User-driven applications and tools for Climate-Informed Maritime Spatial Planning and integrated seascape management, towards a resilient & inclusive Blue Economy

D6.9– Exploitation Strategy (version 1)

WP6 – Communication, Dissemination, and Exploitation of project results

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Lead Contributors	Giorgos Daskalopoulos (GSH), Eirini Marinou (GSH), Betty Charalampopoulou (GSH)
Other Contributors	-
Reviewers	Simona Sirute (METIS), Weronika Borejko (EARSC)

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1 Executive Summary

The present document is one of the deliverables of the OCEANIDS project, which is funded by the European Union's (EU) Horizon 2022 Programme under Grant Agreement (GA) 101112919. This document presents the deliverable D6.9 entitled "Exploitation Strategy (version 1)" which was issued on month M6 of the project, and prepared under Task 6.3 "Exploitation activities, Intellectual Property Rights (IPR) management, and post-project sustainability", as part of Work Package (WP) 6 "Communication, Dissemination, and Exploitation of project results", led by MetisBaltic (METIS). The Exploitation Strategy comprises three iterations, the first delivered on Month M6 and the other two versions on M20 and M32, respectively, and will be delivered by Geosystems Hellas (GSH).

The presented report of D6.9 comprises a comprehensive description of the relevant activities that have taken place so far, as well as those that are planned. This will ensure optimal Exploitation and Business Plan development of the OCEANIDS results, not only during the project's lifetime but also beyond the end of the project. In this preliminary version and to ensure the creation of a solid baseline, the main focus is the identification of key assets for exploitation and the initial strategies to be followed. Moreover, this strategy also includes a high-level description of the methodological approach, the introduction within the scope of the OCEANIDS project, of the EU Exploitation Tools to be used, the rationale of the exploitation workshops/events, as well as the different exploitation opportunities of the generated OCEANIDS strong assets.

The main focus of this deliverable is to prepare a business plan using the Business Model Canvas (BMC) methodology, create a plan used as a reference for the business model, customer segments, customer relations and sales channels, and develop preliminary strategies on potential users and acquirers, considering different marketing and product sales options. This can be achieved through observation of the crisis management and the social market trends, leveraging benchmarking and business competitive intelligence analyses. This will support a gradual transition to a leading market position for the OCEANIDS project, but not limited to that, such as individual components of the overall solution.

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Table 1. List of Acronyms/Abbreviations

Acronym Abbreviation	Explanation
AIRC	Air Center
BMC	Business Model Canvas
BRET	Région Bretagne
CAP	Climate Adaptation Planning
CC	Climate Change
CRETE	Region of Crete
D	Deliverable
DRPM	Regional Directorate of Marine Policies/Azores Region
EC	European Commission
EO	Earth Observation
EU	European Union
GA	Grant Agreement
GSH	Geosystems Hellas
HPA	Heraklion Port Authority
HRB	Horizon Results Booster
IP	Intellectual Property
IPR	Intellectual Property Right(s)
ISL	Institute of Shipping Economics and Logistics
KERs	Key Exploitable Results
KPI	Key Performance Indicator
M	Month
MLG	Ayuntamiento de Málaga/Malaga City Council
MMAIP	Ministry of Maritime Affairs and Insular Policy
METIS	MetisBaltic
O-DSP	OCEANIDS Decision Support Platform
PHEL	Helsingin Satama Oy/Port of Helsinki
PRAA	Raahen Satama Oy/Port of Raahe
PRAU	Rauman Satama Oy/Port of Rauma
SMEs	Small and Medium-sized Enterprises
SWOT	Strengths, Weaknesses, Opportunities, Threats
V-SML	Regional Council of Southwest Finland
WP	Work Package

Table 2. Glossary of terms

Terminology	Explanation
Exploitation Strategy	The utilization of results in further research activities other than those covered by the action concerned, in developing, creating and marketing a product or process, in creating and providing a service, or in standardisation activities. (European Commission 2013, 2016b)
Stakeholder	A stakeholder is an individual, group of persons or organisation that can affect or is affected by the decisions of another organisation. This definition also includes interest groups related to the organisation. A stakeholder's relationship with the focal organisation is generally determined by three main attributes: the power to influence the organisation; a legitimate relationship with the organisation; and an urgent claim on the organisation. (EuroFound, 6 August 2019)
Business Plan	A business plan is a formal written document containing the goals of a business, the methods for attaining those goals, and the timeframe for the achievement of the goals. It also describes the nature of the business, background information on the organization, the organization's financial projections, and the strategies it intends to implement to achieve the stated targets. In its entirety, this document serves as a roadmap (a plan) that provides direction to the business. (Horizon Europe Glossary)

2 Introduction

Coastal regions are often characterised by strategic socio-economic assets (i.e., linked to tourism, fisheries, harbours, and shipyards). This makes coasts particularly sensitive to Climate Change (CC) impacts, which primarily expose infrastructure and local population. Human activities are also responsible for additional pressures on coastal ecosystems, often generating more immediate impacts than those expected from CC by aggravating existing vulnerabilities. The need for CC adaptation in coastal areas is evident and is predicted to become progressively more significant over time due to the grim long-term forecasts of climate variables. Coastal area adaptation strategies should be iterative and dynamic, due to the evolving dynamics of coastal territorial systems. Furthermore, CC adaptation measures should consider local ecology, economy, society, politics, and technology. Therefore, the definition of Climate Adaptation Planning (CAP) must consider specific local socio-economic contexts. The OCEANIDS project aims to develop the tools and applications that enable a more resilient and inclusive society in coastal regions via better-informed and integrated seascape management. The central concept is to collect, harmonize, and curate existing climate data services, making data accessible, reusable, and interoperable for developing local adaptation strategies. To achieve the optimal exploitation of the OCEANIDS outcomes a meticulously crafted exploitation strategy, which is directly connected to the project's dissemination plan developed under WP6 and T6.1.

