



# TWInning Laboratory for an Innovative Global Hub To Explore the Deep

## Deliverable 8.1 Dissemination, exploitation and communication (DEC) plan

Diane Esson<sup>1</sup>, João Canning-Clode<sup>1</sup>, Patrícia Nunes<sup>1</sup>  
ARDITI (1)



Funded by  
the European Union

This project has received funding from the European Union's  
Horizon Europe program under Grant Agreement 101158714

Deliverable number and name	8.1: Dissemination, communication and exploitation (DEC) plan
Work package	8: Share: preparation and training
Related task in DoA	8.1: Dissemination, communication and exploitation (DEC) plan
Due date	31 March 2025
Submission date	27 March 2025
Responsible organization	ARDITI
Author name(s)	Diane Esson, João Canning-Clode, Patrícia Nunes
Dissemination level	PU (public)

### Revision history

Version	Date	Modified by	Comments
1	5-Feb-2025	DE	First draft
2	27-Feb-2025	DE, PN	Full draft ready for review by consortium partners
3	12-Mar-2025	JCC, DE	Revisions, final version

### Disclaimer

Views and opinions expressed in this deliverable are those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible.

## Table of contents

<b>1. Overview.....</b>	<b>4</b>
1.1 Definitions.....	4
1.2 Dissemination, exploitation and communication objectives.....	4
1.3 Target audiences.....	4
<b>2. Management and communications training.....</b>	<b>5</b>
<b>3. Monitoring of communication and dissemination activities.....</b>	<b>5</b>
<b>4. Dissemination strategy.....</b>	<b>6</b>
<b>4.1 Management of research data.....</b>	<b>6</b>
4.2 Methods of dissemination.....	6
Dissemination through working groups.....	6
Publications in scientific journals.....	7
Dissemination through conferences.....	7
4.3 KPIs.....	7
<b>5. Communication strategy.....</b>	<b>8</b>
5.1 Brand identity.....	8
Figure 5.1a. TWILIGHTED logos.....	8
5.2 Methods of communication.....	8
Email.....	8
Social media.....	9
Press releases.....	9
Website.....	9
Digital storytelling.....	9
Other communication tools.....	10
5.3 Engagement events and activities.....	10
Community engagement activities.....	10
Global engagement events.....	10
5.4 Maximizing impact.....	11
5.5 KPIs.....	11
<b>6. Exploitation strategy.....</b>	<b>11</b>
6.1 Stakeholder board.....	11
Table 6.1a. Entities to invite to the stakeholder board.....	12
6.2 Policy briefs.....	12
6.3 Innovation and commercialization.....	12
<b>7. Conclusions and next steps.....</b>	<b>13</b>



## 1. Overview

The Dissemination, Exploitation and Communication (DEC) plan shares the intent, principles and methods for TWILIGHTED's DEC activities, including the platforms used and activities planned. This plan also reviews how to maximize the impact of DEC activities, optimize for the project's KPIs and meet the targets set out in the grant agreement (GA). This is a living document that will be updated M15 (D8.3) and M34 (D9.2).

### 1.1 Definitions

Below are the working definitions of dissemination, exploitation and communication applied to this document and project:

- **Dissemination** – Making results of a project public, to audiences who benefit from these results (including research institutions, industry and policymakers). Means of dissemination include scientific publications and the addition of data to public repositories.
- **Exploitation** – Using project results to develop, improve or market a product, method or policy.
- **Communication** – Sharing the project and project results with the wider community to educate, inspire and motivate positive interactions with science.

### 1.2 Dissemination, exploitation and communication objectives

TWILIGHTED aims to improve the management and sharing of deep-sea research data across stakeholders. To achieve this, all TWILIGHTED members will uphold principles of open science, practice responsible data management and participate in international conferences. TWILIGHTED also seeks to enhance understanding and exploitation of scientific data through open communication with policymakers. Finally, TWILIGHTED aims to improve public engagement in deep-sea science to aid ocean literacy and positive interactions with the ocean. If delivered, we believe these objectives will contribute to more positive interactions with the ocean and more sustainable, science-based policies for maritime planning and resource management.

### 1.3 Target audiences

The main audiences we are trying to reach through the TWILIGHTED project are:

- **Policy makers** – Madeira's regional and municipal governments and regulatory bodies that could benefit from a direct and open communication line with MARE-Madeira/ARDITI's emerging deep-sea research program, to aid informed and sustainable policymaking in the archipelago.

