

FORCOAST



Earth Observation Services For Wild Fisheries, Oystergrounds
Restoration And Bivalve Mariculture Along European Coasts

PROJECT DELIVERABLE REPORT

Deliverable Number: D7.3

Deliverable Title: An Analysis and Overview of
Different Communication Tools

Author(s): Deltares

Work Package Number: WP7

Work Package Title: Marketing &
Communication



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870465.

FORCOAST Project Information	
Project full title	Earth Observation Services For Wild Fisheries, Oystergrounds Restoration And Bivalve Mariculture Along European Coasts
Project acronym	FORCOAST
Grant agreement number	870465
Project coordinator	Ghada El Serafy, Deltares
Project start date and duration	1 st November 2019, 36 months
Project website	https://forcoast.eu/

Deliverable Information	
Work package number	WP7
Work package title	Marketing & Communication
Deliverable number	D7.3
Deliverable title	An Analysis and Overview of Different Communication Tools
Description	This deliverable provides an analysis and overview of different communication tools and channels that are used to meet the information needs of the target audiences (task 7.3).
Lead beneficiary	Deltares
Lead Author(s)	Deltares
Contributor(s)	EuroGOOS
Revision number	8
Revision Date	31/10/2022
Status (Final (F), Draft (D), Revised Draft (RV))	F
Dissemination level (Public (PU), Restricted to other program participants (PP), Restricted to a group specified by the consortium (RE),	PU

Confidential for consortium members only (CO))	
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Document History			
Revision	Date	Modification	Author
1	05/07/2022	Suggestion of first document structure	EuroGOOS
2	04/10/2022	Modification of structure and contribution to drafting content	Luis Rodriguez
3	11/10/2022	Drafting and review	Sonja Wanke
4	15/10/2022	Drafting and review	Luis Rodriguez
5	25/10/2022	Drafting	Luis Rodriguez
6	26/10/2022	Review	Sonja Wanke
7	27/10/2022	Addressing review comments	Luis Rodriguez
8	31/10/2022	Check	Ghada El Serafy

Approvals				
	Name	Organisation	Date	Signature (initials)
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Executive Summary

This deliverable refers to task 7.3. (Assessment of the success of different communication tools). It includes an overview of the main communication tools used during the project execution. The tools provide a combination of one-way and two-way communication between the project and the key stakeholders representing a diverse group (i.e. public, industry, policy, education, environmental conservation and research sectors).

The following communication tools were used:

- Project identify and logo design
- Graphical products such as flyers, leaflets and posters
- FORCOAST project website
- Social media presence
- Presentation template
- Presentations at international events and conferences
- Other communication tools

A series of metrics were collected to determine and track the effectiveness of the different tools in reaching the various stakeholders.

The metrics show that the overall strategy has been limited in targeting representatives from each sector identified as target audiences due to the fact that COVID-19 affected the project and the possibility to interact with the different groups on a more personal and frequent level.

The combination of tools has reached representatives of stakeholders and end-users around 70 times at specific events and points in time, while at the same time having continuous engagement with them, reaching local, national and international levels.

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1 Introduction

This deliverable reports on the mix of communication tools used in the dissemination and outreach activities of FORCOAST and its products and services. The introduction provides an overview of the FORCOAST communication strategy, a summary of FORCOAST's target audiences, types of communication tools used and the metrics to evaluate their effectiveness.

The main body of the report provides a detailed summary of how the communication tools have been implemented in the FORCOAST communication plan and strategy. For each tool, metrics to assess the effectiveness of the communication tools used are provided. The results are then summarised in relation to the metrics of effectiveness as defined in the communication plan.

1.1 Overview of the FORCOAST communication strategy

The FORCOAST project communication and dissemination strategy was defined and outlined in form of the [Communication and Marketing Plan](#) (D7.2) during the first six months of the project. The Communication and Marketing Plan set out an initial strategy for the FORCOAST project with its key objectives as follows:

- Informing and updating project partners and external stakeholders/end-users on the latest news, events, products and services;
- Engaging partners and external stakeholders/end-users in the design and development of the FORCOAST products and services;
- Promoting and raising awareness of the FORCOAST project.

The communication strategy was defined by identifying:

- Key stakeholders and end-users;
- A mix of communication tools targeting the various groups;
- Metrics to measure the effectiveness of the different tools.

The communication activities have been carried out by the WP7 Leaders (Deltares and EuroGOOS) as well as the Pilot Teams at regional levels.

1.2 Target audiences

FORCOAST is a market-uptake project and end-users and stakeholders are at the core of its activities. Therefore, identifying target audiences was a critical step in defining the communication strategy and selecting the most appropriate communication tools. The target audiences identified comprise representatives from public, policy, industry, education, environmental conservation and scientific / research stakeholder groups and include industries related to aquaculture, fisheries, and oyster restoration. For more detailed information on target groups and users, see D7.2 – Communication and Marketing Plan for the FORCOAST Project (FORCOAST communication targets) and D6.2 – Initial Market Analysis (customer identification).

1.3 Mix of communication tools

Communication channels were tailored toward individuals or groups of stakeholder/ user groups and were at the local, national or international level depending on the target audience and the communication method. The mix of communication tools included:

- Regular updates on the project website (<https://forcoast.eu/>)
- Regular social media posts (i.e. Twitter)
- Project identity including project logo, graphics and communication templates

- Regular emails between project partners and external stakeholder groups engaged with the project
- Conferences and events relevant to the project
- Flyers, leaflets, posters and brochures targeting various stakeholders
- Workshops and focus groups
- Publications

1.4 Metrics to evaluate the effectiveness of the communication tools

The FORCOAST communication strategy and the mix of communication tools can be evaluated using a variety of metrics. The metrics will be used as a measure of the effectiveness of the communication strategy and tools employed.

- Number of conferences, events, meetings and workshops organised/attended,
- Number of posters, flyers, leaflets, stickers, newsletters etc. distributed
- Number of posts, articles, press releases, papers, tweets and social media updates published
- Number of people reached is measured by session views on websites, followers on social media
- Number of people attending conferences, meetings, events and workshops

2 Communication Tools Uses and Metrics Evaluation

2.1 Project identity

A strong project identity and brand were designed during the first three months of the project (D7.1). The project identity consists of a project logo, colour scheme and a series of templates.

2.1.1 Logo



Figure 1: FORCOAST logo representing the three target groups - fisheries, oysterground restoration, and bivalve mariculture

The logo and communication templates are available on the project website for all partners. They are a key tool for project partners to access and use in order to promote the FORCOAST project at all networking events attended throughout the duration of the project.

2.1.2 PowerPoint presentation template

A PowerPoint presentation template (Figure 1) was designed as part of the project's identity and is used to present all presentations given on behalf of the FORCOAST project. The template is only available for the consortium members only on the project website: https://forcoast.eu/wp-content/uploads/2020/01/FORCOAST_Presentation_Template.pptx

