NAUTILOS

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Nature of the deliverable		
R	Report	X
DEC	Websites, patents, filing, etc.	
DEM	Demonstrator	
O	Other	

Dissemination level		
PU	Public	X
CO	Confidential, only for members of the consortium (including the Commission Services)	

1. TABLE OF CONTENTS

2. EXECUTIVE SUMMARY

Dissemination and communication activities are critical to maximize the impact of the project through proactive promotion of its objectives and results and, with the targets produced and released for their future exploitation. This document presents the promotional and public outreach campaigns carried out during the first 24 months of the project (M1-24). These campaigns were launched to increase visibility and awareness among the targeted audience groups and the general public, exploiting the trends and functions of social media (LinkedIn, Twitter), utilising visually appealing graphic design, and disseminating among partner networks.

The Covid-19 crisis had a significant impact on NAUTILOS, not only on the execution of the project, but also on the way project results were communicated, disseminated and exploited. Due to the cancellation of several major events and conferences, NAUTILOS missed important opportunities to reach a wider audience.

In addition to reporting on all the activities dealing with communication and dissemination, this report also includes a list of KPIs and the performance of the project with respect to those KPIs. The current document will also provide an overview of the total efforts carried out by the consortium with regard to dissemination and communication and a detailed look at how specific dissemination activities have been targeted at the various dissemination groups and what was their impact.

3. LIST OF FIGURES

4. LIST OF TABLES

5. LIST OF ACRONYMS AND ABBREVIATIONS

Abbreviation	Definition
CO	Confidential
D	Deliverable
EAB	External Advisory Board
EuroSea	Improving and Integrating European Ocean Observing and Forecasting Systems for Sustainable use of the Oceans
EMODnet	European Marine Observation and Data Network
GDPR	General Data Protection Regulation
IPR	Intellectual property rights
KER	Key exploitable results
KPI	Key performance indicator
M	Month
PU	Public
RRI	Responsible Research and Innovation
SEO	Search Engine Optimisation
TechOceanS	Technologies for Ocean Sensing

6. INTRODUCTION

Dissemination and communication activities are critical to maximize the impact of the project through proactive promotion of its objectives and results and, with the target to promote the project activities produced and released for their future exploitation.

The purpose of this document is to describe the communication and dissemination actions and outputs of the NAUTILOS project during the first 24 months.

6.1 Background and justification

In December 2020, the Outreach, Communication and Dissemination Strategy (D10.1) for the NAUTILOS project was delivered. Communication is a contractual obligation for Horizon 2020 funded projects. Beneficiaries agree to "the action and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner" (Article 38 of the Model Grant Agreement). A successful implementation of the dissemination and communication plan, along with the exploitation strategy (D11.1), will help to drive competitiveness and growth in Europe and address societal challenges. Dissemination refers to "the public disclosure of results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium" (Article 29 of the Model Grant Agreement). Regarding results, they are defined as "any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected, which are generated in the action as well as any attached rights, including intellectual property rights" (Article 29 0f the Model Grant Agreement). The dissemination of results contributes to the progress of science, and it is in line with the EU Research and Innovation policy goals: open innovation, open science, and open to the world. The conversion of knowledge into innovation will shape a better European future. Therefore, promoting and investing in innovative ideas with rapid scale-up potential is one of the key actions to maximise the impact of EU research and innovation programmes. In this case, the transfer of knowledge and the dissemination of the results are essential to improve Ocean Knowledge and Literacy, by making these results openly available it will enable their sharing in order to generate further research, novel solutions or tackle other challenges.

6.2 Related documents

D1.3. Data Management Plan (PU)

Data Management Guidelines, in compliance with the H2020 Data Management Guidelines, also based on inputs from WP8. It outlines a data management policy, including data to be generated by the project, its potential exploitation, curation and preservation. Additionally, in line with the principles of Open Access to research data and publications generated through H2020 programmes, NAUTILOS is participating in the Open Research Data Pilot carried out by the European Commission.

D10.1. Outreach, Communication and Dissemination Strategy (PU)

Report outlining the communication and dissemination strategy and actions that will be implemented throughout the project's lifetime in order to achieve the project's widest promotion, greatest visibility

and awareness to the external audiences with a particular emphasis on citizen science campaigns. The Communication and Dissemination Plan will provide the framework and structure of all project information, communication and activities; will define the communication goals, the objectives and timelines; will allocate responsibilities on a partner level and define a set of key performance indicators (KPIs) for the quantification and measurement of the communication and dissemination activities' success.

D10.8. Outreach, Communication and Dissemination Strategy (PU)

An updated version of deliverable 10.8 is to be issued in September 2022, along with this deliverable.

D10.3. NAUTILOS Project Website (PU)

The project's website launched in March 2021 and it will function at least for 2 years after the project's end, includes:

1) public area - the public area providing information on the project, the consortium, the project results (including public deliverables, etc.) and KER, topic related information, news and links, past and upcoming events, social media links.

2) private area - to facilitate the dialogue and exchange of information within the consortium, and to hold all the reference documentation that partners will need during the project.

D11.1. Exploitation Strategy (CO)

The deliverable will provide the Exploitation Plan and IPR Management Strategy of NAUTILOS. It will outline access rights and IPRs (Background, Foreground, Sideground, Postground, Access Rights), risk analysis and mitigation measures, a complete review of current open source and open hardware licenses outlining application to the project scope.

D13.1 H – Requirement No. 1

The procedures and criteria that will be used to identify/recruit research participants must be submitted as a deliverable. - The informed consent procedures that will be implemented for the participation of humans and regarding data processing must be submitted as a deliverable. -Templates of the informed consent/assent forms and information sheets covering the voluntary participation and data protection issues (in language and terms intelligible to the participants) must be kept on file (to be specified in the grant agreement) and the English version must be submitted as a deliverable.

D13.2. POPD – Requirement No. 2

The beneficiaries must confirm that a Data Protection Officer (DPO) has been appointed and the contact details of the DPO are made available to all data subjects involved in the research. For beneficiaries not required to appoint a DPO under the General Data Protection Regulation (GDPR) a detailed data protection policy must be kept on file (to be specified in the grant agreement) and submitted to the Agency upon request. The confirmation for each beneficiary must be submitted as a deliverable. -The beneficiary must explain how all of the data they intend to process is relevant and limited to the purposes of the research project (in accordance with the 'data minimisation' principle). This must be submitted as a deliverable. - A description of the technical and organisational measures

that will be implemented to safeguard the rights and freedoms of the data subjects/research participants must be submitted as a deliverable. - A description of the security measures that will be implemented to prevent unauthorised access to personal data or the equipment used for processing must be submitted as a deliverable. - Description of the anonymisation/pseudonymisation techniques that will be implemented must be submitted as a deliverable. - In case personal data are transferred from the EU to a non-EU country or international organisation, confirmation that such transfers are in accordance with Chapter V of the General Data Protection Regulation 2016/679, must be submitted as a deliverable. - In case personal data are transferred from a non-EU country to the EU (or another third state), confirmation that such transfers comply with the laws of the country in which the data was collected must be submitted as a deliverable.

