessel Traction



Valentin Menard
valentin.menard@beyond-the-sea.fr
+33 781 788 442
<https://beyond-the-sea.com>

Beyond the Sea®, created 2014, is a resolutely innovative project in the purest respect for the environment. The strength of the team is its dedication to the project.



INLOC ROBOTICS
Spain
Engineering Projects
Solutions



Raúl Alonso Truan
ralonso@inlocrobotics.com
+34 934 314 864
<https://inlocrobotics.com/en>

INLOC Robotics is a SME founded in 2014 who, through research projects and engineering projects offers solutions in the field of robotics and automation.



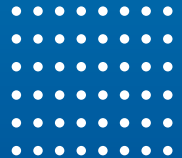
GALATEA PROJECT
SMART SHIPYARD

014





SMART SHIPYARD





01



COMPODEEP

SHORT
DESCRIPTION

CompoDeep aims to pre-design of a kit of standardized structural elements in composite materials allowing deepwater vehicles and equipment's infrastructures to be made / modified / repaired, easily.

What challenge does your project address?

Choice of composite materials and proposed design address five challenges:

- Mass reduction of structural parts and systems.
- Removal of corrosion phenomena and electrolytic couples.
- Damping of vibrations (integrated structural damping and high natural frequencies).
- Modular approach: offer a great freedom of architecture at competitive global cost (standardized set of beams, end caps, assembly joints, repair kits and dedicated 3D printed accessories).
- Materials with embedded sensors (MRO monitoring).

What do you want to highlight to future investors?

Strengths of our solution lead to reduce operating costs and to increase incomes and net margin. According to a recent report published by Allied Market Research, the deep-sea mining equipment & technologies market size is expected to reach \$72,814.2 million by 2030, registering a CAGR of 61.4% from 2021 to 2030. The complementarity of skills between CES Works and Compoxi allow to work both in a disruptive manner while remaining focused on the reality of series production at competitive cost.

What are the next steps of the project?

Long term challenge is to develop a dedicated entity to produce and commercialize competitive, standardized, composite structural kits (automated industrial processes) with optimized characteristics allowing significant mass reduction and intensive use of underwater vehicles and infrastructures in deep seas up to 6000 m. In the short term, it means being able to protect IP, validate use cases through POCs to convince customers and then investors thanks to our start-up studio structure and to enter the market.

SMEs



CES WORKS

France
Primary structures for
Maritime, Aeronautic
& Space applications



Yves-Henri Grunevald • yves-henri.grunevald@ces-works.com • +33 609 606 807 • www.composites-expertise-solutions.com

Development of disruptive innovations applied to functionalized, smart, and/or compliant composite/multi-material structures for severe environment both for military and civil applications.



COMPOXI

Spain
Space and
Aeronautic



Marc Gascons
m.gascons@compoxi.com
+34 667 874 061
www.compoxi.com

Compoxi has developed a thorough expertise in the development, design and manufacturing of composite structures and components.



02



HECTOR - SHIP INSPECTION BY AUTONOMOUS DRONE

**SHORT DESCRIPTION**

The aim of the HECTOR project is the creation of the first-ever fully autonomous solution for inspections of ship confined spaces relying on a drone that collects visual and ultrasonic data.

What challenge does your project address?

The HECTOR project is motivated by the fact that the current methods to inspect ships enclosed areas is a labour intense and most importantly, an extremely hazardous task to be performed by human operators. The HECTOR system offers a drone-based solution that will be able to navigate autonomously within a ship's enclosed space and collect both optical and ultrasonic data. The developed solution will be provided as a product to numerous service providers or shipping companies which that will enable them to reduce manning and maintenance costs.

What do you want to highlight to future investors?

The HECTOR system will develop a small UAV that will be able to navigate autonomously in ships' enclosed spaces and can be operated by any crew member. The aforementioned HECTOR's capability is particularly important since the existing commercially available drones cannot navigate autonomously within a ship's confined space with unknown geometry.

Moreover, the HECTOR system will also include a module enabling collection of ultrasonic thickness measurements. This will constitute a significant advantage compared to the existing commercially available indoor drones, since none of them is integrated with such a system.

What are the next steps of the project?

At the moment, the consortium has finalized the development of HECTOR's technical components (UAV platform, autonomous path planning, ultrasonic thickness measurement module), and the partners are actively working on their integration on board the UAV platform and finally carry out the field tests. By the end of the project, a prototype system (validated at TRL 7) will be created. Moreover, the partners will create a business plan that will define the roadmap for a sustainable business model. Following the conclusion of the GALATEA funding the consortium partners will conduct the necessary steps in order the HECTOR system to reach TRL 9.

SMEs

Christos Skliros
c.skliros@hellenicdrones.com
+30 21 04 11 13 72
www.hellenicdrones.com

Hellenic Drones focuses on the development of innovative UAV-based solutions emphasizing in customized UAVs for industrial and agricultural applications.



Aristotelis Christodoulou
a.christodoulou@robosurveytech.com
+30 69 71 92 53 72
www.robosurveytech.com

Robosurvey specializes in robotic-based inspections of industrial facilities and particularly focuses on inspections of ships and industrial plants.



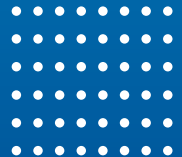
Mihai lovea
Mihai.lovea@accent.ro
+40 745 182 660
www.accent.ro

Accent Pro 2000 offers services in the field of X-Ray Imaging for Security and NDT, to facilitate its access onto national and international markets.





SMART PORT





01



ABAMS - ACCELERATION OF BLOCKCHAIN ADOPTION IN THE MARITIME SECTOR

SHORT DESCRIPTION

CompaDeep aims The goal of this project was to develop a complete prototype of a blockchain-based notary service that can be easily connected to any existing data pipeline and IT infrastructure. The implementation of the prototype in two unrelated sectors (marine and automotive) proved the technical and industrial agnosticism of the technology we are developing.

