# Innovation in NEANIAS

## Overview of WP5 Organising Open Calls and Developing Business Cases

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innomine

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NEANIAS

Novel EOSC Services for Emerging Atmosphere, Underwater & Space Challenges

NEANIAS receives funding from European Union under Horizon 2020 Research and Innovation Programme under grant agreement No. 863448

# CONTENT OF PRESENTATION

Describing the role of innovation in NEANIAS

Describe the process on developing Business Cases

Describe the connection between Thematic WP-s and WP5

The aims of WP5 – Business innovation cases

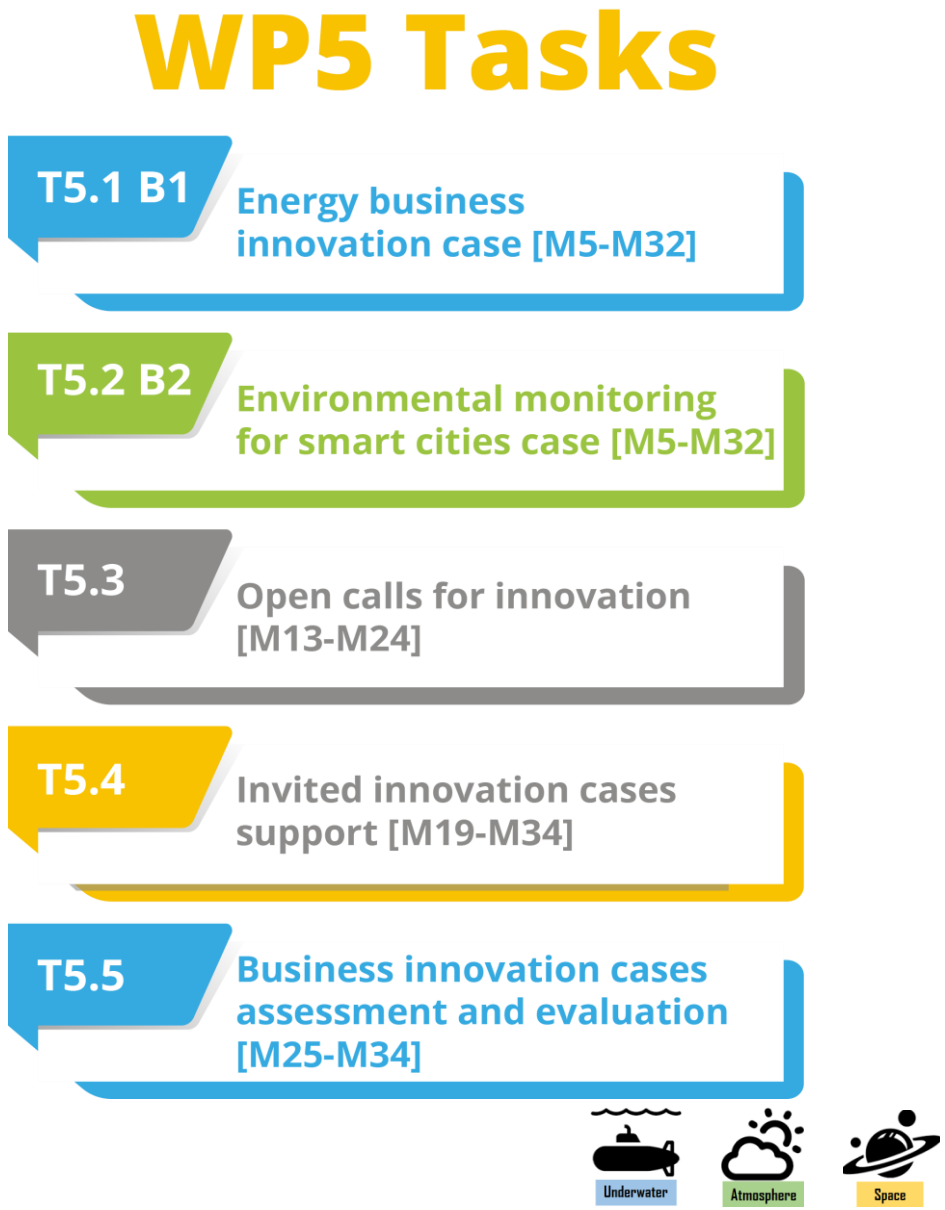
The approach of NEANIAS on fostering open innovation

The concept of interactive value production with the end-users in the frame of WP5

