



DELIVERABLE 9.1

Final DISSEMINATION report

Work Package 9
Final Dissemination report
31 December 2023



Grant Agreement number	862915
Project title	UNITED: multi-Use platforms and co-location pilots boosting cost-effective, and Eco-friendly and sustainable production in marine environments
Deliverable title	Final Dissemination report
Deliverable number	9.1
Deliverable version	Final
Contractual date of delivery	December 31 st 2023
Actual date of delivery	December 31 st 2023
Document status	Review for Submission
Document version	Version 1
Online access	Yes
Diffusion	Public
Nature of deliverable	Other
Work Package	WP9 – Dissemination, Exploitation and Training Activities
Partner responsible	Submariner
Contributing Partners	Deltares, FuE, SPOK, Acteon.
Author(s)	Agnese Cosulich, Ivana Lukic, Manon Berge
Editor	Ivana Lukic
Approved by	Ghada el Serafy
Abstract	<p>The UNITED project is a transformative endeavor aimed at advancing sustainable marine activities while striking a balance between economic growth and environmental preservation. Embedded within this context, this abstract offers a glimpse into the UNITED Final Dissemination Report—an exploration of the project's deliberate dissemination strategies and their role in amplifying its impact.</p> <p>As the project unfurled its goals, the establishment of comprehensive internal and external communication pathways took center stage, guided by Deliverable 9.2 - the Initial Communication Plan. This document ensured that stakeholders were engaged effectively, fostering a collaborative atmosphere that resonated throughout the project's lifecycle. Constant dialogue with authorities, administrative bodies, and stakeholders underscored the project's commitment to informed interactions.</p> <p>The subsequent chapters within the report dive into an intricate tapestry of dissemination strategies. These strategic initiatives have played a crucial role in sharing project outcomes, lessons learned, and research findings</p>

	<p>with diverse audiences. From workshops to dynamic digital platforms, the UNITED project's innovative approach has enriched understanding about multi-use offshore practices.</p> <p>Central to this exploration is the meticulous analysis of Key Performance Indicators (KPIs), measuring the effectiveness of dissemination efforts. With an assessment spanning immediate and medium-term goals, this evaluation contributes insights to enhance strategies and invigorate engagement.</p> <p>This report's structure is deeply linked to Deliverable 9.2 - the Initial Communication Plan, establishing the foundations for a coherent dissemination approach. It also aligns with the comprehensive scope of Deliverable 9.8 - the Final Communication Report, and harmonizes with Deliverable 9.6 - the Report on training sessions for technology transfer. Together, these interconnected documents present a holistic view of the UNITED project's journey in sharing knowledge, fostering understanding, and driving progress within the realm of ocean multi-use solutions.</p>
Keywords	Dissemination, Exploitation, Outreach, Engagement.

TABLE OF CONTENTS

ACRONYMES	5
EXECUTIVE SUMMARY.....	6
INTRODUCTION	6
1. LINK WITH OTHER WORK PACKAGES.....	8
2. DISSEMINATION AND EXPLOITATION	9
2.1. PROJECT OUTLETS FOR DISSEMINATION MATERIALS:.....	9
2.2. COMMUNICATION MATERIALS USED FOR DISSEMINATION	10
2.3. TECHNOLOGY PILLAR.....	12
2.4. ECONOMICS PILLAR.....	13
2.5. ENVIRONMENTAL PILLAR.....	21
2.6. SOCIETY PILLAR	22
2.7. LEGAL PILLAR	23
2.8. OVERALL OUTREACH OF ALL THE PILLARS DISSEMINATION ACTIVITIES.....	27
3. JOINT DISSEMINATION AND OUTREACH ACTIVITIES	27
3.1. DELIVERABLE DISSEMINATION	29
3.2. CITIZEN ENGAGEMENT AND SOCIETY IMPACT	31
3.3. MEDIA OUTREACH AND EDUCATIONAL INITIATIVES	31
3.4. POLICY AND TECHNOLOGY TRANSFER SESSIONS.....	32
3.5. NEWSLETTER	33
4. PROJECT WEBSITE.....	36
4.1. ZENODO	37
4.2. PEER JOURNAL PUBLICATIONS	38
4.3. HORIZON RESULTS PLATFORM & UNITED KEY DELIVERABLES	38
4.4. EXPLOITATION EFFORTS.....	42
4.5. EXPLOITATION OF PROJECT OUTPUTS	42
4.6. ACTIVE AND LASTING COLLABORATION WITH KEY USERS	42
4.7. TRANSITION TO ULTFARMS	43
4.8. KEY EXPLOITABLE RESULTS PILOTS' ANALYSIS.....	43
4.9. NEWSLETTER OF RELEVANT ASSOCIATIONS AND EXTERNAL DISSEMINATION CHANNELS	46
4.10. KEY DISSEMINATION OUTCOMES.....	49
5. IMPACT ACHIEVED.....	49
6. KEY LEARNINGS:	51

ACRONYMES

CCT	Coordination Committee Team
CSET	Core Services Exploitation Team
CT	Consortium Coordination Team
EC	European Commission
IPR	Intellectual Property Right
PA	Partner Assembly
PM	Project Management
SAB	Stakeholder Advisory Board
WP	Work package
SM	Social Medias
SM views	Views gained from social media channel(s)
OWF	Offshore Wind Farms

EXECUTIVE SUMMARY

The UNITED Final Dissemination Report offers a comprehensive overview of the project's dissemination and exploitation activities, following the guidelines outlined in Deliverable 9.2 - the Initial Communication Plan. This report highlights the project's dedication to effectively sharing project outcomes, fostering awareness, and promoting the adoption of multi-use offshore activities.

Dissemination efforts encompassed a range of initiatives, including educational activities like workshops and webinars tailored for both internal and external participants. Specific Key Performance Indicators (KPIs) were devised to measure the impact of these dissemination endeavors and evaluate progress.

This report extensively outlines the diverse channels used to engage stakeholders across different scales, from local to international levels. Deliverable 5.1 provides comprehensive stakeholder descriptions, while Table A functions as a resource hub for accessing tailored dissemination action, emphasizing key objectives, contact information, and pertinent resources.

Throughout the document, dissemination strategies and outcomes are rigorously evaluated based on predefined KPIs. The assessment covers both short-term and medium-term objectives, providing valuable insights to refine dissemination strategies and enhance engagement.

The UNITED project prioritized effective dissemination as a means to maximise impact of the project. This Final Dissemination Report offers a comprehensive account of dissemination and exploitation activities, showcasing the project's dedication to driving progress and cultivating awareness within the Blue Economy. By fostering ongoing engagement with stakeholders and multipliers, the project aimed to ensure the wider uptake of project solutions and recommendations and overall better adoption of multi-use concept.

INTRODUCTION

The UNITED project has been resolutely committed to driving progress, fostering awareness, and promoting the adoption of multi-use offshore practices that harmonize economic growth with environmental preservation. This Introduction sets the stage for the UNITED Final Dissemination Report, a comprehensive account that unveils the project's meticulous dissemination and exploitation activities.

Aligned with the directives outlined in Deliverable 9.2 - the Initial Communication Plan, this report delves into the project's strategic dissemination efforts, highlighting the pathways that have facilitated the sharing of invaluable project outcomes. While communication remains a crucial aspect (as recorded in D9.8), this report distinctively centers on the dissemination initiatives that have been instrumental in promoting its key findings and the impact to motivate a wider use in the future by planners, policymakers, industry and researchers.

From its inception, the UNITED project recognized the need for well-coordinated internal and external communication and dissemination pathways. The Initial Communication Plan laid the groundwork for a seamless consortium, ensuring a collaborative approach and successful engagement with stakeholders at various levels. Throughout the project's lifespan, an unwavering dialogue with authorities, administrative bodies, and pertinent stakeholders has been maintained, underscoring the importance of informed collaboration.

The subsequent chapters will detail a tapestry of dissemination strategies, showcasing the project's efforts to share project outcomes, lessons learned, and research findings with a diverse audience and motivate its uptake and exploitation. By leveraging educational activities, digital platforms, and dynamic engagement measures, the UNITED project has taken significant strides in fostering a deeper understanding of multi-use offshore practices.

The Final Dissemination Report brings to light the meticulous analysis of Key Performance Indicators (KPIs) to measure the impact and effectiveness of these dissemination efforts. Through a comprehensive evaluation, both in terms of short-term and medium-term objectives, the project gains invaluable insights to further refine its strategies and amplify its engagement.



This report provides a comprehensive account of the diverse dissemination channels, stakeholder engagements, and key accomplishments. It goes a step further to highlight the key exploitation activities and achievements in the project, making a link to the technology transfer and intellectual property management in D9.6. Through these efforts, the UNITED project underscores the paramount importance of effective dissemination as a driving force in achieving its objectives. The following chapters will offer a detailed analysis of dissemination initiatives, offering a glimpse into the extensive network that supports the growth of the adoption and the spread of Ocean Multi-use practices and solutions within the Blue Economy.

1. LINK WITH OTHER WORK PACKAGES

In the UNITED project, the interdependencies between various Work Packages (WPs) have been crucial for the effective dissemination of outcomes and facilitation of stakeholder engagement. This section outlines the integrative processes and collaborative efforts that underpinned the dissemination activities across different segments of the project.

The compilation and communication of the outputs and results from each WP were systematically undertaken. Results were meticulously gathered, ensuring that dissemination occurred in a timely manner and accurately reflected the project's progress. A structured protocol was put in place for the collection and synthesis of WP outcomes, which were then communicated strategically to the pertinent stakeholder groups.

Communication of Progress from WP7:

Progress reports and developments from WP7, focusing on the Implementation of Multi-Use Concepts Within Pilots, were regularly collated and disseminated. This process ensured that stakeholders remained informed about the latest advancements within the pilot projects, thereby maintaining a transparent and interactive project environment.

Collaborative Workshop Development:

Throughout the project duration, continuous collaboration with other WPs was essential in curating the content and logistics of workshops. This joint effort covered the development of agendas, the identification of key discussion points, and the curation of reports, briefings, as well as the selection of speakers and moderators. These collaborative initiatives guaranteed that workshops were both informative and reflective of the UNITED project's strategic objectives.

Joint Stakeholder Engagement with WP5:

The partnership with WP5, which addressed Societal Interactions and Engagement, was instrumental in mapping out the key audience for the project's outreach activities. This collaboration resulted in the creation of an online survey, developed jointly to monitor stakeholder satisfaction. The stakeholder engagement strategy, as outlined in UNITED Deliverable 5.1, provided the foundational framework for these interactions, offering a detailed register of key stakeholders at the pilot sites. This register served as a guiding document for consistent stakeholder communication and was integral to the project's engagement strategy.

The initial stakeholder analysis informed the communication plan, generalizing findings from specific pilots using uniform terminology. This approach offered a clear categorization of stakeholders at varying levels—local, regional, national, European, and international—and outlined the key information relevant to each category. The communication plan further specified the channels through which interactions would occur, and it delineated the key project outputs, deliverables, and activities of interest to different stakeholder groups.

2. DISSEMINATION AND EXPLOITATION

The dissemination and exploitation activities within the UNITED project have been meticulously structured to communicate and transfer the acquired knowledge to a broad audience, with the overarching goal of promoting multi-use offshore platforms, driving the Blue Economy forward, and contributing to the sustainable preservation of marine ecosystems.

The project's results and outputs were disseminated through a multi-channel approach, which included a regularly updated project website replete with the latest information and relevant news. Active engagement with stakeholders was maintained through social media platforms such as Twitter, LinkedIn, and Facebook, alongside newsletters that provided regular updates on project activities and related information within the network.

A suite of webinars, with guest speakers, played a crucial role in sharing the project's findings and fostering collaboration. Dedicated written and video materials for each project pillar were produced to effectively disseminate learnings and key recommendations to a targeted audience. Additionally, an online Technology and Knowledge Transfer Hub was established to consolidate all pertinent materials, serving as a central repository for information dissemination.

Over 20 targeted workshops and local outreach activities were organized and co-organized at both the local and EU levels to engage stakeholders, facilitate knowledge transfer, and promote co-creation. These workshops, which were strategically aligned with major conferences and symposiums, significantly extended the project's reach and impact.

Furthermore, the project's outputs were presented at over 100 events, covering diverse topics, and engaging a wide range of audiences, which attests to the broad interest and applicability of the project's work. Some of the key events include WindEurope, Aquaculture Europe and European Maritime Days.

Collaborative efforts with key networks and working groups, spanning across industrial sectors, governmental bodies, and policymakers, as well as projects such as MULTI-FRAME, MUSICA, SEAMARK, eMSP, and EU SCORES, were instrumental in amplifying interest in multi-use concepts and catalyzing new planning and regulatory actions that support multi-use. For example, several UNITED partners have been instrumental in shaping the North Sea Multi-Use Community of Practice and establishing the Industry Sounding Board in UNITED follow up project ULTFRAMES. UNITED results have also fed into some of the core documents including the United Nations Global Compact Climate Friendly MSP Roadmap and the Ocean Multi-Use Toolkit soon to be integrated into the DG MARE MSP Platform. Such actions showcase the strong commitment not only within the partnership and collaborators to advance the concept of multi-use into reality.

The impact of the UNITED project's dissemination activities is most notably exemplified by the establishment of ULTFARMS, a pioneering initiative stemming from the foundational work of UNITED. The influence of the project is further evidenced by the adoption of its results by various entities and the development of new policies and business models, as seen in the contracts with Irish, German, and Japanese authorities for multi-use planning.

Key Performance Indicators (KPIs) have been invaluable in measuring the success and impact of the project's dissemination activities. The collective efforts have reached an impressive audience, a testament to the strategic planning and execution of the UNITED project's communication efforts. This report provides a comprehensive account of the dissemination undertakings, illustrating the scope and efficacy of the strategies employed to ensure the wide-reaching impact of the UNITED project's innovations.

2.1. PROJECT OUTLETS FOR DISSEMINATION MATERIALS:

As a key aspect of its mission, the UNITED project places significant emphasis on the dissemination and exploitation of its activities and results, aiming to foster an ongoing dialogue with potential users, various audiences, experts, researchers of the field of offshore wind turbines both during its duration and beyond.

These outlets include official project reports, presentations, websites, social media platforms, conferences, or any other means of communication that allows project stakeholders, beneficiaries, or the general public to

access and engage with the project's outcomes. To boost the results of these efforts, UNITED embarked on the establishment of a distinctive visual identity, incorporating a characteristic logo, along with a color palette, and graphic style specific identified for the project. This visual identity was extended to all project products, including the website and deliverable templates, and applied to all the below-described communication elements like webinar presentations, flyers, banners, and policy briefs. This section outlines the communication and dissemination outlets of the project for each pillar of the project, along with measurable targets for their outreach.

2.2. COMMUNICATION MATERIALS USED FOR DISSEMINATION

The dissemination strategy of the UNITED project is anchored in a diverse and comprehensive production and dissemination of communication materials. These materials, essential to the project's outreach efforts, play a fundamental role in disseminating complex information related to ocean multi-use practices to a broad audience. The selection and deployment of these communication tools have been crucial in elucidating the project's advancements and engaging a spectrum of stakeholders, including industry professionals, policymakers, and academic researchers.

2.2.1. Categories of dissemination materials :

As outlined in the accompanying table, the UNITED project's dissemination toolkit comprises an array of specifically tailored materials, each serving a distinct purpose within the overall communication strategy.

The categories of these materials include:

- 33 Flyers and E-Flyers

Among which, the flyers produced for dissemination purposes are the following one (the communication flyers can be found in D9.8: The Aquaculture Europe conference tailored flyers for each of the pilots,

-6 commercialization flyers

2 different size format were produced, which of them has the printable and e-version.

- 17 Workshop Reports and Recordings

Detailed accounts of workshops conducted under the project, offering insights and discussions from these collaborative sessions.

- 7 knowledge transfer documents and videos:

Posted on the Knowledge Transfer Hub of the website, those materials were tailored for an easy-reading therefore focused on transfer the knowledge acquired during the project and their dissemination .

Including :

-the Pitching guideline on how to address an effective pitch to investors is found([Delivering An Effective Investor Pitch On Ocean Multi-Use Solutions: An Essential Guide \(July 2023\)](#)),

a video showing how the Middelgrunden wind farm was build ([Construction of the Middelgrunden wind farm near Copenhagen](#)),

Joost Wouter from the Seaweed company explaining the potential and possibilities offshore seaweed farming as a multi-use activity ([The possibilities of offshore seaweed farming as a multi-use activity](#))

A video explaining what is meant with Ocean Multi-Use ([What is the Multi-Use?](#))

A video showing a tourist climbing an wind turbine in the Danish Pilot ([Tourists climbing offshore wind turbines near Copenhagen, Denmark](#))

[DANISH PILOT MANUAL FOR GUIDES - Implementation of multi-use concepts within pilots](#)

A series of 9 videos showcasing the ocean multi-use concept from the health and safety perspective, introducing the assessment framework that is be used to answer whether the ocean multi-use operation is safe ([SOMOS framework for safe multi-use at sea \(video\)](#))

- 8 Policy and Pilot Briefs

Offering succinct, in-depth analyses of policy implications and recommendations based on the project's research.

- 21 Videos

Professionally produced videos that provide an engaging and immersive overview of the project's initiatives, effectively simplifying complex scientific research for public understanding.

13 newsletters

These newsletters served as an essential tool for keeping the community informed about the project's progress, findings, and events.