NAUTILOS Graphic Charter

Document outlining the standards and rules regarding the communication of the NAUTILOS brand.

7. OUTREACH, DISSEMINATION AND COMMUNICATION IN BRIEF

Dissemination and communication activities are carried out to ensure that the project research and practical outcomes are widely disseminated to the appropriate target audiences, at appropriate times along the project lifecycle via appropriate methods with the contribution of all partners of the consortium.

In order to carry out a proper communication strategy, three things need to be clearly defined (see figure 1):
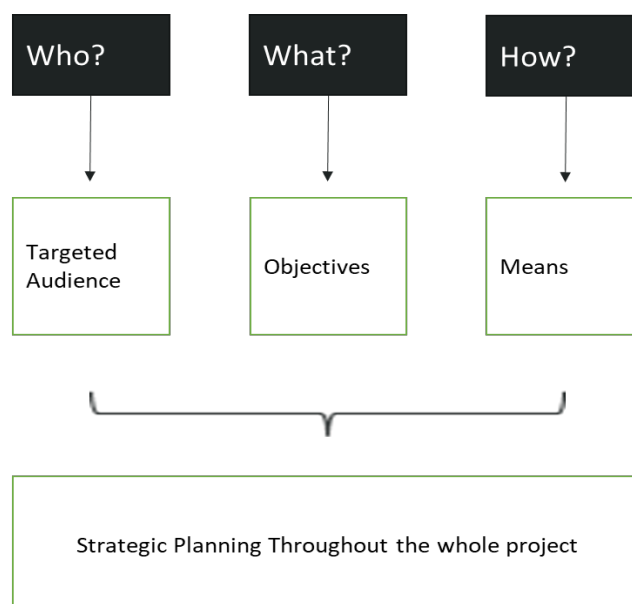
Figure 1 - Scheme for defining a proper strategy

It is of strong interest in the project and its partners to disseminate its ideas and results to a community that is as wide as possible – although being focused on the identified main target groups in order to reach the objectives of dissemination and communication (see table1).

The last step in the recent evolution of the European science communication strategy is constructed around "Innovation Union 2020," where innovation is seen as the key tool for strong and sustainable growth. In this framework, the Responsible Research and Innovation (RRI) concept and the focus on participatory research and innovation imply that all societal actors (e.g., researchers, citizens, policy makers, third sector organisations, etc.) work together during the research and innovation process to align its outcomes with the needs, values and expectations of society. The approach to defining the target audience within NAUTILOS has been constructed around this concept and the Quadruple Helix Innovation Model in which policy, scientific community, industry and society work in tandem (see figure 2).
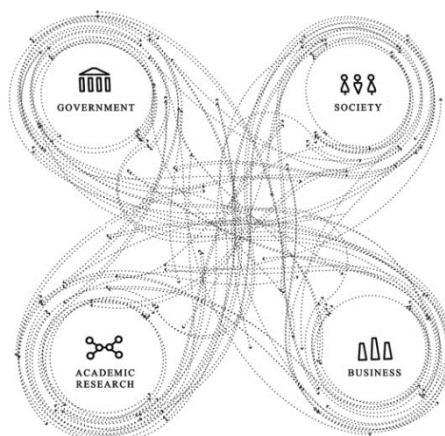
Figure 2 - Quadruple Helix Innovation Model

Using the above as a basis, and consulting all project partners during the proposal stage, the Policy and Decision Makers, the Research and Academia, the Industry, and the Society have been identified as key stakeholders in the project's lifetime and beyond.

Table 1 - Strategic Communication and Dissemination Plan

Who	What	How	
		During the project	*After the project, Legacy*
EU and International networks	Ensuring compliance and alignment to gaps and needs	EAB representation, Stakeholder meetings, NAUTILOS initial, mid and final conferences	Project website
Policy and decision makers	Represent NAUTILOS interests to decision makers, bridge the science-policy gap	EAB representation, 3 policy briefs, policy roundtable, newsletter (policy section), 3 presentations elaborated for European institutions,	Project website, project videos

		NAUTILOS initial, mid and final conferences, Social Media, Website, Project videos	
Industry			
Blue economy commercial and industrial sector operators	Inform about NAUTILOS marine technological developments relevant to their sector, primarily aquaculture and fisheries	EAB representation, Stakeholder brokerage meetings, NAUTILOS initial, mid and final conferences, External events participation (i.e. congresses, trade shows), Social media, Website	Social media, project website, project videos, joint proposal applications
European observation commercial sector (technology providers)	Inform and collaborate with NAUTILOS marine technological, modelling and data developments and products	EAB representation, Stakeholder brokerage meetings, NAUTILOS initial, mid and final conferences, External events participation (i.e. congresses, trade shows), Social media, Website, Project videos	Social media, project website, project videos, joint proposal applications
Research & Academia			
The fundamental and applied marine research community	Be informed and feed information into the project	EAB representation, Journal publications, Synergies building activities, Capacity building dissemination campaigns and learning labs, Stakeholder meetings, NAUTILOS conferences, External events participation (i.e. conferences, symposia, workshops)	E-learning material, joint proposal applications, project website

Related projects in the areas of marine and earth observation	Ensure synergies, differentiation, building on previous projects and increasing project's impact	Synergies building and clustering activities, articles, NAUTILOS conferences, external events participation	Clustering initiatives, joint proposal applications, project website
Society			
NGOs and citizen scientists	Bridge the society-science gap, recruit citizen scientists for the campaigns	Ocean literacy and public engagement campaign, citizen science trainings and campaigns, Online campaign	Project website, project videos, e-learning material, CS App
The general public	Inform and engage the public, convert it to citizen scientists	Ocean literacy and public engagement campaign, citizen science campaigns	Project website, Social media, project videos, e-learning material, CS App
The media	Inform & publicise	Press releases, website, newsletter	Project website

8. COMMUNICATION AND DISSEMINATION ACTIVITIES

8.1 NAUTILOS Website

The entry point to the project communication activities is the website (https://www.NAUTILOS-h2020.eu) acting as a virtual dissemination vehicle, providing to the public and the specific target groups access to valuable information (see figure 3). The website was developed in early 2021 and launched in March 2021. During the first two years of the project, main updates concerned:

- Making available the public deliverables online;

- Being a repository for the Data Portal;

- Acting as a repository for the Citizen Science App;