The formation of an OCEANIDS exploitation team made up of qualified members from each partner organization, is central to this strategy. This team will lead efforts to navigate challenges and seize opportunities, ensuring that the project's services are sustainable after its completion. OCEANIDS aims to forge long-term relationships and foster a vibrant ecosystem around its domain by actively engaging stakeholders both within and outside the consortium.

The role of WP6 “Communication, Dissemination, and Exploitation of project results” is to communicate widely the progress, achievements, and results through multiple channels, to produce and update the dissemination and exploitation plan, and to produce a business model, a business plan and a marketing plan. WP6 consists of the following tasks:

- Task 6.1: “Dissemination, Communication and high impact collateral” [M1-M32]
- Task 6.2: “Liaising with other EU projects, initiatives, and lessons learned: Defining the role of OCEANIDS in the EU Mission” [M1-M32]
- **Task 6.3: “Exploitation plans, IPR management business models and post-project sustainability” [M1-M32]**

The outcomes of this task will be elaborated upon in detail in Deliverables D6.9 "Exploitation Strategy (version 1)," D6.10 "Exploitation Strategy (version 2)”, and D6.11 "Exploitation Strategy (version 3)." These deliverables, along with communication, dissemination, and exploitation reports, will provide a comprehensive overview of OCEANIDS' activities, ensuring a cohesive approach towards achieving its objectives.
This document is the report presenting the Exploitation Strategy (version 1) of the OCEANIDS project. It is one of the outputs of Task 6.3 “Exploitation plans, IPR management business models and post-project sustainability”. The following sub-sections present the scope and objectives and the structure of the document.

2.1 Scope and Objective of the deliverable

The main scope of this deliverable is **to identify sound business models** replicable to various markets and develop new resources and activation techniques for the OCEANIDS results. This will support a gradual transition to a leading **market position** for the OCEANIDS project, but not limited to that, such as individual components of the overall solution. OCEANIDS' exploitation journey is divided into three stages, each with specific short-term, medium-term, and long-term objectives. The initial phase focuses on validating and fine-tuning project outcomes, laying the groundwork for future expansion and deployment. As OCEANIDS progresses, it enters a phase of full deployment, in which semi-commercial products and services are developed, paving the way for future refinement and scaling.

2.2 Structure of the Deliverable

This document consists of the following chapters:

- **Chapter 1** is the executive summary of the deliverable
- **Chapter 2** includes the Introduction, main scope and structure of the deliverable
- **Chapter 3** is devoted to the overall business plan and the exploitation strategy, which started being formulated within the context of the Task "Exploitation plans, business models and post-project sustainability" as it provides the necessary definitions of the followed exploitation plan and methodological approach while also highlighting future potential stakeholders and customers of the OCEANIDS solutions, competitors list and the relevant distribution channels
- **Chapter 4** outlines some initial ideas for the IPR protection plan for the project's outcomes
- **Chapter 5** presents the EU Exploitation Tools that will be used throughout the project's lifetime
- **Chapter 6** summarises the conclusions of this deliverable
- **Chapter 7** includes the references

2.3 Relation to other projects and tasks

In **Figure 1**, the OCEANIDS overall WPs structure workflow and the connection among the WPs are depicted. WP6 is directly connected to all WPs as it serves as the main WP responsible for the dissemination, communication and exploitation of the OCEANIDS project results. To this end, T6.3 is interrelated with all other Tasks and WPs, defining the strategies to be followed to achieve the most optimal business plan which should be followed and applied by all OCEANIDS partners.