What challenge does your project address?

Project results have contributed to the adoption rate of blockchain among offshore companies, lowering the barrier of entry for end users and organizations unfamiliar with blockchain. In addition to prototyping and launching new technology to the market, we have proven that blockchain adoption is closely related to its understanding by end users. During our operations we've learned that the complexity of distributed ledgers is overwhelming for end users and slowing down the pace of adoption. We believe that the benefits of blockchain can be enhanced by a specific approach to developed and implemented solutions.

What do you want to highlight to future investors?

As a result of the GALATEA project, we provided a wide audience with detailed guidelines on how to break the technological nuances of DLT so that users can use blockchain solutions without even knowing that they are interacting with the blockchain. The results of the project include new know-how on the implementation of blockchain in the maritime sector. As a prototype, we set up a new blockchain-based data notary service, with documents as data in the first step. We developed and verified a business plan for a new service based on customer feedback after implementing a prototype for maritime transport management solutions.

What are the next steps of the project?

REXS.io plans to continue cooperation with GS Data in extending notary services to other documents. After receiving customer feedback, clear needs were identified for several stakeholders. In the coming months, both companies will work together to develop a solution that will satisfy end users in the maritime logistics sector. A collection of customer interviews will provide an in-depth insight into the needs of logistics companies operating in the maritime sector. Based on the collected information, a new MVP product will be developed.

SMEs



REXS.IO
Poland
ICT



Agata Kukwa
agata.kukwa@rexs.io
+48 784 027 986
<https://rexs.io>

REXS.IO is commercializes a technology stack for DLT-based notarization of existing data and data ingestion streams with an apparent decoupling of trust and persistence layers.



GS DATA
DEVOPS SRL
Romania
ICT



Georg Serban
george@gsdata.ro
+40 07 65 46 87 14
<https://gsdata.ro>

GS Data as a company operating in the logistics in the naval transportations sector, GS Data will receive, implement, and pilot REXS.IO technology within its existing stakeholder ecosystem.



02



ADVARPOL

ASSESSMENT AND OPTIMIZATION OF ANAEROBIC DIGESTION AS
A VALORIZATION ALTERNATIVE FOR MARPOL WASTE**SHORT
DESCRIPTION**

—

ADVARPOL project aims to develop a biological based solution for the valorization of the MARPOL waste in port facilities, minimizing the operational costs and generating biogas as an added-value product.

What challenge does your project address?

MARPOL wastes are hazardous residues produced in ships which have vast negative effects on the environment and on human health, making it necessary to deploy adequate management facilities for these wastes in ports. The treatment of MARPOL residues in harbor facilities performed by physicochemical and biological processes consumes important amount of chemicals and electrical energy and generate vast amounts of sludge which requires further treatment or controlled disposal. Alternative technological solutions are necessary to valorize this waste.

What do you want to highlight to future investors?

The production of biogas in harbors can serve as an efficient and cost-effective alternative to MARPOL waste management using traditional alternatives. However, the nature of this waste makes it a technically complex process, for which a careful control strategy is required. The entity beneficiary of ADVARPOL proposes to continue advancing in the research of the anaerobic digestion process to optimize the production of biogas and minimize the operational variability.

What are the next steps of the project?

The study has tested the capacity of several of the main MARPOL wastes generated in port facilities to produce biogas through anaerobic digestion. However, the compositional complexity of the samples has meant that this production is, in many cases, low. More efforts must be made to evaluate other MARPOL wastes and combine them by anaerobic digestion to increase the capacity for biogas production and reducing the inhibition process. It is planned to carry out studies, in collaboration with a company in the port area, aimed at optimizing this production.

SMEs**AERIS TECNOLOGÍAS
AMBIENTALES S.L**Spain
Enviromental

Óscar J. Prado Rubianes
.prado@aeris.es
+34 633 030 076
<http://www.aeris.es>

The main aim is to help industries and public entities to improve the environmental quality of their emissions by designing and implementing state-of-the-art, environmental-friendly technologies.



03



CORAL - CONSORTIUM FOR SMART MARINE SOLUTIONS



SHORT
DESCRIPTION

CORAL provides a comprehensive solution for small and medium ports that enables them to digitize their data storage, lower their impact on the environment, and optimize vessel management.

What challenge does your project address?

Many of the solutions on the market regarding digitalization and optimization of processes for the ports are not adjusted to the needs of small and medium ports. For such companies, products that are already available on the market are too expensive and loaded with features that are unnecessary and neglectable. That's why our product, combining several services and using simple, scaled ways of data management, communication, and environmental monitoring is what they need.

What do you want to highlight to future investors?

We created a comprehensive and flexible platform, that can easily be adjusted to the needs of any client. While we target small and medium ports, some of its features can also be of value to bigger companies on the market and entrepreneurs from outside maritime industry. CORAL is in constant development and is only going to get better.

What are the next steps of the project?

For us a current CORAL platform is just the beginning. All members of the consortium have multiple ideas for further development of this product and we plan to continuously improve it. We also agreed how to divide the tasks between companies and share possible profits, so that each company can develop the part that they are best at: WaterRobotics- water drones and buoys, BGEO- GIS data and GIS related solutions, SeaData- software and data analysis.

SMEs

 **SEADATA**
Poland
Environmental
Monitoring



Marta Wenta
mwenta@seadata.pl
+48 504 756 409
www.seadata.pl

We focus on datasets, from public sources, satellites, drones, etc., which are used for applications that enable better management. We put emphasis on environmental monitoring.

 **BGEO**
Spain
GIS



Cláudia Rodrigues
claudia@bgeo.es
+351 963 289 406
www.bgeo.es/en/

Engineering, GIS, Consulting and Training are areas of BGEO. The company is focused on engineering projects. On July 2014, the company grew in services, incorporating GIS into its DNA.

