



Suggested Reference:

JPI Oceans (2023)
Communication Guidelines Resources & Materials. Joint
Programming Initiative Healthy
and Productive Seas and Oceans,
Brussels.

COMMUNICATION GUIDELINES

RESOURCES & MATERIALS

www.jpr occaris.cu		'	communication du
 1.1. Presentation Templa 1.2. Poster Templates 1.3. Brochure Templates 1.4. Website 1.5. Images 1.6. Press support 1.7. Events and meetings 1.8. Stakeholder engager 1.9. Marine science commons 	support	4 4 4 4 4 5 5	
2.2. Ocear	or Water: ODYSSEY n Plastics lab hop International Seabed Authority 3.1. Use of JPI Oceans logo 3.2. Requests		
	4.1. GDPR & open scien 4.2. Data 4.3. Guidelines for differ		12 12 14
	5.1. Use of social media to connect v	vith policy makers	16

5.2. Build your audience – lessons learned from

18

19

succesful organisations (CERN – NASA)

5.3. Glossary

	TABLE
	OF CONTENTS

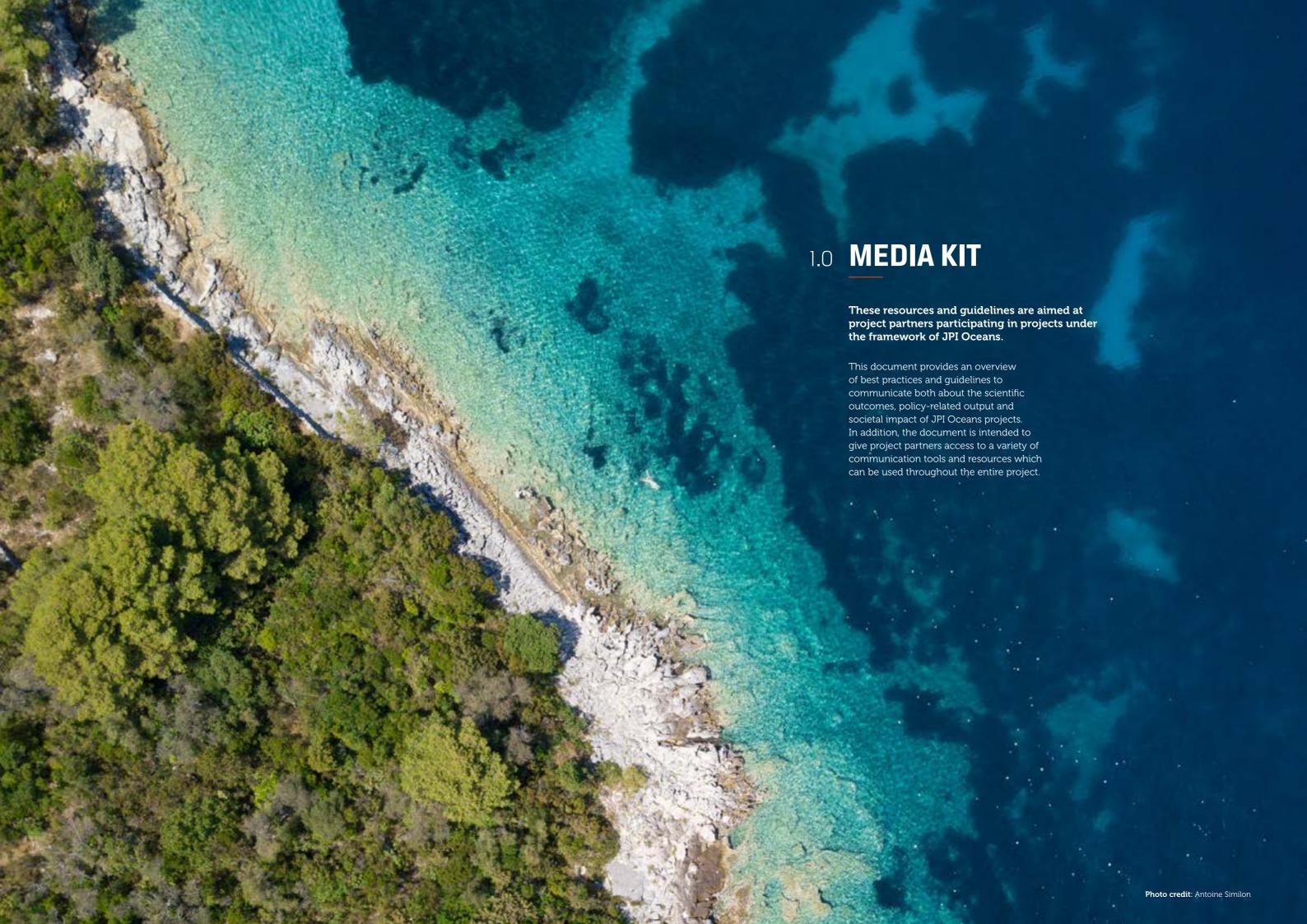
1.0 **Media kit**

2.0 Case studies

4.0 **Open science**

5.0 **Social media**

3.0 Acknowledgement & requests



1.1. PRESENTATION TEMPLATES

For all presentations you are welcome to use the following <u>templates</u>. If you choose not to use the template, we kindly ask you to acknowledge JPI Oceans and the funding agencies in the slides. To do so, the JPI Oceans logo can be downloaded here.

1.2. POSTER TEMPLATES

For posters, you are welcome to use the following template. Note that in order to edit the template, you must own an InDesign Adobe license, or contact the JPI Oceans secretariat in advance. If you do not wish to use the template, we kindly ask you to acknowledge JPI Oceans and the funding agencies in the slides (see section acknowledgement).

1.3. BROCHURE TEMPLATES

The JPI Oceans secretariat provides a service to all projects by producing booklet/brochure templates. You can contact the secretariat and provide a short text which outlines your project and any associated graphics to briefly illustrate the background and aims of the project. All project partners are listed at the back of the brochure. An example of brochure can be found here.

1.4. WEBSITE

The JPI Oceans secretariat offers the possibility to host your website as a subsite of www.jpi-oceans.eu. As an example, see the project website <u>EPHEMARE</u>. Please contact the secretariat if you would like to make use of this offer.

1.5. IMAGES

If you are looking for images to download and use for your website, brochure or presentation:

- <u>Unsplash</u> is a useful resource for free high quality pictures.
- <u>Compfight</u> uses a search tool that can filter for freely available pictures under a Creative Commons licence.