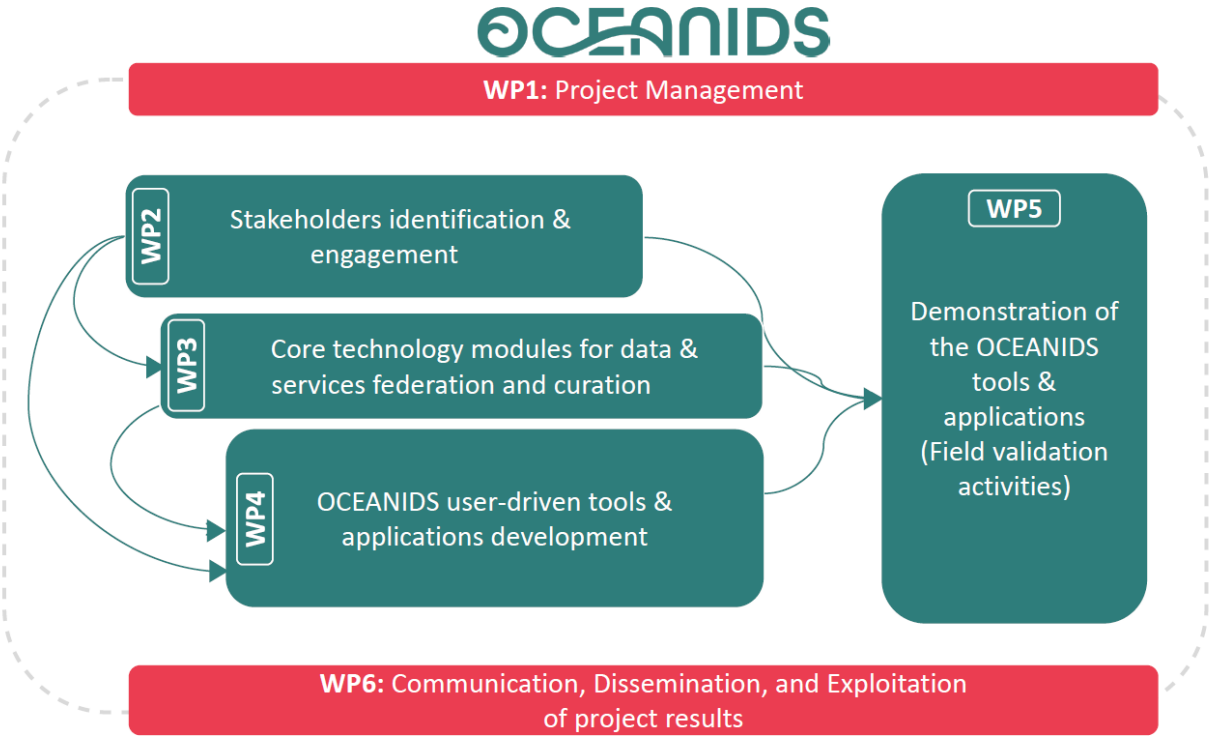

Figure 1. OCEANIDS WPs structure workflow

3 Exploitation Strategy

3.1 General background

The exploitation strategy developed the previous years within the Horizon 2020[1] the framework has been updated and refined in the scope of Horizon Europe[2] in the EU's Framework Programme for Research.

To this end, in the context of Horizon Europe, the exploitation strategy entails:

- **Definition:** Using project results to address societal problems, inform policymaking, or for commercial purposes
- **Purpose:** To maximize the practical impact of research outcomes
- **Additional support**: The offered EU Exploitation Tools as described in **section 5**

The results of an EU project are any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected. They are the outputs generated during the action, which can create an impact during and/or after the EU funding procedure. Exploitation is defined by the EC (European Commission) as the utilization of results in developing, creating and marketing a product or/and process, or/and in creating and providing a service, or/and in standardization activities.

The exploitation of the results of the research project has a double value:

1. Offers society ways to progress by utilizing novel methodologies and tools
2. Promotes research and development of the involved parties through the dissemination of their research work as well as the financial resources that can be gained. Regardless of the perspective from which one examines the interaction between research and the application of its results, society must ultimately be the beneficiary.

The OCEANIDS project's **exploitation plan** is based on a thorough knowledge of how the project's results can be best used, both financially and societally. The first stage is to identify and protect Intellectual Property (IP) to build the groundwork for successful commercialization and diffusion efforts.

The strategic elements of the Exploitation Strategy can be defined as follows:

- **Identifying Key Exploitable Results (KERs) and Assets**: Analyzing OCEANIDS outcomes to identify those with high economic value or societal effect.
- **Market Position and Strengths:** Comparing the project's outcomes to the present market landscape to showcase OCEANIDS' competitive advantages in maritime spatial planning and climate adaption technology.

[1] Horizon 2020 - European Commission (europa.eu)
[2] Horizon Europe - European Commission (europa.eu)

- **Potential Customer Engagement:** Defining target audiences, including governmental bodies, environmental agencies, and maritime industries, to tailor distribution and marketing strategies.
- **Identifying Key Market Competitors:** Recognizing competitors who provide similar or overlapping services in maritime spatial planning and environmental data analysis. This stage is critical for OCEANIDS' strategic positioning in a competitive market, as it differentiates its solutions and highlights distinct value propositions.
- **Business Model Development:** Includes evaluating several business models to determine the most effective commercialization strategies, such as direct sales, licensing, or collaboration.
- **IPR Protection:** Creating a strong plan to safeguard IPRs while ensuring that consortium members benefit from their outcomes.
- **Dissemination and Real-World Application:** Organizing workshops, seminars, and direct engagements to validate and optimize project outputs for practical use.

This strategy approach ensures that all consortium members work together to identify and exploit the concrete and intangible results of OCEANIDS. WP leaders and consortium partners employ structured meetings and targeted questionnaires to continuously improve the exploitation approach. This dynamic strategy not only helps to match project outputs with market and social needs, but it also responds to evolving possibilities and problems in the environmental and maritime planning sectors.

In addition to creating this strategy on paper, real-world application and dissemination activities will be carried out concurrently to maximize the reach and effect of OCEANIDS' results. Future workshops, seminars, and direct engagements with stakeholders will be critical in promoting a thorough understanding and implementation of the created approaches and tools. This ongoing involvement with end-users and stakeholders guarantees that the project's outcomes are not only theoretically viable but also validated and optimized for practical deployment after the project.

3.2 Strengths and exploitable assets of the project

The OCEANIDS project represents an innovation in addressing the complex difficulties faced by coastal regions as a result of CC and human-induced stresses. Using a multidisciplinary approach and cutting-edge technologies, OCEANIDS aims to provide coastal stakeholders with the skills and information they need to traverse the difficulties of climate adaptation and sustainable coastal management. OCEANIDS' comprehensive paradigm emphasizes combining socioeconomic concerns, ecological considerations, and technological advancements to encourage resilience and promote inclusive development in coastal areas.

