DESTINI

SMART DATA PROCESSING AND SYSTEMS OF DEEP INSIGHT http://www.destini2020.eu



Deliverable 4.1

List of DESTINI's Strategic Partners and Stakeholders

Document details:

Editor :	A.S. Andreou
Contributors :	CUT, UNIROMA, JADS
Date:	11/01/2023
Version:	V7.0

Document history:

Version	Date	Contributor	Comments
1.0	15/06/2022	A.S. Andreou	Initial document, structure and content
		S. Mappouras	
		A. Christoforou	
		P. Christodoulou	
		M. Pingos	
2.0	21/07/2022	A.S. Andreou	Additions of new stakeholders' meetings
		S. Mappouras	minutes and notes
3.0	05/08/2022	A.S. Andreou	First review
		Partners	
4.0	07/09/2022	S. Mappouras	Corrections and additions
5.0	05/09/2022	A.S. Andreou	Final review
6.0	29/09/2022	Partners	Final review & approval
7.0	11/01/2023	A.S. Andreou	Document Revision
		S. Mappouras	

Contents

1.	Introduction	5	
1.1	1 Purpose		
1.2	2 Definitions, Acronyms, and Abbreviations		
1.3	Overview	5	
2.	List of Strategic partners and stakeholders	6	
2.1	CYPRUS INSTITUTE OF NEUROLOGY AND GENETICS (CING)	6	
2.2	PARADISIOTIS GROUP	7	
2.3	CYPRUS SUBSEA CONSULTING & SERVICES	8	
2.4	SEWERAGE BOARD OF LIMASSOL	9	
2.5	LIMASSOL WATERBOARD	10	
2.6	LIMASSOL MUNICIPALITY	11	
2.7	MINISTRY OF ENERGY, COMMERCE, INDUSTRY AND TOURISM	12	
2.8	CYPRIOT MINISTRY OF AGRICULTURE, RURAL DEVELOPMENT AND ENVIRONMENT – VETERINARY SERVICES	13	
2.9	OKYPY - State Health Services Organization of Cyprus	14	
2.10	2.10 Lemissoler Navigation Co		
2.11	2.11 Uniteam Marine Navigation Ltd		
2.12	2.12 Lefkonoitziatis Dairies		
2.13	2.13 Climate-KIC and the Innovation & Technology Office		
2.14	2.14 KPMG		
2.15	2.15 SOFTONE		
2.16	2.16 CYENS – CENTER OF EXCELLENCE		
2.17	2.17 ERATOSTHENES CENTER OF EXCELLENCE (CoE)		
2.18	2.18 DIGITAL HERITAGE RESEARCH LABORATORY		
2.19	2.19 Aratos Group		
2.20) Aratos Maritime	25	
2.21	2.21 New.Co		
2.22	2 Blockchain2050	27	
2.23	3 Aratos Medica	28	
2.24	2.24 Xiotec Limited		
2.25	2.25 Dublin City University		
2.26	2.26 University of Peloponnese		

	2.27 Panteio University of Social and Political Sciences	32
	2.28 University of Patras	33
	2.29 City, University of London	34
	2.30 Neapolis university of Pafos	35
	2.31 Deputy Ministry of Shipping Cyprus	36
	2.32 Ministry of Transport, Communications and Works of Cyprus	37
	2.33 HSD SpA	38
	2.34 Rota Laser Dies srl	39
	2.35 ISS - Italian National Institute of Health	40
	2.36 TAS-I	41
	2.37 KU Leuven	42
	2.38 University of Padua	43
	2.39 Ministry of Justice	44
	2.40 Beyond Gravity	45
	2.41 ABB Sace	46
	2.42 Over Technologies	48
	2.43 ASML	49
	2.44 Quantile	50
3.	Conclusions	51

1. Introduction

1.1 Purpose

This document presents a list that includes all the strategic partners and stakeholders of the project. In this context, the capacity and line of business of each entity is described, as well as potential fields of collaboration with the consortium of DESTINI.

This deliverable is part of Work Package 4 (WP4) that describes the actions needed to be taken from the consortium to engage industrial and business stakeholders and establish direct communication channels for feedback and collection of real-world data that will facilitate experimentation and validation, and prepare the road for future piloting. Furthermore, WP4 suggests methods and actions followed by the consortium to extend the community and networks of strategic research collaborators, and support sustainability by attracting EU and national funding in the future.

1.2 Definitions, Acronyms, and Abbreviations

CUT: Cyprus University of Technology

CING: Cyprus Institute of Neurology and Genetics

CoE: Centre of Excellence

CYENS: Centre of Excellence (formely known as RISE)

SBLA: Sewerage Board of Limassol

WBL: Waterboard of Limassol DCH: Digital Cultural Heritage

1.3 Overview

The rest of the document is structured as follows: Section 2 includes the list of stakeholders and strategic partners identified during the duration of the project, in which includes the profiles of the aforesaid organizations and a description regarding potential fields of collaboration with the consortium of DESTINI. Section 3 concludes the document.

2. List of Strategic partners and stakeholders

2.1 CYPRUS INSTITUTE OF NEUROLOGY AND GENETICS (CING)

1. Profile

CING is a bi-communal, medical, research and academic center that combines education, services, and research activities. CING is dedicated to serve the society through preventing diseases and medical care, while offering research and educational programs on neurology and genetics. CING is dedicated to lessening the suffering of patients and their families and preventing diseases through patient care, research and educational programs on neurological and genetic conditions such as muscular dystrophy, multiple sclerosis, epilepsy, chromosomal abnormalities and all other aspects of molecular biology and genetics such as thalassaemia, molecular virology, mental retardation, cardiovascular disease, stroke, cystic fibrosis and neurogenetics. Moreover, CING plays a key role in the fight against crime by providing specialized DNA services to the police authorities and expert court testimony for criminal and civil investigations.

Contact: George Spyrou, georges@cing.ac.cy

2. Potential fields of collaboration

DESTINI in collaboration with the Cyprus Institute of Neurology and Genetics shall blend expertise into the utilization of smart data processing techniques such as machine learning and BPM, to contribute to the solution of problems such as pattern recognition, process analysis, etc. in areas that CING has expertise at, such as:

- Neurobiology,
- Genetics,
- Molecular biology,
- Bioinformatics, etc.