- **Institutes without or starting deep-sea programs** – smaller marine research institutes like MARE-Madeira/ARDITI that have recently started or have the potential to start a deep-sea research program. For these audiences, we seek to share the creative methods and innovative low-cost tools conceived of, tested and developed during the TWILIGHTED project to support entry into this research realm.
- **Institutes with established deep-sea programs** – marine research institutes that have already developed a deep-sea research program and expertise, but would benefit from Madeira's easy year-round access to the deep sea. With these institutes we are also interested in developing partnerships to realize the vision of a global hub for deep-sea research in Madeira.
- **Future funders** – public or private funders that are inspired by the impact a global hub for deep-sea research may have on ocean science and may support future research efforts in Madeira, continuing the momentum of the TWILIGHTED project.
- **Society** – local and global communities that we hope to inspire with the mysteries and emerging science from the deep sea. For these audiences, we will use a variety of in-person events and digital storytelling methods to share knowledge gained through the project and support positive interactions with the ocean.

While described as the 'recipients' of TWILIGHTED communications, all audiences are also sources of information and inspiration for us. The project will use a variety of ways to bring outside knowledge from a range of stakeholders into the deep-sea research programs at MARE-Madeira/ARDITI, GEOMAR and NTNU.

## 2. Management and communications training

As TWILIGHTED is a capacity-building project, a key part of the dissemination, exploitation and communication plan is to enhance the project management and communications skills at ARDITI, to set the institute up for future success in this area. For this, the project has planned a management and communications training course, led by GEOMAR (M8.1), to be held during the scientific training school (M3.1). This training will be available to ARDITI researchers, project management and communications staff and will leverage the knowledge and experience at GEOMAR regarding FAIR (Findable, Accessible, Interoperable and Reusable) and equal data management (including data curation, the Nagoya protocol and sample repositories), science communication and general project management.

## 3. Monitoring of communication and dissemination activities

All consortium members are responsible for filling the communication and dissemination log (found in the TWILIGHTED Google Drive within WP8/9 > DEC Reporting) as activities or project outputs are completed or, at the latest, before each reporting period (M15 and M34). These activities and outputs include:

- Media coverage (newspapers, TV, radio, podcasts...)
- Scientific/peer-reviewed publications

- Non-scientific/non-peer-reviewed publications
- Conference abstracts
- Conference participation
- Outreach/educational talks given
- Events or activities organized
- Events or activities attended

In addition to these outputs, activities and events that are produced, coordinated or participated in by any TWILIGHTED member, the TWILIGHTED Communication team will also log regular communication outputs such as social media posts, website blog posts, videos or podcasts and report these in the interim and final reports.

## 4. Dissemination strategy

All dissemination activities should be designed and executed to ensure maximum visibility, accessibility and impact of project results. Each project member supports TWILIGHTED results dissemination through prompt publication of project results and by sharing results in relevant working groups and at conferences, and by communicating opportunities for dissemination with the consortium.

### 4.1 Management of research data

As described in the Data Management Plan (DMP, D1.2), all project partners are committed to open science and FAIR data management. All project data will be stored in public repositories and all non-sensitive project outputs will be publicly available on the project website: this includes all scientific publications which will be published in open access journals and cited on the project website. Further guidance on responsible research data management can be found in the DMP, D1.2.

### 4.2 Methods of dissemination

#### Dissemination through working groups

TWILIGHTED project members are involved in a variety of working groups and will leverage these groups to disseminate project results to the wider scientific community. One such working group is the International Council for the Exploration of the Sea (ICES), wherein project coordinator João Canning-Clode is the Chair of the Working Group on Introductions and Transfers of Marine Organisms (WGITMO) and MARE-Madeira integrated member Andreia Braga-Henriques is a member of Working Group on Deep-water Ecology (WGDEC). Another working group is the Convention for the Protection of the Marine Environment for the North-East Atlantic (OSPAR). TWILIGHTED members involved in those groups will actively disseminate project developments and findings through informal meetings, networking opportunities, and by presenting preliminary results at these and other relevant scientific platforms

## Publications in scientific journals

As TWILIGHTED is a capacity-building project rather than a research project, opportunities for scientific publications will be more limited as resources are committed to training. Nevertheless, TWILIGHTED expects to have scientific results that merit peer-reviewed publication through training cruises and low-cost technology trials, and will also work together on deep-sea research method or review papers. Over the three-year project, the group expects to publish at least five articles and has budgeted for seven. These publications will be aimed at academic communities, and especially those institutions who are also in the early stages of beginning a deep-sea research program. As a measure of impact, citations and journal impact factors of these publications will be reported in the interim and final reports.