Each category is represented in the table with direct links for easy access, ensuring optimal accessibility and relevance. The table categorizes materials according to the UNITED project's key pillars:

- Technology
- Economics
- Society
- Legal, Policy and Governance
- Environment

This organization facilitates a comprehensive understanding of the multifaceted aspects of ocean multi-use. Additionally, the table includes metrics on the usage and reach of each material (precisely the estimation outreach metrics include the number of views of the section of the website where the material has been published, social media campaign outreach and number of reached people among the conferences where the material has been promoted).

This quantitative data underlines the impact and engagement achieved by these materials, highlighting the effectiveness of the project's dissemination and exploitation strategy.

2.3. TECHNOLOGY PILLAR

The technological pillar of UNITED, dedicated to addressing the technological requirements for achieving ocean multi-use production sites, has played an important role in advancing the project's objectives. This pillar has focused on responding to the specific technological needs of the pilots, developing requisite technologies and methods, supporting the execution and automation of pilot projects, and enhancing observational and automated networks. These efforts have been geared towards creating an integrated system capable of supporting simultaneous activities and managing risks effectively.

In line with these objectives, a comprehensive array of communication materials (as shown in Table 1) has been deployed to disseminate the advancements and insights derived from this pillar. Three key deliverables—Task2.2., Deliverable 7.2 (Blueprint for the Offshore Site Operation), and Deliverable 7.3 (Curriculum for Offshore Course, Guideline, and Learning Manual)—were extensively promoted through social media and the project website. This strategic promotion effectively reached an audience of over 9,000 individuals, thereby amplifying the project's technological advancements.

The dissemination strategy also included the effective promotion of a Policy Brief focusing on Key Findings and Recommendations for Pilots in terms of Operation and Maintenance. This policy brief, shared through similar channels, mirrored the reach of the deliverables, connecting with an equally expansive audience of approximately more than 8,000 people.

Interactive webinars, such as the 'UNITED Multi-Use Policy and Regulation Exploitation and Knowledge Transfer Session Webinar,' successfully connected with 200 attendees. Promotion across digital platforms played a crucial role in highlighting the technological aspects of the project. Additionally, the Dutch pilot's notable engagement, including a visit by the Dutch King, was publicized to more than 9,000 people, showcasing the pilot's technological significance and garnering public interest.

Workshops reports and recordings, including two UNITED webinars on Ocean Multi-Use Demonstration Pilots and workshops on aquaculture multi-use offshore technology transfer and offshore platform operation logistics, reached an audience of over 8,000. These resources were crucial in illustrating the technological implementations and operational insights of the project.

A tailored flyer, created for the Aquaculture Europe conference, showcased each the German pilot's unique technological features to more than 2,000 participants. Additionally, a series of five technical videos was promoted at the UNITED final event and on social media, drawing in over 5,000 views. These videos provided immersive insights into various technological aspects of the project, from virtual tours to detailed operational overviews.

The workshops enumerated in Table 1, an integral part of the UNITED project's communication strategy, were meticulously designed to disseminate knowledge about offshore multi-use sector combinations. These workshops, with a focus on policy, regulation, and technological transfer pertinent to the UNITED pilots, strategically targeted key stakeholders including the scientific community, industry sectors, and policymakers.

The comprehensive approach ensured that the workshops were not only informative but also reached the intended audiences effectively. In addition to these workshops, the policy brief, which was a crucial component of the project's communication material, received substantial coverage. It was included in the Submariner newsletter, featured on the Marine Training Platform, and actively promoted across all the project's social media channels. This extensive promotion strategy successfully engaged the scientific community, policymakers, and industry professionals, ensuring widespread dissemination and impact of the project's findings and recommendations. Furthermore, the UNITED project succeeded in engaging the general public through various mediums. The project's YouTube series played a significant role in this endeavor, offering accessible and engaging content that resonated with a broader audience.

A significant highlight was the reposting by <https://www.koninklijkhuis.nl/> of the Dutch King's visit to the Danish wind farm. This high-profile coverage not only amplified the project's visibility but also underscored the importance of sustainable ocean use practices to a wider public audience. In summary, the UNITED project's comprehensive communication strategy effectively reached a diverse array of stakeholders, spanning the scientific community, industry sectors, policymakers, and the general public. Through targeted workshops, policy briefs,

and engaging digital content, the project ensured that its findings and insights were disseminated widely and effectively, contributing to a broader understanding and appreciation of sustainable ocean use solutions.

2.3.1. OVERALL OUTREACH OF THE TECHNOLOGY PILLAR DISSEMINATION ACTIVITIES

In total, the combined efforts in promoting the Technological Pillar of the UNITED project have reached an impressive total audience of **approximately more than 30,000 people**. This substantial figure not only underscores the success of the communication strategy but also reflects the significant interest and engagement from a diverse range of stakeholders in the technological advancements and innovations achieved in the realm of ocean multi-use.

Table 1 Dissemination in the context of the technology pillar

TECHNOLOGY				
	Material type	Title	Usage	Reached outreach
1	DOCUMENT- Guide for guides Mid-delgrunden wind farm tours	https://www.h2020united.eu/publications	Promoted on social media and website	8,220 views on the website page and 100 views among Linkedin and Twitter
2	Social Media promotion of TASK 2.2	http://tinyurl.com/2u72m79s	Promoted on social media and website	8,220 views on the website, 89 views in twitter
3	Social Media promotion of Deliverable 7.2 -Blueprint for the offshore site operation	http://tinyurl.com/y3ht7w6c	Promoted on social media and website	8,220 views on the website, 228 views on twitter
4	Social Media promotion of Deliverable 7.3 Curriculum for offshore course, guideline, and learning manual	http://tinyurl.com/2mfn9a5e	Promoted on social media and website	8,220 views on the website, 769 views in twitter
5	Wider (external press, social media and website post) promotion of the Dutch Pilot as the King visited.	- http://tinyurl.com/bdemfhr6 - http://tinyurl.com/mv946y2s	Promoted on social media and website and on the https://www.koninklijkhuis.nl/	8,220 views on the website, more than 1000 views from the https://www.koninklijkhuis.nl/
6	POLICY BREIF- Key Findings and recommendations for Pilots in terms of Operation and Maintenance.	https://www.h2020united.eu/images/PDFs/20230612_UNITED_OM_PB_Print_MKO.pdf	Shared on social medias, the website and at the United Final event with an ad-hoc STANDING CARD.	8,220 views on the website, 400 views at the UNITED final event

7	EVENT REPORT - UNITED webinar- Get to know the ocean multi-use demonstration pilots	http://tinyurl.com/3d9aw8w9	Website	8220 views
8	EVENT RECORDING- UNITED webinar- Get to know the ocean multi-use demonstration pilots	http://tinyurl.com/2s4kb4ja	Website	8220 views
9	EVENT RECORDING- UNITED WORKSHOP 3 TRAINING WORKSHOP - AQUACULTURE MULTI-USE OFF-SHORE: TECHNOLOGY TRANSFER	http://tinyurl.com/mrdfvred	Website	8220 views
10	EVENT REPORT- UNITED WORKSHOP 1 Offshore platform operation, safety and logistics within the context of multi-use	http://tinyurl.com/3we9p2n8	website	8220 views
11	AQUACULTURE CONFERENCE FLYER - Seaweed and offshore wind energy in Germany- If aquaculture works here, it will work everywhere!		Presentation af the http://tinyurl.com/2y98yrhz	More than 2000 people
12	WEBINAR- UNITED Multi-Use Policy and Regulation Exploitation and Knowledge Transfer Session	http://tinyurl.com/4vpnn3c9	Promoted on the website and social media	Almost 200 people
13	VIDEO - A virtual tour to Mid-delgrunden windfarm off the coast of Copenhagen	http://tinyurl.com/2axt3w9d	Promoted at the Final UNITED event	Almost 500 views on social media, 400 views at the UNITED Final Event
14	VIDEO- Belgian Pilot : Combining offshore wind, seaweed cultivation,	http://tinyurl.com/2yu7ym56	Promoted at the Final UNITED event	1000 views on social medias, 400 views at the UNITED Final Event

	flat oyster aquaculture & restoration			
15	VIDEO- Construction of the Mid-delgrunden wind farm near Copenhagen	http://tinyurl.com/3956dx9j	Promoted at the Final UNITED event	220 views on social medias, 400 views at the UNITED Final Event
16	VIDEO- Cultivator 1 and 2 offshore operations - 7 miles offshore Scheveningen	http://tinyurl.com/b2a8npej	Promoted at the Final UNITED event	160 views on social medias, 400 views at the UNITED Final Event
17	VIDEO- Near shore testing of Blue mussels cultivation at Kiel harbour, Germany	http://tinyurl.com/mtr3c7yw	Social Media promotion and UNITED Final Event	460 views on social medias, 400 views at the UNITED Final Event

2.5. ECONOMICS PILLAR

The Economics Pillar of the UNITED project has been a cornerstone in evaluating the economic feasibility of multi-use ocean space frameworks, emphasizing operational efficiency, cost distribution across maritime activities, reduced marine space demands, and evolved business models to minimize risks. A variety of communication materials developed under this pillar have significantly amplified outreach, as outlined in Table 2.

Key among these materials was a flyer for the Aquaculture Europe Conference, "Aquaculture and Tourism in Greece - Turning Aquaculture into a Touristic Asset, rather than a Source of Concern for Local Communities," which reached over 2,000 participants, effectively showcasing the Greek pilot's economic potential. In addition, four Business Briefs tailored to the Greek, German, Belgian, and Danish pilots were produced, with an anticipated outreach of approximately 8,000 people.

The policy brief "Assessment on the Added Value of Marine Multi-Use within UNITED Pilots" successfully engaged more than 9,000 individuals through promotions at the final UNITED event, social media, and the project's website, highlighting the economic benefits of marine multi-use concepts. Similarly, the document "Delivering an Effective Investor Pitch on Ocean Multi-Use Solutions: An Essential Guide" reached over 8,000 people, illustrating the appeal of ocean multi-use solutions to potential investors.

Collaboration with SUBMARINER Working Groups led to two commercialization workshop sessions in aquaculture multi-use, engaging over 100 stakeholders. The 'Pilot Wednesday' social media campaign promoted all pilots, each achieving an audience reach of approximately 1,000 people. Event reports on the Dutch German Pilot Commercialization Flyer and the Online Joint Webinar on commercializing UNITED's results and ULTFARMS launch reached more than 3,000 individuals.

Furthermore, the Aquaculture Europe Conference predominantly attracted a scientific community, stakeholders, and industry audience, fostering valuable professional connections. The promotion of the Pitching Guidelines, especially during the webinar for commercializing UNITED's results and launching ULTFARMS, effectively engaged the scientific community and policymakers.

The public was significantly reached through videos listed in Table 2, offering accessible content on complex topics. The promotion of the webinar "Online Joint Webinar Commercializing United Project Results & ULTFARMS Launch" via social media and maritime platforms reached **an estimated 10,000 people**, considering website and article hits, and webinar attendees.

In summary, the UNITED project's comprehensive communication strategy effectively reached a diverse array of stakeholders, from the scientific community and industry professionals to policymakers and the public, ensuring widespread understanding and appreciation of sustainable ocean-use solutions.

2.5.1. OVERALL OUTREACH OF THE ECONOMICS PILLAR DISSEMINATION ACTIVITIES

In summary, the communication efforts for the Economics Pillar of the UNITED project have been comprehensive and effective, reaching in total an estimated total audience of over 42,000 people. This impressive figure highlights the effectiveness of the communication strategy employed and underscores the significant interest in the economic aspects of ocean multi-use projects.

Table 2 Communication material for Dissemination of the Economics Pillar

ECONOMICS				
	Material type	Link	Usage – Reached outreach	Estimated # of people reached
1	AQUACULTURE Europe Conference Flyer- Turning aquaculture in a touristic asset, rather than a source of concern for local communities -		Presentation of the https://www.aquaeas.org/Meeting/AE2022	> 2000 people
2	Danish Pilot Brief - M3.1 Business briefs UNITED: Danish Pilot	https://www.h2020united.eu/publications	Website	8,000 people
3	Greek Pilot Brief- M3.1 Business briefs UNITED: Greek Pilot	https://www.h2020united.eu/publications	Website	8,000 people
4	Belgian Pilot Brief- M3.1 Business briefs UNITED: Belgian Pilot	https://www.h2020united.eu/publications	Website	8,000 people
5	German Pilot Brief- M3.1 Business briefs UNITED: German Pilot	https://www.h2020united.eu/publications	Website	8,000 people
6	POLICY BRIEF- Assessment on the added value of Marine Multi-Use within UNITED pilots.	http://tinyurl.com/3m6nytme http://tinyurl.com/2prfy2xd	Social media and website promotion	8220 website views, 774 views on twitter
7	Pitching Guide - Delivering an effective investor pitch on	http://tinyurl.com/2naa4wzz http://tinyurl.com/44nbear8	Social media and website promotion	8220 website views, 110 views on twitter

	ocean multi-use solutions:An essential guide			
8	E- FLYER & its printable version - Danish United pilot commercialization flyer “ Discover the Power and the Potential of the Middelgrunden windfarm- a Unique Educational and Tourist destination	http://tinyurl.com/2p89f9mp	Social media, website and conferences promotion	866 DK pilot section views, 121 sm views, 400 views at the UNITED Final Event
9	E- FLYER & its printable version - Greek Pilot commercialization flyer n.1 “ Unleash the Potential of Aquaculture: UNITED WINGS ICT SOLUTIONS Innovative Monitoring Solutions”	http://tinyurl.com/2s4bbfcx	Social media, website and conferences promotion	3000 people reached
10	E- FLYER & its printable version- Greek Pilot commercialization flyer n.2 Welcome to the Patroklos area, a paradise for scuba divers located just 60 kilometers south of Athens	http://tinyurl.com/yc5xxybd	Social media, website and conferences promotion	3000 people reached
11	E- FLYER & its printable version- Belgium Pilot commercialization flyer “ UNITED demonstration project in Belgium paves the way for successful multi-use developments in the future!”	http://tinyurl.com/23z64kuz	Social media, website and conferences promotion	163 sm views, 225 BE pilot page, 400 views at the Final UNITED event
12	FLYER & its printable version - - German Pilot commercialization flyer “Unlock the Potential of Ocean Multi-Use with the	https://www.h2020united.eu/images/Flyers/pilot-commercial-german-1-A6.pdf	Social media, website and conferences promotion, UNITED Final event	198 sm views 225 german pilot page views

	German UNITED pilot. Discover the future of Aquaculture in Windfarms			400 views at the Final UNITED event
13	E- FLYER & its printable version - Dutch Pilot commercialization flyer "Revolutionize Offshore Production with UNITED: Seaweed Cultivation and Offshore Solar"	http://tinyurl.com/7fnw98da	Website and social media promotion, UNITED Final event	198 sm views 225 Dutch pilot page views 400 views at final UNITED event
14	EVENT REPORT- Online joint webinar: commercializing UNITED project's results & ULTFARMS launch	http://tinyurl.com/23xf75bv	Website and social media promotion	3000 people
16	VIDEO- UNITED Knowledge and Technology Transfer -Greek pilots	http://tinyurl.com/46e9ttnd	Social media and UNITED Final Event promotion	500 people
15	VIDEO- The possibilities of off-shore seaweed farming as a multi-use activity	http://tinyurl.com/4zzy38n5	Social media and UNITED Final Event promotion	500 people
16	WEBINAR ORGANIZATION- Online Joint Webinar Commercializing United Project Results & ULTFARMS Launch	http://tinyurl.com/3aj6mukv	Social Media and Webiste external platforms (MSP Platform and Marine Training)	9000 people (publication section hits 8220, Website article hits 127, Webinar attendees 100)

2.6. ENVIRONMENTAL PILLAR

The Environmental Pillar of the UNITED project, crucial in addressing the cumulative environmental impacts of ocean multi-use, has focused on developing harmonized monitoring frameworks and assessment methods. These efforts are directed toward understanding both the negative impacts and potential environmental gains of multi-use scenarios in marine spaces. A key objective is to reduce environmental impacts by strategically combining various maritime uses, with a comprehensive assessment framework that considers both local and regional sea perspectives.

For dissemination, an ad-hoc flyer created for promoting the Belgian pilot at the Aquaculture Europe Conference titled "Where Aquaculture Feeds Ecosystem Restoration - Offshore Wind, Flat Oyster Aquaculture & Restoration & Seaweed Cultivation in Belgium." reached over 2,000 people, highlighting the innovative integration of aquaculture and ecosystem restoration practices.

The project's outreach was further enhanced by a study conducted by the University of Ghent on identifying optimal locations for offshore European flat oyster habitat restoration. Promoted through the project website, social media, the UNITED Final Event, and featured in the Nora Newsletter, this study reached an estimated audience of over 1,000 people.

Additionally, the project produced the "UNITED project Interview with Nancy Nevejan #OffshoreNature22" video, showcasing the Belgian pilot project's efforts in both the production and restoration of European flat oysters and sugar kelp. The video illustrates the project's innovative approach, such as installing longlines with aquaculture spat collection frames to attract oyster larvae and designing scour protection around wind turbine poles to encourage natural oyster reef formation. It also highlights the cultivation of sugar kelp alongside flat oyster culture and the testing of different seeding methods. Promoted during the UNITED Final Event and on social media, this video successfully reached an audience of almost 600 people.

2.6.1. OVERALL OUTREACH OF THE ENVIRONMENTAL PILLAR DISSEMINATION ACTIVITIES

In sum, the communication and outreach activities of the Environmental Pillar have collectively reached an impressive total audience of over 3,600 people. This significant outreach reflects the effectiveness of the dissemination strategy in highlighting the project's environmental innovations and sustainable practices. Through these targeted communications, the UNITED project has not only shared crucial environmental insights but has also fostered widespread understanding and appreciation of sustainable ocean multi-use among diverse stakeholders.