2.2 PARADISIOTIS GROUP

1. Profile

Paradisiotis is one of the most technologically advanced food production companies in Cyprus. It started in 1975 with one small center, and now it has 4 centers using the latest technology, to ensure the best service for the whole country. Paradisiotis Ltd is not only one of the largest and most accomplished companies in the field of chicken farming in Cyprus but ever since the company's inception in 1975, it has always looked to producing the best products for the Cypriot consumer. The company's mission has, and will always continue to be, to produce tasty, easy to prepare quality products to satisfy the pocket and the needs of every individual person in Cyprus. Paradisiotis Ltd holds approximately 25% of the food product market and thus is due to the fact that the company and its employees adhere values. This value includes teamwork, innovation, quality products, good service and the respect for the needs of the Cypriot consumer, always trying to improve the range of products and services to suits their needs.

Contact: Pavlos Paradisiotis, pavlos@paradisiotis.com

2. Potential fields of collaboration

DESTINI in collaboration with the Paradisiotis Group shall apply smart data processing technologies and techniques on the procedure of poultry production, in order to take advantage of the modern machinery and further enhance the production line of the company. This can be done through joint National or EU-funded projects:

- Business Process Mining: Identification of bottlenecks in the production line, such as the breeding procedure and/or the delivery routes in order to save energy and time, leading to financial benefits for the company.
- Machine Learning: Visualization and Analytics of the production, and ultimately develop a decision support system to help the personnel to take wiser decisions regarding the processes.
- Blockchain: Blockchain can be used to track the production line, secure critical data, and share critical data regarding medications of the chicks to authorized users, such as the authorities.

2.3 CYPRUS SUBSEA CONSULTING & SERVICES

1. Profile

Cyprus Subsea Consulting & Services was founded in 2012 blending academic and technical expertise with seagoing and survey experience. The organization's main mission is to operate, maintain, develop, and supply ocean gliders and other innovative marine monitoring products while delivering excellent marine services.

Contact: Kyriakos Mavris, kmavris@cyprus-subsea.com

- Cyprus SUBSEA consulting expressed its interest in techniques and technologies revolving around smart data processing, such as IoT, Blockchain, Digital Twins, which could possibly be used to tackle problems and challenges identified in underwater surveillance.
- Such problems are the measurement of water substances and evaluation of water pollution cases by nearby vessels

2.4 SEWERAGE BOARD OF LIMASSOL

1. Profile

The Sewerage Board of Limassol is responsible for the construction, operation, and maintenance of the central sewerage system for the collection and treatment of municipal wastewater of the central Limassol area, as well as the construction of the basic infrastructure of the stormwater drainage system.

Contact: Yiannis Tsouloftas, info@sbla.com.cy

- SBLA, as a stakeholder of DESTINI, shall adopt the knowledge and expertise acquired through
 the project regarding the technologies of IoT, Digital Twins, Smart Data Processing in order to
 develop predictive maintenance techniques for enhancing the monitoring of the sewerage
 system and ultimately optimize the maintenance strategy around the sewerage system.
- Such application can lead to future collaboration between the consortium of DESTINI and SBLA.

2.5 LIMASSOL WATERBOARD

1. Profile

Limassol Waterboard (WBL) is a public entity of Cyprus, and is responsible to provide sufficient quantity and quality and water in order to meet the domestic, commercial and industrial needs of its consumers. The organization main activities are maintaining and expanding the water supply network, imposing water rates, maintenance of the water network, etc.

Contact: Sokratis Metaxas, SocratesM@wbl.com.cy

2. Potential fields of collaboration

The Waterboard of Limassol, as a stakeholder of DESTINI, shall adopt the knowledge and expertise acquired through the project in order to solve two major problems regarding the maintenance of the water network:

- 1. Enhanced monitoring
- 2. Identification of problems on the main pipes of the water network

Ideas have been expressed on applying IoT devices to the most important water pipelines of the water network, and ultimately develop a Digital Twin ecosystem that will be combined with machine learning and smart data processing, in order to provide predictive maintenance strategies, monitoring and real-time data visualization. The main issue is that the pipe network is vast, it covers long geographical distances and is located in difficult terrains and inaccessible areas. Therefore, technology for detecting early and accurately any damages or leakages to the network is of paramount importance.

2.6 LIMASSOL MUNICIPALITY

1. Profile

Limassol Municipality is a governmental entity which is responsible to provide public services within the geographic area of Limassol, such us law, cultural, traffic police, cleaning, etc., to the citizens of Limassol. Limassol is a city on the southern coast of Cyprus and capital of the district with the same name. Limassol is the second largest urban area in Cyprus after Nicosia, with an urban population of 183,658 and a metropolitan population of 239,842.

Contact: Haris Trikkis, haris@trikkis.com.cy

2. Potential fields of collaboration

Transformation of the city of Limassol into a Smart City, using cutting edge technologies such as machine learning, blockchain, digital twins. All these combined with smart data processing and systems of deep insight. Each technology will contribute to the municipality's strategic plan and DESTINI's objectives as follows:

Digital Twins

Monitor of the Smart City as an entity, using IoT devices for different sectors, such as traffic management, energy conservation, safety measures, etc.

Blockchain

Using blockchain, the City can assure the interoperability, immutability and security of crucial data. Blockchain layers can be applied to almost any developed software system.

Smart Data Processing

Smart data processing techniques will be used where applicable, making the processing of the data more efficient, optimizing processes and reducing energy consumption of energy-intensive machinery or services. Special attention will be given to the environment as well. Indicative example is the routes and timetables of garbage collection to avoid causing traffic jam to the city center and optimize routes to save fuel.

2.7 MINISTRY OF ENERGY, COMMERCE, INDUSTRY AND TOURISM

1. Profile

The main objective of the Ministry of Energy, Commerce, Industry and Tourism is the development of Cyprus' economy, through the continuous support of the trade sectors, services, industry, energy, technology and tourism, as well as the strengthening of competition and the protection of consumers' interests. Among the Ministry's priorities, is the creation of the appropriate business environment, by implementing the legislation regarding the registration of companies, trademarks, business names and property rights.