Key Emphases of the OCEANIDS Project:

- Integration of socio-economic contexts into Climate Adaptation Planning.
- Utilization of advanced technologies for data aggregation, processing, and analysis.
- Facilitation of stakeholder engagement and participatory decision-making processes.

- Promotion of multi-level governance procedures for effective policy implementation.

According to the aforementioned, the exploitable assets of the OCEANIDS project can be categorized into **three (3) groups** as described below and also shown in the Figure:

i. **Overall Methodology**:

OCEANIDS offers novel techniques that are adapted to the specific requirements of CAP. By including socioeconomic considerations, ecological issues, and technology developments, these techniques ensure the development of strong and contextually relevant climate adaptation plans. Comprehensive risk and hazard assessment frameworks, multidisciplinary modelling approaches for impact quantification, and participatory decision-making processes for stakeholder participation are among the key methodologies used.

ii. **Integrated Earth Observation (EO) and Spatial Data Platform:**

OCEANIDS creates an integrated EO and geographical data platform that functions as a centralized interface for obtaining and viewing project-related data. Key characteristics include a single access window for geographically enabled data, user-friendly graphical interfaces for data management and processing, and the incorporation of crowdsourced data and cross-referential feedback loops.

iii. **The OCEANIDS Decision Support Platform (O-DSP):**

OCEANIDS presents a Decision Support Platform customized to the demands of coastal stakeholders, providing dependable recommendations and assessments of climate effects. Key aspects include the integration of heterogeneous data sources and services, customized services and tools for port decision-makers and local governments, and the promotion of multi-level governance mechanisms for successful policy execution.

3.2.1 SWOT analysis (Strengths/Weaknesses/Opportunities/Threats)

In the above list, there is a preliminary **SWOT analysis** which examines both internal and external factors concerning the business aspect of the results of the OCEANIDS project. The SWOT analysis will be utilized to help the examination of different aspects of potential OCEANIDS team business and organize discoveries into a simple 2x2 grid template, as demonstrated in **Figure 2**. Each quadrant of the grid corresponds to one letter of the acronym SWOT, which stands for **Strengths, Weaknesses, Opportunities and Threats**. Since the information is presented in an easy-to-read grid, SWOT analysis is a quick and straightforward assessment. This is a primary phase but helps in the OCEANIDS strategic planning. The strategic planning involves new initiatives and the SWOT helps to know the current condition and the forward-looking decisions. This will be updated on a scheduled basis, most probably on a semi-annual basis.

Figure 2. SWOT analysis of the OCEANIDS project

Strengths:

- ✓ **Integration of Socio-Economic Contexts:** By considering socioeconomic factors, OCEANIDS ensures adaptive strategies are contextually relevant
- ✓ **Utilization of Advanced Technologies:** Leveraging cutting-edge technologies enhances the accuracy and effectiveness of interventions
- ✓ **Stakeholder Engagement and Decision-Making:** Strong emphasis on stakeholder engagement fosters ownership and collaboration
- ✓ **Multi-Level Governance Procedures:** Transparent and collaborative governance processes facilitate robust and inclusive policy

Weaknesses:

- ✓ **Methodological Complexity:** Innovative methodologies may require extensive training and expertise for effective implementation
- ✓ **Data Integration Challenges:** Integrating diverse data sources into the risk and hazard assessment platform may encounter technical and logistical challenges
- ✓ **Legal/confidentiality Challenges:** The sensitivity of certain CC-related data, such as the demographics of communities, the prevalence of health or geo-hazards, and other critical information, often leads to data holders being reluctant to share this information due to privacy and security concerns

- ✓ **Stakeholder Coordination:** Ensuring active participation from all stakeholders in decision-making processes may prove challenging due to varying interests and priorities
- ✓ **Governance Hurdles:** Implementing effective multi-level governance procedures may face bureaucratic hurdles and resistance to change

Opportunities:

- ✓ **Technological Advancements:** Rapid advancements in technology offer opportunities for further enhancement and refinement of project methodologies and platforms
- ✓ **Collaboration Opportunities:** Collaboration with other research initiatives and stakeholders could lead to synergies and knowledge exchange, strengthening project outcomes
- ✓ **Policy Alignment:** Opportunities exist to align project outcomes with existing and emerging policies and regulations at regional, national, and international levels
- ✓ **Capacity Building:** Investing in capacity-building efforts could empower local communities and authorities to effectively utilize project outputs for long-term resilience

Threats:

- ✓ **Funding Constraints:** Insufficient funding or budgetary constraints may limit the scope and scale of project activities, impacting its long-term sustainability
- ✓ **Data Privacy and Security Risks:** Managing sensitive data within the integrated platforms may expose the project to risks related to privacy breaches and cybersecurity threats
- ✓ **Political Instability:** Political instability or changes in government priorities could disrupt project implementation and hinder stakeholder engagement efforts
- ✓ **Climate Uncertainty:** Uncertainties related to future climate projections may challenge the accuracy and reliability of risk and hazard assessments, affecting decision-making processes

3.3 OCEANIDS route to the market

3.3.1 Background and Planning

After selecting OCEANIDS' primary exploitable outcomes and assessing their merits, it is critical to determine how these innovations will be delivered to the market. OCEANIDS' path to the market entails determining the most effective sales channels for maximum engagement with its target audience. The final products are intended to cater to a diverse user population, and sales tactics must use a variety of distribution methodologies to fulfil the wide range of customer needs. Offering a function or service that does not meet the

needs of a potential consumer can drive up expenses and, in the end, may not deliver value to the recipient. As a result, the **sales approach** must be adaptable enough to meet the individual needs of each potential buyer. Target groups form a central pillar in shaping these sales methods. Moreover, it is important to recognize the **competitors** of your products to clarify the projects' value proposition and the competitor's advantage. Further details will be elaborated in the subsequent chapters concerning **Early Adapters** (3.3.2), potential **Target Audience** (3.3.3) **Competitor's list** (3.3.4) and **Distribution Plan** (3.3.5).