- Publishing 48 news articles.
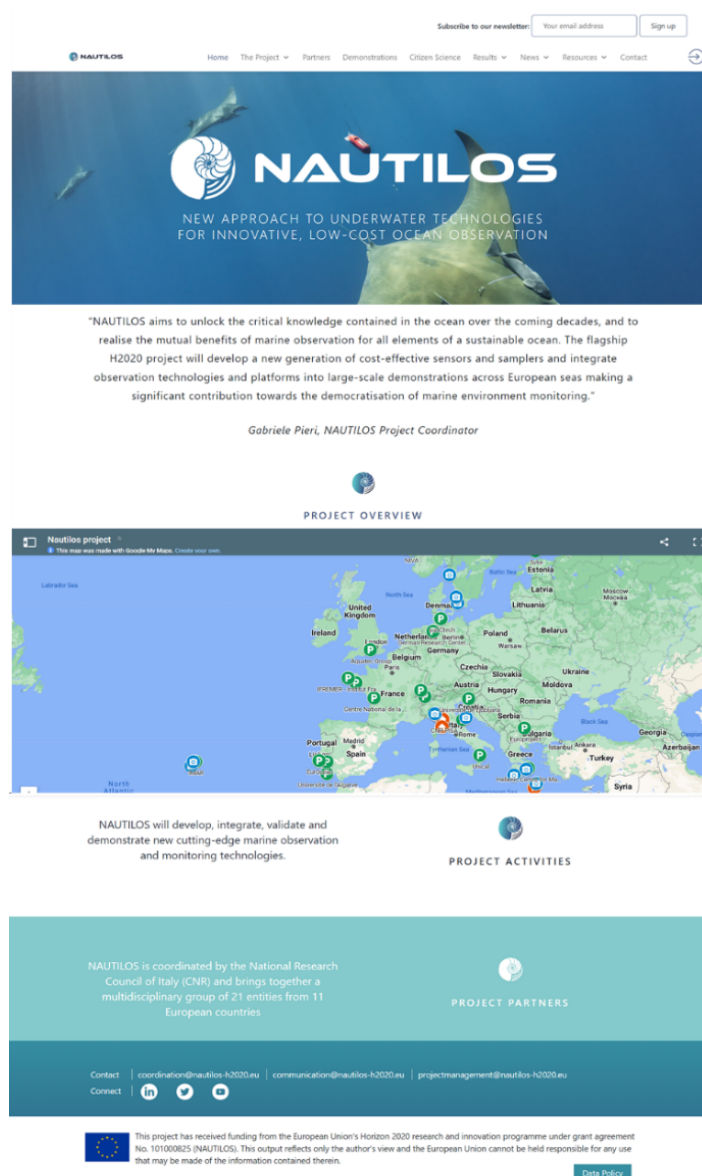
Figure 3 - NAUTILOS Website

o Data Portal

Any new data produced within the NAUTILOS project will be free, unrestricted and accessible with its metadata. Data and metadata generated within NAUTILOS that are stored with the originating institute/organization are to be stored/made available with the NAUTILOS data portal (see figure 4) and are the same that have been shared and are available within the data integrator portals and initiatives (EMODnet, CMEMS, etc.). The beta version of the data portal can be accessed here: https://www.NAUTILOS-h2020.eu/data-portal/.
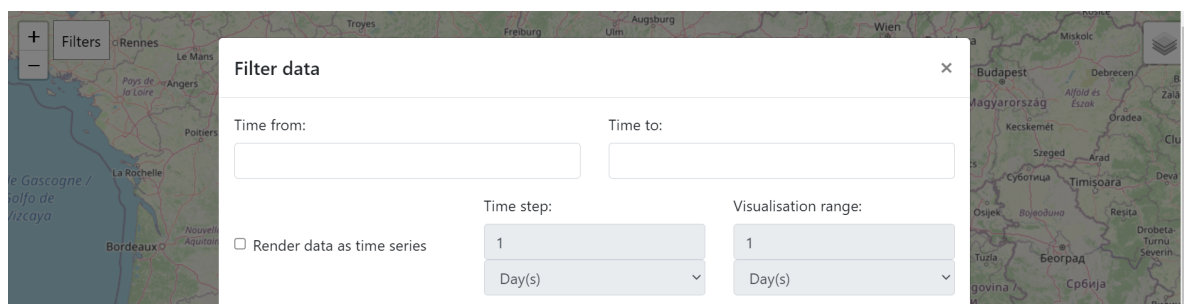
Figure 4 - Data Portal

o   Citizen Science App

The Citizen Science Dedicated App is one of the cool tools that has been designed, implemented, and integrated into the NAUTILOS data infrastructure. It allows for the uploading and analysing data gathered during various citizen Science campaigns. Data acquisition, management, and visualization work as a common entry-point to operate as a bridge towards NAUTILOS data infrastructure, with which they are fully integrated. The App can be downloaded here: https://www.NAUTILOS-h2020.eu/NAUTILOS-cs-app/.
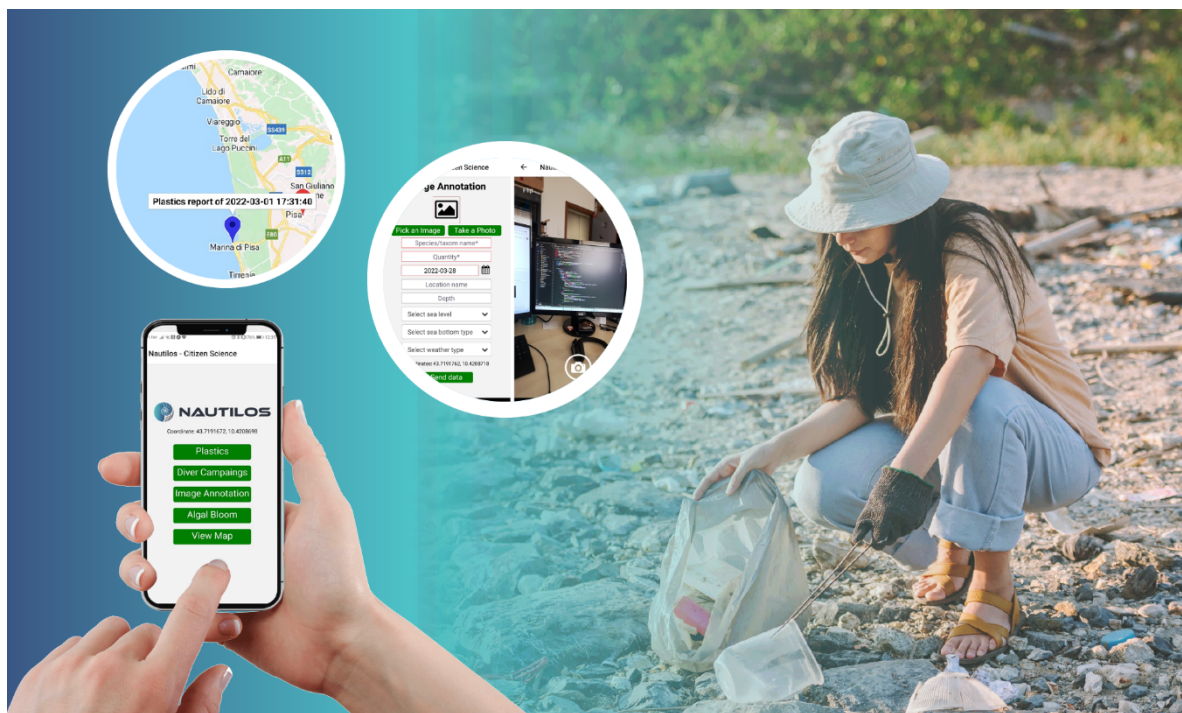
Figure 5 - NAUTILOS Citizen Science Dedicated App

o   Newsletter

Despite the increasing diversity of online communication according to data from 2019, 80% of marketers have reported an increase in email engagement. Currently, newsletters are still considered a cost-effective, high conversion tool which can substantially boost audience engagement.