- <u>The Stocks</u> is a search engine for high quality free photos from different sources.
- <u>DALL·E 2</u> is an AI system that can create realistic images and art from a description in natural language.

In using these pictures, please make sure to credit these as required.

Any pictures generated by your project are appreciated by the JPI Oceans secretariat for illustration and information purposes. You are welcome to send your pictures to willem.demoor@jpi-oceans.eu. We encourage you to store the pictures on your website under a creative commons license to promote re-use in the public domain. To do so, you can refer to the licence of your choice in the credits. An overview of the different licenses can be found here.

1.6. PRESS SUPPORT

If you plan to send out any press releases, we encourage you to take up <u>willem</u>. <u>demoor@jpi-oceans.eu</u> in your press contacts list. As such, the secretariat is updated on latest news and activities.

1.7 EVENTS AND MEETINGS SUPPORT

For any events, briefings or seminars, you are invited to inform the JPI Oceans secretariat. The secretariat can forward invitations to the relevant funding agencies, ministries, European and international institutions.

For project meetings, the JPI Oceans secretariat has a meeting room available in Brussels, which accommodates up to 32 people. The meeting room can be reserved by contacting the secretariat.

Contact details:

Phone: +32 (0) 2 626 16 60 Email: info@jpi-oceans.eu Address: Rue du Trône 4, B-1000 Brussels, Belgium.

Technical facilities:

- Two screens and one projector which can be connected simultaneously
- Video conference system
- Wireless access

1.8. STAKEHOLDER ENGAGEMENT

Stakeholder engagement is the procedure of ensuring that people or organisations are identified and involved throughout the research lifecycle so that they are in a position to inform the design of a project and then make use of the results. The BiodivERsA ERA-NET has developed a 'Stakeholder Engagement Handbook', a non-academic practical guide for researchers planning and carrying out research projects. It is designed to assist research teams identify relevant stakeholders to engage with in order to enhance the impact of their work.

1.9. MARINE SCIENCE COMMUNICATION AND OCEAN LITERACY RESOURCES

The concept of Ocean Literacy was developed by a large group of scientists and educators from the ocean sciences education community in the United States around 2001. Ocean literacy is defined as having an 'understanding of the ocean's influence on you and your influence on the ocean'.