Contact: Constantinos Karageorgis, ckarageorgis@mcit.gov.cy

2. Potential fields of collaboration

DESTINI in collaboration with the Ministry of Energy, Commerce, Industry and Tourism will focus on examining ways that knowledge acquired during DESTINI can be applied and contribute to the ministry's vision and goals. Some ideas of this collaboration could be:

 Examine the energy consumption of energy-intensive machinery using analytics and predictions obtained through smart data processing techniques

2.8 CYPRIOT MINISTRY OF AGRICULTURE, RURAL DEVELOPMENT AND ENVIRONMENT – VETERINARY SERVICES

1. Profile

The Ministry of Agriculture, Rural Development and Environment aims at promoting sustainable development for agriculture and fishing, while contributing to environmental protection and sustainable management of both the environment and Cyprus natural resources through projects, initiatives and actions.

The Ministry's vision is a sustainable, "green" and "clean" Cyprus, which develops along the principles of sustainable development in agriculture and fishing, protects the environmental and manages natural resources effectively, while creating employment opportunities and enhancing the citizens' quality of life.

Contact: Maria Botsaris registry@moa.gov.cy

2. Potential fields of collaboration

DESTINI, in collaboration with the Cypriot Ministry of Agriculture, Rural Development and Environment – Veterinary Services, will examine ways that knowledge acquired during DESTINI can be applied and contribute to the ministry's vision and goals. Some ideas of this collaboration could be:

- Smart Agriculture
- BPM on waste Management
- Analytics and Decision Support System based on KPIs defined by the ministry

2.9 OKYPY - State Health Services Organization of Cyprus

1. Profile

State Health Services Organization is the backbone of the National Health Care System of Cyprus, aims to offer the highest quality of healthcare to the citizens of Cyprus. The organization has 7000 personnel including more than 700 doctors, 1350 beds in 9 hospitals, 38 primary health care centers, mental Health hospital and clinics and the ambulance emergency response service covering all of Cyprus. SHSO is constantly seeking ways to upgrade their services, enhance their facilities, medical equipment, and abilities of their staff. The organization is collaborating with Academic and Scientific Institutions of Cyprus and abroad, and participates in research and training programmes.

Contact: Efthyvoulos Kyriacou, efthyvoulos.kyriacou@cut.ac.cy

2. Potential fields of collaboration

DESTINI in collaboration with the Health Services Organization through a faculty member at CUT that does not participate in the project's team will examine ways that knowledge acquired during DESTINI can be applied and contribute to the ministry's vision and goals. Some ideas of this collaboration could be:

- Efficient and quick data storage/retrieval of emergency data using Data Lakes
- Application of Business Process Mining techniques to make the emergency response procedures faster and more efficient
- Enhancement of the security of sensitive patient data using blockchain

2.10 Lemissoler Navigation Co

1. Profile

Lemissoler developed from a regional Liner Shipping Company into an established Shipping Group operating globally. The company provides dry bulk cargo marine transportation services, with uncompromised obedience to their flagship Corporate Environmental Responsibility.

The main focus of lemissoler is trusted Shipping and Purpose to create Value, and they are trying to achieve that by continuously adapting their strategy to the ever-changing environment of the maritime industry. Additionally, lemissoler diversifies the fleet operation on both the spot and period market and offer core businesses of Ship Management, Commercial Management, Corporate Management and Research & Development always with an emphasis on Corporate Responsibilities, Innovation and Digitalization.

Contact: Philippos Philis, info@lemissoler.com

2. Potential fields of collaboration

DESTINI in collaboration with Lemissoler Navigation Co shall communicate with expert personnel and examine ways that knowledge acquired during DESTINI can be applied on maritime cargo transportation:

- Monitoring of the vessel flit using digital twins
- Enhancing trust of the company's data using blockchain
- Smart data processing for maritime shipping applications

2.11 Uniteam Marine Navigation Ltd

1. Profile

Uniteam Marine Navigation Ltd. is an international ship management organization that provides industry-leading services to ship owners and ship managers across a wide range of countries and jurisdictions. The company covers full management, technical management and crew management, and offer to their clients the core support they need to operate and safeguard their vessels.

Contact: Nikolas Asimenos, nassimenos@uniteammarine.com

2. Potential fields of collaboration

DESTINI in collaboration with Uniteam Marine Navigation Ltd will seek collaboration and examine ways that knowledge acquired during DESTINI can be applied on maritime ship management:

- Visualization and decision support tools to assist the ship management procedures
- Adoption of BPM to enhance the processes and identify bottlenecks
- Blockchain Integration to ensure the security of the data using complex cryptography algorithms

2.12 Lefkonoitziatis Dairies

1. Profile

The company processes milk and produces a series of Halloumi and other traditional dairy products. Halloumi and Yoghurt are the main products the company manufactures today. The majority of the Halloumi made is exported to other EU countries with the UK and Sweden being the biggest markets.

Contact: info@lefkonitziatis.com

2. Potential fields of collaboration

DESTINI in collaboration with Lefkonoitziatis Dairies will seek collaboration and examine ways that knowledge acquired during DESTINI can be applied on dairy production:

- Digital Twin to monitor the industrial environment
- Supply chain management using smart data processing
- Blockchain Integration to track the food supply chain

2.13 Climate-KIC and the Innovation & Technology Office

1. Profile

EIT Climate-KIC is a Knowledge and Innovation Community (KIC), working to accelerate the transition to a zero-carbon, climate-resilient society.

Supported by the European Institute of Innovation and Technology, the organization identifies and supports innovation that helps society mitigate and adapt to climate change. A decarbonised, sustainable economy is not only necessary to prevent catastrophic climate change, but presents a wealth of opportunities for business and society.