Table 3 Communication material for Dissemination of the Environmental Pillar

ENVIRONMENT				
#	Title	Name/ links	Usage – Reached outreach	Estimated # of people reached
1	AQUACULTURE conference FLYER – BE Pilot- Offshore wind, flat oyster aquaculture & restoration & seaweed cultivation in Belgium. Where Aquaculture Feeds Ecosystem Restoration		Promotion at the conference	More than 2000 people

2	Wider promotion of the study conducted by University of Ghent on the identification of optimal locations for offshore European flat oyster habitat restoration.	http://tinyurl.com/4bnc8268	Website, Social media and UNITED Final Event promotion, Nora Newsletter	218 social media views, publication section, 8220 publication section views, Nora newsletter subscribers
---	---	---	---	--

2.7. SOCIETY PILLAR

The Society Pillar of the UNITED project has been a cornerstone in promoting social acceptance and stakeholder involvement in ocean multi-use. It has operated as the primary interface for engaging a diverse range of stakeholders, utilizing centralized surveys and communication channels for effective interaction. This pillar has been crucial in ensuring consistent stakeholder involvement, supporting the development of pilot projects, and learning from these experiences to benefit future ocean multi-use initiatives.

One of the standout initiatives of this pillar was the innovative outreach campaign associated with the Greek Pilot. The "UNITED Ocean Multi-Use Open Days" were designed to engage both local residents and tourists, offering them a chance to immerse themselves in multi-use concepts through interactive and educational activities. These included watching multi-use videos, participating in online quizzes with prizes, gaining insights from Greek pilot leads, engaging in a QR code underwater hunt during dives around a fish farm, and completing questionnaires to evaluate their understanding of aquaculture impacts. This multifaceted campaign culminated in a unique dining experience featuring fish from the aquaculture farm, although specific outreach figures for this campaign are still being finalized.

In addition to this, the Society Pillar created two significant questionnaires to assess participant satisfaction and raise awareness. The first, linked to the Danish pilot's tour, remarkably reached an audience of 34,000 people, with 170 respondents completing the questionnaire. This survey was mainly aimed at tourists and technicians, thus engaging the general public and intersecting with various stakeholder groups. The second questionnaire, prominently displayed on the UNITED project's website, was filled out by over 70 individuals and attracted more than 21,000 visitors.

Moreover, the Society Pillar's initiatives, such as the Satisfaction Survey QR Code & Jotform for the Greek Pilot's QR Code Hunt, primarily targeted the general public. On the other hand, the UNITED-Danish Tour Satisfaction Survey was specifically designed for tourists and stakeholders, effectively reaching these groups. The comprehensive "Satisfaction Survey - Stakeholder and Public Engagement in UNITED" was aimed at a broad audience, including the scientific community, industrial sector, policymakers, general public, investors, and civil society, ensuring extensive feedback and engagement.

The Society Pillar of the UNITED project has successfully implemented diverse and focused strategies to engage various groups, significantly enhancing social acceptance and stakeholder involvement in ocean multi-use. These efforts have been instrumental in fostering a deeper understanding and support for sustainable ocean use solutions.

2.7.1. OVERALL OUTREACH OF THE SOCIETY PILLAR DISSEMINATION ACTIVITIES

In conclusion, the communication and outreach efforts of the Society Pillar have been exceptionally executed, reaching a cumulative audience of **over 55,000 people**. This impressive figure highlights the successful implementation of various outreach activities and the remarkable engagement achieved. Through these initiatives, the Society Pillar has effectively communicated the importance of social acceptance and stakeholder involvement in ocean multi-use, demonstrating how such engagement can lead to a deeper understanding and appreciation of sustainable maritime practices.

Table 4 Communication material for Dissemination of the Society Pillar

SOCIETY				
#	Title	Name/ links	Usage – Reached out-reach	Estimated # of people reached
1	Satisfaction SURVEY QR CODE & Jotform- GK PILOT- QR CODES HUNT		Outreach campaign and event with the Greek Pilot	
2	Satisfaction SURVEY QR CODE & Jotform UNITED-DK Tour Satisfaction Survey	https://form.jotform.com/230092603258350	Website	More than 22000 people reached. 170 people filled in the survey but 22000 visited the home page.
3	Satisfaction survey- Stakeholder and public engagement in UNITED - Welcome!	https://s1.sphinx-online.net/survey-server/s/4dxzut http://tinyurl.com/dbv47bjx	Website and social media	More than 22000 people reached. 71 people filled in the survey but 22000 visited the home page

2.8. LEGAL PILLAR

The Legal, Policy, and Governance Pillar of the UNITED project has been centric in promoting ocean multi-use solutions, focusing on societal, legal, insurance, and health and safety challenges. This pillar has played a central role in shaping viable business models and frameworks for multi-use ocean spaces, with a keen emphasis on efficient risk management and stakeholder engagement.

A key element of the pillar's outreach strategy involved the Policy Brief titled "Key Findings for Multi-Use Pilots in Terms of Legal, Governance, and Insurance." This document was effectively disseminated through various channels including the project's website, social media, the UNITED Final Event, and platforms like the Maritime Training Platform, e-MSP newsletter, and Submariner newsletter. Consequently, it reached an audience predominantly consisting of the scientific community and policymakers, tallying an estimated reach of 9,000 people. This includes 8,220 website visits, 30 direct views, 291 social media views, and 400 event attendees.

In addition, the creation and publication of "Charting IP Strategies for Multi-Use Solutions: Insights from the UNITED Project" significantly contributed to the outreach efforts, with its impact metrics pending. The workshop report "Ocean Multi-Use Policy, Planning, and Regulation Knowledge Transfer Session: Outcomes and Findings" successfully engaged around 8,300 individuals, underscoring the pillar's influence and reach.

Further enhancing the outreach, a series of nine videos introducing the SOMOS framework for safe multi-use at sea effectively reached approximately 4,500 viewers. These videos provided an in-depth and accessible overview of the SOMOS model, resonating with both the general public and the scientific community.

An additional element of the outreach strategy was a video interview with Marijn Rabaut discussing the legal policy brief at EMD 2023, which attracted nearly 500 viewers. This effort added to the overall impact of the pillar's communication strategy.

Summarizing, the Legal, Policy, and Governance Pillar's communication strategy within the UNITED project has successfully reached a diverse array of stakeholders. Through a blend of written materials, interactive webinars, videos, and extensive promotion across multiple platforms, the pillar has effectively disseminated vital information and findings, contributing to a broader understanding and appreciation of sustainable ocean use solutions.

2.8.1. OVERALL OUTREACH OF THE LEGAL PILLAR DISSEMINATION ACTIVITIES

In total, the communication and dissemination efforts for the **Legal, Policy, and Governance Pillar of the UNITED project have achieved an impressive outreach, engaging over 22,300 people**. This achievement underscores the effectiveness of the dissemination strategy and the significant interest in the legal and governance aspects of ocean multi-use solutions. Through these concerted efforts, the project has not only provided valuable insights into the

Table 5 Dissemination in the context of the legal pillar

LEGAL			
Material type	Link	Usage – Reached outreach	Estimated # of people reached
Report Brief- Ventoline's UNITED REPORT - The legal, regulatory and contractual framework for integrated solar and offshore wind	https://www.h2020united.eu/publications	website	8000 people
POLICY BRIEF- Key Findings for multi-use pilots in terms of legal, governance, and insurance.	http://tinyurl.com/2mke6ne5 http://tinyurl.com/2n553eap	Website, Social media and UNITED Final Event promotion	8220 publication section 30 direct views to the link 291 sm views 400 Final United event attendees
IP GUIDELINES: Charting IP Strategies for Multi-Use Solutions: Insights from the UNITED project	https://www.h2020united.eu/publications	Website	8000 people
WORKSHOP REPORT- Ocean Multi-Use Policy, Planning and Regulation Knowledge Transfer Session: Outcomes and Findings	http://tinyurl.com/ha229t7y	Website	8300 people
Video 1: Introduction to the SOMOS framework for safe multi-use at sea	https://www.youtube.com/watch?v=3BRKUYzn6pA	Website and UNITED Final Event	500 people (100 sm views, 400 at the UNITED Final Event)
VIDEO- Video 2: Three layers of the SOMOS model	https://www.youtube.com/watch?v=16B5m8NnVIE	Website and UNITED Final Event	450 people (50 sm views, 400 at the UNITED Final Event)
Video 3: The SOMOS model step 1: Exploring	https://www.youtube.com/watch?v=YxkGW525OPo&t=15s	Website and UNITED Final Event	400 people (sm views, 400 at the UNITED Final Event)
Video 4: The SOMOS model step 2: Understanding	https://www.youtube.com/watch?v=3XNa0VB2cM8	Website and UNITED Final Event	500 people (100 sm views, 400 at the UNITED Final Event)

Video 5: The SOMOS model step 3: Appraising	https://www.youtube.com/watch?v=tY7ibBfFd-c	Website and UNITED Final Event	E500 people (100 sm views, 400 at the UNITED Final Event)
Video 6: The SOMOS model step 4: Deciding	https://www.youtube.com/watch?v=FvnMchlOwc	Website and UNITED Final Event	500 people (80sm views, 400 at the UNITED Final Event)
Video 7:The SOMOS model Step 5: Implementing	https://www.youtube.com/watch?v=ET7W2T_qZ-4	Website and UNITED Final Event	410people (10 sm views, 400 at the UNITED Final Event)
Video 8: Inside the SOMOS model: Evaluation & Communication	https://www.youtube.com/watch?v=MU5n-LOWvvs	Website and UNITED Final Event	420 people (20 sm views, 400 at the UNITED Final Event)
Video 9: The core of the SOMOS model: Three perspectives	https://www.youtube.com/watch?v=0RmwH-gisUqg&t=2s	Website and UNITED Final Event	430 people (30 sm views, 400 at the UNITED Final Event)
Interview of Marijn Rabaut about United's policy brief for multi-use pilots at EMD 2023	https://www.youtube.com/watch?v=Hz-hJJ_awew&t=1s	Website and UNITED Final Event	430 people (30 sm views, 400 at the UNITED Final Event)

2.9. OVERALL OUTREACH OF ALL THE PILLARS DISSEMINATION ACTIVITIES

In summary, the collective efforts across all pillars have resulted in an impressive total estimated outreach of over **152,500 people**. This remarkable achievement not only highlights the success of the project's diverse and dynamic communication strategy but also showcases the UNITED project's ability to engage with a wide range of stakeholders. Each pillar, through its unique communication approach, has contributed to a deeper understanding and appreciation of ocean multi-use, underscoring the project's overarching impact and its role in fostering sustainable and innovative maritime practices. Additionally partners are committed to expand their dissemination actions to promote those deliverables that are yet to be published or to be approved in February 2024.

3. JOINT DISSEMINATION AND OUTREACH ACTIVITIES

Employing a comprehensive approach to dissemination and outreach activities and ensuring that the key findings and advancements from the project's four pillars—Legal, Environmental, Economic, and Society—were communicated effectively to a wide audience (detailed in Chapter 1.2 'Communication Materials Used for Dissemination') UNITED have successfully reached a total of 152,500 people.

In Annex 1 the dissemination and communication activities conducted by all project partners were meticulously tracked and categorized, highlighting participation in **53 international events, 27 local events, 23 mainstream media activities, 16 in-person meetings, and 20 online webinars**. These activities, extending across various sectors, effectively engaged the Scientific Community, Industry, Civil Society, the General Public, Policymakers, Media, Investors, Customers, and others.

Throughout the project's lifetime, **international events engaged over 5,600 individuals**, while local events attracted nearly 5,000 participants. Direct engagement through one-on-one meetings reached over 100 stakeholders, and mainstream media channels had a remarkable outreach of approximately **3,473,000**

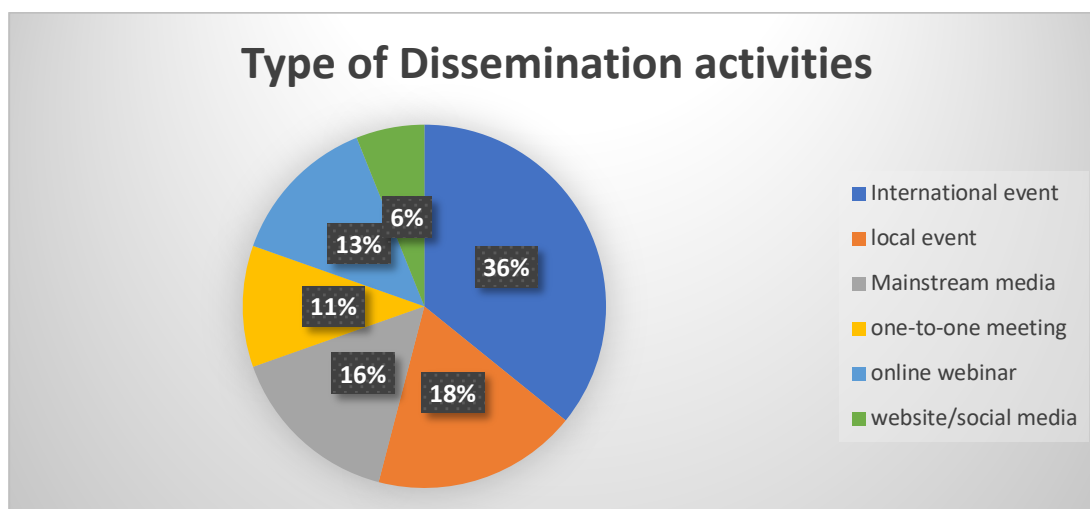


Figure 1 Type of Dissemination activities listed in Annex 1

The dissemination strategy particularly focused on reaching the Scientific Community, Industry, and Policymakers. This resulted in 123 activities catering to the Scientific Community, 120 targeting Industry, and over 90 designed for Policymakers. Civil Society was also a significant focus, with almost 70 activities aimed at engaging this sector. Notably, FuE-Zentrum FH Kiel GmbH was the most active partner with 37 recorded activities, followed by Spok with 24, and Ugent and Submariner with around 20 initiatives each.

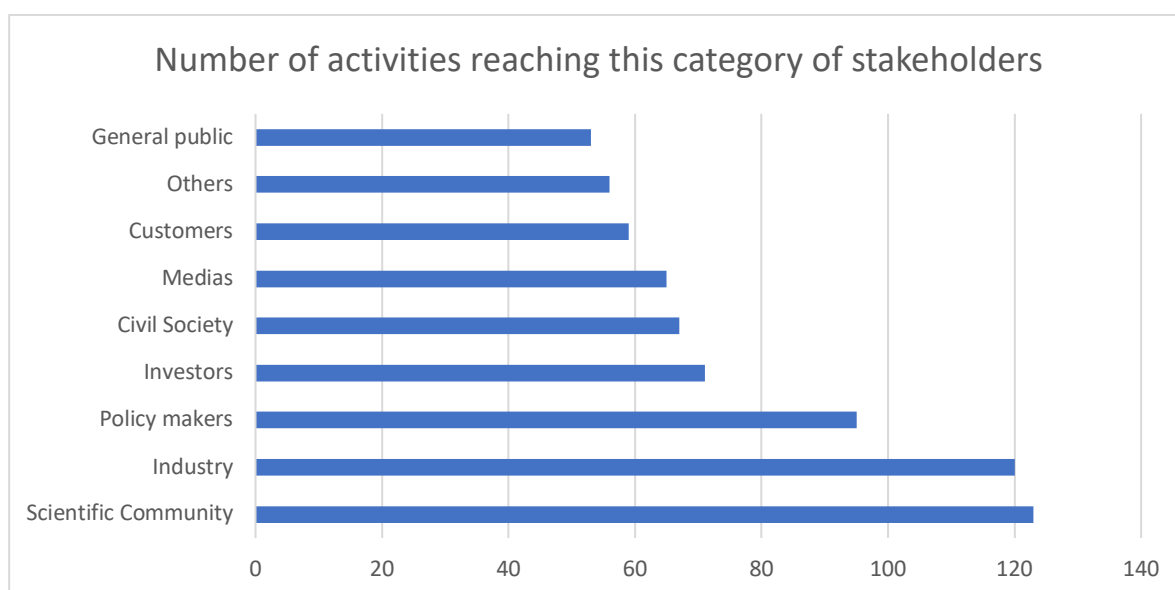


Figure 2 Stakeholders reached by activities

Combining all the outreach throughout the duration of the UNITED project, the initiatives have reached an estimation of a grand total of over 3,565,000 people (considering the social media outreach, the subscribers to both the UNITED newsletter and ULTFARMS newsletter). This remarkable figure demonstrates the vast and successful dissemination and outreach strategies implemented by the project partners. It also emphasizes the collective efforts made to spread and disseminate the UNITED project's key findings, ensuring that the insights were shared with a diverse range of stakeholders, contributing to the widespread adoption and understanding of multi-use ocean space solutions.

It is important to highlight that this total does not include the potential reach of newsletters from other projects that featured UNITED content. The exact subscriber numbers for these external newsletters are not accessible to the UNITED project team, and hence their specific outreach impact cannot be added to the overall total. Nevertheless, the immense number of individuals reached reflects the extensive and collaborative efforts undertaken to ensure the effective dissemination of the UNITED project's significant contributions to the field.

3.1. Deliverables dissemination

The dissemination strategy for the deliverables of the UNITED project has been a multifaceted effort, ensuring widespread exposure and engagement across each of the project's pillars.