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On an individual level this translates into an ocean literate person being someone who:

- Understands the importance of the ocean to humankind
- Can communicate about the ocean in a meaningful way
- Is able to make informed and responsible decisions regarding the ocean and its resources

(Cava et al. 2005, French et al. 2015).

The concept has gained more attention both in Europe and within the research policy community, with an increased focus on enhancing ocean literacy among citizens through research projects. The European Commission has funded two projects on ocean literacy and includes the concept transversally in all Horizon 2020 calls on blue growth.

As part of one of the H2020 projects, SeaChange, the Ocean edge directory, was developed. The database is a useful collection of educational resources and activities that are either available as downloadable products or serve as an inspiration to help share marine and maritime science to any type of audience. The database includes both formal and informal learning resources developed in the framework of European projects, or projects with a European involvement.

The International Oceanographic Council of UNESCO has further developed the UNESCO Ocean Literacy for all - A toolkit to guide scientists, policy makers and educators on the concept. It is an useful overview to learn more about the ocean literacy concept and have a look at successful education activities and campaigns.



Photo;

The Scientific team with Sky Sails kite on the background (L to R: Kim van Arkel (R4W), Raimundo Blanco (EPHEMARE), Frederic Sciacca (R4W), Hans Peter Arp (NGI, WEATHER-MIC) Ricardo Beiras (University of Vigo, EPHEMARE)

2.0 CASE STUDIES

Find below an overview of three successful outreach and engagement activities by JPI Oceans projects. The first two case studies provide good examples on engagement with the general public, while the third case is an example of an effective and timely event to provide scientific advice to policy makers.

CASE STUDY: RACE FOR WATER ODYSSEY

Two JPI Oceans microplastics projects, EPHEMARE and WEATHER-MIC collaborate with the Race for Water Odyssey and gain widespread media attention

Using the ocean, the sun and the wind as its sole sources of energy, the catamaran of the Swiss foundation Race for Water hosted scientists from five JPI Oceans member countries from June to October 2017. The solar-powered vessel hosted research partners from Vigo University, Bordeaux University, University of Antwerp, Marche Polytechnic University of Ancona and the Norwegian Geotechnical Institute involved in the EPHEMARE and WEATHER-MIC projects. On these two missions, the researchers sampled microplastics in the water column, sediment and beaches, and collected endemic marine organisms such as fish, crustaceans, molluscs and bivalves.

Both research projects also used the Race for Water Odyssey to create local awareness of the risks and possible solutions related to microplastics, and to promote research and action on this topic. The research was covered in more than 20 articles, 2 TV interviews and 9 blogposts.