Contact: Alexandrod Charalambides, a.charalambides@cut.ac.cy

2. Potential fields of collaboration

DESTINI in collaboration with 2.13 Climate-KIC and the Innovation & Technology Office will seek collaboration and examine ways that knowledge acquired during DESTINI can be applied on environmental applications:

- Digital Twin to monitor air and sea pollution including coastal lines
- Smart data processing for analyzing and predicting the spread of animal diseases incorporating climate and geomorphological conditions in the models used.
- Blockchain Integration to track spread of climate change and/or animal diseases

2.14 **KPMG**

1. Profile

KPMG is a global network of independent member firms offering audit, tax and advisory services. The firms work closely with clients, helping them to mitigate risks and grasp opportunities. Member firms' clients include business corporations, governments and public sector agencies and not-for-profit organizations. They look to KPMG for a consistent standard of service based on high order professional capabilities, industry insight and local knowledge. KPMG member firms can be found in 153 countries and territories. Collectively they employ 207,000 people across a range of disciplines. Through helping other organizations mitigate risks and grasp opportunities, KPMG can drive positive, sustainable change for clients, KPMG's people and society at large. KPMG leads with a commitment to quality and integrity across the KPMG global organization, bringing a passion for client success and a purpose to serve and improve the communities in which KPMG firms operate.

Contact: Elia Kouzari, elia.kouzari@kpmg.com.cy

2. Potential fields of collaboration

The research interests between DESTINI and KPMG align in the context of Business Process Mining. Furthermore, the two teams shall seek collaboration on:

- Developing a BPM tool
- Investigating BPM models & techniques
- Researching about new BPM approaches

2.15 SOFTONE

1. Profile

SOFTONE is a leading group of business software companies, focused on the development, provision and support of ERP & CRM solutions, Cloud & Mobility services, Professional Accounting solutions, Electronic Invoicing & EDI services. Today, SOFTONE GROUP employs 320 technology experts and industry professionals. The company's award-winning applications and solutions are used by more than 47,000 businesses and are supported through a Network of 600 partners in five European countries. Being one of the first software vendors in Europe to offer its ERP solution as a cloud service (SaaS), SOFTONE GROUP is the undisputed leader of the Greek Cloud ERP market and a decisive player in Southeast Europe with more than 4,500 Software as a Service installations.

Contact: Tryphon Papazoglou, tpapazoglou@softone.com.cy

2. Potential fields of collaboration

SOFTONE is a software company that could be benefitted by integrating knowledge and techniques acquired during DESTINI into their existing solutions:

- Integration of Business Process Mining to ERP systems
- Integration of Machine Learning techniques to enhance the analytics they offer within their software systems
- Application of BPM to SOFTONE's selected customers

2.16 CYENS – CENTER OF EXCELLENCE

1. Profile

The Research and Innovation Centre on Interactive Media, Smart System and Emerging Technologies – CYENS Centre of Excellence (formerly known as RISE), empowers knowledge and technology transfer in the region. CYENS CoE is supported by the European Commission, the Republic of Cyprus and its founding Partners, the Municipality of Nicosia, the Max Planck Institute for Informatics (MPI), University College London, the University of Cyprus, the Cyprus University of Technology and the Open University of Cyprus. CYENS, as a Centre of Excellence, cultivates a culture of innovation and creativity in an inspiring environment filled with academics, researchers, creative and onward-looking people, innovators, entrepreneurs, and practitioners. The Centre operates under the moto "Inspired by Humans Designed for Humans" with the vision to produce world class research that drives innovation towards social and economic benefit while conducting excellent, internationally competitive scientific research in the areas of visual sciences, human factors and design, communication, and artificial intelligence. It sets out to meet the challenge with a total potential funding of more than 30 million Euros for the first 7 years, from a Horizon 2020 Teaming Action and multiple other sources, and a business plan for long-term sustainability and growth.

Contact: Yiorgos Chrysanthou, yiorgos@ucy.ac.cy

2. Potential fields of collaboration

As CYENS has an extensive expertise on human-centric design, GUIs, and graphical environments, some potential fields of collaboration could be:

- Development of Digital Twins
- Development of Serious Games
- Metaverse & NFTs

2.17 ERATOSTHENES CENTER OF EXCELLENCE (CoE)

1. Profile

A new, autonomous, and self-sustained Centre of Excellence, namely ERATOSTHENES Centre of Excellence of the Cyprus University of Technology has been established through the 'EXCELSIOR', H2020 Widespread Teaming Phase 2 project. The newly established center has been created as a result of upgrading the existing Remote Sensing and Geo-Environment Lab, which has been operating within the Department of Civil Engineering and Geomatics of the Cyprus University of Technology since 2007. The vision of the ERATOSTHENES Centre of Excellence is to become a world-class Digital Innovation Hub for Earth Observation, space technology and Geospatial Information and to be the reference Centre in the Eastern Mediterranean, Middle East, and North Africa. The Digital Innovation Hub will create an ecosystem which combines state-of-the-art remote sensing, data management and processing technologies, cutting — edge research opportunities, targeted education services and promotion of entrepreneurship. In order to be dynamic and innovative, the Digital Innovation Hub will be based on two major infrastructures, which are a Satellite Ground Receiving Station and a Ground-based atmospheric remote sensing station. ERATOSTHENES Centre of excellence is paving the way for Cyprus to enter the space arena.

Contact: Diofanos Hadjimitsis, d.hadjimitsis@cut.ac.cy

2. Potential fields of collaboration

As Eratosthenis has an extensive expertise on Earth observations, Satellites and space data, some potential fields of collaboration could be:

- Space Data combined with smart data processing
- Joint Proposals for space related and big data analytics
- Digital Twins with IoT and machine learning

2.18 DIGITAL HERITAGE RESEARCH LABORATORY

1. Profile

The Digital Heritage Research Lab was established in 2013 at the Department of Electrical Engineering and Information Technology of the Cyprus University of Technology. The lab is devoted to research on the digitization, documentation, archiving, preservation, protection and promotion of the tangible and intangible Cultural Heritage remains of our past.