The forthcoming deliverables, including the Catalogue of Multi-use Blueprint Solutions (D1.5), The Business Case for Multi-Use Platforms (D3.4), Recommendations for Stakeholder Engagement (D5.5), Synthesis Report for Pilots (D7.7), Report on Technical Assessment and Validation (D8.1), and the Commercialization Roadmap (M9.5), are poised for broad distribution upon approval.

The policy and business brief listed in tables 1,2,3 and 4 have been meticulously crafted to promote the key messages of each work package and promote the deliverables' key messages and findings.

These deliverables will be shared extensively through each Work Package Leader's network, the project multipliers list, the project's website, and social media accounts, promising a far-reaching impact within the scientific and stakeholder communities. The collaboration with notable social media profiles, such as @REA_research, @HorizonEU, @Ocean_multi_use, and @FrameMulti, has been instrumental in amplifying our message and promoting our posts to a wider audience.

The project has already seen significant engagement through the dissemination of various materials. For example, the ad-hoc flyer made for the Aquaculture Europe conference to promote the Belgian Pilot has reached over 2,000 individuals, emphasizing the synergy between aquaculture and ecosystem restoration. Furthermore, the University of Ghent's study on optimal locations for offshore European flat oyster habitat restoration has garnered attention through the UNITED Final Event, social media, and inclusion in the Nora Newsletter, achieving an outreach of over 1,000 people.

As we anticipate the approval and sharing of the upcoming deliverables, we expect to extend our reach even further through strategic dissemination partners such as the MSPRN E-Newsletter, the EUROPEAN, MARINE BOARD newsletter, and collaborations with organizations like NORTHSEAFARMERS, WindEurope, Ocean Basis, and the Dutch Marine Energy Centre, Marine Training and those platforms listed in table 5. These channels will play a strategic role in broadcasting the valuable findings and insights of the UNITED project.

The dissemination activities associated with the UNITED project's Legal, Policy and Governance, Environmental, and Society Pillars have already reached an incredible number of people, and we are committed to continuing these efforts throughout the website and through UNITED's follow-up project ULTFARMS.

The combined outreach of these activities, bolstered by our strategic dissemination activities and collaborative partnerships, demonstrates the exceptional success of the project in engaging a diverse and extensive audience. We look forward to the continued sharing of our research and findings with UNITED's follow-up project ULTFARMS, which will undoubtedly contribute to the advancement of multi-use ocean space solutions.

3.1.1. Strengthening Synergies: The UNITED Project's Collaborative Efforts

The UNITED project has been a catalyst for innovation and collaboration within the Ocean Multi-Use network, fostering partnerships and knowledge sharing that have extended beyond the project's own framework.

ULTFARMS: The Future Built on UNITED's key findings

The approval and funding of ULTFARMS, a follow-up project conceived by several partners from the UNITED consortium, mark a significant stride in the journey towards sustainable marine and ocean use. The initiative is strategically poised to build upon the technological readiness levels (TRL) and outputs of the UNITED project, aiming to push the boundaries of commercialization and exploitation. This progression ensures that the foundational work of UNITED continues to bear fruit, propelling the sector towards a future where marine space is used optimally and responsibly.

Collaborative Milestone and Knowledge Sharing

In its pursuit of multi-use marine space solutions, UNITED has actively sought collaboration with parallel projects, sharing insights and co-creating content that amplifies the impact of its work. These collaborative ventures have included:

- ➔ **A joint presentation with MUSICA at ICOE 2022**, highlighting the collective research and development in the sector.
- ➔ **Co-organized workshops** and discussions on multi-use with EU-SCORES and MUSICA at EMD 2022, expanding the discourse on multi-use.
- ➔ **Engagement at EMD 2022** with a fireside chat outreach stand alongside MULTI-FRAME and EU4OCEANS, promoting dialogue and public engagement.
- ➔ **Collaboration on the preparation of a joint paper with MUSICA**, tackling the challenges and barriers to multi-use pilot implementation.
- ➔ **The joint creation of an educational video**, 'What is ocean multi-use,' in partnership with MULTI-FRAME, to further public understanding of the concept.
- ➔ **Regular inclusion of MUSICA's work** in the UNITED Webinars, ensuring ongoing learning and exchange within the project's network.
- ➔ **Joint exhibits with MUSICA and EU-SCORES** at key events like the opening of the Dutch Energy Center, showcasing a united front in the quest for sustainable energy solutions.
- ➔ **Collaboration with FLORES project** (Forward Looking at the Offshore Renewables / Erasmus+ funding call) to adapt resources and findings from UNITED into training materials for youth education on ocean multi-use and offshore renewable energy. FLORES utilizes valuable research findings, including video materials from 5 UNITED pilots, to create comprehensive training materials for both youth and trainers. The completed materials will be also published on the Technology Transfer HUB (TTH) on UNITED's website, so it could be used by interested target audiences.
- ➔ **Collaboration with WIN-BIG** - which invited Molly from UNITED to share her experience as a woman in the Blue Economy, specifically in the fisheries and offshore energy sector, in a storytelling format, to give us an insight to the struggles, benefits and changes she has gone over her career compared to other women who did it in the past (<https://winbigproject.eu/events/13/workshops-how-to-close-the-gender-gap-in-the-blue-economy>).
- ➔ **Workshop "How to Close the Gender Gap in the Blue Economy?"** organised in collaboration with the WIN-BIG project at the 1st Mission Arena. Molly Hughes, representing the UNITED project, played a key role. Molly shared a compelling storytelling session that provided very valuable insights into her experiences as a woman in the Blue Economy, specifically within the challenging domains of fisheries and offshore energy. Through her narrative, Molly made a comparison between the struggles, benefits, and transformative changes she encountered over the course of her career, versus other women born before her and that she has worked with, offering a unique perspective on the evolving landscape for women in these sectors. The collaboration between the WIN-BIG project and the UNITED project, contributed significantly to the session's depth and richness. Molly's firsthand account not only shed light on the hurdles women face in traditionally male-dominated fields but also highlighted the positive shifts and advancements. Her storytelling provided crucial context for understanding the broader dynamics influencing gender equality in the Blue Economy.

This collaborative effort between projects fostered an environment of shared knowledge and experiences, contributing to a more comprehensive understanding of the challenges and opportunities in closing the gender gap in the Blue Economy. You can see her presentation, together with the intervention from WIN-BIG project and FLORES project [here](#), or read the summary of the session [here](#).

3.2. Citizen Engagement and Society Impact

UNITED has embraced citizen engagement and societal uptake as integral components of its outreach strategy. Notable initiatives have included:

- ➔ **Innovative engagement campaigns**, such as the 'QR code underwater hunt' at the Greek pilot site, which creatively involved the public in the project and fostered a deeper understanding of the relationship between aquaculture and natural marine life.
- ➔ **'Open House' events and virtual tours** in Denmark, which invited the public to Middelgrunden offshore wind farm to learn about renewable energy's crucial role in climate change mitigation. The questionnaire and survey to gather the target involved audiences' feedbacks.

3.3. Media Outreach and Educational Initiatives

The project has made significant strides in media engagement, leveraging local TV and radio platforms to highlight UNITED's work and its implications for sustainable marine practices, including:

1) Mission day with the Belgian television on board

During summer 2022, the National Belgian Television joined the Belgian pilot for a day at sea. The aim of the excursion on that day of July, was to install a third restoration table, to implant young oyster spat in the restoration table and to attach a new oyster aquaculture structure to the backbone in order to test its application offshore. These tasks were not easy to implement, as very bad weather suddenly hit the crew, despite an initial nice sunrise. Thankfully everyone was equipped with safety helmets and jackets! The anchors and camera crew from the show "Over eten" from the VRT channel were very impressed by the work being done in the UNITED project, particularly under these rough conditions, and were also enthusiastic about experiencing life at sea for a bit! The footage was featured in the "Noordzee" episode of the "Over eten" show on 5.10.2022 on VRT.

2) ZDF TV documentary 'SOS ocean - Help for an endangered habitat'

A new documentary on German television network ZDF, titled 'SOS ocean - Help for an endangered habitat', highlights sustainable solutions to protect the world's oceans. This inspiring documentary uses a simple yet engaging language to showcase some of the most innovative and sustainable initiatives aimed at protecting our oceans from the devastating effects of pollution, overfishing, and climate change.

3) NDR documentary 'Algae cultivation between wind turbines'

A new documentary by German public broadcaster NDR, titled 'Algae cultivation between wind turbines', delves into the inner workings of the German UNITED pilot and its local awareness raising activities. In the documentary, viewers get an up-close look at the project's research facilities at Kiel University of Applied Sciences, where high school graduates are lending their support to the research efforts. The students are learning about the process of seaweed cultivation and its potential to contribute to the fight against climate change.

Educational initiatives have brought the project into classrooms, enabling students to get hands-on experience with marine cultivation and research.

A series of educational tours have been taking place close to shore in the German pilot where students from local schools had a chance to learn about the pilot and learn about the importance of reconciling the food security (aquaculture) and energy security (offshore wind) objectives in a form of a multi-use platform. Namely, a school project was organized with a local "Gymnasium". Together with the teachers a program was conducted. The pupils got a short introduction to the UNITED project by the German project team of FuE. The introduction was followed by lessons on the general idea of algae cultivation, its uses and its bottlenecks. During these lessons, the theoretical background and information of alga cultivation was taught. Also, an experimental setup was prepared. The students were shown how algae propagation is done on a small scale. Algae cultivation tanks were set up at the school, sporulation using algae sorus was conducted by the pupils under supervision of the FuE team and the pupils cared for the algae seedlings that were settling on different net and rope materials. After precultivation of the algae seedling in tanks for 3 weeks the nets were brought onto a private jetty in the open sea, close to the school. The pupils monitored different environmental parameters (temperature, salinity, pH, turbidity, O2) and

documented weekly the growth of the algae by taking photos and keeping a log of the different measured parameters and activist. The experiments are ongoing and will finish in April 2023. A film crew also visited the school and reported on the project on regional television. The television reportage is online accessible <https://www.ardmediathek.de/video/ndr-info/forschungsprojekt-algenzucht-in-offshore-anlagen/ndr/Y3JpZDovL25kci5kZS84NzU3NDcxNS04ZDMzLTQ5MjAtYjE2Ni01Yzk4MTcwMmM4MjMjM>



Figure 3 Screenshot of the TV reportage about the school outreach activity

3.4. Policy and Technology Transfer Sessions

Policy transferability sessions and technology transfer workshops have played a crucial role in disseminating UNITED's findings and facilitating the adoption of its recommendations by sectoral authorities and industry. These sessions have provided a forum for marine spatial planners and other stakeholders to discuss the practical application of UNITED's work and to explore the project's transferability to other settings.

Local community engagement, such as the Belgian pilot video production, offered transparent communication about pilot activities, bridging the gap between the project and local stakeholders.

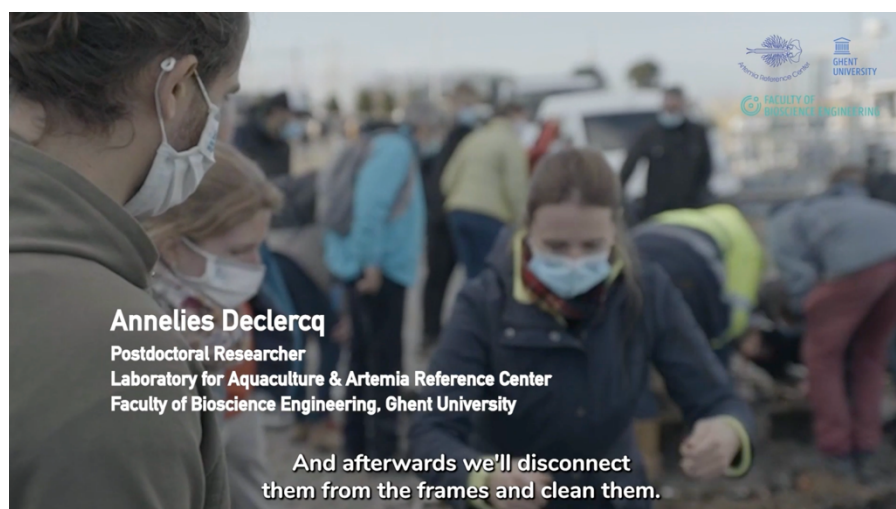


Figure 4 Screenshot from the Belgium video showcasing the local citizen outreach

A series of online and in person technology transfer interventions at the Community of Practice (CoP) meetings took place to exchange on the multi-use technology, regulation and other related aspects related to the advancement of the overall technology readiness level of the multi-use solutions. The role of the CoP is not only to support the wider technology transfer to the different sectors and industries but to also allow for the wider discussion about relevant enablers for the technology transfer incl. the regulation, business plans, etc. Some of the key outputs of this engagement facilitated by the North Sea Farmers include the multi-use procedures developed for the Netherlands and Belgium. Moreover, in the context of the CoP the link has also been established with the eMSP project led by the Dutch authorities (Dutch Enterprise Agency) to discuss the key enablers for the application of the multi-use solutions incl the infrastructural enablers necessary in the context of so called 'MariParks' and the role of government to facilitate these.

3.4.1. Technology transfer sessions in the framework of the SUBMARINER Network mussels and algae working groups

A series of events took place in collaboration with the SUBMARINER Network Accelerator and mussels and seaweed working groups. UNITED pilots had an opportunity to pitch their results and receive the feedback from participants ranging from aquaculture businesses, investors, scientists, and policymakers/regulators. The groups contain over 500 participants working in the field of low trophic aquaculture who benefited from learning about the technological solutions applied on the pilots, and associated lessons learned related not only to the technology per se but also to other relevant enablers including the certification, insurance, necessary offshore trainings, species selection, etc. The feedback from the group members was also used where needed to finetune the outputs in pilots.

3.4.2. Thematic workshops focusing on the technology

A series of thematic workshops and online webinars have been organized in the scope of the project to both present the results and progress of the project, gather external experts to provide an advise and provide for a moderated discussion among the participants thus ensuring the effective knowledge transfer. Most of the events that took place in the framework of the UNITED project can be found here: <https://www.h2020united.eu/publications>

3.5. NEWSLETTER

The UNITED project's commitment to effective communication and knowledge dissemination has been strikingly evident in the successful execution of its newsletter campaign. Since January 2020, a series of 12 newsletters have been judiciously crafted and distributed, serving as a conduit for conveying the project's developments and breakthroughs to a dedicated audience.

This newsletter initiative has witnessed remarkable growth, as evidenced by the substantial increase in subscribers, now totaling 553. This expanding network not only encompasses a diverse array of individuals but also signifies a shared dedication to promoting sustainable ocean multi-use practices. The robust subscriber base underscores the compelling nature of the project's work and its resonance within the global community.

Each newsletter has been composed with precision, providing an in-depth narrative of the project's advancements. It covers a spectrum of content from website updates, partner contributions, and pilot project findings to noteworthy publications. Moreover, the newsletter serves as a crucial channel for spotlighting key events like conferences, webinars, and workshops—each instrumental in nurturing networks, disseminating knowledge, and catalyzing collaborations.

Furthermore, the project's milestones and announcements have reached an even broader audience through inclusion in the newsletters of esteemed partners like UGent, ParkWind, and NSF, leveraging their established networks for greater impact.

In the past eight months, the newsletter has also played a promotional role in introducing ULTFARMS, the direct successor to the UNITED project. This new venture has been presented to the UNITED audience and has already garnered a significant following, with 90 subscribers now eagerly engaged with ULTFARMS, poised to continue the legacy of innovation and sustainability championed by the UNITED project.

3.5.1. NEWSLETTER METRICS ANALYSIS

The graph below presents a detailed analysis of two critical metrics pertaining to the UNITED project's newsletter: the Click Rate and the Open Rate.

These metrics are represented in distinct colors for clarity, with the Click Rate depicted in green and the Open Rate in blue. The graphical representation provides an insightful view of the trends and patterns in subscriber engagement over a specified period.