 **WATER
ROBOTICS** **WATER
ROBOTICS**
France
Water Monitoring



Aurelie Volant
nfo@site.info
+33 624 398 531
www.water-robotics.eu

Water Robotics is an innovative Clean Tech company which develops the "Water Scan" tool, a data acquisition (drones, buoys) and processing chain serving aquatic environments.



04



DTA4IP - DIGITAL TWINS OF ASSETS FOR ADVANCED INTRALOGISTICS IN PORTS

SHORT DESCRIPTION

DTA4IP project is framed within the platform MyPlant-Manager (MPM) from IZURUN TECHNOLOGY, the first one-stop 360° cloud platform focused on the end-user of intralogistics assets, aimed at gaining efficiency in the end user processes where the intralogistics machinery play a critical role, like the Port and Logistic industry.

What challenge does your project address?

The innovative approach of MyPlantManager consists of integrating data from different sources through a proprietary methodology and a 3D visualization by means of a Digital Twin with KPIs particularized to the end-user needs, in collaboration with DIOGHENIS INTERNATIONAL.

MyPlantManager increases safety in operation and the efficiency through customized maintenance plans based on the real use of the machinery. Last, it also grants the end-user with OEM-independency in a multi-asset and multi-plant context.

What do you want to highlight to future investors?

The market volume of software applications for logistics and intralogistics is currently estimated at 14,000 million dollars, and it is estimated that this figure will double by 2025, reaching 24,500 million dollars, with an annual growth rate of 9.7%.

The concept is highly scalable, in particular, in other industrial sectors where the intralogistics machinery is critical in the production processes (Steel Foundries, Mining Industry, Energy Sector and Paper mills to name a few).

We are looking for partners for our international growth!

What are the next steps of the project?

The first services arising from the developments made on this project are currently under commercialization stage.

The remaining services to fully develop the first version of the platform will be ready in 2023.

In 2023 we will commercially target the material handling sector and later on, in 2024 expand the business to other sectors where our solution can be also applied.

SMEs



**IZURUN
TECHNOLOGY S.L.**

Spain
Technological services
Business consulting



Pablo Pedrós Solano
ppedros@izurun.io
+34 678 396 879
www.izurun.io

At IZURUN TECHNOLOGY we bring technology and business together to help companies accelerate their innovation processes.



**DIOGHENIS
INTERNATIONAL**

Romania
Material Handling
Industry



Bogdan Ene
bogdan.ene@dioghenis.ro
+40 721 375 337
www.dioghenis.ro/home.html

Starting since 1994, DIOGHENIS is a reliable partner in material handling, service, training and technical expertise in lifting equipment.



05



FLEETEVEER



**SHORT
DESCRIPTION**

Fleetever is a platform to make international transport easier. On Fleetever you can book, manage and track all your import and export operations.

What challenge does your project address?

Our project is linked to several Galatea challenges: Digitization of the port and Improvement of flow management.

We allow the complete management of import and export logistics flows through an online solution. Fleetever also allows the storage and sharing of information and documents in a secure way.

What do you want to highlight to future investors?

We are at the heart of a huge and growing market: that of international transport (sea and air).

Fleetever has a growth potential is very important, very little competition. The company was created in 2016, we know our market and customer needs.

Finally, we are at the heart of advanced technologies.

What are the next steps of the project?

We continue to create new features: reduction of the carbon impact. We want to offer a solution to optimize logistics flows while reducing the carbon impact of transport.

In the short term we plan to expand abroad in Europe. This establishment abroad is the first step of our international commercial strategy.

SMEs



FLEETEVEER
France
Shipping



Mathieu Roux
m.roux@fleetever.com
+33 430 967 140
www.fleetever.com

Fleetever is a platform to make international transport easier. On Fleetever you can book, manage and track all your import and export operations.



06



NAUSEA 4.0 MODERNIZATION OF MARINAS AND TOURIST PORTS THROUGH DEEP LEARNING TECHNOLOGIES & VIDEO ANALYTICS

**SHORT DESCRIPTION**

NAUSEA 4.0 provides an innovative and disruptive solution for the blue economy and specifically for tourist ports and marina that aim to digitalize the critical port activities, increase profits and also to provide integrated services to their clients.

What challenge does your project address?

NAUSEA 4.0 project delivers new digital services for the marina administrators and for the yachting community, complementing the existing ones that are provided by SAMMY platform. It provides a systematic approach for the digitalisation of the port activities since it complements the existing visualization framework of the SAMMY platform, with advanced video analytics and object recognition algorithms that can provide all the necessary information about the vessel's positions and behavior inside the harbor, by enabling real-time capturing, detection and tracking mechanisms and extract important information related to the occupancy of the berth spots and the maritime traffic.

What do you want to highlight to future investors?

The nautical tourism market requires the adoption of ICT solutions, transforming the marinas into modern facilities, with enhanced autonomy, safety, environmental friendliness and attractiveness. The absence of such systems exacerbates problems such as improper mooring, unnecessary boat maneuvers or activities that affect maritime traffic. From the sea traveler's point of view, the berth space availability, the traffic conditions in relation to safety are the most common concerns. Targeting to a market that consists of more than 1 million berths and 10.000 marinas in Europe, NAUSEA 4.0 services and systems can be considered as a challenging and highly competitive investment opportunity.

What are the next steps of the project?

There is a plan from both partners of the project to demonstrate the project results and gain the first paid customers. As an initial target the newly constructed Marina of Malaga (Spain) has been selected but alternative marinas or Tourist ports can be targeted. The future objectives include the gradual commercialization of the project outcomes along with the continuous improvement and validation of the digital services. In medium term there could be other funding opportunities and mechanisms that will support the technical and business activities of the project while in long term there would be international partnerships and networking for the maximization of the footprint of the solutions in global level.

