



D7.2 OUTREACH AND DISSEMINATION ACTIVITIES REPORT



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D7.2: Outreach and Dissemination Activities Report

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Abstract:	This is the activity report of the outreach and dissemination actions performed from M1 to M12 of the project. This report was developed by SPI and revised by CCG and BCCM/MUCL as well as the project coordinator, UMinho. This report echoes the actions performed by SPI as the leader of WP7 (Outreach and Dissemination) and all the 13 partners and eight third parties that support WP7. This document reports on the types of promotional and educational materials developed and disseminated, the creation and maintenance of virtual dissemination channels, internal and external events organised or attended by the consortium, an account of the Key Performance Indicators and an action plan for the remaining journey of the project. The objective of this document is to present a direct and simplified recollection of the efforts made by the project partners to meet the outreach and dissemination action plans stipulated in D7.1: Outreach and Dissemination Strategy.		
Keywords:	Outreach, dissemination, activities, action plan, report, KPIs		

Dissemination level:	Public	X
	Confidential (for the Consortium and EU Commission Services only)	

Abbreviations

Abbreviations	Expanded
BEA	Spanish Bank of Algae
BCCM/MUCL	Belgian Coordinated Collections of Microorganisms/Agro-food & Environmental Fungal Collection
BCCM/ULC	Belgian Coordinated Collections of Microorganisms/Cyanobacteria collection
CCG	Centro de Computação Gráfica
COVID-19	Coronavirus Disease 2019
CWE	Collaborative Work Environment
EC	European Commission
ERIC	European Research Infrastructure Consortium
EU	European Union
IAFB	Prof. Waclaw Dabrowski Institute of Agricultural and Food Biotechnology
IBPM RAS	Institut of the Russian Academy of Sciences, Skryabin Institute of Biochemistry and Physiology of microorganisms Ras
INRAE	Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement
IP	Institut Pasteur
IS_MIRRI21	Implementation and Sustainability Microbial Research Resource Infrastructure for the 21 st century
KNAW	Koninklijke Nederlandse Akademie Van Wetenschappen
KPIs	Key Performance Indicators
MIRRI	Microbial Research Resource Infrastructure
UL	University of Latvia
UMinho	Universidade do Minho
UNITO	Universita degli studi di Torino
PPT	PowerPoint Presentation
UVEG-CECT	Universitat de València – Colección Española de Cultivos Tipo
RI	Research Infrastructure
R&I	Research and Innovation
SPI	Sociedade Portuguesa de Inovação
TNA	Transnational Access Programme
WP	Workpackages

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Executive summary

This document constitutes the deliverable D7.2: Outreach and Dissemination Activities Report under Work Package 7 (WP7: Outreach and Dissemination) of the IS_MIRRI21 (n° 871129) European

Commission (EC) funded project. It reports on all the actions executed by the WP7 leader, SPI, and the 13 project partners and eight third parties that support the realisation of actions in WP7.

This deliverable has four core chapters and an annex. The objectives of the report are to succinctly present the efforts, results and impact of the outreach and dissemination materials, tools, channels and activities which have been developed from the initiation in February 2020 to the twelfth month of the project. The collection of data for this report was done through the assessment of analytics from virtual platforms such as the project website and social media channels, WP7 internal records of promotional and dissemination materials produced, the first interim progress report of WP1 completed in M7, and two WP7 six month reports collected from the partners.