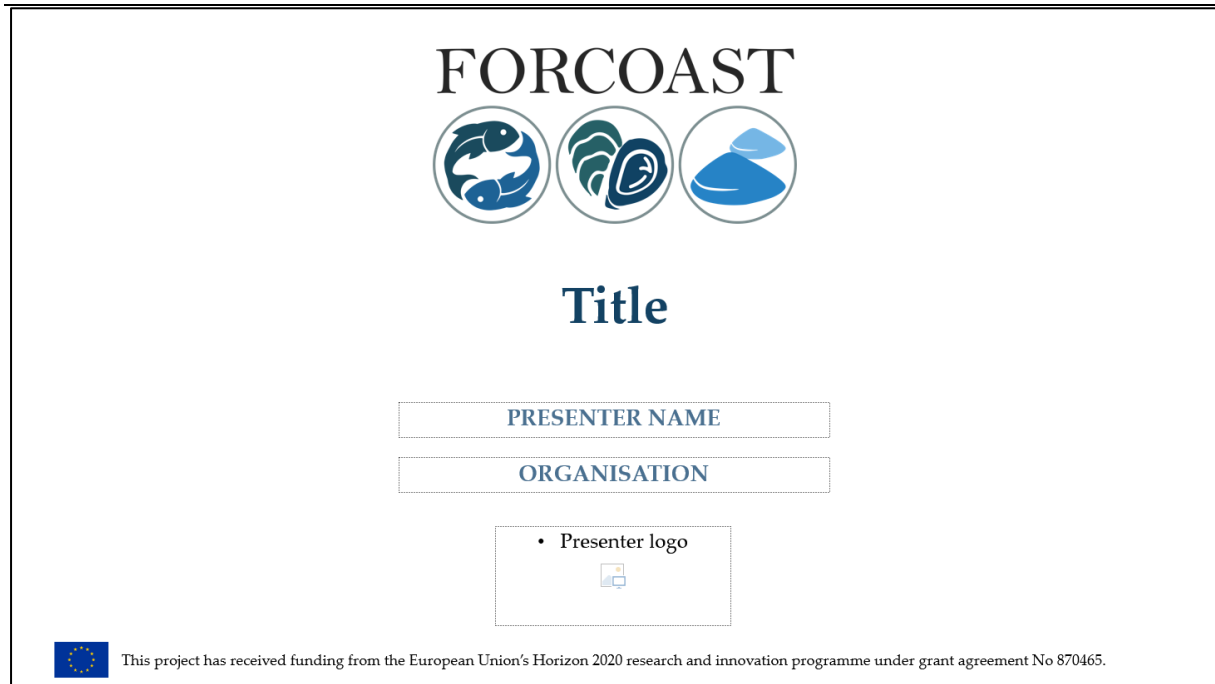


Figure 2: FORCOAST presentation template cover slide

2.1.3 Deliverable report template

A deliverable report template was designed for the documentation of all FORCOAST deliverables (https://forcoast.eu/wp-content/uploads/2020/01/FORCOAST_Deliverable_Template.docx). Each deliverable was uploaded to the FORCOAST website for wider uptake following submission to the European Commission (<https://forcoast.eu/products/deliverables/>).



Figure 3: FORCOAST deliverable report template cover page

2.1.4 Metrics for evaluation

The project identity and brand has been successfully used on all FORCOAST products, communications and outputs.

2.2 Graphical products (leaflets, posters)

2.2.1 Leaflets

The project leaflet was first produced to introduce the FORCOAST project (Figure 4). It briefly presents information about the project within a condensed space, with the intention of making it easily accessible to a large number of potentially interested stakeholders. Later iterations of the leaflet included a description of each of the services including the relevant information for the users. These leaflets were updated towards the end of the project to convey the relevant information about each service in their final status (Figure 4 to Figure 11).



FORCOAST

Earth Observation services for Wild Fisheries, Oystergrounds Restoration and Bivalve Mariculture along European Coasts



What is FORCOAST?

FORCOAST is an EU-funded project aimed at providing downstream information services to users in the wild fishery, bivalve mariculture, and oysterground restoration sectors using satellite information, in-situ information and advanced numerical modelling techniques.



Our goals

FORCOAST aims to provide consistent high-resolution information services which will help to improve planning, management and operations in coastal marine aquaculture activities along European coasts.




Who are we?

FORCOAST partners are public marine research institutes and private small and medium-sized enterprises, which are either developers or users of oceanographic services. This way, FORCOAST makes sure that our innovative tools are designed to satisfy the real market needs.

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 [linkedin.com/company/forcoast](https://www.linkedin.com/company/forcoast)
 info@forcoast.eu



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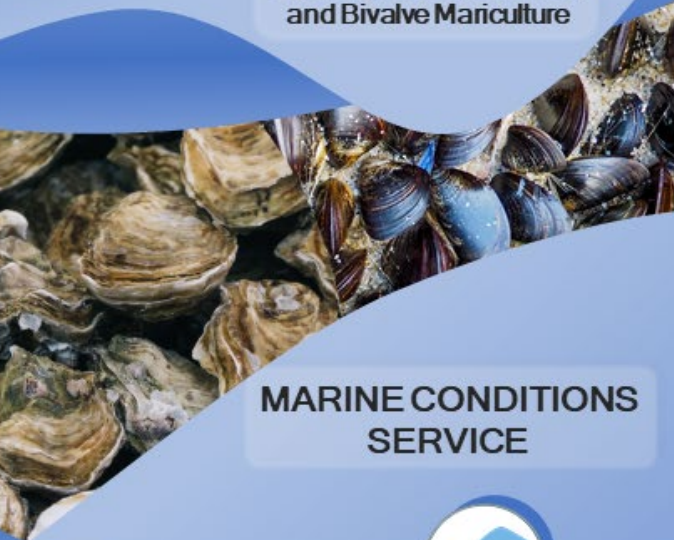
Figure 4: FORCOAST leaflet presenting the project overview




FORCOAST

Information services for
Wild Fisheries,
Oysterground Restoration
and Bivalve Mariculture






MARINE CONDITIONS SERVICE



Who is it for?

'Marine Conditions' has been designed for users in the marine sector which need information about different sea variables and schedule their tasks accordingly.



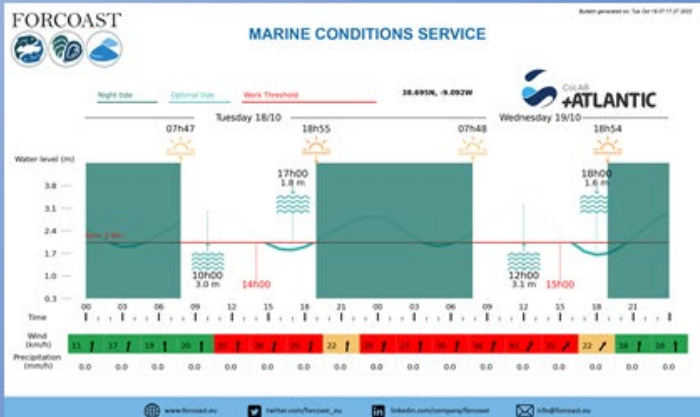
What will I get?

Maps of the different sea variables and daily bulletins that schedules for specified favorable working times.

'Marine Conditions' service?

The FORCOAST 'Marine Conditions' service offers the possibility to obtain met-ocean and water quality marine information, as well as schedule daily operations based on user-based conditions and thresholds.

Bulletin generated on: Tue Oct 16/17 17:27:00



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Figure 5: FORCOAST leaflet presenting the Marine Conditions services




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and Bivalve Mariculture






**LAND POLLUTION
SERVICE**




**'Land Pollution'
service?**

The FORCOAST 'Land Pollution' service offers the possibility to assess the risk of pollutants reaching your farm location from a known source.



Who is it for?

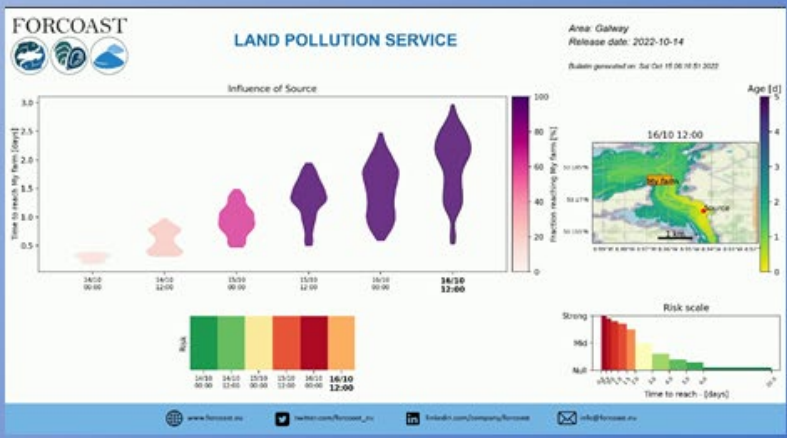
'Land Pollution' has been designed for anyone that needs information about when the most critical time of contaminants reaching their operation place will be.