SMEs

SAMMY
Greece
ICT / Blue Growth



Ioannis Kostopoulos
ioannis@sammyacht.com
+30 26 10 24 00 85
www.sammyacht.com

SaMMY P.C. offers a digital platform for assisting the marinas to manage their amenities and their human capital in an optimal way, to attract more yachts and support their daily activities.



IMCW EUROPE SL
Spain
Business Advisory



Jose de la Maza
josedelaMaza@imcworldwide.com
+34 951 767 973
https://dt-global.com

IMCW Europe SL provides a full range of engineering, economic, financial, environmental and social advisory services.



07



PORTNET



SHORT DESCRIPTION

PORTNET is a disruptive blockchain ecosystem for the development of transparent digital waste management in port ecosystems, offering full traceability since ship-generated waste is discharged at port until its processed by a recycling company.

What challenge does your project address?

The strategic changes towards circular ports, building awareness on the importance of sustainability, and how port authorities can develop circular data-based business models, are progressing very slowly. In fact, 20% Marine Litter comes from ship-generated waste. The current legal framework applicable to ship-generated waste is Directive 2019/883 which has proved inefficient in terms of enforcement of sustainable results. Additionally, the administrative burden for Port Authorities to comply with this Directive has been calculated around 106k EUR.

What do you want to highlight to future investors?

1. Own Blockchain network designed for circular solutions and waste management
2. Digitalization of waste batch to obtain full traceability (tokenization) and Fully reported information through our Big Data and Business Intelligence technology
3. Waste monetization and creation of a decentralized waste market to improve circular behaviours and connect with circular players beyond ports environments.
4. We have invested 300k EUR in PORTNET development (180k € Public funding and 120k € own resources)
5. Ecoembes and the International Port Community System Association's support

What are the next steps of the project?

We have tested our solution in Balearic Islands Port Authority and we plan to replicate the pilot in Barcelona port to validate the results in one of the most important Spanish ports. Moreover we have a strategic partnership with a Singaporean spin-off maritime company to address ASEAN region ports by validating our solution in Singapore.

Once validated in operational environments we plan to address European and ASEAN markets to transform ports in a more efficient and sustainable ecosystems.

SMEs



BLUE ROOM INNOVATION SL

Spain
IT, Blockchain
Developers



Gibovic Denisa
denisa@blueroominnovation.com
[+34 688 464 047](tel:+34688464047)
<https://blueroominnovation.com>

We are focused on designing and implementing blockchain projects applied to sustainability, we have proven track record on waste traceability and process optimization.



08



SMINTIME - SMART INSPECTION FOR MARITIME CONTAINERS

SHORT
DESCRIPTION

The SMINTime project consists in an automated inspection process with robotics, integrated computer vision and AI algorithms that enable the smart inspection of TEUs safely and efficiently.

What challenge does your project address?

The project is addressing a more efficient, digitized, and traceable inspection process for TEUs in the ports through:

1. Elimination of inefficiencies and inaccuracies in the inspection process, with the corresponding economical losses and blaming procedures on the non-traceable container defects.
2. Reduction of personnel risks and potential injuries, linked to the fact of works in height in very windy situations common in ports, leading to accidents, personnel leaves, and economical losses

What do you want to highlight to future investors?

The ports of the future will integrate cutting edge technologies through the inclusion of digitalization, automation, robotics, computer vision and AI. This will raise excellent investing opportunities in both technological assets and inventions, as in technological SMEs developing such technologies. ZeniaLabs AI, Braintronix and Tuito are the Galatea-SMINTime partners and are good examples of SMEs bringing technological solutions to the portuary sector.

What are the next steps of the project?

The technical developments in SMINTime will evolve towards higher TRL levels thanks to the Galatea support and the validation performed with the End User. Field validation will be required during large periods and in different scenarios and situations. Also, learning activities will enable the user acceptance to the new equipments and solutions. Once the systems are mature enough to be integrated and deployed in the real port activities, the solution can be scaled to other European ports and even worldwide.

SMEs

ZeniaLabs
Automation Intelligence



ZENIALABS AUTOMATION INTELLIGENCE
Spain
Robotics and Automation

Javier Sánchez-Cubillo
jscubillo@zenialabs.com
+34 656 768 586
<https://zenialabs.com>

ZeniaLabs Automation Intelligence is a Spanish SME producing AI and robotic-based solutions for simplifying automation tasks in complex environments.

braintronix



BRAINTRONIX SA
Romania
Research and Development

Victor Julien Van Puyvelde
victor@international-t-s.org
+33 673 641 072
www.braintronix.eu

Braintronix company scope is to create intelligent robots through innovative algorithms that use the information gathered from state of the art sensors.

tuito
DIGITAL INTERACTION LAB



TUITO SAS
France
Audio and Voice Processing Software

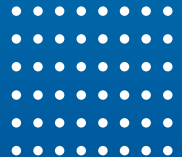
Laurent Molac
laurent.molac@tuito.fr
+33 620 689 195
<http://www.tuito.fr>

TUITO is a AI software development company, specialized in Human Machine Interaction processing solution, with expertise in Audio signal processing solutions and voice recognition technologies.





MARITIME SURVEILLANCE





01



SAFESEA360

SHORT
DESCRIPTION

SafeSea360 is a platform that improves collaborative decision-making in emergency and SAR situations in ports by orchestrating existing video & data sources as well as ad-hoc multi-drone platforms.

What challenge does your project address?

When a major incident occurs in an industrial port, different stakeholders need to cooperate (port authority, companies, police, firefighters, etc). Today they only talk through walkie talkies or radio (audio). It is not possible to share among them existing CCTV cameras, nor mobile phone cameras, drones or sensors on the fly. In addition to that today Crisis rooms are isolated and we make it possible to connect them and allow any type of device for visualization (videowall, tablet, desktop. Smartphone). We make a reality the saying "An image is worth 1000 words" in a safety incident.