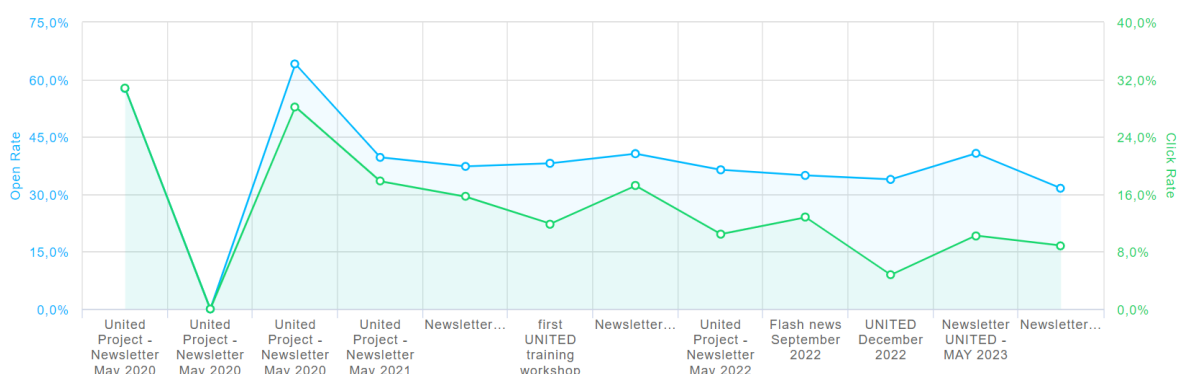


Figure 5 Click and Open rates

Table 6 Newsletter outreach and rates

TITLE	SENT	OUTREACH
United Project - Newsletter May 2020	19.05.2020 16:24	53 CONTACTS 57,7% OPEN RATE 30,8% CLICK RATE
United Project - Newsletter May 2020	28.05.2020 10:13	40 CONTACTS 64,1% OPEN RATE 28,2% CLICK RATE
United Project - Newsletter May 2020	28.05.2020 11:10	CONTACTS 0,0% OPEN RATE 0,0% CLICK RATE
United Project - Newsletter May 2021	04.05.2021 10:02	177 CONTACTS 39,7% OPEN RATE 17,8% CLICK RATE
Newsletter September 2021	29.09.2021 16:48	187 CONTACTS 37,3% OPEN RATE

		15,7% CLICK RATE
First UNITED training workshop	23.12.2021 10:57	202 CONTACTS 38,1% OPEN RATE 11,9% CLICK RATE
Newsletter 2022-01-04T09:58:26+01:00	04.01.2022 10:25	128 CONTACTS 40,6% OPEN RATE 17,2% CLICK RATE
United Project - Newsletter May 2022	04.05.2022 11:58	338 CONTACTS 36,4% OPEN RATE 10,4% CLICK RATE
Flash news September 2022	14.09.2022 16:09	359 CONTACTS 34,9% OPEN RATE 12,8% CLICK RATE
UNITED December 2022	15.12.2022 16:21	366 CONTACTS 33,9% OPEN RATE 4,8% CLICK RATE
Newsletter UNITED - MAY 2023	24.05.2023 10:56	375 CONTACTS 40,7% OPEN RATE 10,2% CLICK RATE
Flash Newsletter- UNITED FINAL EVENT 2023	12.09.2023 16:43	373 CONTACTS 31,6% OPEN RATE 8,9% CLICK RATE

4. PROJECT WEBSITE

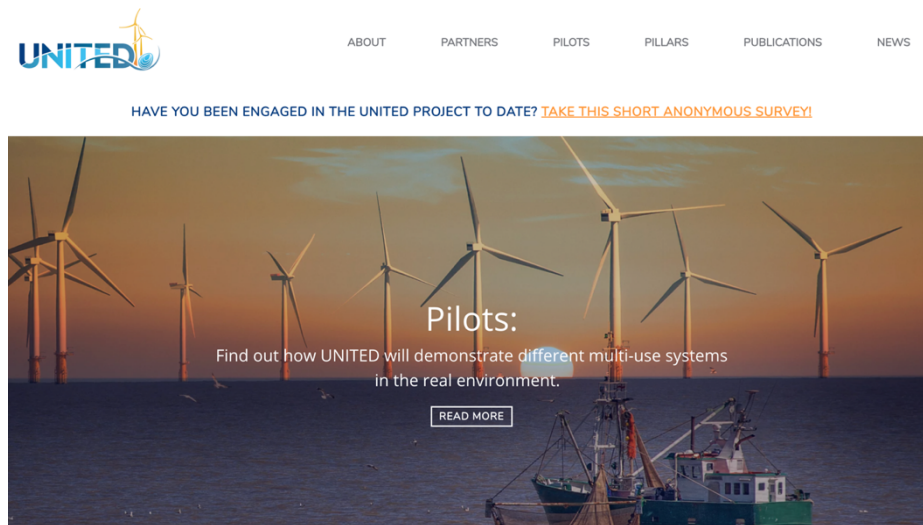


Figure 6 Homepage of UNITED website.

The UNITED project's website has established itself as an indispensable conduit for the dissemination and communication of the project, with its structure meticulously aligned to the strategic imperatives of the initiative. Developed on the Joomla platform, it has successfully captured over 92,000 website views, shattering the key performance indicator (KPI) target of 600 followers and underscoring the effectiveness of the outreach strategy employed.

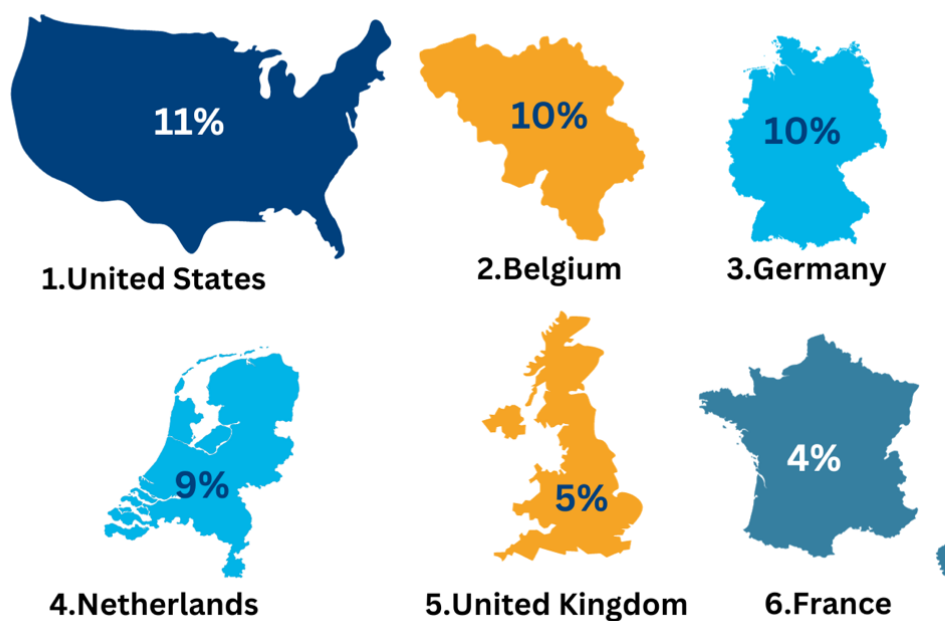


Figure 7 Top countries visiting UNITED website

The homepage stands as the digital linchpin of the UNITED project, strategically crafted to immediately engage visitors. With a staggering 21,530 views coming from a total of 153 countries, it has been the most frequented touchpoint, reflecting its significance in providing an accessible overview of the project. The most of the visits came from the United States, followed by Belgium, Germany, the Netherlands, the UK and France.

It hosts a questionnaire banner designed to elicit feedback, ensuring a two-way communication channel that aids in refining the project's interaction with its audience. The sliding banner below this acts as a portal to essential information on pilots, partners, and pillars, inviting users to explore these facets in depth.

In dedication to the technological transfer and knowledge sharing objectives, the website introduced the 'Training Hub - Knowledge and Technology Transfer' section. This addition houses strategic documents such as the Pitching Guideline and key Ocean Multi-use materials, making it a treasure trove for stakeholders seeking to apply the

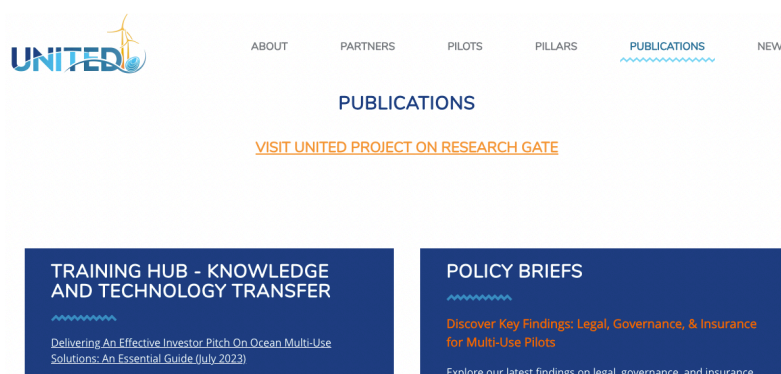


Figure 8 Knowledge Transfer Hub

project's insights. The 'Policy Briefs' section complements this resource hub, providing detailed and easily navigable briefs that encapsulate the policy implications of the UNITED project's work.

Further emphasizing the project's commitment to comprehensive dissemination, the website has prominently featured influential outreach activities. Documentaries and web series like the German-produced 'SOS ocean - Help for an endangered habitat' on ZDF and 'Algae cultivation between wind turbines' on NDR have played a critical role in extending the project's visibility. These productions, along with the Renewable Grid Initiative Offshore Nature 22 series, have been strategically placed to capture the interest of viewers and to showcase the project's engagement with sustainable and carbon-neutral future initiatives.

The publications section, pilot sections, and partners section have also recorded remarkable viewership, with more than 8,200; 7,751 visits and nearly 5,000 views respectively. These figures not only validate the website as a dynamic platform for information dissemination but also highlight the targeted approach to engaging with a diverse audience.

In sum, the UNITED project's website serves as a tracking tool to the project's expansive reach and dynamic approach to stakeholder engagement. Its sophisticated structure and content strategy have been central to the project's success in broadcasting its message and engaging with an international audience, thereby ensuring the widespread dissemination of its findings and fostering an environment ripe for knowledge exchange.

4.1. Zenodo

Zenodo stands as a premier open-access repository that offers researchers the opportunity to share and showcase their scientific outputs across all fields of science. It operates under the European OpenAIRE program and is backed by CERN, ensuring reliable and permanent access to research materials.

In line with this commitment to open access, all public sharable deliverables have been diligently uploaded to our dedicated Zenodo community page. The peer reviewed journal papers will also be uploaded to the repository as soon as these become approved for publishing. This ensures that our comprehensive body of work is not only preserved for posterity but is readily accessible to stakeholders, researchers, and the public, fostering

transparency and ongoing academic discourse.

UNITED 's page in Zenodo: <https://zenodo.org/communities/h2020-united?q=&l=list&p=1&s=10&sort=newest>

4.2. Peer Journal Publications

Several peer-reviewed journal publication have been published and/or submitted to the journal s in the framework of UNITED research.

In details the manuscripts to be submitted are:

- ➔ Integrating Multi-use & Co-Location concepts into the Maritime Spatial Planning
- ➔ Navigating the waves while facing rapid changes during a global crisis: overcoming challenges and risks with pioneering solutions in Multi-use offshore projects
- ➔ Comparison of remote offshore monitoring approaches and applicability of Decision Support Systems (DSS) and Data integration for Multi-use systems: conceptual considerations
- ➔ Across pilot technical comparison of extractive aquaculture
- ➔ Wished-for synergies in a multi-use approach of exposed aquaculture : will it stay a dream ?
- ➔ Probabilistic ecological suitability of mussel *Mytilus edulis* and seaweed *Saccharina latissima* cultivation in the German North Sea (preliminary) - R. Santjer, P. Mares-Nasarre, L. Vilmin, G.Y.H. El-Serafy, O. Morales-Nápoles"
- ➔ Besides, the following papers have already been published:
- ➔ Brecht Stechele, Marie Maar, Jeroen Wijsman, Dimitry Van der Zande, Steven Degraer, Peter Bossier, Nancy Nevejan, Comparing life history traits and tolerance to changing environments of two oyster species (*Ostrea edulis* and *Crassostrea gigas*) through Dynamic Energy Budget theory, Conservation Physiology, Volume 10, Issue 1, 2022, coac034, <https://doi.org/10.1093/conphys/coac034>
- ➔ Brecht Stechele, Anna Hughes, Steven Degraer, Peter Bossier, Nancy Nevejan, Northern Europe's suitability for offshore European flat oyster (*Ostrea edulis*) habitat restoration: A mechanistic niche modelling approach, Research Article, Volume33, Issue7 Special Issue: NATIVE OYSTER RESTORATION ALLIANCE (NORA) 4TH CONFERENCE - RECONNECTING ACROSS EUROPE July 2023 Pages 696-707

4.3. Horizon Results Platform & UNITED Key Deliverables

The Horizon Results Platform features some of the key exploitable results of the UNITED project pilots Moreover, the eight key deliverables documents, representing to the project's framework, are slated for publication, each with an anticipated outreach of approximately 10,000 stakeholders as detailed on the table below.

Table 7 Dissemination channel and multipliers identified for 8 key deliverables.

Key Documents	Dissemination Channels	Multipliers
D1.5 Catalogue of multi-use blueprint solutions	Website, social media, newsletter	<p>All project partners to disseminate with their networks and websites</p> <p>Newsletters (R- MSPRN, Submariner, <u>MSP (MSEG)</u>, Marine Board, C-FAARER, ULTFARMS, WindEurope)</p> <p>Platforms (MSP Platform, DG MARE, NorthSeaFarmers, Marine Training Platform, Blue Bio Match, Marine Training)</p> <p>Working Groups (Capacity 4MSP and HELCOM-VASAB MSP Working Group, ICES Working Group on Offshore Wind and Fisheries, MSP Research Network, United Nations Global Compact Working Group , Community of Practice - North Sea, SUBMARINER Network Members & Working Groups, Blue Cluster Network, Erasmus Mundus MSP Alumni Network, Blue Platform SUBMARINER Mussels and Algae Working Group, ICES Working Group on Offshore Wind and Benthos, ICES Working Group on Open Ocean Aquaculture, MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects)</p>
D3.4 The Business Case for Multi-Use Platforms: Costs, Benefits and Lessons from Practice	Website, social media, newsletter	<p>All project partners to disseminate with their networks and websites</p> <p>Newsletters (R- MSPRN, Submariner, Marine Board, C-FAARER, ULTFARMS, WindEurope, NordicInnovation, MSP Global, BlueInvest).</p> <p>Platforms (MSP Platform, DG MARE, NorthSeaFarmers, Marine Training Platform, Blue Bio Match, Marine Training, Marine Planners, Dutch Marine Energy Centre, Ocean Basis Platform, ENLIT)</p> <p>Working Groups (Capacity 4MSP and HELCOM-VASAB MSP Working Group, ICES Working Group on Offshore Wind and Fisheries, MSP Research Network, United Nations Global Compact Working Group – resulting in a Roadmap for a Climate Friendly MSP, Community of Practice - North Sea, SUBMARINER Network Members & Working Groups, Blue Cluster Network, Erasmus Mundus MSP Alumni Network, Blue Platform SUBMARINER Mussels and Algae Working Group, ICES Working Group on Offshore Wind and Benthos, ICES Working Group on Open Ocean Aquaculture, MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects)</p>
D5.5 Recommendation for Stakeholder engagement	Website, social media, newsletter	<p>All project partners to disseminate with their networks and websites</p> <p>Newsletters (Marine Board, C-FAARER, ULTFARMS, Nordic Innovation, MSP Global, BlueInvest).</p> <p>Platforms (MSP Platform, DG MARE, NorthSeaFarmers, Marine Training Platform, Blue Bio Match, Marine Training, Marine Planners, Dutch Marine Energy Centre, Ocean Basis Platform, ENLIT)</p>

		Working Groups (Capacity 4MSP and HELCOM-VASAB MSP Working Group, ICES Working Group on Offshore Wind and Fisheries, MSP Research Network, United Nations Global Compact Working Group – resulting in a Roadmap for a Climate Friendly MSP, Community of Practice - North Sea, SUBMARINER Network Members & Working Groups, Blue Cluster Network, Erasmus Mundus MSP Alumni Network, Blue Platform SUBMARINER Mussels and Algae Working Group, ICES Working Group on Offshore Wind and Benthos, ICES Working Group on Open Ocean Aquaculture, MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects)
D6.4 Manuscript of Synthesis of Risk Governance	Website, social media, newsletter, scientific magazines	<p>All project partners to disseminate with their networks and websites</p> <p>Newsletters (Submariner, <u>MSP (MSEG)</u>, Marine Board, C-FAARER, ULTFARMS)</p> <p>Platforms (MSP Platform, DG MARE, Blue Bio Match, Marine Training)</p> <p>Working Groups (MSP Working Group, ICES Working Group on Offshore Wind and Fisheries, MSP Research Network, United Nations Global Compact Working Group – resulting in a Roadmap for a Climate Friendly MSP, Community of Practice - North Sea, SUBMARINER Network Members & Working Groups, Blue Cluster Network, Erasmus Mundus MSP Alumni Network, Blue Platform SUBMARINER Mussels and Algae Working Group, ICES Working Group on Offshore Wind and Benthos, ICES Working Group on Open Ocean Aquaculture, MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects)</p>
D7.7 Synthesis report for pilots	Website, social media, newsletter	<p>All project partners to disseminate with their networks and websites</p> <p>Newsletters (R- MSPRN, Submariner, Marine Board, C-FAARER, <u>MSP (MSEG)</u>, ULTFARMS, NordicInnovation, MSP Global)</p> <p>Platforms (MSP Platform, DG MARE, Blue Bio Match, Marine Training, NorthSeaFarmers, platform, Marine training)</p> <p>Working Groups (MSP Working Group, ICES Working Group on Offshore Wind and Fisheries, MSP Research Network, United Nations Global Compact Working Group – resulting in a Roadmap for a Climate Friendly MSP, Community of Practice - North Sea, SUBMARINER Network Members & Working Groups, Blue Cluster Network, Erasmus Mundus MSP Alumni Network, MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects)</p>
D8.1 Report on technical assessment and validation	Website, social media, newsletter	<p>All project partners to disseminate with their networks and websites</p> <p>Newsletters (R- MSPRN, Submariner, <u>MSP (MSEG)</u>, Marine Board, C-FAARER, ULTFARMS, WindEurope)</p> <p>Platforms (MSP Platform, DG MARE, NorthSeaFarmers, Marine Training Platform, Blue Bio Match, Marine Training, Wind Europe Platform, Ocean basis Platform, Dutch Marine Energy Center, ENLIT Platform)</p> <p>Working Groups (Capacity 4MSP and HELCOM-VASAB MSP Working Group, ICES Working Group on Offshore Wind and Fisheries, MSP Research Network, United Nations Global Compact Working Group – resulting in a Roadmap for a Climate</p>