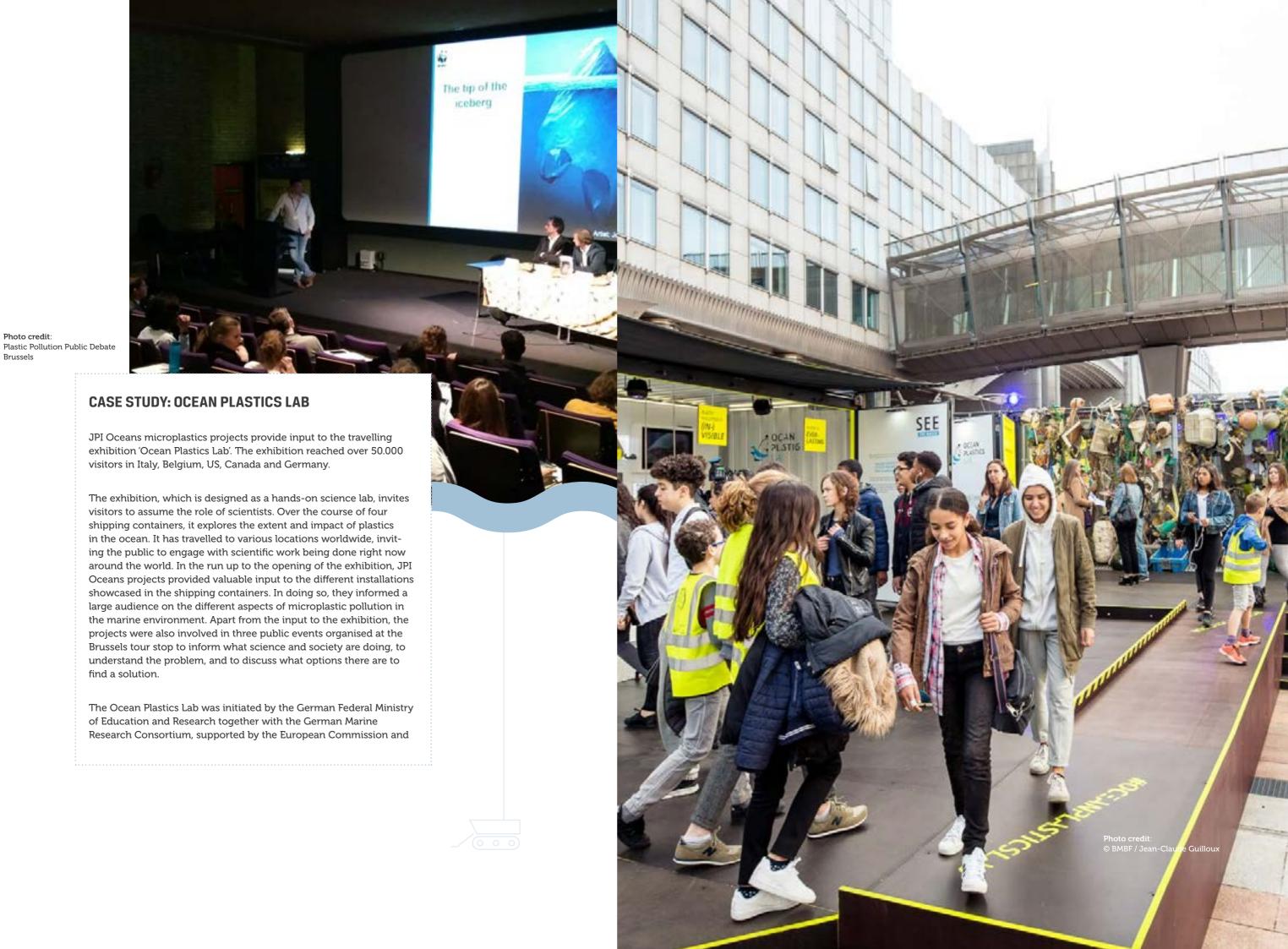


Photo credit:

Brussels

www.jpi-oceans.eu www.jpi-oceans.eu



Photo from left to right: Kristin Hamann, Prof Ann Vanreusel, Dr Matthias Haeckel, Prof Antje Boetius, Dr Daniel Jones, Dr David Billett

CASE STUDY: WORKSHOP INTERNATIONAL SEABED AUTHORITY

JPI Oceans and its MiningImpact project organised a side-event at the 22nd Session of the International Seabed Authority (ISA), allowing the scientists to present the latest research results on the environmental impacts of deep-sea mining and discuss with the delegates how the marine environment could be most effectively protected.

The briefing provided timely input to the ongoing ISA deliberations regarding the exploitation code and aimed to ensure that the deep-sea governance regime is based on the best available scientific knowledge. At the side-event, attended by approximately 90 delegates, contractors and observers to the ISA, the project presented first results and made recommendations to the ISA. In particular, they outlined that their recent cruises to the Clarion Clipperton Zone and DISCOL Area had revealed that nodule ecosystems consist of a highly diverse fauna, whose communities vary considerably across areas with different nodule coverage, as well as more broadly with habitat (e.g. seamounts and nodule habitats).

In light of these findings, the scientists recommended that in order to preserve biodiversity in the CCZ, conservation areas designated by the ISA needed to match habitat characteristics of mined areas (e.g. productivity, nodule coverage) and assessed that the currently assigned Areas of Particular Environmental Interest (APEIs) in the CCZ alone may not provide all the anticipated services. Thus, they suggested that additional Marine Protected Areas would be necessary.

These recommendations sparked lively debates between the country delegates, contractors and observers present in the audience. In a discussion, the audience was particularly interested in impact of mining activities on the fauna and their wider relevance in the ecosystem and the services it provides. The usefulness of the APEIs was also debated, as well as the necessity of having additional protected areas. Finally, the audience enquired about the differences in impacts from different mining technologies.