## Dissemination through conferences

ARDITI, GEOMAR and NTNU plan to attend and apply to present at leading international conferences with relevance to deep sea research including, but not limited to:

- [The Deep-Sea Biology Symposium](#) (DSBS): 12-17 January 2025, Hong Kong, China
- [Ocean Sciences Meeting](#) (OSM): 22-27 February 2026, Glasgow, Scotland
- [The Ocean Twilight Zone Symposium](#) (OTZ): (Last held in 2023, no news for future)
- [ASLO Aquatic Sciences Meeting](#): 26-31 March 2025
- [The UN Ocean Conference](#) (UNOC): 9-13 June, Nice, France
- [One Ocean Science Congress](#) (OOS): 3-6 June, Nice, France
- [VII World Conference on Marine Biodiversity 2026](#) (WCMB 2026): 17-20 November, Bruges, Belgium

In the third year of the project, the consortium will also host the first International Twilighted Conference in Madeira. This conference is aimed at emerging researchers and institutes in the deep-sea research realm and seeks to share best-practice, innovative techniques and scientific results from research in the mesophotic and twilight zones, with a particular emphasis on low-cost methods. TWILIGHTED project results will also be disseminated at this conference.

## 4.3 KPIs

TWILIGHTED's key performance indicator(s) with respect to dissemination are:

- At least 5 Q1 peer-reviewed publications by the end of the project
- At least 10 abstracts submitted to international conferences

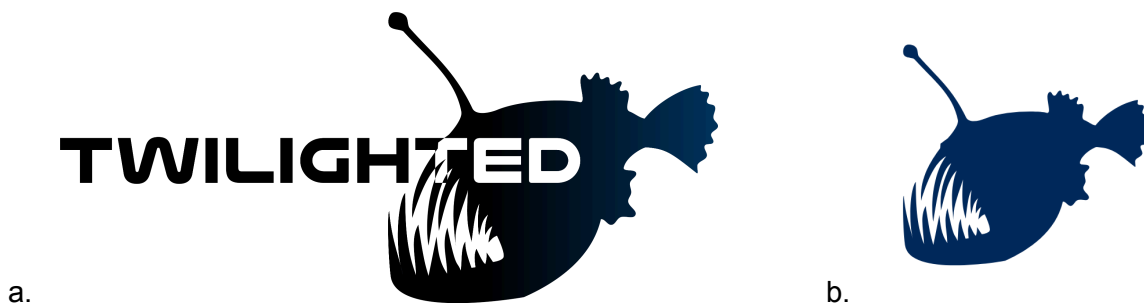
These KPIs will be monitored and reported in both the interim and final reports.

## 5. Communication strategy

TWILIGHTED communications and public engagement activities should increase the public visibility of the project and the local visibility of MARE-Madeira/ARDITI's deep-sea research program in Madeira. Communications and public activities should offer new avenues for any member of society, whether local or digitally global, to engage with deep-sea research and connect with the scientific community. In this way, TWILIGHTED's communication efforts seek to improve society's relationship with the ocean and support greater public understanding and discourse on the deep-sea's marvels, mysteries and threats.

### 5.1 Brand identity

A TWILIGHTED brand identity has been created for communication materials, including fonts, colors and logos (Figure 5.1a) to use. These are compiled within the TWILIGHTED Canva brand kit and can be shared with any project member upon request. Vector and animated files of the TWILIGHTED logo can be found in the project's Google folder.



*Figure 5.1a. TWILIGHTED logos*

(a) Full-color logo and (b) icon, inspired by the deep-sea anglerfish and symbolic of the project's efforts to shine light on the ocean's twilight zone by improving deep-sea research capacity.

### 5.2 Methods of communication

#### Email

Direct external communication can either be done via individual email addresses or using the project email, [twilighted.eu@gmail.com](mailto:twilighted.eu@gmail.com) upon request. This project email is managed by the Project Coordination Team (PCT) and any messages that consortium members would like to send via this email (e.g. to anonymise their individual emails) can be sent to members of this team (see Project Handbook, D1.1). We foresee this email primarily used as a means to recruit for and respond to external applications for the Impossible Things Workshops and the International Twilighted Conference. This is also the email address connected to the TWILIGHTED website contact form.



## Social media

Social media profiles have also been created to facilitate communication of project activities and disseminate project outcomes to a variety of stakeholders. These are:

- Twitter: [https://x.com/twilighted\\_eu](https://x.com/twilighted_eu)
- BlueSky: <https://bsky.app/profile/twilighted-eu.bsky.social>
- LinkedIn: <https://www.linkedin.com/showcase/twilighted/>

Any consortium member who would like to share content on these platforms should send the relevant information and media, as appropriate, to the Communication team (see D1.1).