Contact: Marinos Ioannides, marinos.ioannides@cut.ac.cy

2. Potential fields of collaboration

Potential fields of collaboration between the consortium of DESTINI and Digital Heritage Research Laboratory are:

- Blockchain & NFT applications for Digital Cultural Heritage
- Development of joint proposals for digital cultural heritage with smart data processing
- Efficient storing of digital heritage data using data warehouses & data lakes

2.19 Aratos Group

1. Profile

ThAratos Group of Companies was founded in 2003 in Greece, and was among the first companies in Europe to introduce value-added downstream services to every day people, by delivering tailor made products, designed on user needs and specifications.

Contact: Nikos Bogonikolos, nbogonikolos@gmail.com

2. Potential fields of collaboration

Aratos Group research interests align well with the research interests of DESTINI and DESTINI's JRAs. Furthermore, the two groups have several fields of collaboration on new ideas, on the technologies:

- Space Technologies & Space Data
- Smart Healthcare Applications
- Blockchain, NFT and Metaverse
- lot & Digital Twins
- Applications in Space, Healthcare and Maritime

2.20 Aratos Maritime

1. Profile

Aratos Maritime, a member of Aratos Group, was founded in 2020. It aims to deliver and provide an increasing range of value-added products, services and solutions in the fields of maritime industry, focused on bringing the very best in marine operational, technical, analytical skills to clients in the maritime and offshore industry and related business area.

Contact: Dimitrios Mantelis, mantelis@aratos.io

2. Potential fields of collaboration

Aratos Maritime is a newly established company aiming to apply cutting edge technologies on the sector of Maritime. Some of the applications that the company aims to produce perfectly align with the research interests on DESTINI. Some examples are:

- Smart data processing on Maritime applications
- Blockchain on Maritime for securing data, offering traceability and immutability
- Digital Twins for Maritime for efficient monitoring and predictive maintenance

2.21 New.Co

1. Profile

New.Co, a member of Aratos Group aims to offer a variety of blockchain applications as a service, by integrating blockchain layers on existing software systems. In addition, the company offers consultancy services regarding blockchain technology.

Contact: Manolis Chrysostalis, mc@newcotech.io

2. Potential fields of collaboration

New.Co is offering blockchain applications as a service. The collaboration between the consortium of DESTINI can be established in the process of preparing research proposals related to blockchain and web3, as well as combining several technologies such as blockchain & cloud, IoT & Blockchain, BPM & Blockchain, etc.

2.22 Blockchain2050

1. Profile

Blockchain2050 BV is a dynamic SME that implements the latest improvements in Blockchain technology developing secure and innovative blockchain solutions that use standard open-source implementations and provide the much needed transparency.

A member of the Aratos Group and based in CIC Rotterdam, the heart of the MIT business ecosystem, blockchain 2050 also operates through offices in Athens, Greece and Sofia, Bulgaria.

Contact: Peter Tija, info@blockchain2050.io

2. Potential fields of collaboration

The collaboration between Blockchain2050 with the consortium of DESTINI can be established through researching of new methodologies and approaches towards blockchain applications, and blockchain technology in general. In addition, the two groups could establish collaboration through national/EU-funded projects.

2.23 Aratos Medica

1. Profile

Aratos Medica is a rapidly growing medical technology company with applications and solutions for the new era characterized by IoT (Internet of Things) and Blockchain technology.

Contact: Ioannis Dontas, idontas@aratos.io

2. Potential fields of collaboration

DESTINI in collaboration with Aratos Medica can examine ways that knowledge acquired during DESTINI can be applied on Smart Health applications, regarding the technologies:

- Blockchain
- loT
- Machine Learning
- Smart Data Processing

2.24 Xiotec Limited

1. Profile

Xiotec is developing smart access management solutions for small, medium business client and the residential market. The R&D work involves cutting-edge IoT technology, sensors, machine learning, cloud-based software design, and electromechanical design.

Additionally,

- The company is able to provide high-quality technology solutions, combating climate change, and promoting environmental sustainability.
- Their solutions are developed based on the digital twin models for all Research and Development and Supply Chain Management.

Contact: Shiva Periasamy, shivaperiasamy@xiotecltd.com

2. Potential fields of collaboration

Xiotec specializes in creating NFC, RFID solutions. This could be the link towards the establishment of a collaboration, for combining the technologies that Xiotec has expertise on, with smart data processing, and blockchain.

2.25 **Dublin City University**

1. Profile

DCU is one of the world's leading Young Universities, with a mission to transform lives and societies. Through education, research and innovation, we are focused on delivering real impact, and addressing global challenges in collaboration with our partners and stakeholders.

2. Potential fields of collaboration

 Preparation of joint proposals for combining mechanical engineering and cuttingedge ICT technologies

Contact: Inam UI Ahad, inamul.ahad@dcu.ie

2.26 University of Peloponnese

1. Profile

The University of the Peloponnese exploits the potentials offered by the existing legislation to encourage the scientific and research activity of teaching staff with the aim of strengthening the link between education and research.

In this context, the research policy of the University of the Peloponnese follows the process accordingly:

- Exploring potential in participation of teaching staff in research programs.
- Formation of research teams and Research Networks at national and international level.
- Establishment of Research Laboratories.

Contact: Vasilis Triantafillou, vtriantaf@uop.gr

- Preparation of joint proposals
- Thematic topics of interest: eDemocracy, smart data processing and Blockchain

2.27 Panteio University of Social and Political Sciences

1. Profile

Panteion University of Social and Political Sciences is a public university that offers a wide range of scientific fields in the areas of social and political theory and research: international and European studies, science and media, sociology, social anthropology, psychology, political science, history, social policy, public administration, and economic and regional development. Panteion University has shaped the development of the relevant scientific fields in Greece through a long and distinguished history of educational research and social contribution.

Contact: Nikos Leandros, nleandr@panteion.gr

- Preparation of joint proposals
- Thematic topics of interest: eDemocracy, social sciences, journalism, smart data processing and Blockchain

2.28 University of Patras

1. Profile

Besides its distinguished path in education, the University of Patras excels in various fields of basic and applied research. The University of Patras has acquired international prominence in research areas such as Health, Environment, Biotechnology, Mechanics, Electronics, Informatics and Basic Science. A number of its academic Departments, laboratories and clinics have been recognized as centres of excellence on the basis of international assessment. The University of Patras has acquired a reputation for producing quality and innovative research and for taking part in a plethora of research projects, scientific organizations and research groups.