3.3.2 Early adapters

The consortium of the OCEANIDS project includes partners such as, CRETE, HPA, MMAIP, VSML, PHEL, PRAU, PRAA, MLG, BRET, DRPM, ISL and AIRC. These are twelve (12) organizations representing end users either directly or indirectly, such us ports, regions, cities, and relevant ministries, and also organisations which bridge the knowledge and information produced by the OCEANIDS project to related networks among their community. They are all actively involved in providing functional and non-functional requirements for the OCEANIDS tools and applications. Within the context of D2.1"Stakeholders engagement plan and existing applications or services report", this diverse group of end users-stakeholders-representatives, is called the **"Focus Group"**. They are the authorities responsible for activities relevant to OCEANIDS in their respective regions, communities and infrastructures. As such, the consortium has all the capacity and authority needed, to ensure that access to study areas and critical infrastructure is ensured, for the successful implementation of all project activities. The end users'/citizen's involvement and training will generate as a by-product the growth of a better awareness of the impacts and the need for effective adaptation policies. The Focus Group involved from the early beginning of the project consists of the following entities, covering multi-divergent categories:

- Port authorities:
  - Heraklion Port Authority **(HPA)**
  - Helsingin Satama Oy/Port of Helsinki **(PHEL)**
  - Rauman Satama Oy/Port of Rauma **(PRAU)**
  - Raahen Satama Oy/Port of Raahe **(PRAA)**
- Public entities:
  - Ministry of Maritime Affairs and Insular Policy **(MMAIP)**
  - Regional Council of Southwest Finland **(V-SML)**
  - Region of Crete **(CRETE)**
  - Ayuntamiento de Málaga/Malaga City Council **(MLG)**
  - Région Bretagne **(BRET)**
  - Regional Directorate of Marine Policies/Azores Region **(DRPM)**
  - Institute of Shipping Economics and Logistics **(ISL)**
- Non-Governmental organization:
  - Air Center **(AIRC)**

These users play a crucial role in the adoption lifecycle of a product for several reasons:

- **Requirements identification:** The early adopters, as they follow the project from its early stages, are the most valuable source of information to set a solid baseline and plan the following steps.
- **Feedback and Testing**: Early adopters provide valuable feedback that can help developers identify and fix bugs, improve functionality, and refine the overall user experience. Their insights are essential for making iterative improvements before a product is released to the broader market.
- **Market Validation:** Their positive reception can signal potential success to other consumers, investors, and stakeholders. **Influence and Word-of-mouth:** Early adopters often have a high level of influence within their social and professional circles. Their recommendations can drive broader adoption through word-of-mouth and social proof.
- **Driving Innovation:** Early adopters often provide creative and unconventional use cases for new technologies, pushing the boundaries of what the products can do and inspiring further innovation.

3.3.3 Potential Target audience

The success of the OCEANIDS project is dependent on properly involving a diverse range of stakeholders who are directly affected by or interested in maritime spatial planning and climate resilience. Our target audience is diverse, with each industry and group playing an important part in the execution and impact of our project outcomes. This section describes the **primary target groups** that OCEANIDS intends to contact and influence, including among others regulatory agencies and public authorities, private sector companies, academia, and civil society. Understanding these groups' requirements and behaviours will allow for more targeted communications and tactics to increase stakeholder engagement and project effect. The following list shows the diverse and strategic groups in which OCEANIDS intends to work, showing the commitment to promote inclusive and effective collaboration across many sectors to improve the resilience of coastal and marine environments. This list has been carefully created by WP2 ”Stakeholders identification & engagement”, and more specifically by Task 2.1 “OCEANIDS stakeholders Community: Exchange of best practices, capacity building and networking between groups”. Within this task a Workshop was conducted identifying the following **11 groups of potential target audience** (see D2.1”Stakeholders engagement plan and existing applications or services report” for more information). The Potential Target audience has been separated based on the Importance and Influence, as follows:

- These groups must be ***closely managed and regularly engaged:***

Group 1: Coastal Municipalities and Regions
- ✓ *Mid-to-High Importance AND Mid-to-High Influence*

Group 2: Port Authorities
- ✓ *Mid-to-High Importance AND Mid-to-High Influence*

Group 3: Earth Observation (EO)/Remote Sensing(RS) Solution Providers
- ✓ *Mid-to-High Importance AND Mid-to-High Influence*

Group 4: Research Institutes, Think Tanks, Academia
- ✓ *Mid-to-High Importance AND Mid-to-High Influence*

- These groups must be ***closely managed and regularly engaged:***

Group 5: Networks of Municipalities, Regions, Ports
- ✓ *Mid-to-High Importance AND Low-to-Mid Influence*

Group 6: EU-funded Projects in Coastal Resilience and Adaptation
- ✓ *Mid-to-High Importance AND Low-to-Mid Influence*

Group 7: Banks and Insurance Companies
- ✓ *Mid-to-High Importance AND Low-to-Mid Influence*