What do you want to highlight to future investors?

Industrial ports are economic hubs and any disruption may cost huge amount of money. In case of a critical safety incident, SafeSea360 helps reducing the time or response, improves the resource allocation by anticipating the visual information to all stakeholders and thus maximizes their productivity minimizing the economical impact and maximizing personal security. Platform is modular and is composed by a web application & a multi-drone platform with a portable connectivity network. Our business model is a SaaS subscription. Our proposal is currently escalating in other verticals like firefighters, police and industries.

What are the next steps of the project?

Our next steps are:

Technical:

- Improve quality of visualization in low coverage situations
- Optimize solution for local scenarios where no 4G coverage
- Apply AI into existing streaming video to provide insights for stakeholders to take better decisions

Business Scaling:

- Packetization and modularization of all bricks, making solution more scalable.
- Install pilots to learn and fine-tune to move to TRL 9
- Introduce solution in firefighters, police and industry

SMEs



**BLUE ROOM
INNOVATION SL**

Spain
IT, Blockchain
Developers



Gibovic Denisa
denisa@blueroominnovation.com
+34 688 464 047
<https://blueroominnovation.com>

We are focused on designing and implementing blockchain projects applied to sustainability, we have proven track record on waste traceability and process optimization.



02



SEAI GRASS

**SHORT DESCRIPTION**

SEAI GRASS project aims at creating a single platform that will combine very high/high resolution satellite imagery with high resolution USV (Unmanned Surface Vessel) captures to monitor and study the Posidonia Oceanica meadows of the Mediterranean.

What challenge does your project address?

Posidonia Oceanica, an endemic aquatic plant of the Mediterranean and a protected habitat and species, has suffered a general regression over the past few years. Although Posidonia Oceanica is considered the most important and well-studied seagrass species of the Mediterranean Sea, to date there has been a limited effort to combine all the spatial information available and provide a complete distribution of meadows across the basin. Towards this direction, SEAI GRASS project is mainly targeting the creation of a single platform to integrate high-resolution satellite imagery and autonomous USV (Uncrewed Surface Vessel) data acquisition to obtain high resolution spatial measurements of this protected species.

What do you want to highlight to future investors?

The current attempt to combine satellite imagery with USV (Unmanned Surface Vessel) data for Posidonia Oceanica monitoring has shown great success both in estimating Posidonia presence, its health condition and blue carbon quantification. Through the SEAI GRASS project, the application has only taken place in selected areas of interest, showing promising prospects of being deployed in other parts of the Mediterranean region. Towards this direction and in order to make this happen, future investments for in-situ measurements are deemed necessary.

What are the next steps of the project?

So far, the SEAI GRASS project has tested the Posidonia Oceanica monitoring in a pre-defined area, proving the successful acquisition of in-situ measurements to complement remote sensing data. Their integration in a single platform has been achieved and the next step would be the exploitation of future grants and open calls, in order to implement the application in other parts of the Mediterranean region (Italy, France and Greece).

SMEs

**PLANETEK
HELLAS LTD**
Greece
ICT



Stelios Bollanos
bollanos@planetek.gr
+30 21 52 15 73 90
www.planetek.gr

Planetek Hellas is a Greek SME, operating in the field of Software Development for the On Board and the Ground Segment, Science Data Exploitation and Earth Observation applications.

GPASEABOTS
Blue Floating Technology

GPASEABOTS, S.L
Spain
Maritime



Pau Guasch
p.guasch@gpaseabots.com
+34 673 381 845
www.gpaseabots.com

SEABOTS specializes in the development of marine robotics and unmanned surface vehicles (USVs), facilitating the analysis, conservation and restoration of the marine environment.



03



KITEYE

SHORT DESCRIPTION

KitEye project aim to develop a large range day and night vision for boat. The optics are mounted under a kite which generate power with a small wind turbine onboard. This energy is used to power the optics, gimbal and radio transmission for the winch ground station. The winch can be mounted on various size boats for search and rescue operation, depolluting, fauna and flora observation or Scientific missions.

What challenge does your project address?

We chose to candidate for 3 challenges of Galatea:

- 1. Maritime Surveillance – Environment:**
Preservation of marine and maritime ecosystems
- 2. Maritime Surveillance – Security:**
Detection of illegal activities
- 3. Maritime Surveillance – Security:**
Improvement of search and rescue

What do you want to highlight to future investors?

KitEye can detect object up to 25 Km distance, day or night. The system can be installed on various boat size and is self-sufficient for a 48 hours trial. A static kite lift the payload up to 300 meters and retransmit images to the winch ground station. There is no real limitation in term of achievable altitude except flight regulation. On areas where fly regulation are not constraint, higher altitudes are possible. An operating suitcase with a large screen allow operating the systems and monitoring the camera in the same time. Coast guards, Depolluting campaign or scientist can benefit for the capacity of vision of Kiteye.

What are the next steps of the project?

Next step is going to be full integration of all Kiteye parts into one single product. After this step is complete, the system will be tested at sea to make it operational for the final test of 48hours that will be held at the end of the galatea project (april 2023).

SMEs



KITEWINDER
France
Wind Energy, Design
Office, Resin Molding



Olivier Normand
o.normand@kitewinder.fr
+33 (0)6 03 88 82 52
www.kitewinder.fr

Kitewinder is a French company who works in the renewable energy sector. We develop air-borne wind turbine. Our main product works at 100 meters using a kite.



AKEROS
France
Software



Guillaume Thibault
guillaume.thibault@akeros.com
+33 (0)6 28 36 87 94
www.akeros.com

Akeros is a French company whose expertise comes from its knowledge of software. The diversity and implementation of robotic systems is the main issue we address.