What will I get?


Information bulletin, including animated forecasting maps of the pollutant trajectory and color-coded risk indicators.


'Land Pollution' bulletin example



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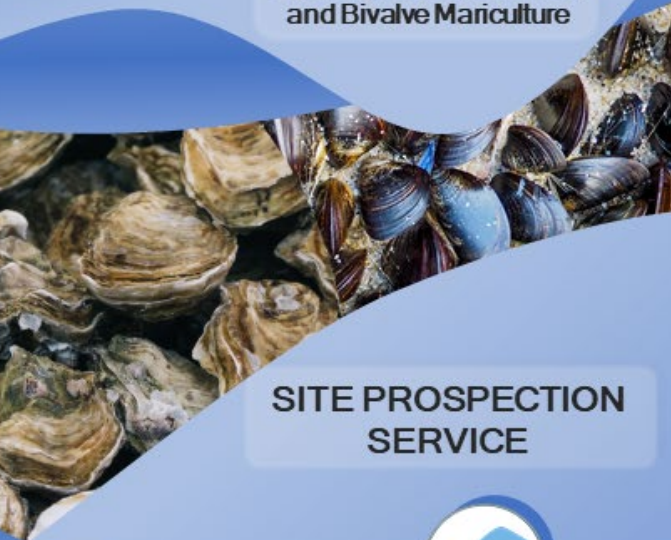
Figure 6: FORCOAST leaflet presenting the Land Pollution service




FORCOAST

Information services for
Wild Fisheries,
Oysterground Restoration
and Bivalve Mariculture






**SITE PROSPECTION
SERVICE**




**'Site Prospection'
service?**

The FORCOAST 'Site Prospection' service offers the possibility to identify areas with high growth potential and low mortality for the selected species of oyster or bivalve.



Who is it for?

'Site Prospection' has been co-designed with end-users for anyone that needs to assess the suitability of a certain area for bivalve or oyster cultivation and growth.



What will I get?

Maps of environmental variables and indices that indicate the suitability of the area.

'Site Prospection' bulletin example



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Figure 7: FORCOAST leaflet presenting the Site Prospection service



FORCOAST

Information services for
Wild Fisheries,
Oysterground Restoration
and Bivalve Mariculture





**SPAT CAPTURE
ASSISTANCE SERVICE**



'Spat Capture Assistance' service?

The FORCOAST 'Spat Capture Assistance' service offers the possibility to have an estimation of the time of arrival of spats in your location of interest from known sources.



Who is it for?

'Spat Capture Assistance' has been designed for anyone that needs to know when will the spats arrive to their location in order to plan their operations.



What will I get?

Time estimations of spat's first and last arrivals to your location of interest for each of the sources.

'Spat Capture Assistance' bulletin example



Oyster Grounds

- Belgian North Sea
- English South Coast
- English South-East Coast
- French North Coast
- Western Scheldt

Spawning ground	First arrival	Last arrival
Western Scheldt	28-06-22	07-08-22
Belgian North Sea	05-07-22	14-08-22
French North Coast	30-06-22	09-08-22
English South Coast	28-06-22	07-08-22
English South-East Coast	07-07-22	16-08-22

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Figure 8: FORCOAST leaflet presenting the Spat Capture Assistance service



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Information services for
Wild Fisheries,
Oysterground Restoration
and Bivalve Mariculture





**CONTAMINANTS
SOURCE RETRIEVAL
SERVICE**



'Contaminants Source Retrieval' service?

The FORCOAST 'Contaminants Source Retrieval' service offers the possibility to use a backtracking simulation to identify potential sources of a known contaminated spot.



Who is it for?

'Contaminants Source Retrieval' has been designed for users in the marine sectors who could use information about potential sources of the contaminants in their farm or oysterground location.



What will I get?

An animated map of the contaminants' trajectory, along with a map of all the possible contaminants' sources and location with the longest contaminant exposure time.

'Contaminant Source Retrieval' bulletin example

Particle density Index:
15-Oct-2022 12:00



FORCOAST



Single Particle map:
15-Oct-2022 12:00



CONTAMINANT SOURCE RETRIEVAL SERVICE

Bulletin generated on: Mon Oct 17 17:18:18 2022
Area: Galberty Bay
Your coordinates x = -8.95°, y = 53.2°
Simulation length: 2.0 days

Areas where Local Exposure Time is longer than 13.22 hours



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Figure 9: FORCOAST leaflet presenting the Contaminants Source Retrieval service



FORCOAST

Information services for
Wild Fisheries,
Oysterground Restoration
and Bivalve Mariculture







**SUITABLE FISHING
AREAS SERVICE**



**'Suitable Fishing
Areas' service?**

The FORCOAST 'Suitable Fishing Areas' service offers the possibility to access maps containing information about the most favorable location for a specific fish species.



Who is it for?

'Suitable Fishing Areas' has been designed for anyone that needs information fish suitability of a certain fish species in their region.

What will I get?

Map of the suitability of your selected area, and its evolution over time.

'Suitable Fishing Areas' bulletin example



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Figure 10: FORCOAST leaflet presenting the Suitable Fishing Areas service



Information services for
Wild Fisheries,
Oysterground Restoration
and Bivalve Mariculture





FRONTS DETECTION SERVICE



'Fronts Detection' service?

The FORCOAST 'Fronts Detection' service offers a visualization tool of where strong-, weak-, or no temperature and chlorophyll fronts are expected to occur.



Who is it for?

'Fronts Detection' has been designed for users in the fishery sector that can use temperature and/or chlorophyll forecasts to improve their daily operations at sea.



What will I get?

Predictions of the location and intensity of temperature and chlorophyll sea fronts, as well as their evolution over time visualized in an animated map.

'Fronts Detection' bulletin example



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Figure 11: FORCOAST leaflet presenting the Fronts Detection service

2.2.2 Posters

During the FORCOAST lifetime, different posters have been produced to disseminate and promote the project, its features and services at different events and conferences. Figure 12 to Figure 15 display examples of FORCOAST posters.