The Open Call Process and results

# Aims of WP5 – Business innovation cases

- ✓Triggering business innovation
- ✓Supporting business cases
- ✓Planning and launching open calls
- ✓Business innovation cases analysis & activity planning
- ✓Support building of innovation capacities



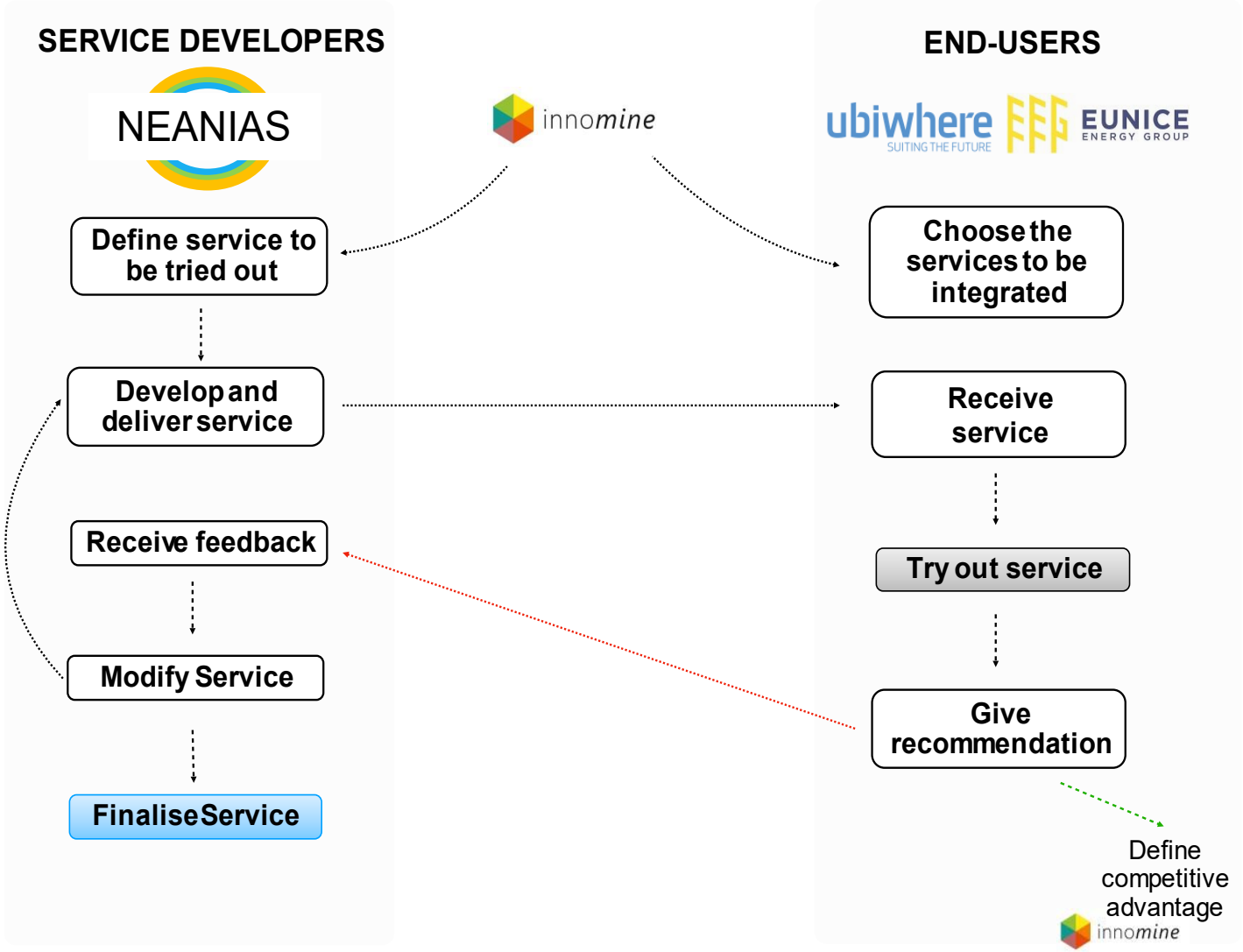
# Objectives of innovation within NEANIAS

- Providing **Sustainable Innovative Services** to the Research Communities
- **Innovation and quality**: delivering high-quality innovative services that can establish a loyal user base and can trigger demand.