Contact: Spyros Likothanasis, likothan@ceid.upatras.gr

- Preparation of joint proposals
- Thematic topics of interest: Machine Learning & intelligent systems, smart data processing and Blockchain

2.29 City, University of London

1. Profile

City University of London aims to be a distinctive global university known for strengths in business and the professions, but with academic quality similar to other University of London Colleges. The underlying values of the university is to be Ambitious, Collaborative, A community, Diverse and inclusive, Organizationally self-confident.

Contact: Sumsun Naher, sumsun.naher1@city.ac.uk

2. Potential fields of collaboration

• Preparation of joint proposals on the health sector combined with machine learning

2.30 Neapolis university of Pafos

1. Profile

Neapolis University Pafos (NUP) is one of the leading private Universities of Cyprus. Established in 2010, NUP, is a vibrant academic institution with emphasis in the provision of high-quality Higher Education and the creation of cutting-edge applied knowledge, focusing, in parallel, on the provision of optimal academic services to its academic community and the broader society, at a national as well as at an international level.

Contact: Savvas Chahtzichristofis, s.chatzichristofis@nup.ac.cy

- Collaboration on national and European proposals
- Collaboration on national projects for public sectors
- Thematic topics of interest: Smart data processing, Blockchain, NFTs, Metaverse

2.31 Deputy Ministry of Shipping Cyprus

1. Profile

The Deputy Ministry of Shipping Cyprus aims at safeguarding and further developing Cyprus shipping as a safe, socially responsible and sustainable industry, for the enhancement of the national economy and the creation of new jobs, specialisation and expertise in the sector. The vision of the Ministry is to consolidate Cyprus' position as an advanced maritime cluster encompassing the full range of shipping and shipping-related services and a top quality, competitive, sovereign registry.

Contact: VassilioisDemetriades, <u>maritimeadmin@dms.gov.cy</u>

2. Potential fields of collaboration

DESTINI in collaboration with the Deputy Ministry of Shipping Cyprus shall examine ways that knowledge acquired during DESTINI can be applied and contribute to the ministry's vision and goals. Some ideas of this collaboration are as follows:

- Collaboration on national and European proposals for shipping and Maritime
- Collaboration on national projects for the maritime sector of Cyprus
- Application of technology and expertise acquired during the project on Cyprus maritime applications

2.32 Ministry of Transport, Communications and Works of Cyprus

1. Profile

The mission of the Ministry of Transport, Communications and Works of Cyprus is the design and implementation of policies for the continuous improvement of transport (air, maritime and land) and of communications, as well as the continuous upgrading of the quality of projects implemented by the Ministry. In addition, the better promotion and exploitation of the archaeological wealth as well as other resources of the country is pursued.

Contact: Yiannis Karousos, permsec@mcw.gov.cy

2. Potential fields of collaboration

DESTINI in collaboration with the Ministry of Transport, Communications and Works of Cyprus shall examine ways that knowledge acquired during DESTINI can be applied and contribute to the ministry's vision and goals. Some ideas of this collaboration could be:

- Preparation of joint proposals
- Cooperation in the context of national projects that revolve around technologies of digital twins
- Strengthening of ties and links with industrial players in Cyprus under the umbrella term of Industry 4.0

2.33 HSD SpA

1. Profile

HSD Mechatronics designs, produces and sells electrospindles, 2-axis milling heads and technologically advanced components for machining metal, alloys, composite materials and wood. It boasts a structure of 8,000 sq. metres, organised according to the principles of "just-in-time" production. It has its HQ in Italy, and 5 branches located in the main market countries.

HSD produces components for processing all types of materials: metal, wood, composite, glass and stone. It also offers solutions for every kind of application: High power cutting, High speed cutting, Motion and Electronics.

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

HSD has undertaken an initiative, named Electrospindle 4.0, for digitalizing products, production processes and services according to the principles of Industry 4.0 and smart manufacturing. A collaboration on these topics is already in place with Sapienza, and the interest in DESTINI is particularly with respect to research outcomes of the project also transferable in their scenario. A continuous alignment between HSD and DESTINI has been carried out during the project (cf. the seminars given by HSD representatives in the DESTINI schools).

Moreover, HSD is interested in preparation of joint proposal, especially at the EU level, and cooperation in national projects around AI/ML approaches and technologies of digital twins.

2.34 Rota Laser Dies srl

1. Profile

Rotalaser is a SME born in 1994 from the partnership between two professional experts from the packaging sector. The market it that one of dies for companies producing boxes or packaging and the goal is to offer high-tech products, accompanied by consulting services on the design and production of cutting-edge tips.

Rotalaser is aimed at those who, in the agri-food, industrial, mechanical and pharmaceutical sectors, need fast and optimized production lines.

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

Rotalaser has undertaken an initiative, named Fustella 4.0, for digitalizing products, production processes and services according to the principles of Industry 4.0 and smart manufacturing. A patent and project on these topics is already in place with Sapienza, and the interest in DESTINI is especially about the techniques of machine learning and image processing investigated in the project thay may also be transferable in their scenario. Rotalaser is particularly interested in preparation of joint proposals at the national level for the National Recovery and Resilience Plan (NRRP), Mission 1 - Industry, part of the Next Generation EU.

2.35 ISS - Italian National Institute of Health

1. Profile

The Istituto Superiore di Sanità (Italian National Institute of Health, literally 'Higher Health Institute'), also ISS, is an Italian public institution that, as the leading technical-scientific body of the Italian National Health Service (Servizio Sanitario Nazionale), performs research, trials, control, counseling, documentation and training for public health. The Institute is under the supervision of the Ministero della Salute (Ministry of Health).