3.0 ACKNOWLEDGEMENT & **REQUESTS**

In all outreach activities, project beneficiaries shall highlight the financial support they receive.

Unless JPI Oceans requests otherwise, any publicity, including at a conference or seminar or any type of information or promotional material (brochure, leaflet, poster, presentation, etc...), must specify that the project has received research funding through JPI Oceans and the respective National Funding Institutions, and display the JPI Oceans logo and logos of the respective funding institutions.

Please note it is **JPI Oceans** (please never write JPIO, JPI O, JPI "Oceans", JPIOceans, JPI-Oceans, the JPI Oceans...).

3.1. USE OF JPI OCEANS LOGO

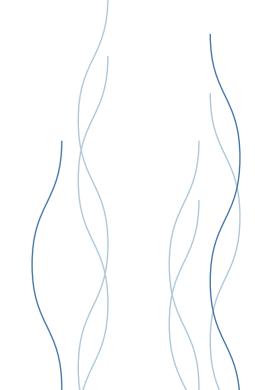
Please use the logo in its current form.

Do not incorporate the logo in another logo, leave enough white space and place it on a white background. On dark backgrounds, use the white version of the JPI Oceans logo. You can find the logos here.



3.2. REQUESTS

Apart from the formal reporting required, the JPI Oceans secretariat will have occasional communication requests in order to provide more information on the projects in the JPI Oceans Annual activities report, factsheets, posters, online newsletter or other publications. If there are ad hoc high-level opportunities to showcase the projects, (event in the European Parliament, G7 policy event, etc.) project leaders or partners may be invited to present the results and outcomes of their research.



Communication Guidelines 12 www.jpi-oceans.eu www.jpi-oceans.eu



4.0 **OPEN SCIENCE**

As funding for the research partners is provided by the funding agencies from respective countries, national rules apply with regards to reporting and open access requirements. In line with the framework conditions for Joint Programming Initiatives, it is strongly recommended to provide open access to research outputs.

4.1. GDPR AND OPEN SCIENCE

As of 25 May 2018, the EU General Data Protection Regulation (GDPR) has been in force. The regulation is intended to protect the personal data of individuals and its free movement in the EU. It applies to any type of scientific research that collects, processes, and re-processes personal data. More information on GDPR and the research process, on the blog of OpenAire.

4.2. DATA

In line with the Strategic Research Agenda of JPI Oceans, data generated in JPI Oceans projects shall be made available to the scientific community. This includes storing the original data in common data bases such as EMODnet, SeaDataNet, Pangea and ICES Marine Data.

The European Marine Observation and Data Network (EMODnet) has launched its <u>Data Ingestion portal</u> which facilitates data managers to ingest marine datasets for further processing, publishing as open data and contributing to applications for

society. The portal provides guidance information for potential data providers for preparing and progressing their data submissions. In addition, a Help Desk is available during the week at EU office hours for answering questions of data providers.



Photo credit: Christin Hume

MARINE DATA MANAGEMENT GUIDELINES – EMODNET

Marine data include a very wide range of measurements and variables derived from a broad spectrum of multidisciplinary research projects and monitoring programmes. The data are collected by different institutes, governmental organizations or private companies using heterogeneous instruments and sensors installed in various observing platforms. Depending on the data type, the acquisition systems, the delivery time frame or operations of the archiving centre, there is not a unique used data model and structure and the original measurement format may not be the same with the format that the archiving centre can accept.

In general, the archiving format should:

- be independent from the computer (and libraries).
- insure that any isolated data includes enough metadata to be processed (e.g. location and date),
- be compatible and include at least the mandatory fields (metadata) requested for the exchange format(s),
- include additional textual or standardized "history" or "comment" fields to prevent any loss of information,
- provide similar structure and metadata for different data types such as vertical profiles and time series.

Alongside the data, additional information (metadata) is needed not only for quality control and archiving, but also for

exchanging data or integration of them into regional or global data sets. For all types of data, information is required about:

- Where the data were collected location (preferably as latitude and longitude) and depth/height
- When the data were collected (date and time in UTC or clearly specified local time zone)
- How the data were collected (e.g. sampling methods, instrument types, analytical techniques)
- How you refer to the data (e.g. station numbers, cast numbers)
- Who collected the data, including name and institution of the data originator(s) and the principal investigator
- What has been done to the data (e.g. details of processing and calibrations applied, algorithms used to compute derived parameters)
- Watch points for other users of the data (e.g. problems encountered and comments on data quality)

EMODnet encourages the great variety of data submitters to adopt the common formats for metadata and data with the existing marine community practices and make use of these common standards for their data packages submissions. This will enable the easiest integration of their data sets into the current data systems and make them re-usable. A summary of these basic data management guidelines used by the marine community can be found below.