The execution of the outreach and dissemination activities closely follow the scheme of D7.1: Outreach and Dissemination Strategy developed in May 2020 by SPI. All the dissemination materials are designed with a close consideration of the projects target stakeholders' needs and expectations (see Chapter 2) by IS_MIRRI21 and its consortium. The materials developed for the internal and external stakeholders of the project are classified into three groups: i) Project related promotional materials; ii) Informative materials and iii) Functional materials. The promotional and informative materials are disseminated through the new project website launched in May 2020 and the five project social media channels (Twitter, Facebook, LinkedIn, YouTube and ResearchGate). Complementarily, dissemination channels and tools have been designed specifically for MIRRI to increase its visibility as a pan-European Research Infrastructure. In terms of outreach actions through direct interaction with target stakeholders, in-person contacts have been hindered due the outbreak of the COVID-19 pandemic from 2019 to the time of this report writing. Nevertheless, the project partners performed diffusion of the project through participation and co-implementation of external events' primarily organised by analogous initiatives and European projects. The outreach and dissemination action plan for the remaining duration aims to continue increasing the project's visibility through heightened presence in social media and collaboration with other initiatives to co-organise events. Thus far, the project has gained a leap forward with a respectable impact in terms of KPIs, especially looking at the interaction and subscriptions on the project website and social media, participation in external events, dissemination of scientific articles and development of promotional materials.

This deliverable is a public document developed by SPI and revised by two partners UMinho and CCG, and a third party, BCCM/MUCL.



1. Introduction

1. Introduction

This document is the second report of WP7 (Outreach and Dissemination) concisely presenting the outcomes of the communication, dissemination and outreach activities carried out in the first year (M1-M12) of the Implementation and Sustainability Microbial Research Resource Infrastructure for the 21st century (IS_MIRRI21) project. IS_MIRRI21 is a Horizon 2020 project supported by the funding of the European Commission (EC) under the Directorate-General for Research and Innovation. The project has a three-year life span to conclude with the establishment of a pan-European Research Infrastructure known as Microbial Resource Research Infrastructure (MIRRI) as a self-reliant, sustainable and fully functional entity. This project is implemented through collaboration among 14 European partners and eight third-parties that are all active contributors in the outreach and dissemination activities.

This report constitutes the deliverable D7.2: Outreach and Dissemination Activity Report associated mainly to Task 7.2: Development of communication tools and channels, as it presents the results of the work done in this task. However, this deliverable also includes activities undertaken in Task 7.3: Stakeholder Engagement and Task 7.4: Public Engagement and their results as they pertain to the use of the materials developed in Task 7.2 and their exploitation to engage target audiences. WP7 is responsible for the development of promotional and dissemination materials as well as the enforcement and supervision of the outreach activities by the partners. This report looks at the outreach and dissemination activities stipulated in D7.1: Outreach and Dissemination Strategy (M3) and how they have been successfully implemented. This deliverable is developed by Sociedade Portuguesa de Inovação (SPI) in M12 with the support of Paula Monteiro from CCG and Heide-Marie from BCCM/MUCL as internal reviewers and editors.

The findings of this report will be used in the development of the project Annual Report due in M13. As a public report, this deliverable will be made available on the project website after approval by the Project Officer has been attained. This report is divided into five sections:

- Objectives and methodology;
- IS_MIRRI21 target stakeholders;
- Outreach and Dissemination Activities and Outcomes from M1 to M12;
- Action plan and next steps; and
- Annex

1.1. Objectives

WP7 intends to achieve four outcomes: i) expand awareness of IS_MIRRI21 and consequently MIRRI's existence among potential microbial resource users and providers, members and publics; ii) mobilise the target audiences of specific project outcomes such as researchers and students for the Transnational Access, and Education and Training programmes, iii) catch the interest of governmental and non-governmental organisations that are potential members of MIRRI and other audiences that promise short or long-term involvement; and iv) raise awareness in the society about the benefits of microorganisms and microbial collections to support bio-economy and face societal challenges.

This report intends to provide an update on the progress the consortium has made to accomplish the plans that were set out in D7.1. All the partners are involved in the dissemination activities and will continuously contribute to the outreach activities through participation in external events, launching events with specific IS_MIRRI21 related themes and

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dissemination of informative and promotional materials developed under WP7 through their organisation and personal communication channels (e.g. social media accounts) and direct or indirect communication in their networks.