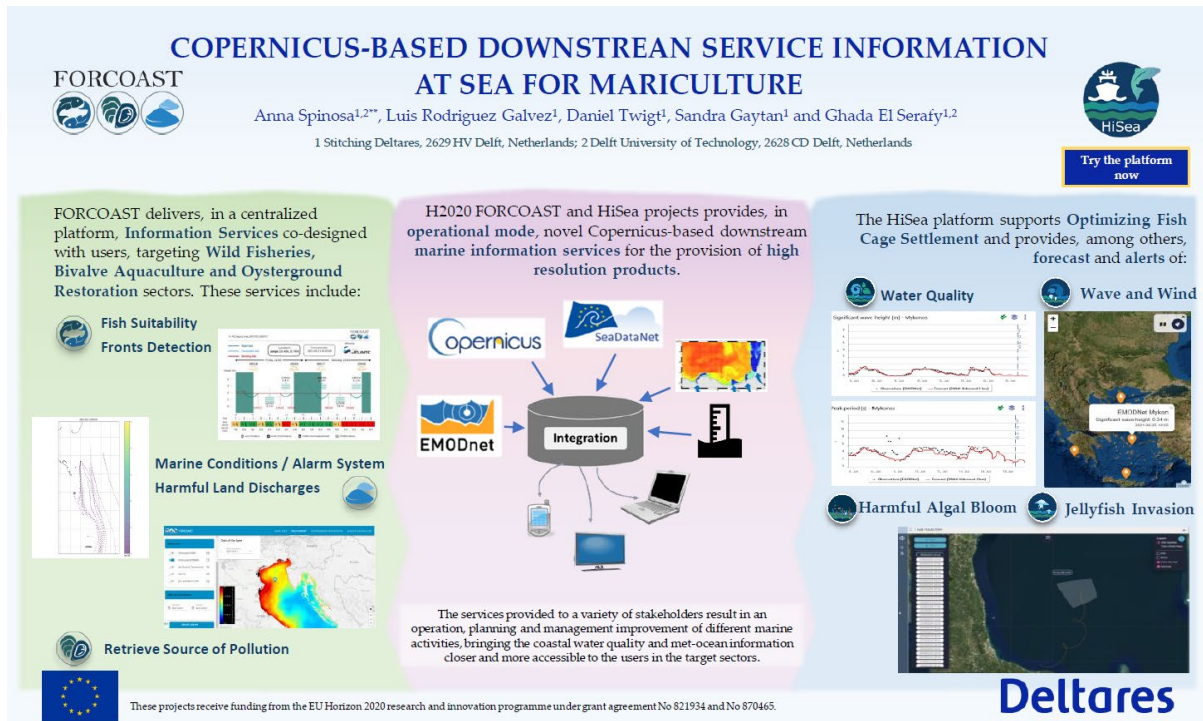


Figure 12: Poster of FORCOAST and HiSea projects for the AMEMR Conference 2021



YTIDE - METEOROLOGICAL AND OCEANOGRAPHIC SERVICE FOR AQUACULTURE

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CoLAB +ATLANTIC

IFT TÉCNICO LISBOA

exporsado

+ TIME IS MONEY

"Arriving 15 minutes later can mean an extra cost of €1,500" *

"This happens 6 or more times a month" *

* Estimations made with our partner ExporSado



ADAPTED TO YOUR OFFICE



SETTING UP YTIDE SERVICE FOR YOU

- + USER REQUIREMENTS**
 - ✓ Owning a smartphone
 - ✓ Provide location of your production area
 - ✓ Define environmental limit conditions (tide, wind, waves, ...)
 - ✓ Access to internet during the day
- + SERVICE**
 - ✓ Service delivered to your mobile phone
 - ✓ Specific channel per user or group of users
 - ✓ Currently distributed by Telegram app
 - ✓ Free trial period for Portugal
 - ✓ Daily message for the following 2 days
 - ✓ Weekly message for the following week



INFORMATION EASY TO READ

The information you need to make decisions and plan activities:

- Customised for your production site
- Easy to read format



+ ADVANTAGES

Ease of access:
faster and easier than accessing a website

Interaction with colleagues:
sharing information never been so intuitive

Increased productivity:
time optimisation and more efficient work

One stop shop:
capacity to aggregate operational information

Experienced modelling team:
co-designed with end-users

+ EVERYTHING YOU NEED ON YOUR PHONE & PC



WHAT IS INCLUDED IN YOUR YTIDE

3D high-resolution numerical modelling:
State-of-the-art models adapted to your site

Astronomical and meteorological tide:
Including all the contributions to water level

Global ocean circulation:
Unleashing and downscaling global processes

Including local effects:
local high-res bathymetry and river forcing

YTIDE MAKES ALL THE DIFFERENCE

Service	Local Data	Bathymetry effect	High-resolution meteorology	Atmospheric pressure effect	Wind effect	Distribution via smartphone
YTIDE	✓	✓	✓	✓	✓	✓
Global Models	✗	✓	✗	✓	✓	✗
Tidal charts	✗	✗	✗	✗	✗	✗
Other tidal services	✗	✗	✗	✓/✗	✗	✓/✗

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Figure 13: FORCOAST poster on the Marine Conditions service for the AquaEAS 2021 meeting

FORCOAST - Earth Observation Services for Wild Fisheries, Oystergrounds Restoration and Bivalve Mariculture along European Coasts



Luis Rodriguez Galvez ⁽¹⁾, Ghada El Serafy ^(1,2), Daniel Twigt ⁽¹⁾, Anna Rubio ⁽³⁾, Arthur Capet ⁽⁴⁾, Tomasz Dabrowski ⁽⁵⁾, Daan Delbare ⁽⁶⁾, Vicente Fernandez ⁽⁷⁾

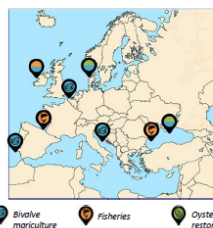
(1) Deltares, Boussinesqweg 1, 2629 HV Delft, The Netherlands, (2) TU Delft, The Netherlands, (3) AZTI, Spain, (4) University of Liège, Belgium, (5) Marine Institute, Ireland, (6) ILVO, Belgium, (7) EuroGOOS, Belgium

Introduction

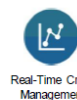
Sea related activities are set to increase and the growth in food production from sea is already a reality. However, this growth must be aligned with increasing environmental constraints as well as complying and restoring regulations and frameworks. This requires the adoption of improved and efficient behaviors based on wider incorporation of available information and knowledge from the industry and citizens alike. Marine and coastal managers must make decisions to maintain the social, economic, and ecological health of marine and coastal areas in coastal and nearshore areas and to operate, plan and manage their activities at sea. The European funded FORCOAST project represents a step forward in this direction by bringing the coastal water quality and met-ocean information closer to the target sectors: wild fisheries, oystergrounds restoration, and bivalve mariculture.

Objectives

FORCOAST aims to provide high resolution water quality and hydrodynamic information services in coastal and nearshore areas, to improve operation, planning and management of different marine activities in the sectors of aquaculture and wild fisheries. The FORCOAST platform is being developed to support eight pilot sites covering five different regional waters (North Sea, Baltic Sea, Mediterranean Sea, Black Sea and the coastal Atlantic Ocean).



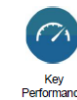
Early Warning Systems



Real-Time Crisis Management



Information for Planning Operations



Key Performance Indicators

Methodology

FORCOAST is developing, testing and demonstrating, in operational mode, novel Copernicus-based downstream information services that will incorporate Copernicus Marine, Land and Climate Services Products, local monitoring data and advanced modelling in the service. The services will integrate these products with local models and other diverse data sources (local, regional or global) with ICT (enhancing new frontiers opened by web, and use of cloud) across the different market segments. Furthermore, FORCOAST will be deployed and make use of one of the DIAS systems.

Figure 14: FORCOAST poster for the Ocean Sciences Meeting 2020 and EGU 2022 conference



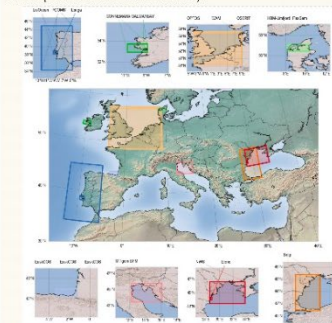
FORCOAST : Earth Observation Services for Wild Fisheries, Oysterground Restoration and Bivalve Mariculture along European Coasts

Arthur Capet ^{1,*}, Luc Vandenbulcke ^{1,*}, Marilaure Grégoire ^{1,*}, Luis Rodriguez Galvez ², Daniel Twigt ³, Anna Rubio ³, Vicente Fernandez ⁴, Tomasz Dabrowski ⁵, Daan Delbare ⁶, Ghada El Serafy ²

¹ MAST-FOCUS, Liège University, Belgium, ² Deltares, The Netherlands, ³ AZTI, Spain, ⁴ EuroGOOS, Belgium, ⁵ Marine Institute, Ireland, ⁶ ILVO, Belgium

8 Pilots

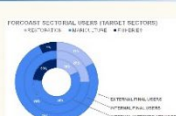
Each pilot gathers high resolution downsampled models (incl. waves, BGC, physics and sediments, depending on site), researchers, intermediate service providers and users community.