Communication Guidelines 14 www.jpi-oceans.eu www.jpi-oceans.eu www.jpi-oceans.eu

4.3. GUIDELINES FOR DIFFERENT DATA TYPES

International Oceanographic Data and Information Exchange:

The main objective of the programme "International Oceanographic Data and Information Exchange" (IODE) of the "Intergovernmental Oceanographic Commission" (IOC) is to facilitate the exchange of oceanographic data and information between participating Member States. For that purpose, IODE maintains the **IODE** Ocean Data Practices repository, is a data and information management of best practices repository of community practices that enables those who are going to embark on a new project and need to prepare a data management plan, to look for methodology already used by other projects or data/information centres ("best practices").

ICES Marine Data:

The ICES Data Centre accepts a wide variety of marine data and metadata types into its databases that are used in various assessments for expert groups and regional sea conventions. In order to ensure comparable data with high quality, guidelines have been developed and adopted specifically to the type of data and whether it is associated with a marine convention monitoring programme. Each guideline addresses the data and metadata requirements of a specific data type, targeted toward physicalchemical-biological data types collected on oceanographic research vessel cruises. They cover three main areas:

 What the data collector should provide to the data centre (e.g. collection information, processing, etc)

- How the data centre handles data supplied (e.g. value added, quality control, etc)
- What the data centre can provide in terms of data, referral services and expertise back to the data collector

The ICES guidelines can be accessed here.

SeaDataNet marine and oceanographic data standards:

SeaDataNet maintains and operates a Pan-European data management infrastructure for marine and oceanographic data and provides metadata discovery and data access services to the data holdings of a distributed network of more than 100 connected marine data centres from 35 countries. Specific data file formats have been developed and used for data exchange:

- SeaDataNet ODV4 ASCII for profiles, time series and trajectories,
- SeaDataNet NetCDF with CF compliance for profiles, time series and trajectories,
- SeaDataNet MedAtlas as optional extra format,
- NetCDF with CF compliance for 3D observation data such as ADCP.

Manuals and guidelines on the data transport formats can be found here. In addition, available options and methods to connect to the infrastructure and contribute to the its metadata discovery system can be found here.

European Ocean Biogeographic Information System (EurOBIS):

The European Ocean Biogeographic Information System – EurOBIS – is an

online marine biogeographic database compiling data on all living marine creatures. The principle aims of EurOBIS are to centralize the largely scattered biogeographic data on marine species collected by European institutions and to make these data freely available and easily accessible. Integration and quality control of biogeographical data from many different sources requires a minimum of standardization and quality control before sound and useful integration becomes possible. EurOBIS follows a number of international standards and runs a number of quality control procedures on each received dataset, in order to be able to estimate the quality of the provided data and to define the fitness for purpose of the data for our various users. A basic overview of the standards and basic quality control (QC) procedures and standards can be found here.

Data can be submitted using different data formats. The accepted data formats are:

- Excel spreadsheet (.xls, .xlsx)
- · Access database (.mdb, .accdb)
- Comma/tab separated values (.csv)
- Text file (.txt)

More on the EurOBIS data formats can be found here.

Marine Environmental Data and Information Network (MEDIN):

MEDIN is a partnership of UK organisations committed to improving access to marine data and easier data sharing. MEDIN Data Guidelines provide a list of information that should be collected with the data to ensure they can be re-used in the future. The guidelines are tailored to different methods and are arranged by

theme aiming to improve interoperability between organizations by providing a format which can be used to import and export data.

The MEDIN data guidelines including details of formats can be found <u>here</u>. Please note that the guidelines are currently being updated.

MEDIN Submission guidelines for geology, geophysics and backscatter can be found here. For geosciences and elated disciplines data information on how to deposit data at the NERC National Geoscience Data Centre (NGDC) can be found here.