ACR-SYSTEMS
Poland
Optronics



Max Salamonowicz
msalamonowicz@acr-sys.com
+48 793 169 083
https://acr-sys.com

ACR was present in the film industry for 7 years, and it has also provided custom solutions to different industries such as: mining, agriculture, aerospace, renewable energy...



04

**SHORT
DESCRIPTION**

SUIPOL concept is an initiative set up by AGUILA to go further on its support to the Senegalese ministerial teams. Within the framework of the suspicion of pollution leading to the endangerment of the health of Senegalese fishermen. Its objective is to collect pollution data in the marine environment in order to identify risk areas and prevent possible contamination.

SMEs

**AGUILA
TECHNOLOGIES**
France
Innovation, Techfor-
Life, TechforGood



Rémy Mokhtari
remy.mokhtari@aguila.fr
+33 682 146 110
<https://aguila.fr>

Our main solution dedicated to maritime, GAAL, is a complete system for a sustainable management of artisanal fisheries : a VMS beacon, a fisheries monitoring platform, mobile applications.

What challenge does your project address?

Our challenge was to develop a technology that does not exist nowadays: preventing algae pollution before it occurs. In fact, algae pollution is currently a phenomenon that is only monitor once the crisis is ongoing. With our technology, we want build a system that will allow our customer to benefit from a continuous seashores watch, which will work as a whistle-blower in order to protect fishermen from contamination by abnormal pollution.

To do so, our technical challenge was to merge laboratory, in situ and satellite measurements in order to benefit from a reliable diagnostic.

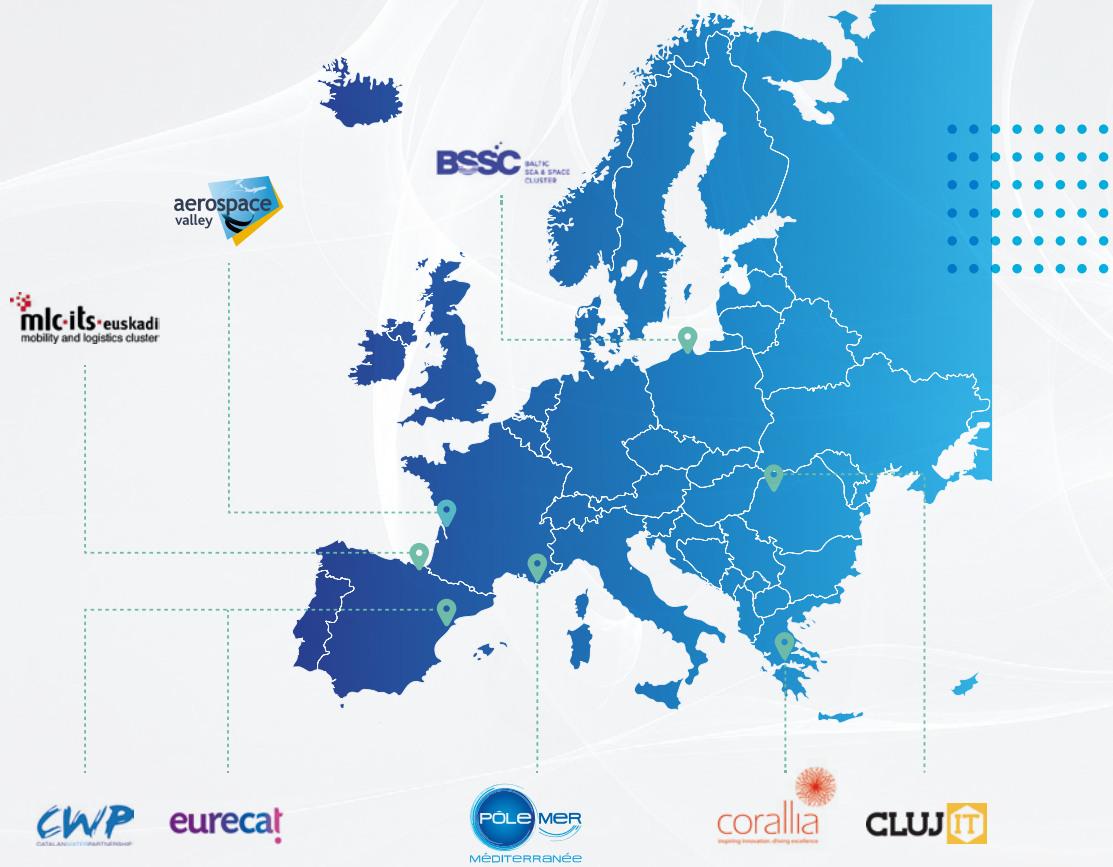
What do you want to highlight to future investors?

As introduced in our application, the proposed project also has a significant economic and environmental impact. It allows for the protection of artisanal fishing, which represents an important economic issue. A pollution disaster could make it disappear while it has created 600,000 jobs for the case of Senegal. It also helps to protect coastal communities, tourism etc... Preserving fishery resources and ecosystems helps maintain fishing activity for future generations, guarantee food security, and contribute to national GDP.

What are the next steps of the project?

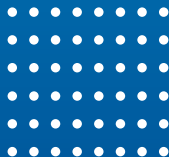
We plan to add this service of Maritime pollution detection system to our current maritime safety solution in 2023/24. In fact, we are already in talks with several customers and prospects in order to make them benefit from this additional service.

Our target is to be fully ready for the roll out projects of our pilot customer planned in 2024/25.





CONSORTIUM PARTNERS



GALATEA consortium gathers 7 experienced and skilled European clusters and 1 technology center. Involved in the support of innovative SMEs, these organisations are convinced that transnational cooperation is a multiplier and crosssectorality an asset for the development of new value chains, aiming to face major challenges related to digitalisation and ecological transition”.