Group 8: Private Sector (including SMEs)
- ✓ *Mid-to-High Importance AND Low-to-Mid Influence*

Group 9: Citizens and Residents
- ✓ *Mid-to-High Importance AND Low-to-Mid Influence*

- These groups must be ***kept satisfied, and ideally empowered, and their interest must be protected:***

Group 10: Policy-Makers, Government Institutions
- ✓ *Low-to-Mid Importance AND Mid-to-High Influence*

- These groups should not be prioritized (minimum effort):

Group 11: General Audience and Private Sector
- ✓ *Low-to-Mid Importance AND Low-to-Mid Influence*

3.3.4 Preliminary Competitor's list

In the context of maritime spatial planning in Europe, the OCEANIDS project operates within a dynamic and evolving field of initiatives and platforms, all of which contribute to the larger goal of sustainable and resilient use of marine resources. This section provides an overview of entities and programs that **mirror or interact** with OCEANIDS' objectives. These **rivals or possible partners** are important in establishing our strategic approach since they represent continuing activities and established tactics in the field. Recognizing these entities not only helps OCEANIDS position itself effectively in the market, but also helps to uncover potential for collaboration, innovation, and uniqueness.

Focusing on European-based initiatives and projects, there are some **significant entities** and **projects** that might be viewed as competitors or collaborators with the OCEANIDS project:

- ✓ EMODnet (European Marine Observation and Data Network) - EMODnet serves as a key resource for various stakeholders in Europe by providing access to harmonized marine data, products, and services.
- ✓ PlanBothnia - This was a specific project that developed a maritime spatial plan for the Bothnian Sea, highlighting collaborative MSP methods and tools in a European regional context.
- ✓ SIMCelt (Supporting Implementation of Maritime Spatial Planning in the Celtic Seas) - Aimed at promoting cooperation in MSP among Member States around the Celtic Seas, this project could provide insights and frameworks relevant to OCEANIDS.
- ✓ BaltSpace - A project that addressed key challenges in maritime spatial planning in the Baltic Sea region, focusing on integration, coherence, and participation—key aspects also likely relevant to OCEANIDS.
- ✓ ADRIPLAN (ADRiatic Ionian maritime spatial PLANning) - Focused on the Adriatic-Ionian region, this project developed cross-border maritime spatial planning to manage and use marine and coastal resources sustainably
- ✓ HARMONIA, CMEMS, NextGEOSS
- ✓ e-SHAPE, euPOLIS, SEN4RUS

3.3.5 Distribution Plan

The OCEANIDS **distribution approach** is based on a **Unified Solution Package** that includes the Integrated EO and Spatial Data Platform, the O-DSP, and a variety of new methodologies developed throughout the project. This comprehensive package is specifically created for urban planners, policymakers, and practitioners interested in marine spatial planning and urban coastal adaptation to CC. The major exploitable outcomes, available both as part of the Unified Solution Package and as standalone tools, increase OCEANIDS' credibility and reach by offering stakeholders cutting-edge solutions to improve resilience and sustainability in coastal towns.

3.3.5.1 Objectives and Potential customers

The goal of OCEANIDS is to deliver cutting-edge, cost-effective and user-friendly digital tools to improve maritime spatial planning and climate resilience. The project's unique solutions address the demands of both the public and private sectors, including legislators and urban planners. OCEANIDS responds to market demand for improved, integrated tools for coastal management and climate adaptation, which will boost commercialization and strategic market positioning.

OCEANIDS **targets a diverse variety of stakeholders**, including marine industry experts, government organizations, environmental agencies, urban planners, university researchers, and coastal community leaders. The distribution techniques are carefully adapted to each target group's individual needs and interests, resulting in successful and positive interactions.

3.3.5.2 Channels of distribution for KERs of OCEANIDS

Unified Solution Package

OCEANIDS will provide a comprehensive, unified solution package that includes tools such as the Integrated EO and Spatial Data Platform and the O-DSP, as well as the overall methodology resulting from the project. This package will provide stakeholders with comprehensive tools for data-driven decision-making in coastal and maritime spatial planning. This all-inclusive package is designed for stakeholders who want a holistic approach to adopting sustainable urban development plans and climate adaptation.

Standalone Tools

Each key exploitable result can also be provided **as a standalone tool** for stakeholders with specific needs:

- ✓ **Integrated EO and Spatial Data Platform:** Ideal for users requiring comprehensive geospatial data access, supporting a range of applications from research to practical implementation in coastal management.
- ✓ **O-DSP:** Offers advanced decision-support tools for policymakers and regional planners, integrating various data sources into a unified system that supports strategic planning and operational optimization.

Selling Methodologies

Additionally, OCEANIDS will market the methodologies developed during the project. These methodologies detail the processes used to create the project's key results, offering valuable insights to stakeholders interested in the scientific and practical foundations of the tools and platforms developed by OCEANIDS.

3.4 Business Plan overview

The OCEANIDS project, with its integrated technical solutions optimized for coastal management and climate resilience, has the potential to transform maritime spatial planning. The strategic business plan will detail a two-pronged sales strategy based on direct sales and partnerships, utilizing the OCEANIDS Integrated EO and Spatial Data Platform and the O-DSP. A specialist sales staff will push direct sales, taking a consultative approach to better satisfy the demands of urban planners, legislators, and environmental agencies, resulting in high adoption rates. This team will use constant market research to respond to changing consumer wants and modify consultations to improve client engagement.