NEANIAS approach fostering innovation through

- **technological innovation**
- **business innovation**

# The process of developing Business Cases with the involvement of end-users

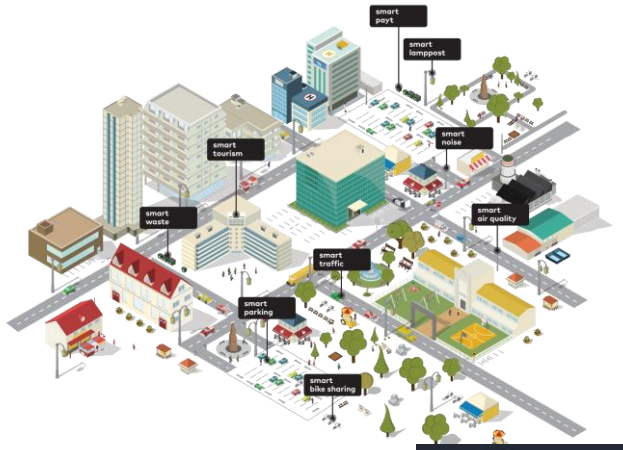


# Business Case 1: B1 - Energy business innovation case

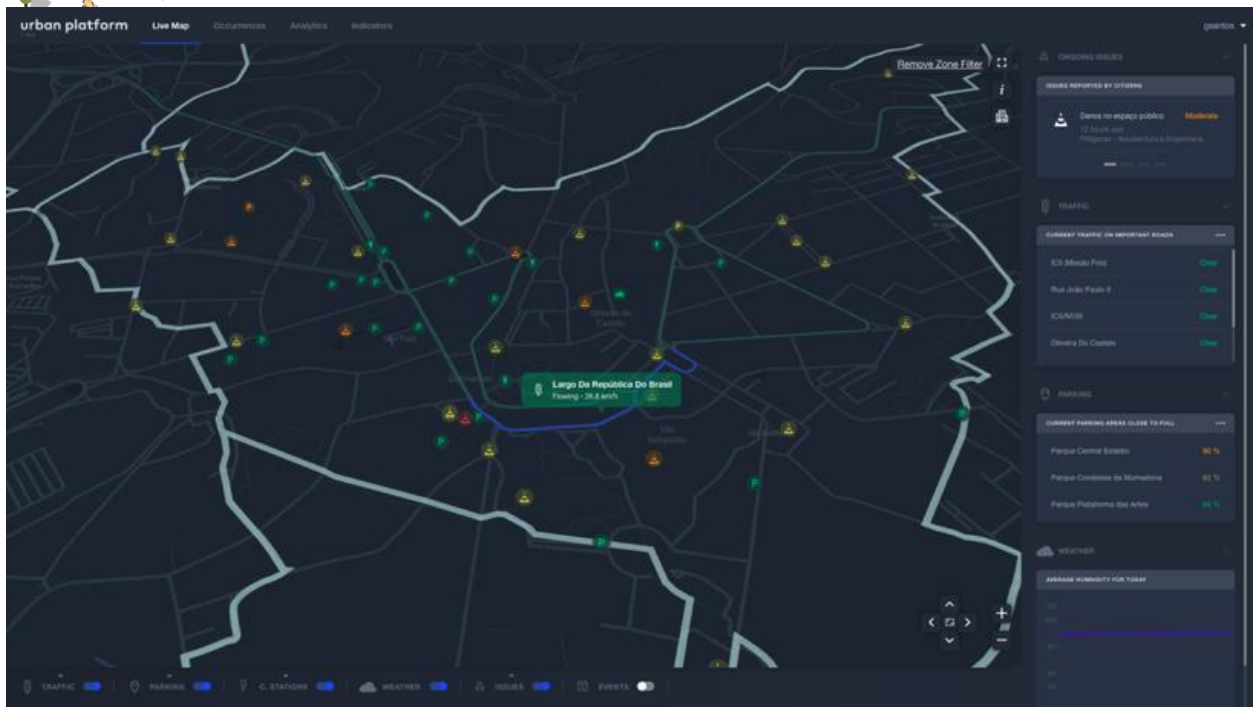
The **"AIGAIO" Project** and also known by the **European Network of Transmission System Operators for Energy** (Entso-e) as the Southern Aegean Interconnector, refers to the construction of a submarine DC transmission link to connect the licensed RES plants of the South Aegean Sea to mainland Greece, as well as to the islands of Crete, Kos, and the Dodecanese. The link, the capacity of which lies **between 600-800MW** in both directions using HVDC (High Voltage Direct Current) technology, will be used for transmitting electricity from the RES plants previously mentioned to the mainland and the island of Crete.