15

The NAUTILOS newsletter is designed in full compliance to legal requirements including GDPR. The email footer displays the sender's address and offers a convenient and visible unsubscribe/opt-out button.

The newsletter will also require readers to manually opt-in to receive emails. GDPR compliance within NAUTILOS is described within D1.3. Data Management Plan and D13.2, POPD – Requirement No. 2 and, and D13.1 H – Requirement No. 1, where the template for the informed consent applicable to the newsletter is provided.

There are currently 36 subscribers to the NAUTILOS newsletter covering all the targeted audiences. For the reporting period, three issues were sent with the major outcomes of the project. For details on these newsletters visit: https://www.NAUTILOS-h2020.eu/resources/#newsletter.
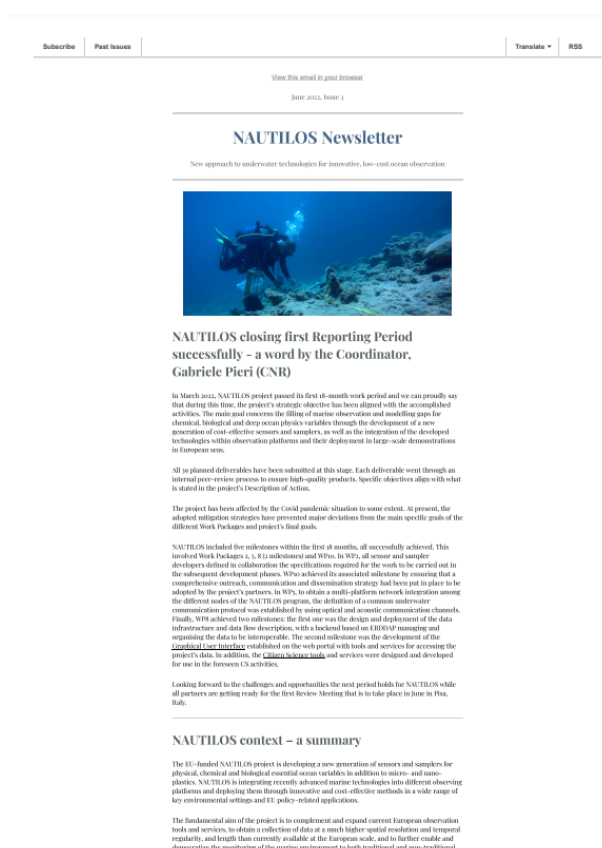
Figure 6 - Example of a project Newsletter

o Results monitoring

Statistics on the project website are obtained using Google analytics (since March 2021). It is a free powerful tool that generates advanced web statistics and complies with General Data Protection Regulation (GDPR). It also allows access to real traffic excluding that related to robots. To ensure that dissemination through www.NAUTILOS-h2020.eu is efficient, 3 indicators have been defined and are monitored on a monthly basis (See Table 2). Other information given by the statistics tool is very interesting, as it provides an overview of the most visited pages and worldwide visibility of the project (See Table 3).

Table 2 - Website Dissemination impact

Month	Number of monthly Sessions/Engaged Sessions	Engagement Rate %	Avg. Engagement time (seconds)	No. of references from external web pages
March 2021	326/0	0	6m 21s	9
April 2021	365/0	0	1m 36s	49
May 2021	197/0	0	1m 55s	15
June 2021	235/0	0	1 09s	20
July 2021	179/0	0	1m 50s	11
August 2021	197/0	0	57s	33
September 2021	288/0	0	1m 31s	8
October 2021	351/0	0	1m 40s	38
November 2021	300/77	25,5	1m 17s	30
December 2021	212/102	48.11	1m 20s	10
January 2022	177/102	57.95	59s	16
February 2022	207/115	55.29	59s	9
March 2022	367/178	48.37	1m 22s	12
April 2022	239/129	54.43	1m 06s	11
May 2022	418/229	54.65	1m 04s	19
June 2022	338/196	57.99	1m 20s	14
July 2022	319/161	50.63	1m	26
August 2022	144/62	43.06	46s	4
September 2022	383/190	86	45s	10
Objective	**200**	**50**	**120**	**10**

Table 3 - Complementary statistics as of 24th of August

Top 10 countries visiting the website (Nº Sessions)		Top 10 URL (Nº Page Views)	
Italy	455	Home - NAUTILOS	4636
United States	57	The Project - NAUTILOS	1435
Portugal	197	Partners - NAUTILOS	1256
Germany	52	Demonstrations - NAUTILOS	643
France	57	News	521
Switzerland	38	Citizen Science	421
United Kingdom	61	Resources	403
Greece	65	Data Portal	214
China	5	Map - NAUTILOS	151
Bulgaria	109	New Approach to Underwater Technologies for Innovative, Low Cost Ocean observation: Launching of the NAUTILOS project	145

Statistics on the website show results that are higher than the initial objectives. The number of visitors to the website is globally increasing. From the Top 10 countries visiting the website, we can see that visitors are mainly coming from Italy. The duration of visits is increasing since there is more and more content available.

8.2 Partners' Websites

The NAUTILOS beneficiaries have been mobilised via dedicated [Call for action] emails to promote results and opportunities on their own websites and social media channels. Some examples can be found in Figure 7.
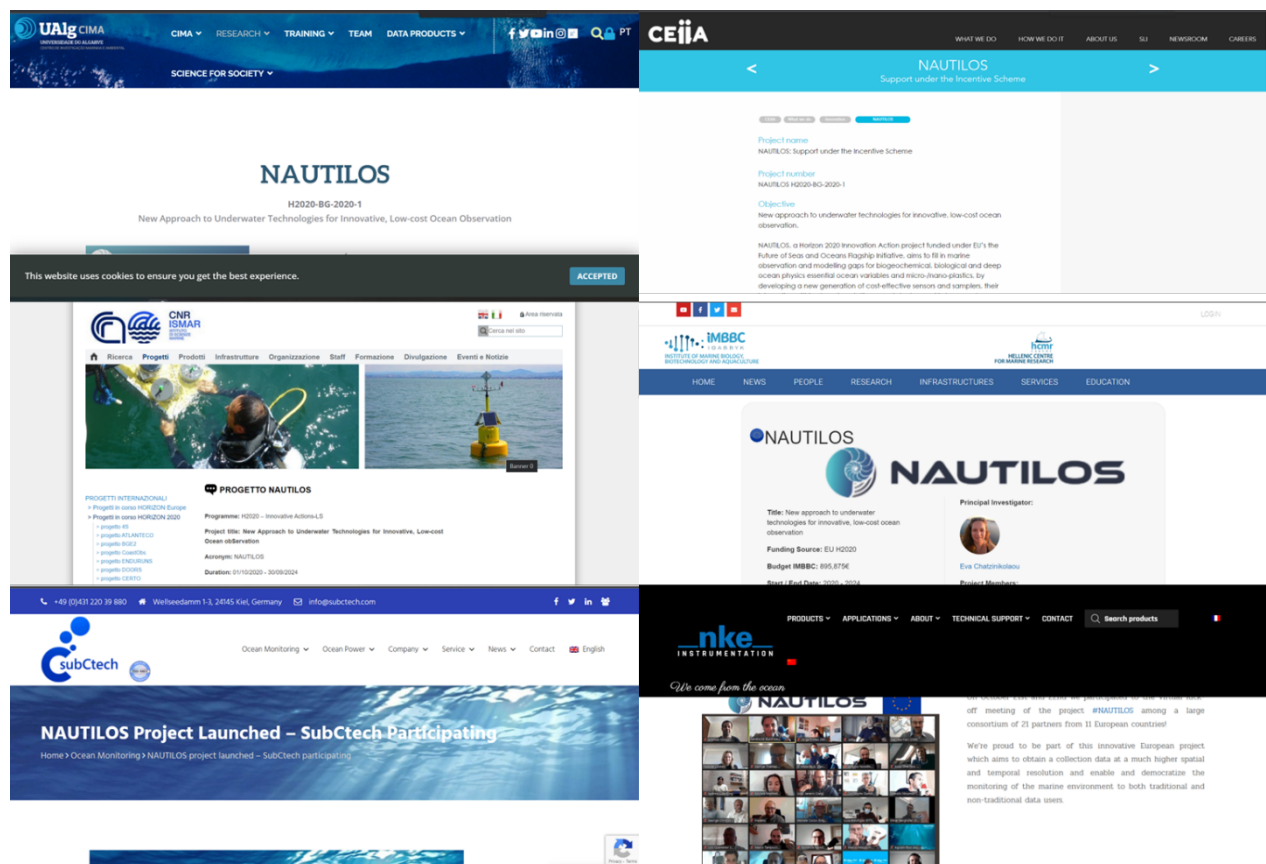
Figure 7 - Example of several partners websites disseminating NAUTILOS