01

→ AEROSPACE VALLEY



France

Mr. Diego Carballo
European projects manager
+33 (0)4 89 33 00 89
carballo@aerospace-
valley.com
www.aerospace-valley.
com/en

Aerospace Valley contributes to the development and competitiveness of its members through innovation by promoting collaborative research and development projects.



Aerospace Valley strongly supports the entire civil aviation value chain by fostering collaborative innovation, training, business development and employment. Beyond aviation the cluster is also active in the sectors of space (both infra and applications), drones & UAV, the defence sector, smart transportation systems or, more transversally, on embedded systems, ICT including AI, or industry 4.0.

Regarding European and international cluster cooperation, Aerospace Valley has been active consortium member of several COSME projects such as EACP-ABROAD (ESCP-4i, coordinator), EACP-EuroSME or more recently SpaceWaves and Space2Waves (ESCP-4i). Aerospace Valley strategically harnesses cross-sectoral and cross-border opportunities offered by emerging industries such as blue growth through its EU-funded (H2020 Innosup 1) projects NEPTUNE, GALATEA. UFO on or Small Flying Objects. The cluster also aims at facilitating access to global business. Aerospace Valley has also been member of Horizon 2020 CSA-type projects such as ICARe, RADIANT or Sunjet II that all aimed at fostering international cooperation regarding aerospace R&T.

02

→ BALTIC SEA &
SPACE CLUSTER



Poland

Mr. Marek Grzybowski
President
+48 505 050 179
contact@bssc.pl
Mr. Krzysztof Anzelewicz
Vice-president
+48 797 990 179
contact@bssc.pl

www.bssc.pl

The BSSC cluster is a key cluster in Central and Eastern Europe and the Baltic Sea region, it is also recognized in the maritime industry on a global scale.



The aim of the Cluster is to support innovation and development in the field of research, entrepreneurship, administration, and local government related to the Baltic Sea Region and the world ocean along with land and water facilities along the course of the Vistula and Oder rivers, economic and social ties of Pomerania and Poland with the countries of the Baltic Sea Region and fulfilling the role of the coordinating institution through:

- creating a network of cooperation between enterprises, local government, universities, and business environment institutions,
- increasing the innovative and integration capacity of maritime economy enterprises and the Vistula catchment area, supporting the construction and innovative development and competitive Cluster
- creating conditions for effective commercialization of research results of universities and research and development units,
- consultancy for enterprises, development of innovative technologies, support for economic initiatives,
- development of professional qualifications and skills of working people to meet the needs of the regional economy,
- participation in European and global organizations, especially in the organization of European clusters,
- participation in the implementation of the priorities and activities of the European Union Strategy for the Baltic Sea Region.



03

→ CLUJ IT CLUSTER

**Romania****Mr. Andrei Kelemen**

Executive Director
+40 755 122 057
andrei.kelemen@clujit.ro

Mr. Stelian Brad

President
+40 730 017 126
stelian.brad@clujit.ro

www.clujit.ro

Cluj IT is an innovative cluster association, a bottom-up initiative founded in October 2012, with over 90 members. With a vision of change, Cluj IT aims to increase the competitiveness and visibility of the Romanian IT industry, as well as to position the NW Region of Romania as an innovative digital hub.



Cluj IT cluster has a unique particularity being one of the largest and oldest clusters in the country and at the same time the only one with 12 public universities members and 2 national research centers. As an active promoter of innovation, Cluj IT has recognized the importance of IT industry collaboration with the academic and research environment and other stakeholders along the industry's value chain and it provides a platform where cooperation and innovation are drivers of a planned change, which is to move companies from an industry based mainly on outsourcing to proprietary products (and services).

Cluj IT's strategic activities are driven by the needs and directions identified from within the cluster ecosystem and supported through strategic collaborations and transnational and cross-sectoral projects. At the ecosystem level, Cluj IT focuses its activities on 6 directions corresponding to the 6 internal groups: WG Data Intelligence, WG Brained City, WG Internationalization, WG Learning and Development, WG Digital Health, WG Cybersecurity & Blockchain.

For the past 10 years Cluj IT Cluster has directed its focus and activities to supporting the ecosystem in its journey on becoming more resilient and more sustainable. In this regard, the cluster channeled its capability and actively contributed in developing new mechanisms and instruments by being part of strong European funded projects, but not limited to (8 projects in implementation at the moment).

04

→ CORALLIA

**Greece****Ms Nektaria Berikou**

International
Collaborations Manager
+30 210 63 00 770
galatea@corallia.org
<https://corallia.org>

Corallia is an incubator, youth entrepreneurship accelerator and multi-Cluster facilitator that implements targeted interventions focusing on the management of Clusters, Incubators and Entrepreneurship Programmes.



Driven by the vision to establish the brand name "Innovation Designed in Greece", Corallia implements since 2005 targeted interventions of sustainable innovation ecosystems such as Clusters, Incubators & Entrepreneurship Programmes playing a key role in the development of the Greek startup ecosystem.

In specific, it implements the most prominent accelerator in Greece in cooperation with Eurobank, the egg (enter-grow-go), the STARTAB Programme in partnership with Prince's Trust, the ESA BIC Greece Programme and many open innovation events (CASSINI Hackathon, ActinSpace, Copernicus hackathons). Corallia has also coordinated three highly specialised technology clusters with > 175 members, the gi-Cluster (Digital Creative Industries Technologies & Applications), mi-Cluster (Nano / Microelectronics Systems & Applications) & si-Cluster (Space Technologies & Applications). In addition, it manages the operation of the Innohub Business Innovation Center in Athens.

Corallia constantly pursues and establishes strategic European and global collaborations with the ultimate goal to facilitate SMEs' internationalisation and nurture cross-sectoral innovation through the development of new industrial competitive value-chains in key sectors of the Greek economy.