In parallel, collaborations will be critical in expanding the reach and effect of the OCEANIDS solutions. Strategic collaborations with marine industry players, environmental consultants, and academic institutions will help to integrate OCEANIDS solutions into broader service offerings, increasing market penetration and user base growth. Furthermore, the initiative will use a strong marketing strategy that includes digital marketing, participation in significant trade exhibitions, and focused public relations efforts to increase brand recognition and promote community around sustainable marine practices. The business strategy will explain multiple revenue streams from consultant services, technology product sales, and possible savings achieved through enhanced environmental management, laying the groundwork for the OCEANIDS project's long-term financial performance.

3.4.1 Business Model Canvas

The OCEANIDS project's business model will be developed based on the **Business Model Canvas (BMC)** approach. This method will enable optimum market positioning through the development of an effective business cycle that includes all project partners and stakeholders. In **Table 3** the preliminary version of Oceanids Business model Canvas is depicted.

The OCEANIDS service provider will take advantage of the consortium's strengths, which include expertise in system and service development, service delivery, and existing operational services. The objective for the operational stage is to establish OCEANIDS as a prominent participant in the market for climate adaptation and coastal management services.

This BMC will be updated during the OCEANIDS project implementation to reflect continuing changes and insights gleaned from stakeholder interaction and market study. The BMC is depicted in **Table 3.**

Table 3. Business Model Canvas (BMC)

<table>
<tr>
<td rowspan="2">Key Partners
Satellite downstream services developers
Space industry (downstream – upstream)
IT service and software companies
Critical infrastructure operations
Port Authorities Companies and managers
Port Construction Companies
Satellite Data Providers
Research Institutes
Public Entities and Authorities
Legal entities</td>
<td>Key Activities
Development of Decision Support Tools
Stakeholder Engagement and Capacity Building
Validation and Demonstration Activities
Data Curation and Standardization
Core Technology Modules for Data and Services Federation
Development of User-driven Tools and Applications
Demonstration and Validation of Tools and Applications</td>
<td rowspan="2">Value Proposition
Provider of integrated climate-informed maritime spatial planning and seascape management services.
Enhanced experience for regional authorities and stakeholders through a single-access platform.
Digitization and accessibility of climate data, supporting transformative innovations.
Environmental performance improvement in coastal regions via advanced decision support tools.
Public health improvement and resilience against climate risks through evidence-based assessments.
Sustainable coastal development and climate adaptation strategies.
Enhanced transparency and efficiency in coastal management and governance.
Support for investments in resilient coastal infrastructure and intermodal logistics under initiatives like the "Connecting Europe Facility".
Engagement and empowerment of local communities through inclusive governance and participatory tools</td>
<td>Customer Relationships
Motivation to act
Expertise contributes
Data provision
Tangible results
Personal interaction</td>
<td rowspan="2">Customer Segments
Regulatory Bodies & Policymakers
Earth Observation & Satellite Data and Services Providers
Maritime Economic Sectors
Climate Change Impact and Risk Assessment Specialists
Environmental Engineering & Other Engineering Firms
Financiers & Investors in Climate Change Services
Universities & Other Research Communities
Citizens & Social Organizations Active in Climate and the Environment</td>
</tr>
<tr>
<td>Key Resources
Remote sensing and EO experts
Software developers (ML/DL)
Data analysts
Legal and Compliance Support</td>
<td>Channels
To be considered later on.</td>
</tr>
<tr>
<td colspan="3">Cost Structure
Software
IT & infrastructure installation
System update and maintenance</td>
<td colspan="3">Revenue Streams
Subscription Fees for Access to the Decision Support Platform
Consulting Services for Climate Risk Assessment
Licensing Fees for Advanced Analytical Tools
Partnerships and Collaborations</td>
</tr>
</table>

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4 Intellectual Property Rights (IPR)

The initial step in formulating an Exploitation Strategy for the OCEANIDS project involves securing the IP related to the innovative methodologies and digital tools developed. IP represents[3] the intangible creations of the human intellect, and its protection is crucial for managing the exploitation strategy effectively (**Table 4**).

IPRs[4] are vital business assets and are categorized as follows:

Table 4. Common IPRs

Type	Description
Trademarks	Used to signal the origin of products to consumers, distinguishing the services offered by OCEANIDS.
Patents	Rights granted for the project's inventions, which may include new digital platforms or algorithms for maritime spatial planning.
Designs	Protects the external appearance or the user interface of the developed software tools.
Utility Models	Protects technical solutions and innovations for a shorter period than patents, suitable for components with a shorter commercial lifecycle.
Copyrights	Applies to software, written materials, and other intellectual works produced during the project.
Trade Secrets	Protects valuable project information not intended for public disclosure, maintaining a competitive edge.

Within the first months of OCEANIDS's implementation, a systematic review was conducted using the Consortium Agreement (CA) to verify the background IP declared by each partner. In the upcoming months questionnaires will be distributed among partners in order to identify the "owner" for each KER produced by the project activities and they will be documented in D6.10 "Exploitation Strategy (version 2)" at M20.

IPRs are not only protective measures for invention, but they also help to preserve a balance between public and private information sharing. OCEANIDS intends to maximize the utilization of these assets as resources by identifying specific IP rights and incorporating them into strategic management. Tailor-made IPR standards for each exploitable component will be developed as the project progresses, particularly by M32, when the O-DSP and its subcomponents reach higher technical and operational maturity.