**23 uninhabited islets** in the Aegean Sea
**582MW** wind farm
**245 Km** of HV DC Submarine cable
**189 Km** of HV AC Submarine cable
**9.7m/s** of measured annual wind speed
**1.786 GWh** of estimated annual energy production
**1,964,059 MWh** of net energy production (P50)
450,000 households electricity needs coverage
**850,000 tons** $CO_2$ decrease

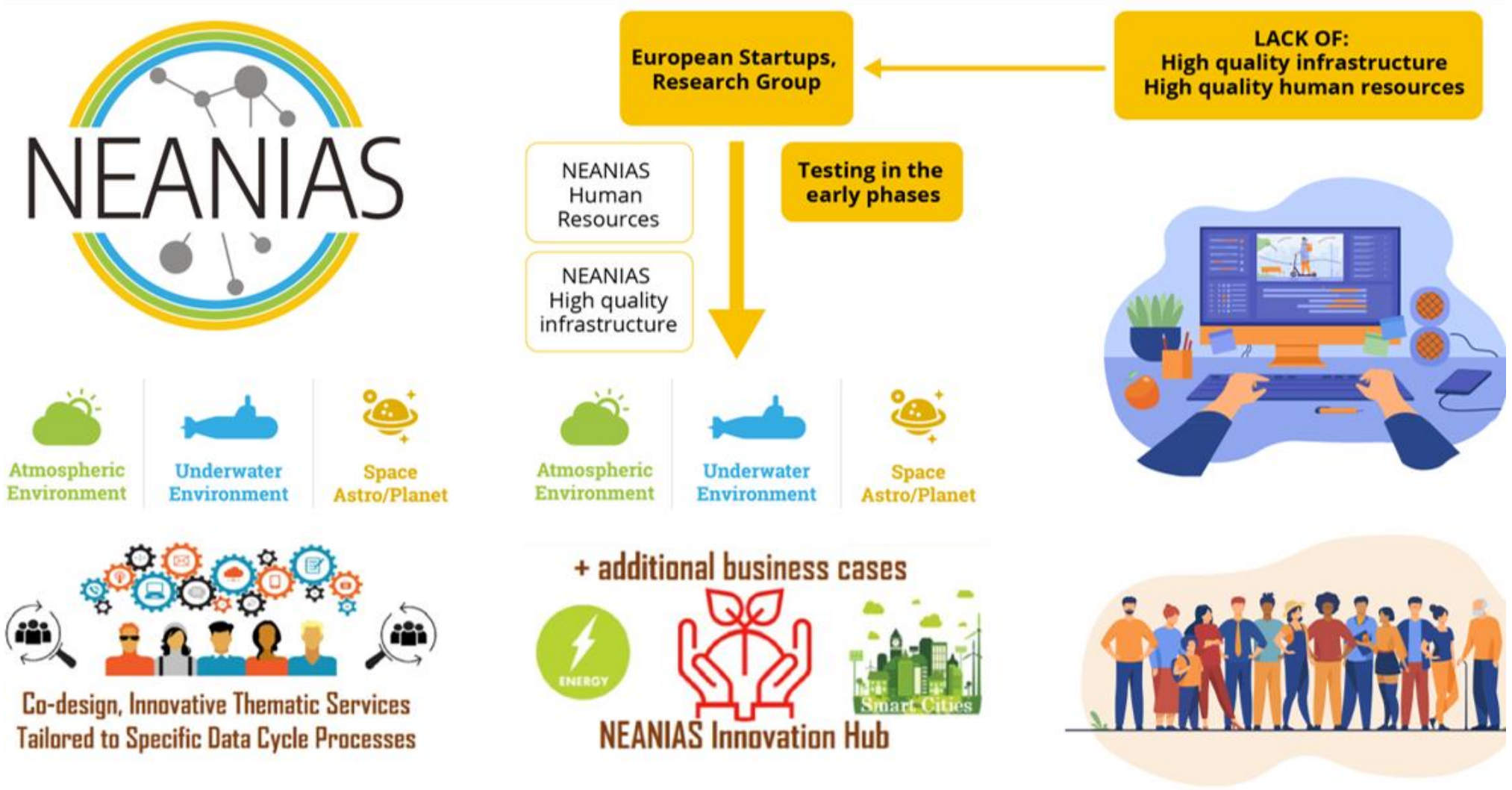
# Business Case 2 - The Smart City Case




NEANIAS services are leveraged by the **Urban Platform developed by UBIWHERE** to create an **urban ecosystem network capable of monitoring, controlling, and forecasting** not only the city's air quality performance, but also the city's dynamics using different sources of data (such as traffic flow, geolocated touristic events, or even for multimodal travel planning).