## Press releases

Press releases are another important means of communicating relevant events, publications and news with external audiences. Press releases created by the MARE-Madeira/ARDITI communication team for the Madeira or Portuguese press will be shared with consortium members for adaptation for the German or Norwegian press, as relevant. Press releases created by any consortium member should be recorded in TWILIGHTED's Dissemination and Communication Log on the Google Drive.

## Website

The TWILIGHTED website, <https://twilighted.eu>, offers an overview of the TWILIGHTED project, provides information to the community for how to get involved (including events and studentship applications), shares public deliverables and disseminates news such as publications and outreach efforts. It also offers a means for stakeholders to contact project coordinators through its online contact form.

The channel for communicating news on the website is the website's blog (<https://twilighted.eu/news/>), while publications are disseminated on a separate page (<https://twilighted.eu/news/publications/>). A general overview of the website can be found in D8.2.

## Digital storytelling

A short film (5-10 min) on the deep-sea around Madeira will be produced and shared on the TWILIGHTED website and YouTube channel to increase engagement of the general public in deep-sea research (D9.1). In addition, reels (2-3 min) will be produced to showcase low-cost deep-sea research methods used and developed during the TWILIGHTED project, to aid dissemination of these methods with other research institutes.

## Other communication tools

A variety of other communication platforms and strategies will be used to encourage general engagement in deep-sea research in Madeira. These include but are not limited to: podcasts, which will be created on [MARE-Madeira's Aquatic Research Podcast](#) and will highlight TWILIGHTED activities and researchers; [Abyssmal Humor](#) cartoons, adding to those already created for MARE-Madeira and which will be used to create TWILIGHTED postcards for distribution at events and conferences; and live screenings of deep-sea habitat mapping efforts.

## 5.3 Engagement events and activities

TWILIGHTED will organize and deliver various engagement events and activities to inspire local and international communities with the deep sea and encourage future positive engagement with this lesser-known environment. Local activities may be organized by any project member and will receive support from the TWILIGHTED Communications team; international events planned within the TWILIGHTED timeline will be coordinated by the Communications team, with support from consortium leadership and any other project members.

### Community engagement activities

All ARDITI project members who attend a TWILIGHTED training school, cruise or staff exchange will be asked to organize a community engagement activity on their return. These activities may be a school visit or a public presentation or another activity of the researcher's choosing that aids deep-sea literacy and engagement.

### Global engagement events

The Impossible Things Workshops are our primary engagement event for the international community. These workshops invite any member of the global community to apply to participate, and specifically attempt to recruit individuals from outside of marine science. This has the dual purpose of bringing new ideas to deep-sea science and innovation (to the benefit of deep-sea research), while also inspiring more people from outside of marine science with the wonders of the deep (to the benefit of global ocean literacy and engagement).

The International Twilighted Conference also presents global engagement opportunities. Although primarily a scientific conference, we will invite relative other stakeholders (such as fisheries or low-cost technology manufacturers with technologies relevant to low-cost deep-sea research efforts) to also speak at or hold workshops around this conference. In addition, we will host local community events around this conference to maximize the local impact of this international event on ocean literacy and engagement. More details on this conference will be available in the updated DEC (D9.2), delivered by M34.

In addition to events organized by the project, we will also attend high-level policy-oriented conferences such as the UN Ocean Conference and, where possible, participate in panels or

host side events. These conferences are important to sharing our work beyond the scientific community and influencing action across a wide range of stakeholders.

## 5.4 Maximizing impact

Various initiatives and partnerships are planned to maximise the impact of TWILIGHTED's communication efforts and outputs. Regarding TWILIGHTED's short film on the deep sea, budget has been reserved to submit this film to relevant competitions or screenings; we will also showcase the film at events such as the Edinburgh Ocean Leaders film festival and at TWILIGHTED-organized events such as the International Twilighted Conference and the Impossible Things Workshop. For local community engagement activities, [MARE-Madeira's youth ambassadors](#) will be invited to participate and help coordinate, to improve relevance to the community. For international events such as the Impossible Things Workshop, applications will be made for endorsement by the UN Ocean Decade, and we will attempt a partnership with the Deep Ocean Stewardship Initiative (DOSI), asking them to share any relevant digital media with their large, global network.