05



CATALAN WATER PARTNERSHIP (CWP)



Spain

Mr. Xavier AMORES

Cluster Manager
+34 664 648 209
xavier.amores@cwpcat.com
www.cwpcat.com

The CWP is the water cluster of Catalonia. Encompasses more than 120 entities representing the overall water value chain. CWP's aims are to increase the competitiveness of its members and the sustainability in the use of water.



The CWP is the water cluster of Catalonia. It is recognized in the Catalan and Spanish programs and has the Excellence Gold Label by the European ESCA. CWP encompasses more than 120 entities of different typology and representing the overall water value chain, such as SMEs, engineering companies, research centres, universities, utilities, manufacturers, or public administration, among others. The general aims of the CWP are to promote the competitiveness and the sustainability in the water sector. Depending on the individual needs of each one of the partners, the cluster can provide a wide range of services such as business and internationalization support, networking and training, promotion of the R&D in the sector, facilitate the technology transfer or search for project funding.

The CWP promotes R&D projects at Catalan, Spanish and EU levels, interacting with other clusters, knowledge providers and companies from other regions and countries. These projects are conceived to facilitate the water sectors to overcome different challenges like water scarcity, micropollutants, network efficiency and digitalization, among others. Moreover, the CWP appears regularly in the press and the media, organizes webinars, or other events such as specific workshops or webinars to facilitate the contact and collaboration among the different actors of the water sector.

06



EURECAT TECHNOLOGY CENTRE



Spain

Mr. Aitor Corchero

Senior Researcher
+34 973 193 660
aitor.corchero@eurecat.org
https://eurecat.org/en

EUT is a Technology Centre in Catalonia that manages a turnover of 50M€ with 650 professionals. EUT is involved in more than 200 R&D projects and has a customer portfolio of over 1.600 clients. Technology transfer is an essential activity in Eurecat, with 36 international patents and 7 technology-based companies.



EUT R&D, innovation and training activities span from Industrial Technologies (metallic, plastic and composite materials, manufacturing processes, autonomous and professional robotics, functional printing and fabrics, simulations, sustainability and Chemistry) to Digital Technologies (Digital Humanities, Big Data Analytics, IT Security and Applied Artificial Intelligence, e-health, data mining and multimedia technologies) Sustainability (Water, Air, Soil, Waste, Energy, Batteries and Environmental Impact) and Biotech (Omic science and Nutrition & health). Additionally, EUT has been accepted by the European Commission as a KETs (Key Enabling Technologies) Technology Centre to collaborate with SMEs on close-to-market research and innovation activities.

In GALATEA, EUT provides his climate, water and blue economy expertise in terms of digitalization and industry 4.0. In this regards, EUT role is to give advice and support to SMEs in the elaboration of technologies susceptible of being exploited and promoted in the following areas: (i) Smart Ports and Logistics; (ii) Smart Ships; (iii) Smart Shipyard; and (iv) Maritime Surveillance. This service include the promotion of novel technologies such as artificial intelligence applied to the process optimization, machine learning algorithms for risk assessment, novel digital systems for the port transition to industry 4.0, etc. Main services that EUT could offer are related to: (i) consultancy digital services for SMEs and authorities; (ii) public programs funding opportunities; and (iii) support in the elaboration of business plans in terms of digitalization.



07

→ BASQUE MOBILITY
AND LOGISTICS CLUSTER

Spain

Ms. Leire Balzategui
Strategic Area Manager
+34 685 74 09 12
lbalzategui@mlcluster.com
<https://mlcluster.com/>

Since 2005 the Basque Mobility and Logistics Cluster works in the fields of people mobility, freight logistics and related industry developing transport products, solutions, services and specific technologies (ITS –Intelligent Transport Systems) which make mobility safe, efficient, sustainable and technologically advanced.



The Cluster works in the areas of innovation, internationalisation, cooperation and promotion. Its mission is to drive the development and strengthening of companies and associated stakeholders by boosting innovation, internationalisation, sectoral cooperation and fostering synergies with other sectors. The objective is to offer a broad concept of Mobility and Logistics, facilitate dynamic cooperation between stakeholders, enhance competitiveness, offer a differential value proposition, and interact with the other sectors.

The Cluster seeks to consolidate its position as the cluster organisation of excellence, by promoting the efficient and sustainable competitive improvement of the sector in the Basque Country, by supporting the development of Basque strategic sectors and by contributing to a better quality of life for society.

The activity of its 111 members reaches 15% of the Basque Country's GDP, with an investment of 3.3% allocated to R&D.

08

→ PÔLE MER
MÉDITERRANÉE

France

Mr. Colin RUEL
Head of Europe department
+33 (0)4 89 33 00 89
europe@polemermediterranee.com
<https://en.polemermediterranee.com>

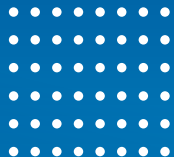
As a sea innovation cluster, Pôle Mer Méditerranée ambitions to sustainably develop the maritime and coastal economy in the Mediterranean basin, in Europe and in the world by developing innovative projects and supporting development of companies.



Certified as a global competitiveness cluster since 2005, Pôle Mer Méditerranée, based in South of France, brings together and supports SMEs, MSCs, large groups and research and training organisations around six areas of the Blue Economy with high innovation potential:

- Maritime defence, security, and safety
- Naval and yachting
- Marine energy and mining resources
- Marine biological resources
- Coastline and marine environment
- Ports, infrastructures and logistics

In SUD Provence-Alpes-Côte d'Azur, Occitanie and Corsica regions, Pôle Mer Méditerranée gathers an important and strong network of more than 470 members, around maritime and coastal themes with high societal and environmental challenges. It promotes the emergence and development of innovative collaborative projects and supports its members in the growth of their businesses.



GALATEA project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement n°879026.

www.galateaproject.eu
info@galateaproject.eu