8.3 Social Media

Social media, and social media networking, when used strategically, can be a very effective tool for engaging with a variety of stakeholder audiences. NAUTILOS is making use of relevant social media networks to promote the project, its partners and results – scientific knowledge and RTD Innovations. With the following objectives:

- Increase project awareness and visibility in a cost-effective manner;

- Raise interest on the project topic among both expert and non-expert audiences;

- Use as a tool for target group interactions, feedback gathering and consultations;

- Raise awareness of other communication and dissemination activities, informing the follower community about those;

- Promote the knowledge, activities, benefits and outcomes generated during the project's lifecycle;

- Enhance project positioning through engine search, image search, local search, etc.

A dedicated Twitter and LinkedIn accounts were created following the application of the Social Network Honeycomb Framework in identifying the most appropriate social media channels.

To select the most appropriate channels the consortium has applied the Social Network Honeycomb Framework in identifying the most appropriate social media channels. The framework is composed of seven building blocks used to analyse and understand social networks' structures, including:

- Identity, the central block - the extent to which information regarding the users is part of the social media, incl. disclosure of preferences, opinions, etc;

- Conversations - the importance of connecting, talking and confronting with other users;

- Sharing - the importance of distributing content;

- Presence - the importance that availability has in the social network, including the extent of user's participation in the social network activity;

- Relationship - the extent and centrality of connections among users. Higher the importance, deeper the created relationships;

- Reputation - the possibility to create different standings on the social network to be "recognised" by others;

- Groups - the possibility to create sub-groups among the social network population.

The most relevant blocks for the structure of each social network are darker in colour with white being the least important.
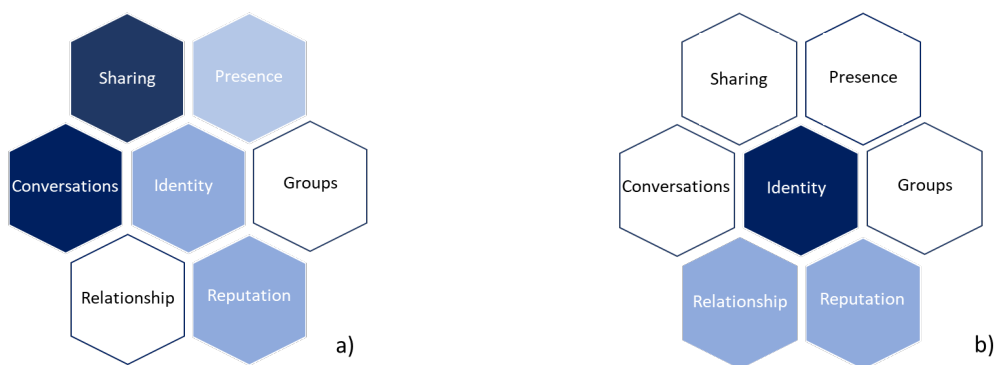
Figure 8 - Social Network Honeycomb Framework for Twitter (a) and LinkedIn (b).

Twitter is a fast-paced platform that allows the user to consume fast, concisely and to the point. Therefore, NAUTILOS has Twitter as its primary social media channel. The project's presence on Twitter includes at least weekly posts. Contents shared not only cover the information from the project, but also the information relevant to our target audience on topics related to NAUTILOS.
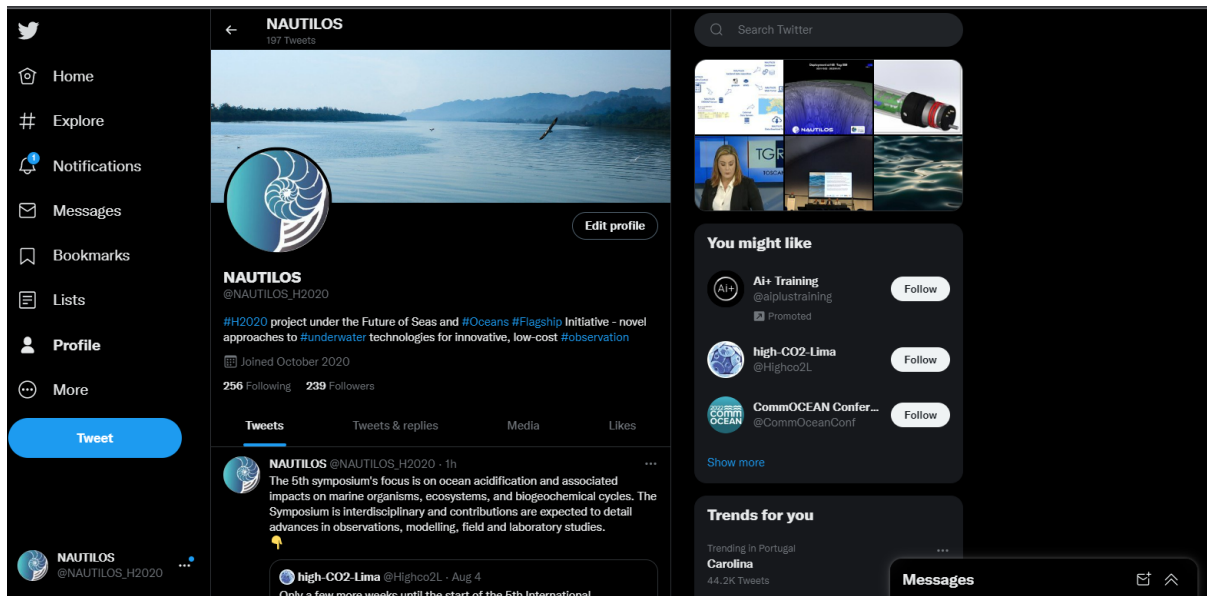
Figure 9 - NAUTILOS Twitter page