## 5.5 KPIs

TWILIGHTED KPIs with respect to communication are:

- Social media post reach or impressions of at least 20,000/year from MARE-Madeira/ARDITI platforms from TWILIGHTED posts
- At least 200 attendees per year at local TWILIGHTED activities
- At least 3 press releases per year covering local TWILIGHTED activities

Progress on these KPIs will be reported in the interim and final reports.

## 6. Exploitation strategy

Successful exploitation of TWILIGHTED results may help to increase the impact of the project beyond academic research. Potential outcomes could include adjustments to local policy on marine spatial planning or resource use, or the commercialization of the project's low-cost technology adaptations or innovations. Exploitation requires establishing communication channels with relevant stakeholders, including policymakers and private entities. For these purposes, TWILIGHTED will create a stakeholder board with local policymakers in Madeira, with which to share policy briefs, and will also establish relationships with private entities (especially those involved in marine robotics or other technologies), primarily through its Impossible Things Workshops.

### 6.1 Stakeholder board

The Stakeholder Board will help TWILIGHTED connect with local stakeholders and will be composed of representatives from local government, municipalities, the conservation institute,

and other relevant stakeholders. With this board, we will share new methods, findings and best-practice recommendations based on TWILIGHTED learnings. Throughout the project, at least two policy briefs relevant to open-ocean and deep-sea management will be submitted to this board and relevant stakeholders.

Due to significant political change in Madeira since the start of the TWILIGHTED project and new elections scheduled for the end of March 2025, individual representatives for the Stakeholder Board have not yet been selected. The entities that will be approached to invite to this board, following the elections and political appointments, are summarised in Table 6.1a. (Note, these names may change according to political decisions and priorities of incoming regional leadership.)

*Table 6.1a. Entities to invite to the stakeholder board*

Local stakeholder	Description
Regional Directorate of the Environment and the Sea	Responsible for policies concerning the health of Madeira's terrestrial, aquatic and atmospheric environments
Regional Directorate of Sea Affairs	Responsible for policies concerning sea-based activities, including fishing, maritime transport and aquaculture
Instituto das Florestas e Conservação da Natureza, IFCN	Responsible for the management of Madeira's marine and land reserves and the protection of local biodiversity
Port Authority	Responsible for the management of Madeira's ports
Maritime Authority	Responsible for ensuring maritime safety, overseeing navigation, enforcing maritime laws, and protecting the marine environment within Madeira's jurisdiction.
SEDES-Madeira	Longest-standing civic association in Portugal, which seeks to influence policy in the interests of humanity, socio-cultural development and democracy.

## 6.2 Policy briefs

At least two policy briefs concerning the open ocean or deep sea of Madeira and relating to TWILIGHTED activities or learnings should be shared with the Stakeholder Board and any other relevant stakeholders to encourage best-practice with regards to these environments. A policy brief template is available in the TWILIGHTED Google Drive (WP8/9: Share).

## 6.3 Innovation and commercialization

Low-cost innovations or adaptations for deep-sea research developed directly within the TWILIGHTED project are not expected to be associated with intellectual property (IP), given the project's commitment to open practices and open science. However, there is a possibility of forming partnerships with commercial entities following the Impossible Things Workshops, as



representatives from the private sector will be in attendance and have expressed interest in developing new ideas further. In this situation, there's the potential to be a partner in the development of technologies with IP considerations. Any such developments will be under the direction of the commercial partner and a joint ownership agreement should be established to ensure that project partners may access the technology for the purposes of the project. Any such agreement will be subject to agreement by the General Assembly (GenA) as described in the Consortium Agreement (CA).

## 7. Conclusions and next steps

This DEC plan outlines the principles and methods for TWILIGHTED DEC activities and outlines expectations for all consortium members with respect to organizing and reporting on these activities. Abiding these guidelines, the first year should witness the following next steps:

- The TWILIGHTED Communications Team will receive communications training at the Management and Communications Workshop hosted by GEOMAR in June 2025 (M8.1) and shadow communication teams at GEOMAR as part of the Staff Exchange II (M4.2)
- The TWILIGHTED Communications Team will proceed with relevant posts on social media and the website blog, event coordination (including the Impossible Things Workshop) and local activity planning
- Consortium members will review conferences and submit abstracts and register attendance where relevant
- ARDITI consortium members will arrange local engagement activities in Madeira following training workshops and cruises, and all consortium members will ideate and organize additional TWILIGHTED engagement activities whenever possible.
- The General Assembly (GenA) will select a Stakeholder Board following the regional elections in Madeira, by summer 2025.

This DEC plan will be updated and delivered by M15 of the project.