3 Sectors

Services are co designed with internal and external user communities, issued from the sectors:

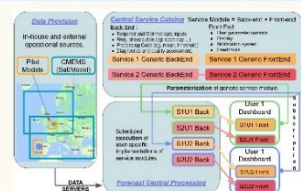
- Wild Fisheries
- Oysterground Restoration
- Bivalve Mariculture



What is FORCOAST ?

FORCOAST is a H2020 SP4CE project, aiming at developing, testing and demonstrating novel Copernicus-based downstream information services. FORCOAST will provide consistent coastal data products, based on a standardized data processing scheme and stimulate their exploitation within three targeted sectors. FORCOAST builds on cloud computing and utilizes one of the DIAS systems. A portfolio of services is accessible to eight pilot sites from the North Sea, Baltic Sea, Mediterranean Sea, Black Sea and the coastal Atlantic Ocean.

1 Central platform



Services modules are co designed at pilot levels, involving local research groups, private entities and end users. Services modules are deployed on one central cloud-based platform, exploiting Earth Observation and downsampled pilot models. The services are designed to be:

- Transferable spatially, and adapt to model outputs from new Pilots.
- Modular to meet local requirements of new users.
- Evolutive, based on cloud computing, FORCOAST may ingest new sources of data.

9 Service Modules

Fish Index

Sector: Fisheries
Method: Habitat suitability model from remote sensing and wave forecasts.
Development: Bulgarian Pilot, Terrasigna, USOF.

Marine Conditions

Sector: Aquaculture
Method: Met-Oceans services, based on forecasts.
Development: Danish & Portuguese Pilot, DMI, MARETEC.

Site prospecting

Sector: Aquaculture
Method: Growth model, hindcasts.
Development: Danish Pilot, Aarhus University.

Suitable habitat

Sector: Restoration
Method: Habitat models, hindcasts.
Development: Irish Pilot, Marine Institute.

Harmful Events

Sector: Restoration
Method: Remote Sensing (Turbidity, SST, Chl), modelling (Salinity)
Development: Irish Pilot, Marine Institute.

Front Detection

Sector: Fisheries
Method: Front detection on SST & Chl remote sensing and forecasts.
Development: Spanish Pilot, AZTI

Land pollution

Sector: Aquaculture
Method: Lagrangian modelling of harmful releases, forecasts.
Development: Romanian Pilot, MAST Uligeo, Jaijoo

Spat Capture

Sector: Aquaculture
Method: Timing of spats arrival, lagrangian modelling.
Development: Belgian Pilot, RBINS

Recruitment

Sector: Restoration
Method: Spawning grounds and Lagrangian.
Development: Irish Pilot, Marine Institute.

More info ?



<http://forcoast.eu>

acapet@uliege.be

Figure 15: FORCOAST poster for the ULiege Colloquium 2021 event

2.2.3 Metrics for evaluation

Table 1: Number of initially printed and/or downloaded from the project website

Communication Product	Format	Total number
Leaflet	Digital	8
Poster	Digital, physical	4

2.3 Project website

The project website was launched in November 2019 (<https://forcoast.eu/>). The FORCOAST website acts as the main point for general project information for partners and stakeholders. The FORCOAST website contains public domain information such as a description of the project on the home page, project members, work packages explanation and a description of the eight different pilot sites, including illustrative imagery. Furthermore, the website includes sections for public deliverables and publications that is updated as such material is produced. The FORCOAST website is adapted for mobile use, allowing for a clear disposition of its elements and making navigation via smartphones a suitable option. This has greatly facilitated accessibility. The website has a clear layout and reoccurring theme that it used in all promotional materials prepared for and by the project.

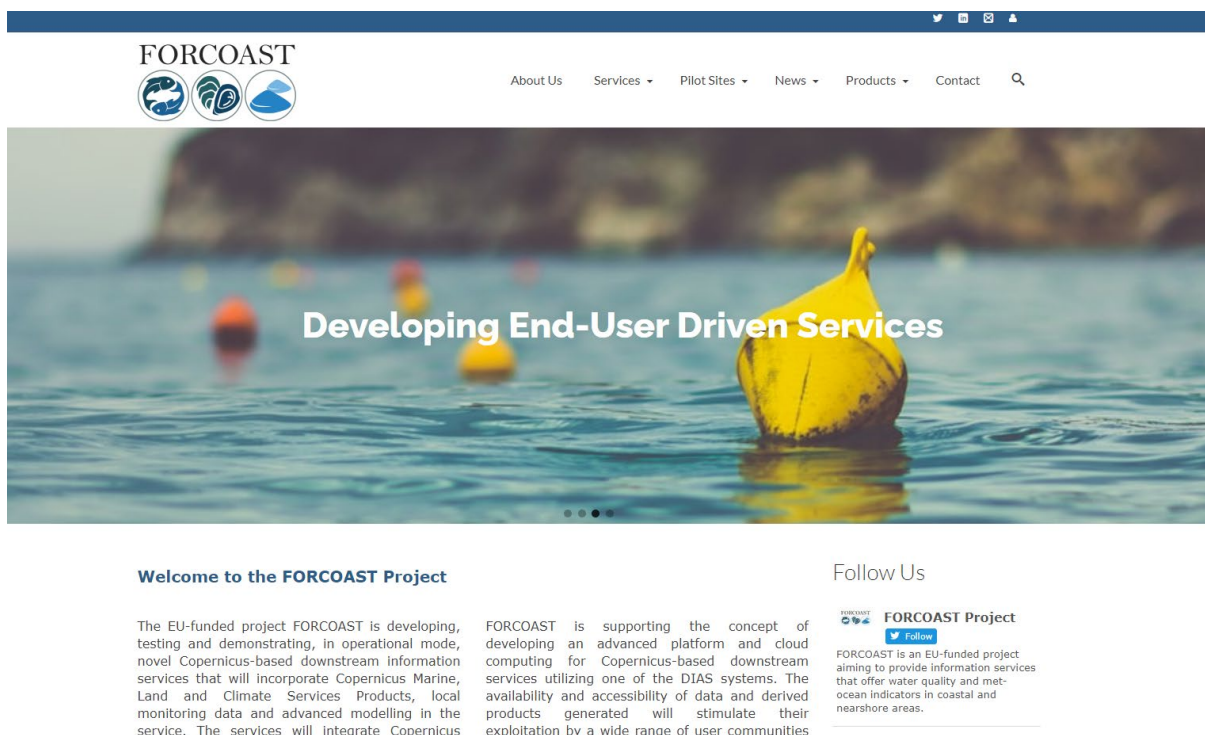


Figure 16: FORCOAST website

2.3.1 Regular website updates

The website is updated regularly incorporating the latest news, events, products and services for the end of the project. New content highlights were broadcasted through the different social media channels of the project to maximise the audience reached.

2.3.2 Metrics for evaluation

The website was updated regularly with the latest information and project progress. All new content was broadcasted through the project's social media channels to maximise the audience reached and dissemination achieved. Since the start of the project, there have been 7 news posts, 26 events, and 12¹ deliverable reports (Table 2).

Table 2: Content updates on the project website to communicate the latest project activities and outputs

Content type	Number uploaded	Link
Blog post	7	https://forcoast.eu/news-events/
Events	26	https://forcoast.eu/news-events/events/
Deliverables	12 ¹	https://forcoast.eu/products/deliverables/
Publications	4	https://forcoast.eu/products/publications/

The website has received 4,400 visits with 2,900 users (as of 25th October 2022). The average time a visitor has spent on the website is 2:09. A high average duration indicates that visitors find content of interest (Source: Google Analytics, Figure 16).