		Friendly MSP, Community of Practice - North Sea, SUBMARINER Network Members & Working Groups, Blue Cluster Network, Erasmus Mundus MSP Alumni Network, Blue Platform SUBMARINER Mussels and Algae Working Group, ICES Working Group on Offshore Wind and Benthos, ICES Working Group on Open Ocean Aquaculture, MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects)
D9.7/M9.5 Commercialization Roadmap	Website, social media, newsletter	<p>All project partners to disseminate with their networks and websites</p> <p>Newsletters (R- MSPRN, Submariner, <u>MSP (MSEG)</u>, Marine Board, C-FAARER, ULTFARMS, WindEurope)</p> <p>Platforms (MSP Platform, DG MARE, NorthSeaFarmers, Marine Training Platform, Blue Bio Match, Marine Training)</p> <p>Working Groups (Capacity 4MSP and HELCOM-VASAB MSP Working Group, ICES Working Group on Offshore Wind and Fisheries, MSP Research Network, United Nations Global Compact Working Group – resulting in a Roadmap for a Climate Friendly MSP, Community of Practice - North Sea, SUBMARINER Network Members & Working Groups, Blue Cluster Network, Erasmus Mundus MSP Alumni Network, Blue Platform SUBMARINER Mussels and Algae Working Group, ICES Working Group on Offshore Wind and Benthos, ICES Working Group on Open Ocean Aquaculture, MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects)</p>
Blueprint	Website, social media, newsletter	<p>All project partners to disseminate with their networks and websites</p> <p>Newsletters (R- MSPRN, Submariner, <u>MSP (MSEG)</u>, Marine Board, C-FAARER, ULTFARMS, WindEurope)</p> <p>Platforms (MSP Platform, DG MARE, NorthSeaFarmers, Marine Training Platform, Blue Bio Match, Marine Training)</p> <p>Working Groups (Capacity 4MSP and HELCOM-VASAB MSP Working Group, ICES Working Group on Offshore Wind and Fisheries, MSP Research Network, United Nations Global Compact Working Group – resulting in a Roadmap for a Climate Friendly MSP, Community of Practice - North Sea, SUBMARINER Network Members & Working Groups, Blue Cluster Network, Erasmus Mundus MSP Alumni Network, Blue Platform SUBMARINER Mussels and Algae Working Group, ICES Working Group on Offshore Wind and Benthos, ICES Working Group on Open Ocean Aquaculture, MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects)</p>

4.4. Exploitation efforts

The UNITED project has demonstrated commendable progress in advancing the Key Exploitable Results (KERs) of its pilots, as detailed in Deliverable 9.6 and in the table below. This includes a comprehensive exploitation plan and addresses intellectual property issues for each pilot. Through targeted sessions with the Horizon Results Booster, the project has effectively refined pitching strategies and intellectual property guidelines. These efforts have been aptly summarized on the project's website, offering easy access to key outputs for future reference and application.

Additionally, the commercial potential of each pilot has been actively promoted through extensive dissemination activities such as conferences and social media, bolstered by the distribution of pilots' commercialisation flyers. This widespread promotion has been crucial in maximizing the exploitation opportunities of the project's results and outputs. The project has engaged relevant stakeholders and multipliers through numerous in-person and online sessions, focusing particularly on commercialization and policy advice. These sessions have been instrumental in enhancing skills in pilots necessary for effective exploitation, including identifying key products and services, managing intellectual property rights, and marketing strategies.

Collaboration with Horizon Results Booster and BlueInvest

Notable events specifically designed to encourage exploitation include commercialization webinars organized in collaboration with Horizon Result Booster and BlueInvest; policy and regulation online sessions, and focused discussions at the UNITED final event in Gothenburg. Additionally, recorded fireside chats at various events have engaged policy advisers and industry professionals on topics such as insurance and regulation.

4.5. Exploitation of project outputs

Key solutions and recommendations from UNITED have been integrated into several key documents in the last two years because of the extensive collaboration of UNITED partners with key projects and initiatives. For example, extensive collaboration with the MULTI-FRAME project has led to the UNITED solutions being fed into the Ocean Multi-Use Toolkit, which has a global scope, thereby extending the project's outreach.

UNITED's collaboration with DG MARE is set to integrate the Multi-use Toolkit into the EU MSP Platform, exemplifying the project's influence at the EU level. The project has not only raised awareness about multi-use but has also provided practical advice from real-world applications to both industry and policymakers. National and private funding has supported new multi-use initiatives, with many UNITED partners playing key roles in advancing technology and commercial readiness. A notable example is the financing by Amazon for North Sea Farmers to establish the first commercial seaweed farm within an offshore wind farm, showcasing just one of the many impacts UNITED has made over the years.

Moreover, collaboration with the United Nations Global Compact has resulted in UNITED recommendations feeding into the Climate Smart MSP Roadmap. Some other notable examples include several capacity building documents on the topic of multi-use maritime spatial planning developed in the framework of HELCOM led Capacity4MSP project, and UNITED Nations MSP Global project as well as the SUBMARINER Network Roadmap 2030 and Mission Ocean BANOS Arena Roadmap 2030.

4.6. Active and lasting collaboration with key users

Active collaboration with initiatives like Nordic Innovation, SUBMARINER Network Aquaculture Working Groups, BlueBloMatch, ULTFARMS and United Nations Global Compact will ensure continued promotion of UNITED outputs through various platforms and collaborative events.

At the national level, collaborations with relevant authorities and processes have been established. North Sea Farmers and Deltares are core members of the Community of Practice North Sea in the Netherlands, and FUE

and SUBMARINER are leading stakeholder engagement for multi-use in Germany. These efforts reflect UNITED's significant impact on policy discussions and planning at both EU and Member State levels, influencing processes in countries like Sweden, Germany, the Netherlands, and Belgium.

4.7. Transition to ULTFARMS

As the project approaches its conclusion on December 30, 2023, the UNITED partnership remains committed to disseminating and exploiting the final project deliverables and outputs upon their approval in February 2024.

4.8. Key Exploitable Results Pilots' analysis

4.8.1. Danish Pilot

The Danish pilot focuses on implementing Ocean Multi-use practices by merging offshore wind energy with tourism to exemplify the multi-use concept in ocean space. This initiative has carved out a niche in harmonizing renewable energy with recreational and educational experiences, marking a significant stride in sustainable ocean utilization.

Central to the pilot's success are the Key Exploitable Results (KERs), where tour operators, educational institutions, and organizations have emerged as primary beneficiaries. These stakeholders have actively engaged with the pilot, promoting its unique offerings, and leveraging its educational potential. Notably, the absence of intellectual property rights has fostered an environment ripe for open knowledge exchange and dissemination.

The following entities have been identified as potential amplifiers in the Baltic Sea region: SUBMARINER, State of Green, and Vindenergi Denmark. Revenue generation through specialized training services has further bolstered the pilot's appeal, benefiting key players such as SPOK, boat operators, and tourism agencies.

The exploitation activities underpinning the pilot are diverse and dynamic. They include the expansion of boat tours, integration of new operators, and the advent of virtual tours, all of which collectively enhance tourist engagement and experience.

Centered around the Middelgrunden offshore wind farm near Copenhagen, the pilot has revolutionized the concept of wind energy tourism. By offering specialized tours that provide an in-depth look into wind energy operations, the initiative has professionalized turbine visits, drawing interest from a broad spectrum of sectors.

Addressing legal and insurance challenges associated with recreational activities at wind farms, particularly for climbing turbines, the pilot has also enhanced boat services, improving accessibility and logistics for visitors. This has led to a significant increase in the number of tours, underlining the project's success in attracting and retaining public interest.

Training and knowledge transfer have been instrumental aspects of the pilot. New guides have been trained, and a comprehensive Manual for guides' has been developed and posted on the website "Knowledge Transfer Hub", ensuring the dissemination of knowledge and expertise for wider application.

In terms of Intellectual Property Protection, the pilot has emphasized creative problem-solving approaches to enhance visitor experiences while addressing insurance and safety concerns.

The commercialization efforts and public policymaking initiatives have focused on diversifying multi-use opportunities, exploring various activities around wind farms. The strategic positioning of the Middelgrunden site has not only showcased its multi-use potential but has also aligned with Denmark's sustainability image.

Collaboration has been a key pillar of the pilot, with enhanced engagement with local stakeholders and creative solutions to overcome challenges. This collaborative spirit has been instrumental in assuring the sustained success of multi-use activities around wind farms.

4.8.2. Dutch Pilot

The Dutch pilot promotes the ocean multi use combination of seaweed cultivation and offshore solar energy production within wind farms. This initiative has identified a series of Key Exploitable Results (KERs), notably a pioneering seaweed cultivation system coupled with a seeding and harvesting machine, designed to meet the stringent DNV standard. Complementing this, the pilot features an advanced monitoring concept integrating

small data buoys and telemetry, tailored for multi-use settings, alongside a cutting-edge offshore solar installation technology, both rigorously vetted by DNV.

Targeting a diverse array of stakeholders, from seaweed and solar energy producers to farm developers and energy developers, this pilot has laid the groundwork for numerous beneficial applications. Intellectual property, crucial to this innovative venture, is managed through a Joint Development Agreement spearheaded by North Sea Farmers, sharing Intellectual Property rights particularly in the realm of seaweed cultivation.

Located at the challenging “North Sea Farmers” Offshore Test Site, the Dutch pilot has navigated the North Sea's demanding conditions. This necessitated the creation of robust, innovative technological designs for both seaweed cultivation and floating solar energy systems, meticulously documented in deliverables like D7.1, D7.2, and D7.4, providing an in-depth overview of the technical specifics and difficulties face throughout the lifecycle of the project.

The pilot's approach to technology transfer and exploitation has been to leverage the Offshore Test Site as a dynamic incubator for research, pilot projects, and the scaling of seaweed cultivation alongside offshore solar energy production. This focus has been on affirming the economic and technical viability of these ground-breaking multi-use solutions. Intellectual property protection has been a focal point, ensuring the security of unique innovations linked to seaweed cultivation and combined wind farm usage.

In terms of commercialization, the Dutch pilot has placed significant emphasis on the economic feasibility of offshore seaweed cultivation. It has probed the extensive business potential of seaweed as a versatile biomass, suitable for integration within wind farms, leading to the formation of The Seaweed Company as a pioneering commercial enterprise in this field. The subsequent North Sea Farm #1 project is a direct offshoot of the pilot's success, marking a substantial stride in commercial activities under UNITED.

Collaboration has been a cornerstone of the Dutch pilot's methodology, effectively addressing the challenges of offshore production and showcasing the feasibility of multi-use in severe sea conditions. This collaborative strategy, which includes active participation in the Community of Practice North Sea and stakeholder engagement, has significantly swayed policymaking and regulations in the Netherlands. The pilot's success has contributed to the development of multi-use areal passports for new offshore wind farms and highlighted offshore solar as a crucial step in the Netherlands' energy transition journey, reflecting the pilot's profound impact on policy and industry practices.

4.8.3. German Pilot

The German pilot of the UNITED project has epitomized innovation in the challenging environment of the North Sea, where robust design was essential for the survival and efficiency of aquaculture systems. This pilot, known as FINO 3, successfully integrated the sustainable cultivation of blue mussels and seaweed with the dynamic generation of wind energy, demonstrating a remarkable harmony between marine aquaculture and renewable energy sources.

At the heart of the pilot's success was its focus on knowledge transfer and exploitation. FINO 3 emerged as a beacon of expertise, disseminating valuable insights into the integration of aquaculture and wind energy in harsh maritime conditions. Training sessions and comprehensive management strategies were developed, creating a blueprint for effective operation in the North Sea's severe maritime environment and policy brief on Key findings and recommendations for pilots in terms of operation and maintenance.

Intellectual property protection was a key strategic element in safeguarding the pilot's innovative work. Meticulous efforts were made to identify patentable technologies and establish legal frameworks to protect the intellectual property, ensuring the long-term viability and utilization of the pilot's findings.

The concept of commercialization was actively pursued, with the pilot's initiatives aiming to elevate the co-existence of aquaculture and wind energy to commercial scales. Support was extended to emerging spin-off companies, and engaging dialogues were initiated with stakeholders to explore the commercial potential of the pilot's work. These efforts transformed the pilot's vision into viable economic ventures, signalling a promising future for sustainable practices in the blue economy.

In summary, the German pilot has boldly navigated the frontiers of innovation, setting a precedent for future endeavours in sustainable ocean usage. Its story is a proof to the project's commitment to harmonizing the ocean's

resources with renewable energy, paving the way for a future where marine and energy sectors coexist sustainably and profitably.

4.8.4. Belgian Pilot

In the Belgian pilot, focusing on environmental impact assessments and the creation of innovative aquaculture technologies, identified its KERs including consultancy services for environmental impact assessments, seaweed net design, and various cultivation techniques, which were not only crucial for the advancement of sustainable aquaculture practices but also represent potential patentable innovations.

The target groups for these KERs were primarily aquaculture companies and marine contractors, with the main beneficiaries being a consortium of research institutions and corporate entities including RBINS, UGent, JDN, and Colruyt Group. These stakeholders were instrumental in applying the research findings to practical, commercial contexts.

Exploitation activities within the Belgian pilot were dynamic and forward-thinking. Seaweed, for instance, was considered for the development of new products by Origin in a new research and innovation project. Furthermore, the pilot's findings are set to be scaled up in the ULTFARMS project, ensuring the continuation and expansion of successful practices.

The Belgian pilot's design was tailored to the specific challenges of offshore environments, addressing issues such as distance from shore, sea conditions, and optimizing growth conditions for seaweed and flat oysters. By implementing robust designs and methodologies, the pilot aimed to maximize the ecological and economic benefits of co-located aquaculture within offshore wind farms.

The knowledge transfer efforts included structured training sessions, detailed on deliverable D9.6 to ensure comprehensive and proactive sharing of know-how. The emphasis on end-user uptake meant that a broad spectrum of stakeholders was equipped with the knowledge to implement tangible improvements in aquaculture practices.

Intellectual property protection was approached strategically, with investigations into potential patents for the technologies related to flat oyster aquaculture and restoration. Legal frameworks for the co-location of these activities within wind parks were also established, particularly in line with the legal aspects explored in Task 6.2 of WP6.

Commercialization efforts aimed to create a blueprint for the co-location of aquaculture and restoration activities, with a keen focus on the economic viability and potential integration into public policymaking. While no spin-off companies emerged directly from the pilot, the techniques developed were being integrated into existing farm practices, highlighting an ongoing exploration of economic feasibility.

Overall, the Belgian pilot exemplified a strategic and integrated approach to developing and exploiting KERs. It fostered collaboration among stakeholders, protected intellectual property, and positioned its outcomes for commercial and policy impact. The pilot's key findings continue through its contributions to the follow-up project ULTFARMS, ensuring long-term sustainability and advancement of multi-use ocean space solutions.

4.8.5. Greek Pilot

The Greek pilot, located at the Patroklos Pilot site near Cape Sounio, Greece, has been an exemplary model in demonstrating the harmonious integration of fish aquaculture with scuba diving tourism. This innovative approach has led to the identification of several Key Exploitable Results (KERs), including fish aquaculture products, diving tours to the fish farm, data on the impact of fish aquaculture, advanced monitoring software, and the use of remote operating vehicles (ROVs).

The primary beneficiary of the identified KERs is WINGS ICT, which has played a central role in facilitating the collaboration between KASTELORIZO AQUACULTURE and the local scuba diving center, Planet Blue. This collaboration has not only enhanced operational efficiency but also promoted the sustainable co-existence of aquaculture and tourism activities. The AQUAWINGS platform, developed by WINGS ICT, has been instrumental in real-time monitoring of environmental parameters and farm activities, ensuring minimal environmental impact and efficient management.

Exploitation activities have been focused on scaling up diving tours and launching targeted marketing campaigns in collaboration with local businesses. This initiative aims to increase the visibility and acceptance of aquaculture

products among the local community and tourists. The pilot has successfully navigated the legal and regulatory challenges associated with multi-use marine spaces, setting a precedent for future projects in similar settings.

The Greek pilot's efforts in environmental monitoring have been noteworthy, with a focus on minimizing stress factors in farmed fish and ensuring the well-being of marine life. This has been achieved through continuous monitoring of water quality parameters and fish behaviour, using underwater cameras and other sophisticated equipment.

In terms of community engagement, the pilot has conducted several workshops and interviews to engage local stakeholders and explore additional benefits through partnerships. This has led to a transformation in community perception, highlighting the positive impacts of sustainable and collaborative practices in multi-use marine spaces.

Overall, the Greek pilot stands as a testament to the successful implementation of multi-use concepts, showcasing the potential for sustainable integration of aquaculture and tourism. The pilot's approach, underpinned by innovative technology and collaborative efforts, has set a benchmark for future projects aiming to harmonize different marine activities while ensuring environmental sustainability and community involvement.

4.9. Newsletter of relevant associations and external dissemination channels

The dissemination of information and achievements of the UNITED project has been strategically amplified through collaborations with various relevant associations and networks. These platforms have played a focal role in broadening the reach of the project's key activities and outputs, including policy briefs, business briefs, webinars focused on the commercialization of ocean multi-use solutions, and the final event of the UNITED project. This chapter provides an overview of these collaborative efforts and their impact on the project's dissemination strategy.