LinkedIn is a social networking site designed particularly for the business or sector of activity community. The goal is to allow registered members to document and establish networks of people they trust and know professionally.
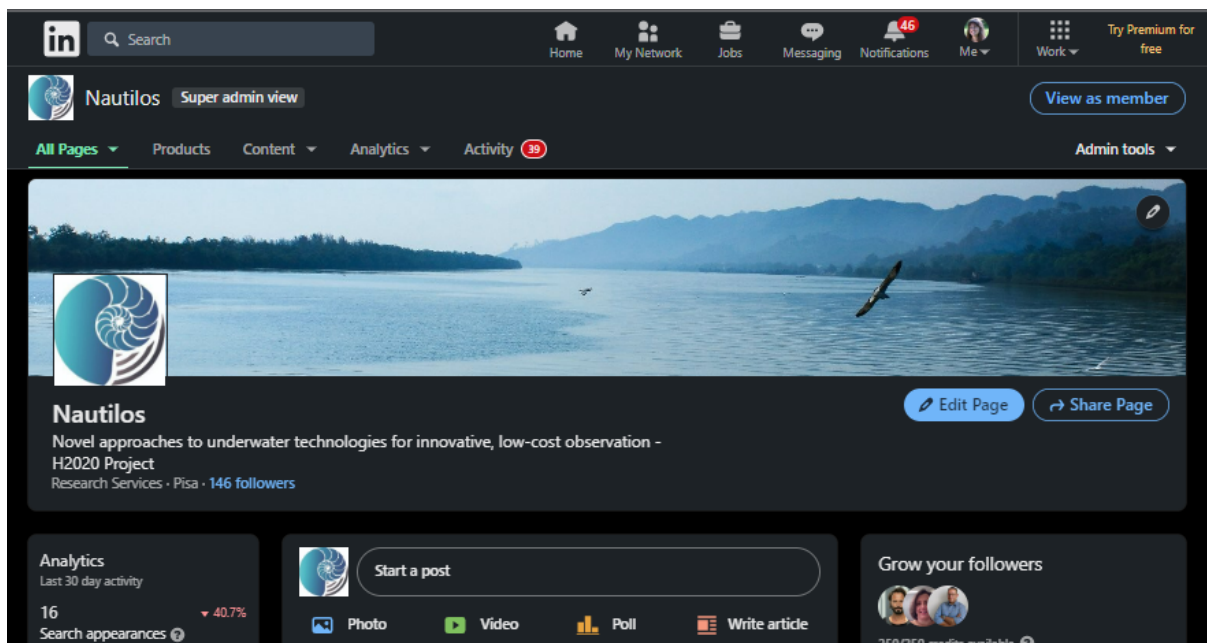
Figure 10 - NAUTILOS LinkedIn page

o   Results monitoring

To ensure that dissemination through social media is efficient, 3 indicators were previously defined and are regularly monitored (see table 4):

- The number of Tweets/Posts per month. The objective is 8 per month;

- The number of Impressions /Reach for each month. The objective is more than 500 per month;

- The number of active members on LinkedIN and Twitter. The objective is 500 at the end of the project, currently we have 248 followers on Twitter and 158 followers on LinkedIn.

Table 4 - Social Media Updates and Engagement

| Month	Twitter		LinkedIn	
	N. Tweets	Impressions	N. Posts	Impressions
August 2021	4	1291	1	107
September 2021	4	1165	1	162
October 2021	10	2827	9	1093
November 2021	9	3070	5	815
December 2021	1	664	2	706
January 2022	3	1129	4	908
February 2022	4	484	2	289
March 2022	7	765	1	178
April 2022	4	923	3	653
May 2022	8	1349	2	251
June 2022	6	996	3	1268
July 2022	9	1769	5	2095
August 2022	4	391	6	696
September 2022	3	933	5	431

Twitter and LinkedIn members who viewed project updates every month are significantly above the objective of 500. The size of this community fluctuates from month to month, certainly due to an alternation between strong moments with rich contents and marked by season.

8.4 Event attendance

Events provide a channel for dialogue and communication with a range of potential end users, networking opportunities and an opportunity to make the NAUTILOS brand visible.

Participation in events is key to:

- Communicating the results and main achievements of the project;

- Fostering the exchange of technical methods, protocols and best practices;

- Receiving valuable expert feedback on project goals, work plans and results;

- Identifying synergies with other projects; and

- Raising awareness about NAUTILOS and its results.

To ensure that the project has a common set of messages with a common visual image, NAUTILOS have produced a set of promotional and printed materials as well as templates widely disseminated among partners for widespread use. Although COVID-19 pandemic has greatly affected these activities, members of the project have actively participated in major European international conferences acting as ambassadors (face-to-face and virtually). A list of the events attended is available in Table 5.

Table 5 - List of events attended by project partners

Name	Date	Location	Activity	Responsible Partner
EMODnet Conference	14-16 June 2021	Virtual	Presentation at a conference	CNR
EuroGOOS Conference	3-5 May 2021	Virtual	Presentation at a conference	CNR
SEAFUTURE	28 September – 01 October 2021	La Spezia, Italy	Exhibition	Edgelab
ROBOVIS 2021	28 – 27 October 2021	Virtual	Presentation at a conference	CNR
European Maritime Day	119 – 20 May 2022	Ravenna, Italy	Organisation of a Workshop	ETT, CNR, HCMR

8.5 NAUTILOS Joint Dissemination Activities

All partners are assuming responsibility for maximising the visibility of NAUTILOS and conveying its findings and outputs to the relevant stakeholders relying on their strong outreach capacity. They are encouraged to present the project at relevant national, European and international events and publish articles in professional journals, newsletter and media. Information on NAUTILOS will also be actively posted on various social media. In doing so, the project's coverage in online and offline media, by other similar/relevant projects and the web in general is aimed to be boosted.

The latest examples include an article in the Italian journal La Repubblica[1] and a TV piece on the Italian channel Rai 3 on its daily regional news program[2].

8.6 Scientific publications

Scientific publications are multidimensional Open Access gateways for the exploration of project results and knowledge transfer and represent the collaborative efforts of the project partners. A list of publications can be seen below.