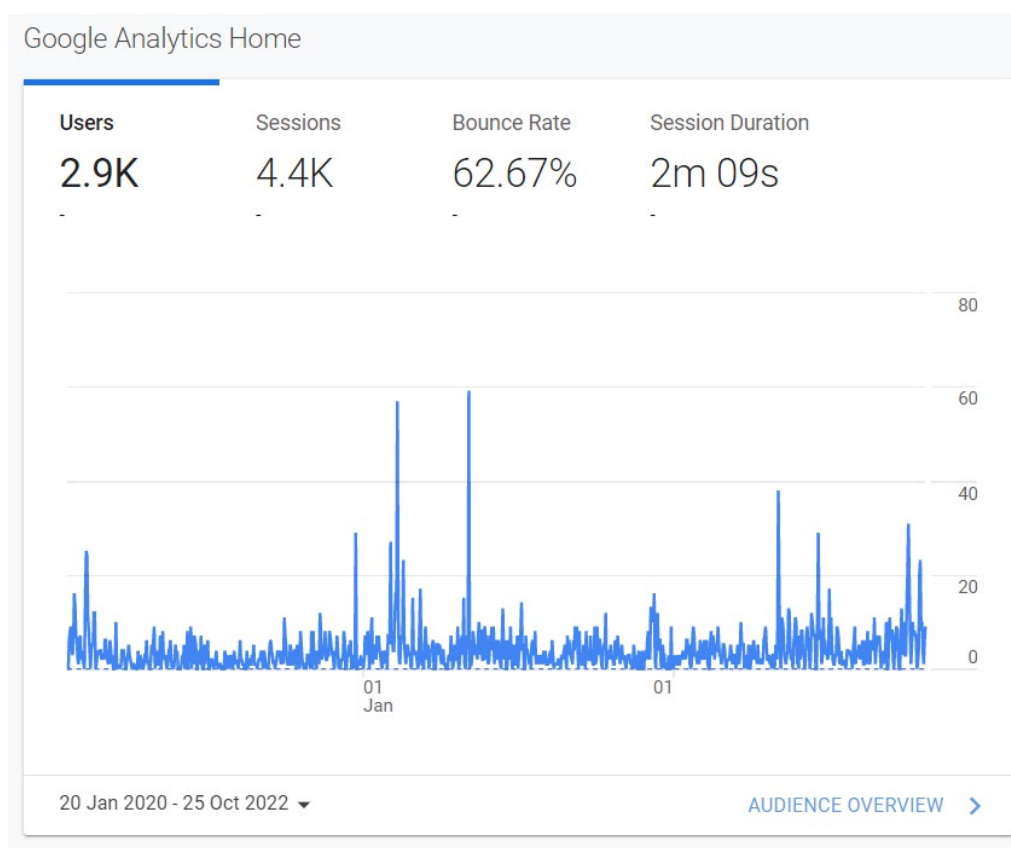


Figure 17: Google Analytics forcoast.eu statistics on usage

2.4 Social media presence

FORCOAST is present on different social media channels, which helped the project become more reachable and visible to a broader audience. The two main platforms where FORCOAST provides updates about the project, related events and news are LinkedIn and Twitter.

¹ Remaining project deliverables are to be added to the website once they are submitted to the EC.



Figure 18: FORCOAST Twitter account

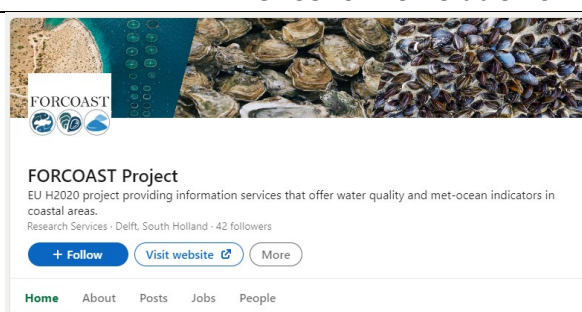


Figure 19: FORCOAST LinkedIn profile

Next steps regarding social media presence and promotion after the project include creating and executing a social media campaign for the final product after the project completion, identify areas of improvement, maintaining a consistent posting schedule, diversity content and use a mix of organic (and paid if possible) advertisement to boost the project's visibility and outreach, engage in community management regularly responding to the users' comments and queries. Deliverable D6.4 – *Final Business Plan* includes a promotion strategy for each of the services in the FORCOAST catalogue, in which social media is considered when applicable.

2.4.1 FORCOAST Twitter and metrics for evaluation

The FORCOAST community has posted around 57 tweets promoting the activities and latest achievements of the FORCOAST project while also sharing news from the aquaculture and broader marine sciences field. The Twitter account has 68 followers as of 25th October 2022 (https://twitter.com/forcoast_eu).

Twitter Analytics provides insights into the visitors' statistics on a monthly basis. For October 2022, 389 users visited the FORCOAST Twitter profile and 160 impressions were generated (Figure 19).