Table 8 Communication material for Dissemination of the Legal Pillar

Collaborative Dissemination Channel			Topics covered					
			Policy Makers	Re-search	Indus-try	Tourism & Nature	Aquaculture & OWF	Mixed In-dustry
Newsletters	1	R- MSPRN Newsletter		x	x	x	x	x
	2	SUBMARINER Newsletter	x	x	x	x	x	x
	3	MSP (MSEG) Newsletter	x	x				x
	4	Marine Board Newsletter	x	x	x	x	x	x
	5	C-FAARER Newsletter	x	x			x	x
Platforms	6	MSP Platform		x		x	x	x
	7	DG MARE	x	x				
	8	NORTHSEAFARMERS platform		x	x		x	x
	9	BlueBioMatch Platform		x	x			x
	10	WindEurope Platform	x	x	x	x	x	x
	11	Ocean Basis platform			x		x	x
	12	Dutch Marine Energy Centre		x	x		x	x
	13	ENLIT platform			x		x	x
	14	HORIZON RESULTS PLATFORM				x	x	x
	15	Marine Training platform		x		x	x	x
	16	VLIZ Website	x	x		x		x
Working Groups & Networks	17	Capacity 4MSP and HELCOM-VASAB MSP Working Group		x				x
	18	ICES Working Group on Offshore Wind and Fisheries		x				x
	19	MSP Research Network	x	x		x	x	x

	20	United Nations Global Compact Working Group – resulting in a Roadmap for a Climate Friendly MSP	x	x		x	x	x
	21	Community of Practice - North Sea	x	x		x	x	x
	22	SUBMARINER Network Members & Working Groups	x	x	x	x	x	x
		Blue Cluster Network	x		x	x	x	x
	23	Erasmus Mundus MSP Alumni Network		x		x	x	x
	24	Blue Platform SUBMARINER Mussels and Algae Working Group	x	x	x		x	
	25	ICES Working Group on Offshore Wind and Benthos		x			x	
	26	ICES Working Group on Open Ocean Aquaculture		x			x	x
	27	MSP Research Network – Multi-Use Research Network created in the framework of UNITED and MULTI-FRAME projects	x	x	x	x	x	x
Projects	28	ULTFARMS	x	x	x	x	x	x
	29	MSP Global	x	x	x	x	x	x
	30	CAPACITY4MSP	x	x		x	x	x
	31	SeaMark		x	x		x	
	32	MUSES	x	x	x	x	x	x
	33	MUSICA	x	x	x	x	x	x
	34	MULTI-FRAME	x	x	x	x	x	x
	35	GRASS Project	x	x	x		x	
	36	BlueGrowthFarm	x	x	x	x	x	x
	37	WINBIG	x	x				x
	38	FLORES	x	x	x			x

4.10. Key Dissemination Outcomes

Newsletters' Reach: Among the dissemination tools, the five newsletters that focused heavily on disseminating UNITED materials and key findings mainly reached a research audience, predominantly engaged in mixed industries topics. This targeted approach ensured that the content was directly relevant to the interests and needs of the audience, maximizing its impact.

4.10.1. Effective Platform Utilization

The platforms used for promoting UNITED's key documents and findings have successfully reached a wide audience in the industry and research sectors. The primary focus of this audience has been on Aquaculture & offshore wind farms and mixed industries, reflecting the project's alignment with these critical areas of marine research and sustainable development.

4.10.2. Working Groups & Networks Collaboration

Collaboration with various working groups and networks has bolstered UNITED's ability to reach a research-oriented audience. This collaboration has been particularly effective in engaging those working in Aquaculture & offshore wind farms and mixed industries, demonstrating the project's relevance and applicability across these sectors.

4.10.3. Partnership with Sister Projects

Collaborations with other and sister projects have achieved significant out-reach, encompassing industry, policy, and research communities. These collaborations have effectively reached audiences involved in Tourism & Nature, Aquaculture & offshore wind farms, and mixed industries. Such partnerships have not only extended the project's reach but also enriched its content through the exchange of ideas and best practices.

Each of these entities has contributed to the broad dissemination of the project's insights, reaching a diverse and relevant audience that includes industry experts, policymakers, academia, and the general public.

4.10.4. Comprehensive Dissemination Network

Furthermore, a detailed list of these multipliers can be found at the end of this document in Attachment A. This list encompasses all the platforms and networks that have been leveraged, providing a comprehensive view of the UNITED project's extensive dissemination network. Through this multi-faceted approach, the project has significantly expanded its reach, ensuring that its contributions to sustainable ocean multi-use practices are widely recognized and utilized.

UNITED's external dissemination strategy has been marked by a multi-dimensional approach, leveraging a range of networks, platforms, and collaborations. This approach has not only broadened the project's reach across various sectors but has also ensured that the dissemination of its findings is both impactful and relevant to a diverse range of stakeholders. The collective efforts of these collaborations have been instrumental in advancing the dialogue and understanding of sustainable ocean multi-use practices.

5. IMPACT ACHIEVED

The impact of the UNITED project's dissemination activities, as documented previously and in the Technology Transfer Report (D9.6), has been profound, particularly in the realms of industry and policy.

5.1.1. Industry Impact

UNITED has played a distinguished role in influencing industry dynamics and fostering technological transfer, as evidenced by its impact on various industry sectors.

UNITED's approach to reaching investors and the wider industry community involved organizing a series of collaborative events. Notably, a workshop during the European Maritime Days in 2021, conducted in partnership with the United Nations Global Compact and the EU-SCORES project, provided a platform to discuss the transferability of UNITED's outputs. Similarly, at the Danish Marine Energy Center opening event, a stand and discussion session

were set up in collaboration with the EU SCORES and MUSICA project, facilitating dialogue and knowledge exchange. These events, including the annual SUBMARINER Network Members Assembly, served as crucial avenues for discussing ocean multi-use topics and exploring the potential of UNITED's results for future projects in the region.

Moreover, the project, has sparked significant business interest, with partners frequently approached to share their expertise at industry events and with authorities, showing a high demand for the knowledge and innovations generated by the project, signifying its relevance and applicability in real-world settings. The project has also recorded over 10 business inquiries. Most of these were directed towards the aquaculture products and farming solutions as well as towards the Middelgrunden wind farm tours.

UNITED has been instrumental in initiating new innovation projects, such as ULTFARMS, which emerged as a direct outcome of UNITED's groundbreaking work. Furthermore, the collaboration with Horizon Result Booster and the analysis of Key Exploitable Results (KERs) have laid a solid foundation for commercializing multi-use solutions developed within the project's framework. Investments from NordicInnovation, Amazon, and entities in the US Northeast that have fed into future multi-use endeavours underscore the project's wide-reaching impact and its capacity to motivate diverse funding sources.

The establishment of initiatives like the Community of Practice North Sea and the MSPRN Multi-Use group highlights UNITED's influence in creating collaborative platforms for knowledge exchange and sector development. These initiatives have been fundamental in promoting a deeper understanding and implementation of multi-use ocean space solutions.

Moreover, UNITED has significantly contributed to the development of vital industry resources. These include the UNGC Climate Smart MSP Roadmap, Capacity4MSP, the MULTI-FRAME Toolkit, and United Nations MSP Global MSP Capacity Building documents. By enhancing industry-wide knowledge and establishing best practices, these resources reflect UNITED's overarching impact on the industry.

5.1.2. Policy Impact

In terms of policy influence, notable changes include the incorporation of multi-use as a tender criterion in Poland and the Netherlands. A multi-use permitting procedure has also been developed for the Netherlands and Belgium, led by the UNITED's North Sea Farmers – NSF. Extensive engagement of UNITED partners with the authorities of these countries has proven to be fruitful. There has also been an uptick in government commissioned studies on multi-use integration within Marine Spatial Planning (MSP) and regulation. Namely, several of UNITED partners are involved in directly leading the multi-use related studies commissioned by Irish, German, and Japanese authorities to support maritime spatial planning in these countries. This underscores the role that the project had in shaping global marine policy and regulation.

5.1.3. Research impact

The project has made a significant impact in the marine and environmental research world, particularly in advancing the concept of ocean multi-use. This impact is evident in the initiation and development of ULTFARMS, a pioneering follow-up project that builds directly on the insights and innovations of UNITED. ULTFARMS, supported by individual national funding, is poised to further explore and develop Low-Trophic Aquaculture (LTA) systems in challenging offshore and low-salinity environments, thereby continuing the groundbreaking work of UNITED in sustainable ocean use.

One of the key indicators of the UNITED project's research impact is the noticeable increase in peer-reviewed journal papers addressing multi-use topics. This uptick reflects a growing academic interest in the field, spurred in part by the project's findings and advocacy for multi-use ocean space solutions. The publication of these papers demonstrates the project's success in generating new knowledge and contributing to the broader scientific discourse on sustainable marine practices.

Additionally, the UNITED project's research outcomes have been instrumental in informing and shaping discussions in ULTFARMS and other related initiatives. By laying a solid foundation of knowledge and best practices, UNITED has enabled subsequent projects like ULTFARMS to start from a more advanced position, potentially accelerating their progress towards achieving sustainable and profitable ocean use solutions.

6. KEY LEARNINGS:

The UNITED project's journey, encompassing strategic dissemination and stakeholder engagement, encountered diverse challenges and yielded unexpected successes, offering rich insights for future initiatives like ULTFARMS.

6.1.1. Challenges Encountered:

- **Balancing Engagement Methods:** Achieving the right balance between digital outreach and in-person interactions was a considerable challenge. Each method offers unique advantages in stakeholder engagement and requires a nuanced approach to maximize impact.
- **Content Customization:** Catering to a wide range of stakeholders necessitated the creation of tailored content. This included industry professionals, policymakers, the scientific community, and the general public, each with distinct informational needs and engagement preferences.
- **Impact of COVID-19:** The pandemic severely limited in-person meetings, prompting a shift to virtual platforms. This transition required rethinking engagement strategies to maintain effectiveness in a predominantly digital environment.

6.1.2. Unexpected Successes:

- **Multimedia Utilization:** Diverse multimedia formats like videos, webinars, and interactive surveys achieved higher engagement levels than anticipated, demonstrating their effectiveness in complex concept communication.
- **Robust Collaborative Networks:** The project's ability to foster extensive internal and external collaborations, including with Msp Platform, Marine Training Platform and SUBMARINER Network, enhanced its reach and impact beyond initial expectations.

6.1.3. Recommendations for ULTFARMS:

- **Advanced Digital Analytics:** Implementing sophisticated digital analytics tools can provide deeper insights into audience engagement and content performance, guiding more targeted communication strategies.
- **Tailored Content Development:** Investing in content specifically designed for various stakeholder groups can enhance relevance and impact.
- **Enhanced In-Person Engagement:** Despite the emphasis on digital platforms, the value of face-to-face interactions remains crucial. Future projects should strive for a harmonious blend of digital and in-person outreach.

6.1.4. Successful Dissemination and Outreach Achievements:

The UNITED project's dissemination approach integrated digital and in-person methods, successfully engaging a broad audience. Key achievements include:

- **Digital Footprint:** Active social media engagement and webinars significantly extended global reach and engagement.
- **In-Person Conferences and Events:** Facilitated deep connections and knowledge exchange within the scientific and industry communities.
- **Diverse Communication Materials:** Flyers, policy briefs, workshop reports, and videos played a crucial role in disseminating project milestones and insights.

The project's overall outreach engaged approximately 3.5 million individuals, demonstrating the effectiveness of its dissemination strategies. As ULTFARMS advances, it will build on these strategies, aiming for greater impact in sustainable ocean use and aquaculture innovation.

ANNEX 1

DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

Legend:
 SC science communication
 Ind Industry
 CS civil society
 GP General Public
 PM Pomicity Makers
 M Media
 Inv Investors
 C Customers
 O Other

Dissemination and communication activity	Location	Start date	Type of dissemination channel	SC	Ind	CS	GP	PM	M	Inv	C	O	Total est. no° of persons reached	WP	Beneficiaries
Meeting with Ministry of Economic Affairs, Transport, Employment, Technology and Tourism	DE	23 January 2020	one-to-one meeting					x					5	5, 7, 9(?)	FUE
International Maritime Event	Online	09 February 2020	International event	x	x	x	x	x	x	x	x	x	50		Deltares
Meeting with Economics Professor of University of applied sciences Kiel - Interview , Presenting UNITED	DE	25 February 2020	one-to-one meeting	X									1	3	FUE
Website - LINK	Online	01 March 2020	website/social media	x	x	x	x	x	x	x	x	x	1060	7,9	UGent
Presentation of UNITED at the CONECT2020 conference in Riga, Keynote speaker (Webinar available)	Riga, LV	13 May 2020	International event											9	SPOK
Organisation of a webinar with all pilots presented - it was organised by SUBMARINER and supported by Deltares, UGENT, WUR, WINGS. The Horizon 2020 sister project MUSICA also attended and presented. LINK	Online	03 June 2020	online webinar	x	x	x	x	x			x	x	90	9	SUBMARINER
UNITED project presentation -Presentation at the MULTI-FRAME project Kick-Off - MULTI-FRAME is a new international ocean multi-use related project running in parallel with UNITED. The UNITED project was presented at the MULTI-FRAME kick off to familiarise the MULTI-FRAME partnership with UNITED activities and discuss possible synergies between the two projects e.g. Community of Practice	Online	08 June 2020	online webinar	x	x	x	x	x			x	x	20	WP9	SUBMARINER
SH Interview -Meeting with Association of Fishermen and pond Farmers	DE	16 July 2020	one-to-one meeting									x	1	1, 5	FUE
Ghent University and ILVO press release - Flat oyster spotted Belgium waters again - https://www.marineatugent.be/flat-oyster-spotted-belgian-waters-again	BE	28 August 2020	Mainstream media	x	x	x	x	x	x	x	x	x	400		UGent

ANNEX 1

DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

Interview , Presenting UNITED -Talk with Musselfisher on the phone	DE	8 September 2020	one-to-one meeting		X											FUE
Guided tour and UNITED outreach -Danish pilot demonstration day - The demonstration was organised in the Danish pilot. This was an opportunity to learn more about the importance of offshore renewable energy and multi-use opportunities, as well as the benefits that the concept can bring to the local communities through benefit sharing. The video about the Danish pilot was also recorded at the site.	Copenhagen, DK	20 September 2020	local event	x	x	x	x	x	x	x	x	x	100	WP9, WP7		SUBMARINER, SPOK
Webspot-UNITED Project: eerste tests voor erosiebescherming met succes gelanceerd.	Online	23 September 2020	website/social media	x	x	x		x	x	x	x		1000	7		JDN
YOUMARES 11 - Project UNITED, E. Strothotte, M. Jaeger	Online	15 October 2020	International event	x	x					x			200	5, 7, 9		FUE
Conference- UNITED project – The flat oyster restoration envisaged in the Belgian pilot	Rotterdam, NL	19 October 2020	International event	x	x			x		x			200	7,9		All Belgian pilot partners: Brevisco, Colruyt, Jan De Nul Group, Royal Belgian Institute for Natural Sciences, Parkwind, Ghent University (MTD, ARC Phycology, Legal)
Presentation at the conference - The presentation provided insights into the application of the multi-use concept advised by the UNITED project. The combination between offshore wind and tourism was discussed as of the most relevance in the Med. - Offshore wind and tourism: Could the two happily co-exist?. Ivana Lukic	Online	10 November 2020 - 11 November 2020	International event	x	x	x	x	x	x	x	x	x	100	WP9		SUBMARINER
Presentation at the working group meeting - The presentation provided the state of the art in the Baltic Sea on the topic of multi-use, taking the opportunity to highlight some of the examples from the UNITED project. - Multi-Use in the Baltic Sea. Ivana Lukic		12 November 2020 - 13 November 2020	International event	x				x					50	WP9		SUBMARINER
Presentation at the Conference- Ocean Multi-Use Concept. Ivana Lukic		16 November 2020	International event	x	x			x	x	x	x	x	300	WP9		SUBMARINER
Presenting UNITED - Go Deep International Meeting	Online	17 November 2020	International event		X											FUE
Organization of a workshop LINK	BE	24 November 2020	local event	x	x			x	x	x			100	WP9		RBINS, UGent, ILVO
Presentation at the workshop - The presentation held at the event provided the state of the art of multi-use in the Baltic Sea exemplifying the UNITED project as a good practice among others Ocean Multi-Use in the Baltic Sea. Ivana Lukic- LINK		26 November 2020	International event	x	x	x	x	x	x	x	x	x	100	WP9		SUBMARINER
Collaboration event - UNITED introduction, Ghada El Serafy Collaboration between: UNITED, MUSICA, The Blue Growth Farm, Space at Sea		02 December 2020	International event	x									8	WP1 - 10		Deltares
Webmeeting with Jouke Heringa from ZeeMOs project	Online	09 December 2020	one-to-one meeting	x	x								1			FUE
Ghent University press release - Will the Belgian Oysters flourish on our shores? Marine@Ugent (marineatugent.be)	BE	16 December 2020	Mainstream media	x	x	x	x	x	x	x	x	x	400	WP9		UGent