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[1] https://firenze.repubblica.it/cronaca/2022/07/12/news/pisa_cnr_elefanti_marini_NAUTILOS_gabriele_pieri_sensori_tracciati-357573695/

[2] https://twitter.com/NAUTILOS_H2020/status/1544982197370765312

o Article in Journal

- Merlino, S.; Paterni, M.; Locritani, M.; Andriolo, U.; Gonçalves, G.; Massetti, L. Citizen Science for Marine Litter Detection and Classification on Unmanned Aerial Vehicle Images. *Water* 2021, *13*, 3349. https://doi.org/10.3390/w13233349
- Papini, O.; Reggiannini, M.; Pieri, G. SST Image Processing for Mesoscale Patterns Identification . Eng. Proc. 2021, 8, 5. https://doi.org/10.3390/engproc2021008005
- Reggiannini, M.; Moroni, D. The Use of Saliency in Underwater Computer Vision: A Review. Remote Sens. 2021, 13, 22. https://doi.org/10.3390/rs13010022
- Francesco Misurale, Cristina Scarone, Laura Pezzolesi, Rossella Pistocchi, Anna Maria Bassi, Antonio Novellino, Matilde Calderoni, Aldo Pagano, Valentina Giussani, and Susanna Alloisio.An Integrated In Vitro Approach for Human Health and Environmental Risk Assessment of Mediterranean Ostreopsis cf. ovata, Prorocentrum lima, and Coolia monotis Strains.Applied In Vitro Toxicology.Sep 2022.102-112.http://doi.org/10.1089/aivt.2022.0008

o Publication in Conference proceedings/Workshop

- Reggiannini M., Janeiro J., Martins F., Papini O. and Pieri G. (2021). Mesoscale Patterns Identification through SST Image Processing. In Proceedings of the 2nd International Conference on Robotics, Computer Vision and Intelligent Systems - Volume 1: ROBOVIS, ISBN 978-989-758-537-1, pages 165-172. DOI: 10.5220/0010714600003061
- Gabriele Pieri, Manolis Ntoumas, Michela Martinelli, Eva Chatzinikolaou, Flavio Martins, et al. NEW TECHNOLOGY IMPROVES OUR UNDERSTANDING OF CHANGES IN THE MARINE ENVIRONMENT. 9th EuroGOOS International conference, Shom; Ifremer; EuroGOOS AISBL, May 2021, Brest, France. pp.500-508. ffhal-03329200v2 DOI: 10.13155/83160
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8.7 Press Releases

With regards to interactions with external media outlets, 1 official press release has been drafted and branded with the NAUTILOS visual identity entitled: "PRESS RELEASE NR. 1 – NEW APPROACH TO UNDERWATER TECHNOLOGIES FOR INNOVATIVE, LOW-COST OCEAN OBSERVATION: LAUNCHING OF THE NAUTILOS PROJECT" about the project kick-off. With the support from the consortium the press release was distributed and multiplied by several networks.

HCMR-IMBBC also published a press release at a local newspaper "Patris" for the beginning of the project (Dec 2020) that can be found here (in Greek)

In addition, HCMR-IMBBC has published an article at the local newspaper Patris with the title "The global bet is to save the environment" (in Greek) in February 2021 where NAUTILOS is also mentioned.

8.8 Policy Briefs

By increasing policy communication NAUTILOS aims to bridge the science-policy gap thus creating a shared understanding of science and innovation and raising public confidence in the project's outcomes.

NAUTILOS supported the development of a joint policy brief. NAUTILOS is one of the ten innovative EU projects committed to build ocean observation systems that provide input for evidence-based management of the ocean and the Blue Economy. These projects have joined forces in the strong cluster 'Nourishing Blue Economy and Sharing Ocean Knowledge'. Under the lead of the EuroSea project, the group published a joint policy brief listing recommendations for sustainable ocean observation and management. The cooperation was supported by the EU Horizon Results Booster and enabled the group to achieve a higher societal impact. The policy brief was presented to the European Commission on 15 October 2021.
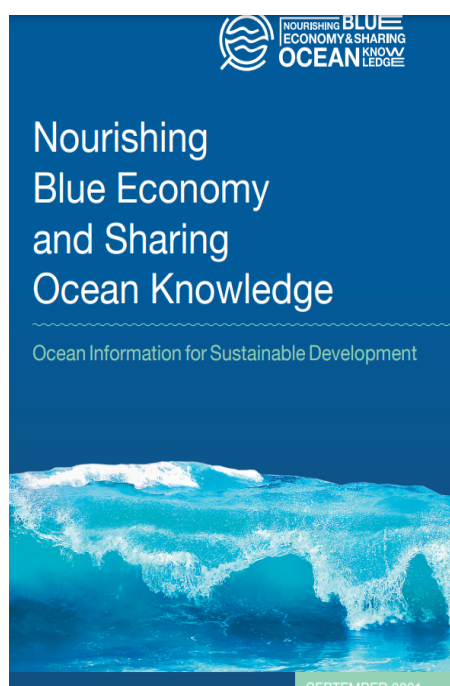

Figure 11 - Joint policy brief

NAUTILOS aims to establish collaborations and expand the existing network with current and past projects, initiatives, networks and relevant stakeholders, in order to magnify the impact and building capacity of the European Strategy for Plastics in a Circular Economy.

At the end of 2021 and at the beginning of 2022 two roundtables of synergy discussions were organized:

1. The first one was between NAUTILOS and EuroSea among the work package leaders on the following themes:
   - Topic 1: Technical work in instrumental development and application – i.e. tests within FerryBox, moving NAUTILOS instruments to EuroSea platforms;
   - Topic 2: Forecasting;
   - Topic 3: Sensors and instruments for aquaculture facilities;
   - Topic 4: Observation System Design;
   - Topic 5: Joint communication and stakeholder engagement activities.

2. The second roundtable was between NAUTILOS and TechOceanS:

   - Topic 1: Samplers (eDNA, microbiology, microplastics);
   - Topic 2: Biology/biological and habitat measurement (incl. Imaging and acoustics);
   - Topic 3: Testing, deployments and demonstration activities;
   - Topic 4: Joint communication and stakeholder engagement activities.

Another round of thematic discussions will be organized in the coming months with the two project representatives.

Running and previous projects' scopes and objectives, are being analysed, aiming to establish contacts with the respective project's coordinator to implement possible joint activities including: cross-dissemination, joint participation as speakers to events, co-organisation of events, cross-project demonstrations, etc.

9. COMMUNICATION MATERIALS

9.1 Visual Identity

A clear visual identity is key to convey a strong, consistent and unique image of the NAUTILOS project, increasing the partners' ability to communicate our mission, objectives and achievements.

Such a visual identity connects all the project's partners together and makes the project more recognizable and understandable by the wider public. A proper use of the NAUTILOS logo, wordmark typefaces and colour palette contribute to creating a familiar look of the project on all means of communication, reinforcing its quality image at the same time.

The Graphic Charter is intended to provide the partners with rules and procedures for promoting NAUTILOS accurately. The following pages explain more about our visual elements and how to use them consistently across all media and communications.

Since the NAUTILOS brand is to be used across a wide range of media and will be targeting a diverse range of stakeholders, the tone and feel of the brand identity have been chosen to appeal to both scientists and policy makers but also science and nature/marine lovers, including non-scientists (citizen scientists).

○ *Logo*

The visual of an actual NAUTILOS has been used within it and it simultaneously bears connection to the sea but also to novel marine technologies. The type is fresh, clean, sharp, and dark blue whilst the pictorial mark (logo symbol) is multi-coloured in the blue gamma.