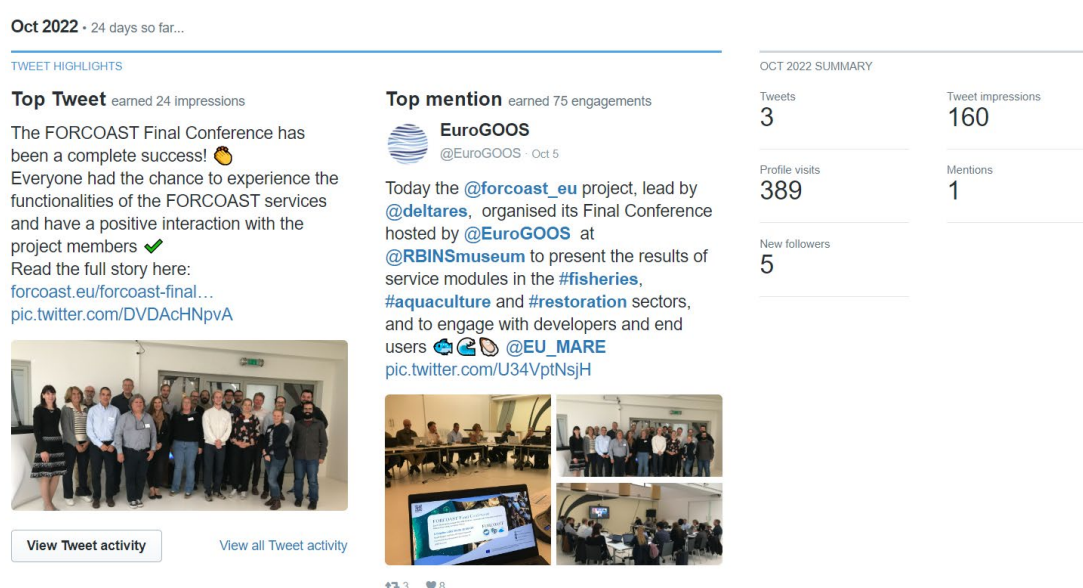


Figure 20: Twitter Analytics for October 2022

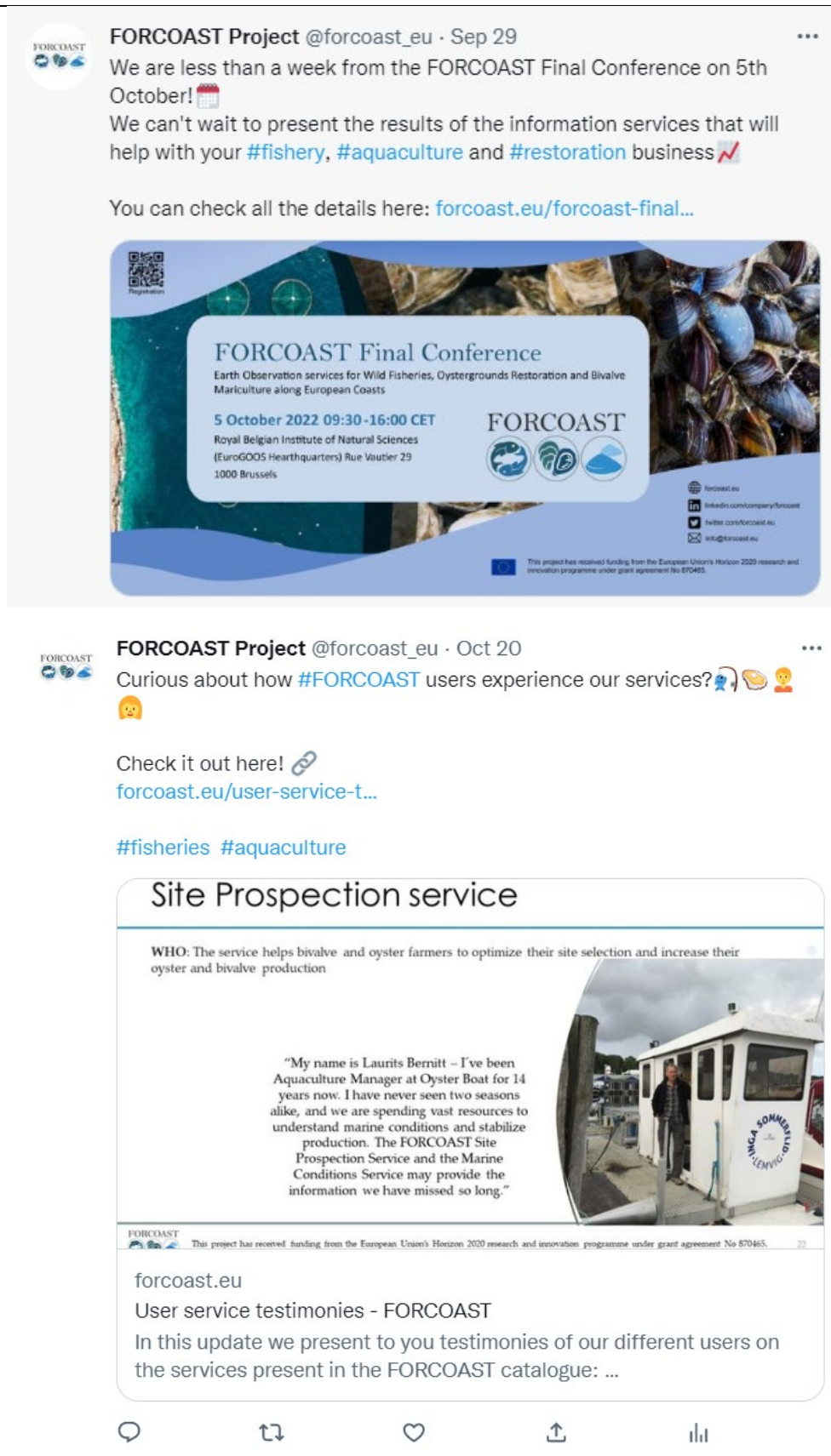


Figure 21: Example tweet published by FORCOAST

2.4.2 FORCOAST LinkedIn and metrics for evaluation

FORCOAST has set up a LinkedIn profile (<https://www.linkedin.com/company/forcoast/>) promoting activities and engaging with professional audiences to introduce its key services and products. Additionally, it announces open positions under the project. The page has 45 followers as of 25th October 2022.

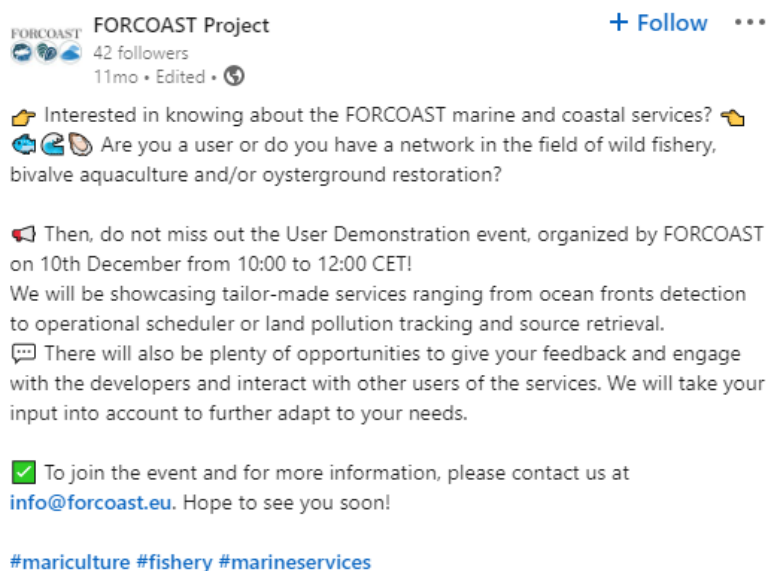


Figure 22: Example LinkedIn post published by FORCOAST

2.5 Workshops and Trainings

In total four workshops and trainings have been held by FORCOAST to engage with stakeholders and end-users focusing on the co-development and co-design of the FORCOAST products and services. Establishing effective relationships with these groups is key to the success of the project's user-centric approach and its legacy. Engaged users are likely to become advocates of the FORCOAST products and services and communicate their benefits to their extended networks and communities, which helps increasing awareness amongst target groups and uptake of the project's products and services.

Table 3: Workshops and training organised by FORCOAST

Title	Date and location	Purpose/Activity
Users Day (Figure 22)	11 th February 2021, online	Graphical prototype demonstration for users to gather feedback for service development.
User Demonstration (Figure 23)	10 th December 2021, online	Prototype demonstration via web application of the different services by the consortium internal users, following user story format.
Pilot Workshops (Figure 24)	Mid-2022, online/hybrid	The different Pilots set up workshops to demonstrate fully working live services in their areas and give access to users attending.

Final Conference (Figure 25)	5 th October 2022, Brussels and hybrid	Final event to demonstrate live the full functionalities of the FORCOAST product package as well as putting in common plans for the future post-project.
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Figure 23: Attendees at the FORCOAST Users Day, online

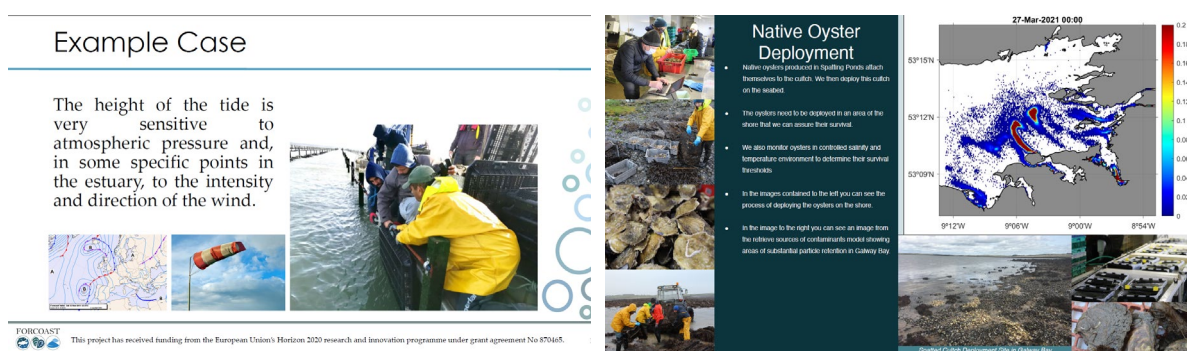
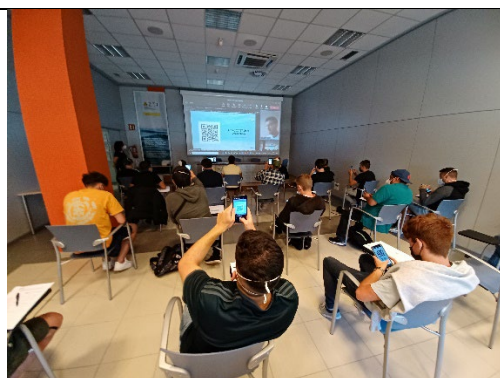


Figure 24: Example slides from the presentations given by FORCOAST internal users, Exporsado (left) and Cuan Beo (right), at the User Demonstration event



**Работна среща –
Идентифициране на подходящи райони за риболов**
27 юни 2022, 15.30 ч., online

**User Workshop –
Identifying the Suitable Fishing Areas**
27 June 2022, 15.30h EET, online

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870465.