The aim of this report is to present the activities that have taken place in the first year of the project and:

- i. assess the outcomes achieved thus far in the overall aim of WP7,
- ii. further develop recommendations to enhance the dimensions of the outreach, and
- iii. gain insight into how the next Outreach and Dissemination Strategy (D7.3 due in M19) can be improved from experience-founded learnings.

1.2. Methodology

As per the Description of Action of the IS_MIRRI21 Grant Agreement (871129), this report is developed by SPI in M12 of the project. The data presented in this report was gathered from various sources that developed or performed outreach and dissemination actions:

- D7.1: Outreach and Dissemination Strategy
- Project website and social media analytics
- First interim progress report developed in M8 under WP1
- WP7 records of developed and disseminated materials
- WP7 records of events organised or attended by the partners of IS_MIRRI21
- WP7 six month dissemination reports from partners collected by WP7

As the primary developer of promotional materials, WP7 keeps an internal log of the materials developed and disseminated. For the purpose of easy access and fair distribution, all promotional and dissemination materials developed under WP7 are made available to all the partners by email (all.ismirri21@mirri.org) and on the common but private online hub, synology server (available at <https://cectsyn2.cect.org:5019/>). The social media and website analytics are accessible to the leader of WP7 at any given time and the activities on these channels are presented to the partners at the General Assembly meetings or upon request. The WP7 six month dissemination report is collected from all the partners and their third parties twice a year by filling in a report form/excel file developed and distributed by WP7. The first WP7 six month dissemination report was collected in M7 and the second round of reports will be gathered in M13 in time for the project Annual Report.



2. IS_MIRRI21 Target Stakeholders

2. IS_MIRRI21 target stakeholders

This section contains the summary of the outputs presented in D7.1 and their relevance to the stakeholders. IS_MIRRI21 has five target groups that are either users of its services and offers or providers of resources (Figure 1).



Figure 1. Target stakeholders of IS_MIRRI21.

Each of these target stakeholders have specific requirements and expectations from IS_MIRRI21 (Table 1) and the dissemination and outreach materials as well as activities. Therefore, the dissemination tools and channels were carefully selected during the proposal stage in order to ensure the outputs and products of the project reach these groups of stakeholders. The action plan for dissemination and outreach of the project includes the development of virtual and physical tools and activities that would specifically meet the expectations and needs of the target audiences. The majority of these materials were envisioned in D7.1, however, additional tools and channels to those proposed in D7.1 were developed as was deemed necessary by the consortium members (see Chapter 3). The tools and channels are also seen in Table 2.

Table 1. The expectations of target stakeholders from IS_MIRRI21.

Target stakeholders	Needs
Users of microbial resources	Reliable and up-to-date information about the services and offers of IS_MIRRI21
Providers of microbial resources	Access to local repositories and appropriate usage of the materials deposited by the providers
Policymakers	Up-to-date and reliable scientific results useful for policy making i.e. easily digestible and comprehensive information adequately formulated to assist in the tackling of current economical, ecological, environmental and medical global issues
Potential members of MIRRI	Services with added value to already existing facilities in their territories and adhering to Circular Economy and Bioeconomy roadmaps and to environmental and scientific research ethical regulations
Citizens or lay audiences	Education and interactive tools and scientific materials

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Table 2. Dissemination tools and channels and their target audiences.

Tools	Target groups
Project brochure	All target stakeholders
Project Roll-up	All target stakeholders
TNA related materials such as (Flyer, Catalogue and application guidelines)	Users
Educational videos	Citizens
Introductory video	All target stakeholders
Newsletters	All target stakeholders
Multimedia	Citizens
Press releases	All target stakeholders
Scientific articles	Users, providers and policymakers
Channels	Target groups
Project website	All target stakeholders
Social media	All target stakeholders
Direct contact (email)	Users, providers, potential members of MIRRI and policymakers
Internal workshops	Users, providers, potential members of MIRRI and policymakers
External Events	All target stakeholders