ANNEX 1

DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

ISH Interview and visit to Hortimare networking	NL	19 January 2021	one-to-one meeting		X								1		FUE
Presenting UNITED at Global Maritimes	Online	12 February 2021	one-to-one meeting		x								1		FUE
Panel discussion focusing among others on the sustainable integration of offshore wind developments into the existing context of uses and interaction with the local communities. The UNITED Danish pilot was exemplified and the concept of multi-use and benefit sharing was discussed in general. LINK		03 March 2021	International event	x	x	x	x	x	x	x	x	x	100	WP9	SUBMARINER, SPOK
Ocean Multi-Use presentation at the conference to the international community and show the UNITED project as a good example of a pilot action meant to collect and share information about the multi-use development in a real environment. . Ivana Lukic		10 March 2021	International event	x	x	x	x	x	x	x	x	x	100	WP9	SUBMARINER
Ghent University press release - A new crop in the sea: Seaweed cultivation in Belgian waters LINK	BE	31 March 2021	Mainstream media										3100	WP9	UGent
Aquaculture Europe	BE	12 April 2021 - 15 April 2021	International event	x	x	x			x				50	7, 9, 5, 2	FUE
Ghent University press release - "We dromen van Noordzee vol zeewierboerderijen"- LINK	BE	12 May 2021	Mainstream media	x	x	x	x	x	x	x	x	x	1500000	WP9	UGent
Ghent University press release - Voor het eerst gekweekt zeewier uit onze Noordzee: "Gezond, maar duurt nog jaren voor het in de winkel ligt" VRT NWS: nieuws	BE	19 May 2021	Mainstream media	x	x	x	x	x	x	x	x	x	1000000	WP9	All Belgian pilot partners: Brevisco, Colruyt, Jan De Nul Group, Royal Belgian Institute for Natural Sciences, Parkwind, Ghent University (MTD, ARC Phycology, Legal)
Ghent University press release Local news Belgium (VRT)	BE	19 May 2021	Mainstream media		x	x	x	x	x	x	x	x		WP9	All Belgian pilot partners: Brevisco, Colruyt, Jan De Nul Group, Royal Belgian Institute for Natural Sciences, Parkwind, Ghent University (MTD, ARC Phycology, Legal)
Workshop co-organised together with the Capacity4MSP and MULTI-FRAME projects in the framework of the 4th Baltic Sea MSP Forum. The workshop served to bring projects together and discussed the concept of multi-use in the blue economy context in the Baltic Sea and North Seas and beyond. Ivana Lukic and Laurine Tertre LINK	LV	01 June 2021 - 02 June 2021	International event	x	x	x	x	x	x	x	x	x	200	WP9	SUBMARINER, SPOK
Panel discussion at the conference - The event was organised by the IUCN Global Business and Biodiversity Programme as a panel discussion. The concept of multi-use was discussed among other. Ivana Lukic	Online	21 June 2021	International event	x	x			x		x			30	WP9	SUBMARINER
Presentation at the conference - The presentation gave insights into the topic of multi-use exemplifying the UNITED project and its offshore renewable energy related pilots in the context of smart energy	GR	24 June 2021	International event	x	x			x	x	x			100	WP9	SUBMARINER

ANNEX 1

DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

transition. Ivana Lukic LINK															
Danish pilot demonstration sessions- Visit the wind farm	Copenhagen, DK	30 June 2021	local event	x	x	x	x	x	x	x	x	x	1200		SPOK
UNITED project presentation -Meeting with licensing agencies about offshore multi-use projects	Kiel, GER	13 July 2021	local event	x				x					15	7	FUE
Magazine item- Seaweed harvest within the Belgian pilot of UNITED	Online	20 July 2021	Mainstream media	x	x	x	x	x	x	x	x	x	1000	9, 7	UGent
Conference presentation- Ocean multi-use UNITED project	Online	21 August 2021	online webinar	x	x			x	x	x		x	100	9	SUBMARINER
Presentation at a conference - Oyster longline design optimization: aquaculture pilot study in the Belgian part of the North Sea LINK	Funchal, PT	07 October 2021	International event	x	x	x							50	WP7	UGent
Workshop presentation- Ocean Blue Economy and Marine Spatial Planning	Online	13 October 2021	International event	x	x			x				x	150	9	SUBMARINER
Webinar organisation- Several UNITED related presentations took place	Online	27 October 2021	online webinar	x	x	x	x	x	x	x	x	x	80	9	SUB, Acteon
Presentation UNITED at Community of practice: business case multi-use-Dutch pilot: floating solar and seaweed cultivation	NL	09 November 2021	local event	x	x	x		x					100	WP7	NSF, TSC, OOE
Poster presentation- Belgian pilot restoration, nearshore and offshore	Online	23 November 2021 - 24 November 2021	online webinar	x	x			x	x			x	500	9, 7	UGent
Conference presentation- The multi-use concept within UNITED - Case report piloting offshore wind and aquaculture multi-use in the North Sea, Nancy Nevejan and Annelies Declercq	Online	24 November 2021	online webinar										200	9, 7	UGent
Trade fair /Conference - Oral presentation at Wind Europe 2021, during the ocean(Offshore Coalition für Energy and Nature) Workshop „Multi-use in Marine Spatial Planing: Sharing experiences, opportunities, and limitations“	Copenhagen, DK	24 November 2021	International event	x	x			x		x			20	7	FUE, KMF
Workshop organisation- Several UNITED related presentations	Online	26 January 2022	online webinar	x	x		x	x		x	x	x	80		SUB, WUR
Video and newsitem- Restoring oyster banks in the North Sea	Online	24 February 2022	Mainstream media	x	x	x	x	x	x	x	x	x	1000	9	JDN
Interview for the University of Latvia, Faculty of Law	Online	10 March 2022	one-to-one meeting	x									1	7	KMF
OTS meeting - UNITED stakeholder engagement in the Netherlands	Online	17 March 2022	local event	x	x			x	x	x	x	x	30	9, 5	SUBMARINER, NSF
Conference presentation- UNITED Danish pilot	Valencia, ES	23 March 2022 - 25 March 2022	International event	x	x			x	x			x	200	9, 7	SPOK
Blue Deal Business Forum - Middelgrundedn Offshore Wind farm. UNITED and the Cooperative Approach LINK	Valencia, ES	23 March 2022 - 24 March 2022	International event	x	x	x	x	x	x	x	x		300	7 and 9	SPOK
Exhibition: Offshore projects, German Offshore Wind Energy Foundation – Presentation and poster	Berlin, DE	5 April 2022 - 13 April 2022	local event	x	x			x					100	7	FUE
Magazine item – WinMon	Online	20 April 2022	Mainstream media	x	x			x	x			x	1000	9	RBINS
Invited speaker for the meeting of the Bundesverband der Windparkbetreiber Offshore e.V. – presentation of the UNITED project	Berlin, DE	26 April 2022	local event	x	x								30	7	FUE
Journalists: The Times, Süddeutsche Zeitung, NRC Handelsblad	DE	04 May 2022	Mainstream media						x				2	7	FUE

ANNEX 1

DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

Workshop organisation – UNITED related presentations	Online	17 May 2022	online webinar	x	x		x	x		x	x	x	70		SUB, FUE
Conference presentation – UNITED Danish Pilot	Online	18 May 2022	International event	x	x			x	x			x	200	9, 7	SPOK
Workshop presentation - Oral presentation, UNITED project German pilot - Necessary data collection and monitoring practices at the seaweed farms in the Baltic Sea, Eva Strothotte/Tim Staufenberger	Online	18 May 2022	online webinar	x	x								27	7	FUE, KMF
Exhibition - UNITED at the European Maritime Days booth EU4Ocean	Ravenna, IT	18 May 2022 - 20 May 2022	International event	x	x	x	x	x	x	x	x	x	500	9, 5	SUB, Acteon
Movie screening and QR code hunt – at the exhibition hall	Ravenna, IT	18 May 2022 - 20 May 2022	International event	x	x	x	x	x	x	x	x	x		9, 5	SUB, Acteon
Macro Algae Workshop – Oral presentation		18 May 2022	International event	x	x								27	7	FUE, KMF
Final Blue Deal Conference - Towards Ocean multi-use in the Mediterranean. Lessons learned from Denmark LINK	Online (Ravenna, IT)	18 May 2022	online webinar	x	x	x	x	x	x	x	x		200	7 and 9	SPOK
Workshop organisation - Several maritime plans support multi- use, yet realization is still lacking: what are the next steps?	Ravenna, IT	19 May 2022	International event	x	x	x	x	x	x	x	x	x		9	SUBMARINER
Presentation about Sustainable Blue Economy and MSP (in the Med)	Venice, IT	23 May 2022 - 26 May 2022	International event	x	x	x		x			x		25	7	OOE
Presentation at a conference - UNITED Project presentation and offshore solar	Venice, IT	23 May 2022 - 26 May 2022	International event	x	x	x		x		x			20	WP7	OOE, TSW, NSF
Oral Presentation of a part of the PhD at EGU22, Vienna, PhD presentation by Rieke Santjer - UNITED was shortly introduced (as case for PhD)	Vienna, AT	26 May 2022	International event	x									60	7	Deltares
Exhibition - Rollup, poster, flyers and exchange with stakeholders, Ivana Lukic	The Hague, NL	02 June 2022	International event		x			x	x	x	x	x	200	9	SUB, Deltares
Workshop organisation - Interactive session	Delft, NL	02 June 2022	International event	x	x	x						x	40	9	SUBMARINER
Conference presentation - Fire chat: Blue economy and multi-use, Ivana Lukic	Split, HR	09 June 2022	International event	x	x	x	x	x	x	x	x	x	500		SUBMARINER
Television - UNITED nearshore site of the Belgian pilot	Ghent, BE	19 June 2022	Mainstream media	X	X	X	X	X	X	X	X	X	800000	9, 7	UGent
Workshop organisation - Nature restoration as an integral part of ocean multi-use: the case of native flat oysters in Belgian offshore wind farms Dr. Annelies Declercq; Seaweed cultivation & solar energy: a Dutch perspective on multi-use of wind farms, Zinzi Reimert	Lisbon, PT	30 June 2022	International event	x	x	x	x	x	x	x	x	x	100	9,7	Ecologic, NSF, TSC, OOE
25-year anniversary of Middelgrunden Wind Farm	Copenhagen, DK	17 September 2022	local event			x							280	<u>7 and 9</u>	SPOK
Conference - UNITED Belgian Pilot presentation	Ravenna, IT	27 September 2022	International event	x	x								300	3, 4	UGent
Aquaculture Europe Oral Presentation - Booth WINGS- Greek pilot	Rimini, IT	27 September 2022 - 30 September 2022	International event	x	x			x					100		WINGS
Exhibition LINK	Hamburg, DE	15 October 2022	local event	x	x					x				5, 7, 9	FUE

ANNEX 1

DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

Presentation Belgian pilot during fair - Nature restoration as an integral part of ocean multi-use: the case of European flat oysters in Belgian offshore wind farms	Brussels, BE	19 October 2022	International event	x	x			x					100	7	All Belgian pilot partners: Brevisco, Colruyt, Jan De Nul Group, Royal Belgian Institute for Natural Sciences, Parkwind, Ghent University (MTD, ARC Phycology, Legal)
Enterprise Europe Network, Investor Bank Schleswig-Holstein, Germany - Oral presentation: The UNITED Project	Kiel, DE	03 November 2022	International event	x	x			x		x			40	7	FUE
Presentation Invest Bank Schleswig-Holstein – UNITED project	Kiel, DE	03 November 2022	local event	x	x			x		x	x		100	7	FUE
UNITED workshop 5 (Gent): Politics and Regulations affecting Multi-use	Gent, BE	22 November 2022	International event										20	WP7	NSF, TSC, OOE
Meeting in the Parliament Seoul, and univ. Mokpo, South Korea - Middelgrunden Wind and The Fishermen	Seoul and Mokpo, KR	23 November 2022- 24 November 2022	International event	500	x	x	x	x	x	x			10000	WP9	SPOK
Interview – UNITED project	Online	23 November 2022	online webinar	x	x	x	x	x	x	x	x	x	10	7	FUE
Community of Practice - Synergies and Multi-use in Offshore Renewable Energies: offshore wind and tourism.	The Hague, NL	30 November 2022	local event		x		X						150	7 and 9	SPOK
TV station ZDF documentary - Plan B SOS Ocean	Kiel, DE	01 December 2022	Mainstream media			x	x		x				1000000	7	FUE, KMF
roundtable	Copenhagen, DK	06 December 2022	one-to-one meeting		x			x					7	7 and 9	SPOK
Award event, Blue Cluster	Antwerp, BE	15 December 2022	International event	x	x	x	x	x	x	x	x		100	7	All Belgian pilot partners: Brevisco, Colruyt, Jan De Nul Group, Royal Belgian Institute for Natural Sciences, Parkwind, Ghent University (MTD, ARC Phycology, Legal)
Break-out session UNITED at EU-SCORES stakeholder event – Dutch Pilot	The Hague, NL	21 December 2022	International event	x	x	x		x					60	WP7	NSF, TSC, OOE
Interview newspaper SHZ – UNITED project	Kiel, DE	12 January 2023	Mainstream media			x	x		x				500000	7	FUE
Presentation UNITED and German pilot	Kiel, DE	16 January 2023	one-to-one meeting	x									2	7	FUE, KMF
Presentation GEOMAR – UNITED project	Kiel, DE	16 January 2023	local event	x									2	7	FUE
Interview – UNITED project	online	20 January 2023	online webinar	x									20	7	FUE
Presentation UNITED – for Bachelor University of Oldenburg	Kiel, DE	21 January 2023	one-to-one meeting	x									1	7	FUE
Meeting with Ministry of Economic Affairs, Transport, Employment, Technology and Tourism – UNITED project, Lehmann-Matthaei, B.; Strothotte, E.	Berlin, DE	23 January 2023	one-to-one meeting					x					5	5, 7, 9(?)	FUE
Presentation: UNITED Dutch pilot: OFFSHORE SEAWEED AND FLOATING SOLAR ENERGY	NL	24 January 2023			x	x		x						WP7	NSF, TSC, OOE

ANNEX 1

DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

[illegible]

ANNEX 1

DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

Panel Community of practice North Sea	NL	15 June 2023	local event	x	x	x		x					100	WP7	NSF
Open House Day of Middelgrunden Wind Farm demonstrating the UNITED pilot	Copenhagen, DK	18 June 2023	local event			x	x						150	7 and 9	SPOK
Conference - UNITED Belgian Pilot Seaweed experiments	Trondheim, NO	21 June 2023 - 22 June 2023	International event	x	x								400	3, 4	UGent
Interview for Global Seafood Alliance article - Greek pilot - WINGS		04 July 2023	Mainstream media										1		WINGS
Interview published in local Newspaper (Kieler Nachrichten) - Mit Algen werden Zukunftsträume wahr	DE	13 July 2023	Mainstream media			x			x		x	x	230.000	7,9,5,6	FUE, KMF
Meeting presentation Copenhagen - Danish Wind Energy & Power to X	DK	11 August 2023	local event	17	x			x		x			17	WP9	SPOK
Lecturing DIS - Danish Wind Energy, Middelgrunden Wind	DK	14 August 2023	local event	16								x	16	WP9	SPOK
Meeting presentation Copenhagen - Danish/European Wind Energy & Power to X	Copenhagen, DK	30 August 2023	local event	x	x					x			30	WP9	SPOK
PhD Presentation with focus on the German Pilot - Oral Presentation: "A case study of ecological suitability of mussel and seaweed cultivation using bivariate copula functions"	Southampton, UK	9 September 2023	International event	x	x	x							40	7	Deltares
Joint Webinar: Commercializing United Project's Results & ULTFARMS Launch	Online	13 September 2023	online webinar	x	x		x			x		x	96	9	SUBMARINER and all partners
Focus group - Job opportunities in the maritime energy sector	Online	14 September 2023	online webinar	X	X								45	7 and 9	SPOK
Aquaculture Europe Oral Presentation - Booth WINGS- Greek pilot	AT	18 September 2023 - 21 September 2023	International event	x	x			x					100		WINGS
Interview - "Inspiring jobs for the youth. Ocean energies"	Online	19 September 2023	online webinar				X						50	7 and 9	SPOK
Participation in workshop: vessel safety in relation to multi-use in windfarms	NL	21 September 2023	local event		x			x					30	WP7	NSF, OOE
Presentation at conference – Seaweed: the sustainable future resource of the North Sea LINK	NL	28 September 2023	local event	x	x			x					250	WP7	NSF
Webinar - How to combine offshore wind with tourism	Online	05 October 2023	online webinar		x									WP9	SPOK
Summit - UNITED project presentation	Paris, FR	05 October 2023	International event	x	x	x							250	3, 4	UGent
Documentary film – Plan B	Kiel, DE	23 October 2023	Mainstream media	x	x	x	x	x	x	x	x	x	3000	7	FUE, KMF
Interview about United - interview/announcement of information	Kiel, DE	26 October 2023	Mainstream media	x	x	x	x	x	x	x	x	x	1500	7	FUE, KMF
Conference organisation - UNITED Final Event (7 sessions) LINK	Gothenburg, SE	14 November 2023 - 16 November 2023	International event	x	x	x		x			x		468	WP4	
Web-seminar to Ministry of Energy in Chile - Combining offshore wind with tourism	Online	28 November 2023	online webinar	x									10	WP9	SPOK

ANNEX 1
DISSEMINATION AND OUTREACH ACTIVITIES IN THE UNITED PROJECT

Participation event and share UNITED results Dutch pilot on seaweed LINK	Frankfurt, DE	28 November 2023 - 30 November 2023	International event	x	x	x		x	x	x	x		25000	WP7	NSF
Offshore Energy Exhibition & Conference 2023 – Represent UNITED Dutch Pilot: offshore multi-use	Amsterdam, NL	29 November 2023	International event	x	x	x		x	x	x	x		400	WP7	NSF
Presentation of UNITED (and ULTFARMS)	Kiel, DE	30 November 2023	local event	x									20	WP7	FUE
Interview (UNITED and ULTFARMS)	Kiel, DE	06 December 2023	one-to-one meeting	x	x			x		x	x		60	WP7	FUE
Webinar - How to combine offshore wind with tourism	Online	09 November 2023	online webinar											9	SPOK
UNITED Newsletter	Online	various	website/social media	x	x	x	x	x	x	x	x	x	400	9	SUBMARINER