Figure 25: Picture from the workshop held in Pasaia, Spain, focused on the Fronts Detection service (left) and cover slide from the presentation for Bulgarian stakeholders (right)



Figure 26: Pictures from the FORCOAST Final Conference / Assembly in Brussels

2.6 Conferences and Events

Members of the FORCOAST project have regularly participated in several conferences and events to promote the FORCOAST project and its products and services. Presentations were mostly given in form of posters and oral presentations.

Conferences, events and exhibitions provided an opportunity to communicate the FORCOAST project and its objectives, activities, products and services to a range of stakeholder and end-user groups. They were also an opportunity to build connections with external partners and stakeholders and create advocates for the project. Below is a list of conferences and events in which FORCOAST partners participated.

Table 4: Participation of FORCOAST partners in conferences and events

#	Title of conference/event	Date	Place	Contributing Partner(s)
1	EGU 2021	19-30 April 2021	Online	Deltares
2	Workshop on smart farming in the North Sea	14 October 2022	Online	Deltares
3	AMEMR 2021	12-15 July 2021	Online	Deltares

4	ICES WGIPEM annual meeting	22-24 March 2021	Online	Marine Institute, Aarhus University
5	EGU 2021	19-30 April 2021	Online	DMI
6	Aquaculture Europe 2021	4-7 October 2021	Madeira, Portugal	IST
7	Native Oyster Restoration Alliance 3rd Conference	3-5 November 2020	Online	Cuan Beo
8	The 9th EuroGOOS conferences	3-5 May 2021	Online	DMI
9	EO FOR WATER CYCLE SCIENCE 2020	16-19 November 2020	Online	Deltares
10	Havforskermøde	Havforskermøde	Online	Aarhus University
11	EGU 2020	3-8 May 2020	Online	Deltares
12	Ocean Sciences Meeting 2020	16-21 February 2020	San Diego, USA	Deltares
13	Copernicus Land, Marine and Coastal Workshop	31 March 2020	Online	Deltares
14	Copernicus Marine Service Online Training Workshop for the Black Sea Region	19 May 2020	Online	Sofia University, Terrasigna, University of Liege, Jiloo, NIMRD
15	Identification, promotion and implementation of Copernicus products, applications and services for aquaculture stakeholders (workshop within Aquaculture Europe 2022)	27 September 2022	Online	OGS
16	Annual meeting of the ICES WGIPEM	24-27 October 2022	Online	AU
17	XIX seminário de aquacultura	21 May 2021	Online	IST/Deltares
18	ICES WGOOFE Meeting	25-26 Nov 2021	Online	IST/Marine Institute
19	MONGOOS General Assembly & Modelling and Observations Workshop	5 December 2019	Online	EuroGOOS
20	NOOS Annual Meeting	15 September 2022	Rotterdam, The Netherlands	Deltares
21	OGS Summer School - The Copernicus Marine Service as a supporting tool to foster Sustainable Blue Economy	6 July 2022	Trieste, Italy	OGS
22	Biomatch	22 Feb 2020	Aarhus, Denmark	Aarhus University

2.6.1 Metrics for evaluation

At the end of period 1, information collected for the dissemination and communication activities log showed that FORCOAST has participated in eight conferences reaching around 500 individuals representing key stakeholders and user groups during these events.

By the end of the project duration, FORCOAST has participated in a further 14 conferences (making a total of 22 conferences/events) reaching around 1200 stakeholders.

2.7 Scientific Publications

In total four scientific papers were published under FORCOAST. They can also be found on the project website here: <https://forcoast.eu/products/publications/>

Table 5: FORCOAST scientific publications

Journal	Title	Authors
Marine Pollution Bulletin	Methodology for defining homogeneous water bodies for management purposes https://doi.org/10.1016/j.marpolbul.2021.113004	Vibe Schourup-Kristensen, Marie Maar, Janus Larsen, Christian Mohn, Jens Murawski, Jun She, Hans H.Jakobsen
Frontiers in Marine Science	Ocean Circulation Model Applications for the Estuary-Coastal-Open Sea Continuum https://doi.org/10.3389/fmars.2021.657720	Jens Murawski, Jun She, Christian Mohn, Vilnis Frishfelds and Jacob Woge Nielsen
Conservation Physiology	Comparing life history traits and tolerance to changing environments of two oyster species (<i>Ostrea edulis</i> and <i>Crassostrea gigas</i>) through Dynamic Energy Budget theory https://doi.org/10.1093/conphys/coac034	Brecht Stechele, Marie Maar, Jeroen Wijsman, Dimitry Van der Zande, Steven Degraer, Peter Bossier, Nancy Nevejan

2.8 Emails

Emails were used as a key method of communication between project partners and external stakeholders and end-users who were engaged in the project's activities. They were a useful tool in keeping recipients updated with the latest information.

2.8.1 Metrics for evaluation

There has not been any specific feedback regarding email communication from partners besides the one used for deliverables, service co-design and user feedback.

3 Summary

The document presents the different communication tools used by the FORCOAST consortium during the project duration. The variety of communication tools has proven to be effective and has helped to reach a wider range of stakeholders including but not limited to fisheries, oysterground restoration specialists and bivalve mariculture operators. The table below provides a summary of the mix of communication tools used to implement the FORCOAST communication plan and the associated metrics for evaluation.

The metrics show that the overall strategy has been effective in targeting representatives from each sector identified as target audiences. The combination of tools has reached end-users and stakeholders circa 70 times at specific events and points in time, while at the same time having continuous engagement with them, reaching the local, national and international levels. The communication strategy has achieved a combination of one-way and two-way communication with stakeholders and end user groups at local, national and international levels.

Table 6: Summary of communication tools used and metrics for evaluation

Medium/ Activity	Type of Audience	Communication Level	Communication Type	Date/ Frequency	Evaluation Metric	Metrics
Logo / identity		International	One-way	Used on all project communication activities and channels	Templates used by all partners	Logo and branding effectively used on all project outputs
Leaflets, flyers	Public	International	One-way	Two sets of leaflets: beginning and end of the project	Use to introduce potential new users to the service of interest	Referrals to the leaflets as an entry point
Website	Public	International	One-way	On-going updates	Number of sessions (average session time)	Number of users
Website content updates	Public	International	One-way	Recurrent	Total number of new content uploaded	Number of visits
Social Media	Public	International	One-way	Recurrent	Number of followers	
Workshops and training	Industry	International, national, local	Two-way	Periodically along the project's lifetime	Number of engaged contacts	

Conferences and events	Science, research, policy industry	International	One-way, Two-way	Periodically based on events of interest	Number attended	
Publications	Science	International	One-way	Periodically along with publishing material	Citations	
Emails	Internal partners, external stakeholders engaged in the project	International	One-way, two-way	On-going communication	Feedback received regarding email communication	No feedback from recipients received
Blog posts	Public	International	One-way	Recurrent based on news	Number of posts and views	