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

ISS has a partnership with Sapienza (and many other Italian universities) on research activities on data management and AI techniques supporting health research, but also the management of funds from the National Recovery and Resilience Plan (NRRP) for the Department of Environment and Primary Prevention. The ISS is interested in the research outcomes of the project in terms of novel data management and analytics techniques, as well as possible employment in the future of ESRs trained on these topics (after a call for applicants, as of current laws), both being also areas of interest to DESTINI's consortium. Therefore, collaboration will be sought in this respect.

2.36 TAS-I

1. Profile

Thales Alenia Space, the joint venture between Thales (67%) and Leonardo (33%), operates in Italy through Thales Alenia Space Italia (TAS-I), which has 2 300 employees at four plants, in Rome, Turin, L'Aquila and Milan. Thales Alenia Space in Italy has over 40 years of experience in building systems and equipment for space telecommunications, navigation, Earth observation, science, exploration and transport. Orbital infrastructures are a particular area of expertise, with Thales Alenia Space Italia delivering half of the pressurized volume on the International Space Station.

The company contributes to many of today's leading space programs, working for both government and commercial customers, including NASA, the European Space Agency (ESA) and the Italian space agency (ASI), as well as leading satellite operators.

Thales Alenia Space in Italy invests massively in Research & Development to support a continuous stream of innovations in all sectors. It has also developed a broad network of partners from both academia and industry, including many innovative small businesses, to support R&D and Production activities.

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

TAS-I has a collaboration with Sapienza in the context of digitization initiatives for the plant of Rome and application of Industry 4.0 principles in general to their production processes. In particular, the interest is about the outcomes of the DESTINI project about Digital Twins and their applicability and transfer to projects financed in the context of the National Recovery and Resilience Plan (NRRP), Mission 1 - Industry, and National Recovery and Resilience Plan (NRRP), Mission 4 - Extended Partnership 15 - Aerospace - Spoke 2.

2.37 KU Leuven

1. Profile

The KU Leuven (or Katholieke Universiteit Leuven) is a research university in the city of Leuven, Belgium. It conducts teaching, research, and services in computer science, engineering, natural sciences, theology, humanities, medicine, law, canon law, business, and social sciences. In addition to its main campus in Leuven, it has satellite campuses in Kortrijk, Antwerp, Ghent, Bruges, Ostend, Geel, Diepenbeek, Aalst, Sint-Katelijne-Waver, and in Belgium's capital Brussels. KU Leuven is the largest university in Belgium and the Low Countries. In 2017–18, more than 58 000 students were enrolled. The Research Centre for Information Systems Engineering (LIRIS) conducts research on business information systems and supply chain management, specifically on process mining techniques for discovering IoT-enhanced business processes, on decision-centric declarative process development, on runtime evolution of IoT processes

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

KU Leuven is aiming at collaborating on topic of interests such as processing mining, IoT analytics, data governance. In addition to targeting top-level publications, the collaboration is aimed at future joint proposals in the Horizon Europe framework. Currently, representatives from KU Leuven and from DESTINI jointly organizes BP-Meet-IoT workshop, cf. http://pros.webs.upv.es/sites/bp-meet-iot2022/

2.38 University of Padua

1. Profile

The University of Padua (Italian: Università degli Studi di Padova, UNIPD) is an Italian university located in the city of Padua, region of Veneto, northern Italy. The University of Padua was founded in 1222 by a group of students and teachers from Bologna. Padua is the second-oldest university in Italy and the world's fifth-oldest surviving university. In 2010, the university had approximately 65 000 students. In 2021, it was ranked second "best university" among Italian institutions of higher education with more than 40 000 students according to Censis institute, and among the best 200 universities in the world according to ARWU.

The Department of Mathematics is named after Tullio Levi-Civita, formerly a student and later a professor at the University of Padua. The department hosts around 120 faculties, 50 PhD students and over 30 postdocs, both in Mathematics and in Computer Science, and benefits from the constant presence of several visiting scholars from all over the world. The department organizes bachelor and master programs in Mathematics and Computer Science and a master program in Data Science, and is a member of the international network "ALGANT".

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

UniPD is interested in the outcomes of the project about process mining and data science in general, and aims at developing further research proposals either at the EU level - Horizon Europe framework - and Italian one, in the context of the PRIN framework (fund for basic research in Italy). Currently the collaboration is based on joint research activities leading to joint publications co-authored by UniPD personnel and DESTINI representatives.

2.39 Ministry of Justice

1. Profile

The Ministry of Justice of Italy (Italian: Ministero della Giustizia) is a department of the government of Italy. Headquartered in Rome, it is headed by the Minister of Justice.

The Ministry of Justice is led by two fundamental functions that are enumerated in the Italian constitution: the organization of the services related to the judiciary and the responsibility to take disciplinary actions against a judge. All other functions are detailed through ordinary state laws. Article 110 of the Italian Constitution explicitly states that the organization and operation of services concerned with the administration of law are entrusted to the Minister of Justice. The minister is entrusted by the parliament as well as the council of ministers, to carry out the administration of correct governance as a means of checks and balances in the country. He also has the power of legislative initiative and the competence to create or remove judiciary.

The Ministry of Justice carries out its fundamental functions within the central structures, such as Rome, and in the judicial offices, tribunals, and courts. The judicial courts are composed of a chief magistrate and a court manager. The chief magistrate heads the judiciary and has the last say on judicial office decisions. The court manager serves as internal assistance to the judge and public prosecutors. The Italian judiciary is divided into three departments: inferior courts, intermediate appellate courts, and courts of last resort. The vertical and hierarchical structure of the courts of the judicial system is mitigated by the esteemed judges and prosecutors of the Superior Council of Magistrates.