This proactive approach to IP management will help OCEANIDS navigate the complicated terrain of IP, establish a climate conducive to innovation, and secure the project's unique results.

[3] http://www.iphandbook.org/handbook/ch05/p01/
[4] https://europa.eu/youreurope/business/running-business/intellectual-property/rights/index_en.htm

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Moreover, to enhance our knowledge and make sure that the EU exploitation tools such as **Horizon IP scan**[5], will be used in the following months (**Figure 3**). Horizon IP Scan aims to empower SMEs by enhancing their IP knowledge and ensuring effective IP management in collaborative Research and Innovation endeavour. Is a tailored, free-of-charge, first-line IP support service provided by the EC specifically designed to help European start-ups and other small and medium-sized enterprises (SMEs)[6] involved in EU-funded collaborative research projects to efficiently manage and valorize IP in collaborative R&I efforts. More specifically this tool offers:

- **IP Assessment**: The Horizon IP Scan team performs an individual, professional assessment of your intangible assets. This helps you understand your existing IP and identify potential ways to protect it.
- **Collaborative IP Strategy**: For projects with multiple partners, the service helps develop a shared strategy to manage and exploit new IP generated during collaborative research efforts.
- **Local Expertise**: The service leverages a network of local IP experts across EU Member States and associated countries. These experts provide jargon-free advice tailored to your specific needs.
- **Three Major Steps**: The process involves a preparation phase, a main interview (conducted in person or online), and the provision of a detailed report with recommendations.

Figure 3. Horizon IP Scan EU exploitation Tool

The Horizon IP Scan team will guide you with the following:

- Increase IP knowledge
- Get a clear picture of OCEANIDS existing IP
- Identify potential ways to protect intangible assets
- Develop a joint IP management and exploitation strategy among partners
- Prevent potential IP conflicts
- Boost Plan for the Exploitation and Dissemination of Results

[5] https://intellectual-property-helpdesk.ec.europa.eu/services/horizon-ip-scan_en
[6] https://intellectual-property-helpdesk.ec.europa.eu/system/files/2021-03/HorizonIPScan_Guide-for-Applicants_fin_1.pdf

5 European Exploitation Tools

In the upcoming months following the completion of this deliverable, the **Horizon Results Booster (HRB)**[7] service will be initiated after contacting an EU expert (**Figure 4**). More specifically the Business Plan Development Support Service will be requested. To be eligible for this service, OCEANIDS must have a prepared exploitation plan and a basic draft of its business plan. The insights gained from this study will be directly applied to this HRB service. OCEANIDS consortium will receive specialized training and assistance in developing a thorough business plan that includes market analysis, business strategy, operational planning, competition identification and analysis, and a specific action plan.

Figure 4. EU exploitation tool: Horizon Results Booster

OCEANIDS results will be promoted via the **Horizon Results Platform (HRP)**[8] as depicted in **Figure 5**, which is a matchmaking tool allowing you to publish the KERs to promote them vis-à-vis your targeted audiences - investors, stakeholders, policymakers, potential business partners, etc.

Figure 5. EU exploitation tool: Horizon Results Platform

[7] https://www.horizonresultsbooster.eu/

[8] https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/horizon-results-platform

6 Conclusion

The exploitation plan specified in this document serves in a twofold way: i) to inform on the vision behind the direction taken in making the OCEANIDS project's results tangible and valuable, especially in real-world environments and situations, such as addressing marine sustainability and climate resilience; ii) and also to pave the way towards an effective and appropriate exploitation and commercialization route.

Furthermore, it ensures simplifying and quantifying the steps needed to proceed with the decided strategy. This will be implemented by the following actions:

- Identify the **potential market to exploit**, that is the interested parties and end-users
- Define their requirements, needs, and potential acquired benefits through the usage of the **project's solutions**
- Propose different, innovative, clear feasible solutions for the exploitation strategy through a comprehensive **business plan**

The success of this plan is strongly based on the holistic approach regarding how the project's results will be utilized. Different markets and groups are targeted, aiming for the expansion of the project's initial idea whenever possible.

This document is a constant work in progress, meaning that the overall strategy will be evaluated frequently according to specific success criteria. If needed, the strategy will be adapted to new problems and possibilities, to better suit the project's needs and the latest opportunities offered in the future. This process shall ensure the successful commercialization of the project's results. The strategy outlined herein will be further detailed and refined in the forthcoming deliverables, D6.10 "Exploitation Strategy (version 2)" at M20 and D6.11 "Exploitation Strategy (version 3)" at M32, which will include more specific directions regarding the targeted groups and the OCEANIDS added value outcomes.

Overall, this organized strategy will ensure that OCEANIDS is well-positioned to successfully sell its maritime spatial planning solutions, hence improving climate resilience and coastal management initiatives.

7 References

[1]. European Commission, European Research Executive Agency, Communication, dissemination & exploitation what is the difference and why they all matter, Publications Office of the European Union, 2023, https://data.europa.eu/doi/10.2848/289075

[2]. Business Model Generation, New Jersey, John Wiley & Sons, 2010

[3]. Communication, dissemination and exploitation "A quick guide on why they all matter and what is the difference", June2023

[4]. Horizon IP Scan - European Commission - IP Helpdesk. https://intellectual-property-helpdesk.ec.europa.eu/services/horizon-ip-scan_en

[5]. Horizon IP Scan - IP Helpdesk. https://intellectual-property-helpdesk.ec.europa.eu/system/files/2021-03/HorizonIPScan_Guide-for-Applicants_fin_1.pdf

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