Figure 12 - NAUTILOS Logo and its colour variations

○ Graphic Charter

In addition to the logo, a graphic charter has been created outlining the standards and rules regarding the communication of the NAUTILOS brand.

A graphic charter aims to create consistency and uniformity, supports the creation of a strong brand image and allows the project to be easily recognized and remembered by all relevant stakeholders.

All NAUTILOS communication tools should be presented according to the rules set out in the graphic charter. With it, the message is correctly transmitted, uniformly, from the project to the target audience.

The graphic charter includes graphical components, but also editorial elements:
▪ Typography;
▪ Institutional Palette;
▪ Possible colour variations.

Both the logo and the Graphic Charter are available to all project partners under the project's ownCloud.

9.2 General Templates

The project's general templates have been designed based on the standards and rules set out within the project's graphic charter. Thus, in addition to facilitate the management of the project, they also convey the common project visual identity. All partners must be aware of their existence and use them appropriately. All project communication and management templates are available under the project's ownCloud account. The templates include:
- PPT Master Template;
- Basic Word Template;
- Deliverables template;
- Templates for meetings;
- Template for meeting agenda.

9.3 Promotional and Marketing Collateral

The marketing and promotional materials within NAUTILOS include brochures, posters and images adapted for use on social media, presenting the project, its objectives, expected results and benefits to end-users. It also includes corporate material that helps strengthen the brand identity.

Communication materials are designed and modified in accordance with the needs of the partners to achieve maximum impact and the widest possible outreach.

Online communication tools are also uploaded on the website, distributed via social media channels and distributed over partner's networks.

o   Introductory Project Presentation

A simplified introductory PowerPoint presentation was designed to describe the key points of the project in a visual format (a visual representation of the project fact sheet). The presentation is divided into the following sections:
- Project overview;
- Consortium partners;
- External Advisory Board
- Project objectives: all the outcomes that will result from the development of the project;
- Project structure: the different work packages and how they are embedded within the project organization; a brief outline of how the project will achieve the proposed objectives;
- Solutions: instrumentation developed;
- Activities;
- GANTT chart;
- Expected impact;
- Development to deployment phases;
- Discussion of possible synergies;
- Call for action: information on how to engage in the different project activities.

The following presentation is available to all partners via the project's ownCloud.

o   Digital Brochure

While the project is favouring electronic communications, motivated by a better scalability (ease-of-update) and respecting the environment, off-the-shelf brochures and other printed material will also be used. An informative foldout brochure was developed to present the NAUTILOS project and its

objectives to a broad audience. The brochure was designed to be eye-catching. In terms of content, it contains the key principles underlying the NAUTILOS approach.

Figure 13 - NAUTILOS Brochure

o   Project Infographic

Due to the considerable complexity of the project an Infographic was produced. It is a visual representation of the project. The NAUTILOS Infographic combines the *Gaps and Needs*, in the current framework, with the NAUTILOS *Solutions* and extrapolates to its possible long-term *Impacts*. The NAUTILOS infographic is an effective tool to present data and explain complex issues in a way that can quickly lead to insight and better understanding.
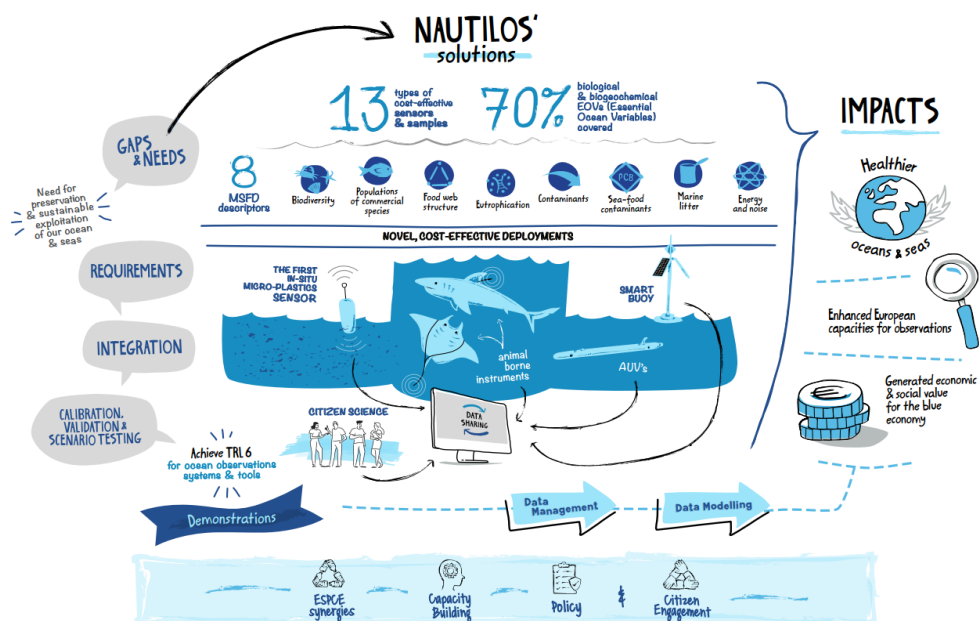

Figure 14 - NAUTILOS Infographic

Video material can be powerful for engaging an audience and transmitting key messages quickly. Videos have a high reach, improve SEO and account for half of all mobile traffic (surpassing all other communication tools).

Two project introductory videos (a long one and a shorter version of it for the social media) were created and are available on the project's YouTube channel: https://www.youtube.com/channel/UC6TiBpIUQ4NbIW0wXhfdsXQ

The videos are shared via social media networks, uploaded on the website (can be broadcasted at events, on the website and through social media).

The videos will:
- Create awareness of the project;
- Raise interest on the project's topics;
- Invoke engagement in the later project stages ;
- Ensure the continuity and legacy of NAUTILOS.

A third video also available on the project's YouTube channel is celebrating the project partners' return to normality in what was the project's first face-to-face meeting.

As NAUTILOS expects to take part in several relevant events with exhibition areas. The project has developed some products to reinforce the branding and raise interest in such events. In this scope pencils, tote bags and notebooks were produced.

Figure 15 - Project Giveaways

10. CONCLUSIONS

Overall, the work completed during this period laid a strong base in terms of promoting the NAUTILOS project and its mission. We are now ready for the second part of the project where the Capacity Building activities and the Citizen Science campaigns will hopefully begin running stable, and the first technical outcomes will start to be published more regularly.

The visual identity for the project has been strengthened and implemented in all project materials (brochures, videos, collateral, etc.). These materials have been shared amongst the partners and used at both internal and external events and activities (when possible).

The main digital channels for dissemination have been set up and established, such as the website (with resources, news and opportunities), and social media (Twitter and LinkedIn). Channels are growing at a healthy rate and are targeting the goal audiences with regular relevant content. In addition, the newsletter has been designed according to the visual identity and has already launched 3 times, growing a steady number of subscribers.

With regards to interactions with external media outlets, an official press release has been drafted and branded with the NAUTILOS visual identity. A joint policy brief was issued and cemented the impressive amount of synergies already established for the first 2 years of the project.