International Hydrographic Organization (IHO):

Standardisation of hydrographic methods and the provision of information is a fundamental part of achieving the IHO objectives. The Organization began developing standards and guidelines intended for use by the wide community of professionals with responsibilities in the fields of hydrography, nautical cartography, safety of navigation and related matters. IHO standards are compiled and maintained by various Working Groups made up of volunteer representatives from IHO Member States (usually from HOs), together with expert contributors representing industry and the various other stakeholder groups. Standards must be authorised by a majority of IHO Member States before they can enter into force.

A list of the IHO standards can be found here



Communication Guidelines 16 www.jpi-oceans.eu

5.0 **SOCIAL MEDIA**

All JPI Oceans projects are encouraged to publish their progress and results on social media. For any project news or publications, we encourage you to direct a message to us, include @jpioceans in your message, tag JPI Oceans in a picture or use the #JPIOceans hashtag. By doing so, the JPI Oceans secretariat can increase the reach of your message by retweeting or liking it. JPI Oceans can be reached on: Twitter, LinkedIn, Instagram, Facebook. A Twitter list including many JPI Oceans projects and activities can be found here. If you wish to add your new Twitter account to this list, please contact the JPI Oceans secretariat.

5.1. USE OF SOCIAL MEDIA TO CONNECT WITH POLICY MAKERS AND THE GENERAL PUBLIC

Start by looking and listening

The ideal way to start with social media for your organization or project is to start listening by establishing an account and searching for project related topics, similar organisations, etc. For science communication, NASA, NOAA and CERN can be regarded as best practices. In order to get a feel of the way of communicating, it can be useful to browse the online profiles of these organisations to get familiar with the medium and the tone of the conversation.

A non-exhaustive overview of marine science institutes, organisations and scientists with large follower bases:

International organisations and institutes

@ipioceans

@EU_MARE

<u>@NOCnews</u>

@PlymouthMarine

@Ifremer_fr

@GEOMAR_de

@ICES_ASC



As a next step, make an overview of your consortia partners and partner organisations which have Twitter account and start following them. Once your project has an account, it is useful to keep on following the conversations and updates of your partners and target groups. This allows you to follow the latest news and updates and respond to these adequately.

Choose your channel

When starting with social media, it is important to carefully select the channels you would like to use. Keep in mind that Facebook and Instagram are in general used for leisure and visual content. Twitter is used for both for leisure and professional purposes, and LinkedIn mainly for professional purposes. In addition, there are very specific tools like Slideshare which you use to share your presentations online.

Facebook and Instagram are very suitable if you have a lot of video content, exceptional pictures or results which can appeal to a wider audience. Apart from leisure, Twitter is also used more professionally and will be more suitable for specialized information and updates. This is especially the case for all policy-related information. Since there are already a lot of governmental organisations and elected officials on Twitter, it is the ideal channel to get in contact with these organisations and officials and provide them with updates and information. Twitter is also

accessible for non-Twitter users, unlike Facebook. You can visit specific Twitter user profiles or the Twitter search page, which allows you to search topics/ users without an account. It should be noted that organisations and politicians must first start "following" you before they can see your updates. It is therefore important to build your audience.

As mentioned above, LinkedIn is only used for professional purposes. It is therefore very suitable to create groups of colleagues or people within a certain discipline. These groups can be set up as forums in which these individuals can discuss and comment on articles, updates, etc. In that regard, it can also be suitable to promote events. Finally, LinkedIn can be a useful tool for recruitment of new personnel in the framework of your project.

www.jpi-oc

5.2. BUILD YOUR AUDIENCE - LESSONS LEARNED FROM **SUCCESFUL ORGANISATIONS**

Create value and be social

Be aware to use social media tools only for pure project promotion purposes. Keep in mind that the content you produce should be interesting, useful or fun to read or watch. This implies that you don't have to refer to your own content only. You can as well link to articles, videos, etc. of other organisations or partners in your consortium.

People will be more likely to follow you or befriend you if you respond to their inquiries and refer to their content through retweets for example. Follow the Twitter accounts of the people and organisations who are partners in your project and ask them to announce the project and refer to your social media contact details.

Adapt your language and tone

Be personal and human in your communication. In general, people like to interact with the people, not with large organisations. It should be clear that there is a person behind the impersonal handle of your organisation. This implies that while using social media, language and tone should be adapted. It is usually not appealing to just update your social media profiles with the title of your press releases.