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

The Ministry of Justice, in particular DGSIA - Direzione generale per i sistemi informativi automatizzati (general office for information systems and ICT) is interested in the outcomes of the DESTINI project as far as data management techniques and the adoption of datalake technologies, ML/AI and NLP in particular applied to document management inside the Ministry. The collaboration is currently carried out in the context of two initiative involving DESTINI representatives, namely the project datalake@Giustizia, for the ideation and design of the datalake of the Ministry, and the project GiustiziaAgile for the BPR - Business Process Reeenginering of some offices and process mining applied to infer strategic KPI and enforce online monitoring over juridical procedures

2.40 Beyond Gravity

1. Profile

Beyond Gravity is the space-oriented segment of the Swiss technology group RUAG. At a total of fourteen sites in Switzerland (Zurich, Emmen and Nyon), Sweden (Gothenburg, Linköping), Finland (Tampere), Germany (Coswig), USA (Denver, Titusville, Decatur) and Austria (Vienna, Berndorf), Beyond Gravity employs around 1 265 people and posted sales of 339 million Swiss Francs in 2019. Beyond Gravity manufactures payload fairings for a number of launchers, including Arianespace's Ariane and Vega rockets, United Launch Alliance's Atlas 5 500 series, and for ULA's forthcoming Vulcan launcher.[10]

A payload fairing protects the payload from the environment during the ascent, ensuring cleanliness and limiting its exposure to the intense noise, vibration and aerodynamic pressure occurring during launch. Once the dynamic pressure and thermal fluxes fall below a threshold, this structure separates via explosives from the launch vehicle, exposing the payload and reducing the mass of the still accelerating vehicle.

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

Beyond Gravity is building a novel site in Linkoping in order to accommodate a huge contract for a private company willing to launch a satellite constellation. The construction of the site is aiming at incorporating Industry 4.0 principles, in particular the adoption of data lakes and analytics, and digital twins. With this respect, they are interested in the outcomes of the project concerning such aspects, and a collaboration is in place with some representatives of the DESTINI project.

2.41 ABB Sace

1. Profile

ABB is a multinational corporation headquartered in Västerås, Sweden, and Zürich, Switzerland. The company was formed in 1988 when Sweden's Allmänna Svenska Elektriska Aktiebolaget (ASEA) and Switzerland's Brown, Boveri & Cie merged to create ASEA Brown Boveri, later simplified to the initials ABB. Both companies were established in the late 1800s and were major electrical equipment manufacturers, a business that ABB remains active in today. The company has also since expanded to robotics and automation technology.

The ABB Frosinone factory was opened in 1969, and it represents a center of excellence in ABB Group for the design, development, and manufacture of low-voltage circuit breakers (molded case circuit breakers and air circuit breakers). The 150 000 square-meter facility with 800 employees is highly automated and produces around 2,5 million circuit breakers every year. Lean manufacturing has always been its specialty. Pieces are shipped from Frosinone, about 100 kilometers south of Rome, to over 100 countries in less than four days. Flexibility, lean production processes, capacity to efficiently and rapidly meet market demands, and process innovation are some of the most significant characteristics of this site.

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

The Frosinone site is a frontrunner in driving Industry 4.0, with the aim of promoting smart, digitalized and connected operations. In this sense, the company has already adopted some of the tools and technologies that in a few years will be common in production processes, such as big data analysis, collaborative robots, 3D printing and augmented reality, among others. The interest is therefore on the outcomes of the DESTINI project, though an already established collaboration with some of the DESTINI partners

2.42 Over Technologies

1. Profile

Over Technologies was established in September 2012 as a spin-off of the laboratories of Sapienza Università di Roma, with the slogan "We switch off what you forgot", as an exploitation of two FP7 projects, namely SM4All and Greener Buildings. In 2016, the BEMS (Building Energy Management System) is made available on the market and Over received the first EU project award: Horizon 2020 GAIA. In 2018 Over becomes a leader in the Banking sector and makes a revenue of 1,35M€; in 2019, Milan branch opens and Over launch a new product set to become a bestseller: the OSensor, an air monitor device that recorded more than 8.000 installations in its first few months on the market.

Contact: Sapienza University of Rome, Massimo Mecella, mecella@diag.uniroma1.it

2. Potential fields of collaboration

Over Technologies is interested in the outcomes of the DESTINI project in terms of analytics over big data and AI/ML techniques applied to IoT-based data. Moreover, Over Technologies is interested in joint proposals in the Horizon Europe framework.

2.43 **ASML**

1. Profile

ASML is an innovator leader in the semiconductor industry founded in 1984. Today, ASML employs more than 32000 people from 122 nationalities and operates in more than 60 spaces. ASML focuses on created microchips/integrated circuits/semiconductor chips user for smartphones, cars, medical equipment and more. In addition, ASML provides software to go along with its hardware. Their lithography systems follow a hybrid approach, using high-tech hardware and advanced software.

Contact: Ekhtiar Syed, ekhtiar.syed@asml.com

2. Potential fields of collaboration

During discussions, ASML was interested on collaborating with the consortium, with the main interest being blockchain for data management, and tracing of their industry environment. Starting with Blockchain, the company is also interested on applying several technologies in collaboration with the consortium of DESTINI, with the knowledge acquired during the project period. Such technologies are:

- Digital Twins
- Business Process Mining
- IoT
- Machine Learning
- Al

2.44 Quantile

1. Profile

Quantile is a startup company comprised of 3 data scientists that aim to solve problems for their clients regarding data problems. The company is based on Netherlands, and have the capacity to offer technological consulting services, or development of tools to handle data efficiently, in a way to provide insights from the data.

Contact: JADS, Willem-Jan van den Heuvel, W.J.A.M.v.d.Heuvel@jads.nl

2. Potential fields of collaboration

The fields of collaboration between the consortium of DESTINI and Quantile, are based on the team assisting each other in its field of expertise. The consortium of DESTINI discussed the ability to offer the knowledge and expertise acquired in order to assist the company to expand its capabilities. Smart data processing and process mining were the two fields of common interest. Quantile, being a startup company at JADS, showed great interest in collaborating with the consortium on new ideas for proposals to attract funding.

3. Conclusions

This deliverable is a part of work package 4, and includes all a list of strategic partners and stakeholders of DESTINI, providing at the same time a short description of future collaboration plans with each one of them. Over forty (40) stakeholders and strategic partners were described in this document, which include companies, factories, universities, and organizations of the public sectors, their line of business or interests align with the research agenda of DESTINI. Communication with all these stakeholders will continue past the end of the project pursuing the submission of new proposals for attracting future funding and seeking to continue collaboration on applied research.