# The concept of the NEANIAS Open Call



# NEANIAS communication activities project and thematic levels

## SOCIAL MEDIA

Ongoing campaign in Hungarian and English
Design materials translated

**Main channels**
DIH Network
Innomine's network
SME, Start-up, Student groups
Any specific groups relevant for NEANIAS

## DIRECT MAIL CAMPAIGN

**Organisations we already worked with:**
Partners, Universities, SMEs, Startups,
Other projects
International networks, associations, etc.

**Other organisations (we have not worked with):**
International Student Associations
Networks
Groups of SMEs
Umbrella organisations etc.

# Evaluation criteria of the Open Call Applicants

**Evaluation criteria - Business aspects - WP5/WP9**

**Additional business opportunities:** to NEANIAS partners and increase the value of NEANIAS services?

**Corporate background:** Please ask about the Team and the competencies. Do they have anyone with a corporate, or business background?

**Clear business potential:** can NEANIAS can increase that with the services provided?

**Evaluation criteria - Technology aspects - WP2/WP3/WP4 Partners**

**Novelty:** By using one or more services of the NEANIAS project, a significant impact can be achieved in terms of the novelty of the developed product, or service described in the application form.

**Exclusivity:** The project described in the application, can utilise novel NEANIAS services, which provide a solution on their research needs, which would otherwise not available for them by using their internal competencies.

**Technical excellence and industrial relevance:** The proposed project provide technical excellence, as by developing a new product and/or service, a novel, innovative technology/service can be developed.

**Realistic and feasible:** The proposed solution is using NEANIAS services for a limited period (ideally 3 month) time, and by utilising these services the added value of NEANIAS is straightforward, and quantifiable metrics are defined.

# Onboarding of external business cases – 1st Open Call

| Name of Applicant | Thematic Sector | Country | Services to be integrated |
|---|---|---|---|
| OWL LDA | Atmospheric | Portugal | **Mapping Urban Green Spaces, understanding urban dynamics, monitor surface temperature with satellite data**: Atmospheric Thematic Services, more specifically the Air Quality Estimation, Monitoring and Forecasting service. |
| GEOInsight Ltd. | Space | Hungary | **Monitoring, Simulating and Forecasting Urban Mobility:, Deep learning assisted Modelling** Data Management and Visualization, Structure Detection on Large Scape Maps with Machine Learning service |
| EnaliaTec | Underwater | Greece | **3D Seabed Mapping and Classification Utilizing Sonar-Based Information:** UW-MAP "Seabed Classification from Multispectral Multibeam Data" and UW-BAT "Underwater Bathymetry Processing" services from the service catalogue. |

# Onboarding of external business cases – 2nd Open Call

| Name of Applicant | Thematic Sector | Country | Services to be integrated |
|---|---|---|---|
| DDQ B.V. | Core | The Netherlands | Visualisation (Core service), Artificial Intelligence (Core service) |
| Relief Applications | Atmosphere (Thematic service) | Spain | Atmospheric Perturbations and Components Monitoring (Atmosphere), Air Quality Estimation, Monitoring and Forecasting (Atmosphere) |
| Walldone | Atmosphere (Thematic service) | Greece | Greenhouse Gases Flux Density Monitoring (Atmosphere), Air Quality Estimation, Monitoring and Forecasting (Atmosphere) |
| SOTIRIA Technology | Underwater (Thematic service), Space (Thematic service), Artificial Intelligence (Core service) | Greece | Bathymetry Mapping from Acoustic Data (Underwater), Seafloor Mosaicing from Optical Data (Underwater), Seabed Classification from Multispectral, Multibeam Data Service (Underwater), FAIR Data Management and Visualization (Space), Map Making and Mosaicing of Multidimensional Space Images (Space), Structure Detection on Large Scape Maps with Machine Learning (Space), AI-Gateway (Core Service) |

NEANIAS

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# Thank You!

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