An example below of Tweets of CERN on the large Large Hadron Collider:

- Now stabilizing the beams
- Collapsed!!
- The ramp is successfully completed!

- Beams are now accelerated to 3.5 TeV, the highest energy! Preparing for collisions now!!
- Ramping up now!
- Preparing for new injection from SPS, the smaller accelerator that brings particles to the LHC.

Another example is what NASA did with @NASAinsight, the robotic lander which studies the interior on Mars (figure to the right). By writing in the first person, followers are following what seems like a firsthand perspective of what is going on with the lander.

Use visuals

All social media have shifted their focus to highlight pictures and videos from their users. As a consequence, text only messages are usually lost in the timeline and are unlikely to get picked up by the algorithms which decide what your followers will see. It is recommended to add a picture, infographic or video to all your posts.

Use your project partners to provide a personal perspective

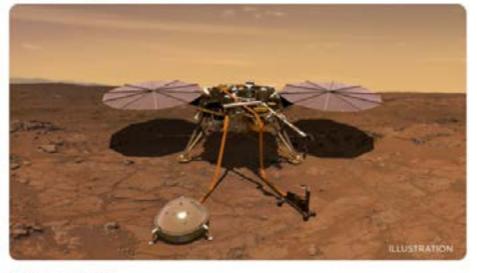
Instead of only using the impersonal account of your organisation to represent it through social media, it could be interesting to share the experiences of your project partners by rotating the social media responsibilities. This allows every partner, from coordinator to technician, to show its activities and share his/ her progress. A scheduled rotation also ensures the responsibilities are shared equally between partners.





I'm beaming! During my first full day here, I broke my first record by generating more electrical power than any previous robot on the surface of #Mars . I'm in a sandy area with few rocks, soaking up the Sun. More about where I landed:

go.nasa.gov/2RvGiMI



1:23 AM - 1 Dec 2018

2,647 Retweets 15,758 Likes













Use Twitter as a point of service

While some organisations are happy to respond to user's inquiries, it could be useful to ask "what do you want to know?" This could be interesting way for scientists or organisations to interact with their stakeholders.

5.3. GLOSSARY

Twitter

Twitter is a microblogging system that allows for sending messages consisting of a maximum of 280 characters ("Tweets") into the public domain. People read Tweets of Twitterers they are interested in by "following" them. Twitter is a platform that can be used in many different ways. People often publish what they are thinking, doing, or planning at that particular moment, and their followers

may answer directly to those tweets by addressing the response using the "@" symbol in combination with the name of the recipient. In addition, one user's statements may be "retweeted" by another user to his followers using the "RT" prefix. In this way, messages can spread on the web very fast. Tweets may consist of "private" information or information regarding special topics – there are no restrictions regarding content. Tweets may also contain links to other websites such as blog articles, wikis, and multimedia resources.

Facebook

Facebook is a social networking service and website launched in February 2004. As of the second quarter of 2018 Facebook had gained 2.23 billion monthly active users. Users must register before using the site, after which they may create a personal profile, add other users as friends, and exchange messages, including automatic notifications when they update their profile. Additionally, users may join common-interest user groups, organized by workplace, school or college, share pictures, videos, articles and play games.

Communication Guidelines 20 www.jpi-oceans.eu www.jpi-oceans.eu www.jpi-oceans.eu

Linkedin

LinkedIn is a social network for professionals. Linkedin standardizes information entered by users into predefined "Profile Headline", "Summary", "Education", "Company", etc. categories. Users can connect with colleagues and professional contacts, and join groups which collect people with the same interest or from a common industry/research discipline.

Instagram

Instagram is one of the fastest growing social networks and is primarily focused on sharing pictures. Like Twitter, the network works with hashtags to identify similar topics and is accessible to non subscribers as well.

TikTok

TikTok is a short-form, video-sharing app that allows users to create and share 15-second videos on any topic. Its creator, Bytedance, runs a different version of the app, Douyin, in its home market, China. The platform allows users to get creative with their content using filters, stickers, voiceovers, sound effects, and background music.

YouTube

YouTube is a video platform that's driven by two types of users creators and viewers. The video creators are the people who have channels and upload videos to those channels. The video viewers are the people who watch videos, interact with videos, and subscribe to channels. YouTube is a free video-sharing website and the second largest search engine behind Google Search.



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