3. Dissemination and Outreach Activities and Outcomes

3. Dissemination and Outreach Activities and Outcomes from M1 to M12

This chapter presents all the dissemination materials and activities which have been produced or implemented under WP7 from February 2020 to January 2021. The four tasks of WP7 started from the launch of the project in February 2020. Developments for the outputs of Task 7.1 (Outreach and Dissemination Strategy development and update) and Task 7.2 (Development of communication tools and channels) started in February with the initial drafts of a set of three dissemination materials (project Word and PPT templates, brochure) which were used in the Kick-off Meeting on 25 and 26 March 2020. The intention during the proposal development stage was to have Task 7.3 (Stakeholder Engagement) and Task 7.4 (Public Engagement) fully active in participating and launching engagement oriented online and on-site events and meetings for the purpose of creating awareness about the project and gaining interest for long-term commitment to MIRRI. However, due to the outbreak of the COVID-19 pandemic at the end of 2019 and the social distancing measures imposed for the protection of public health in 2020 and 2021, the actions of these tasks remain constrained to online or virtual means.

3.1. IS_MIRRI21 promotional and dissemination materials

From the start of the project, multiple promotional materials such as brochure, flyer and press releases to promote the project activities and informative materials such as scientific papers, games, and infographics have been developed and/or made available to the public from the project dissemination channels. These materials have been designed paying close attention to the main end-users. Thus, the information provided in each material is tailored to the anticipated needs and expectations of the target audiences. Below are short descriptions of the materials, their contents and dissemination.

3.1.1. Overall project related promotional materials

Brochure and roll-up

As one of the most diffusible and informative dissemination materials, the project brochure was developed in February 2020 to be presented to the consortium at the Kick-off Meeting at the end of March 2020. The four page brochure was designed by SPI and the content and layout of the final draft was shared with all the partners in April 2020 for approval. The initial idea was to have a four page file with content relating to IS_MIRRI21, namely illustrating the aim and duration of the project, project partners, target stakeholders, main expected outcomes and impacts of the project and contact information. To make the target stakeholders aware of the link between IS_MIRRI21 and MIRRI, two pages were added containing a concise explanatory text about MIRRI, its microbial holdings, the specialisations of the consortium members and a map showing the member countries of MIRRI (Figure 2).

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Figure 2. Final IS_MIRRI21 brochure in English – back page (top) and front page (bottom).

Similarly, the project roll-up was developed in April 2020 containing precise information about the aim, duration, and partners of the IS_MIRRI21 and shared with all the partners mainly for physical promotion of the project (Figure 3). Under the usual circumstances, the brochure is normally disseminated through physical and virtual means in internal and external events such as workshops, assemblies, conferences, etc. However, due to the constraints on movement caused by the outbreak of COVID-19, IS_MIRRI21 partners have mostly participated or organised online events and meetings. As a result, the dissemination of the brochure has mostly been done through virtual means and the display of the roll-up has been limited to events organised by the project partners and the MIRRI Central Coordinating Unit office (e.g. WP8 online workshop held on 23/10/2020 for the Enlargement of Membership for MIRRI) (Figure 4).



Figure 3. Final IS_MIRRI21 roll-up in English.

After the partners provided their inputs, the brochure and roll-up were finalised and shared with the consortium on 08/06/2020 by email and uploaded on the synology server. In M12, the brochure and roll-up are available in four European languages: Portuguese, Spanish, Polish and English on the public platforms (project website and social media pages) and private repository (synology server), respectively. Currently, the translation to French, Italian and Russian is in progress with the partners INRAE, UNITO and IBPM RAS, respectively. For the translation of the contents, the following partners were the major contributors:

- English - Sociedade Portuguesa de Inovação (Portugal)

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- Portuguese - University of Minho (Portugal)
- Spanish - University of Valencia (Spain)
- Polish - Institute of Agricultural and Food Biotechnology (Poland)

In terms of KPI, until end January 2021, the brochure has been viewed 42 times on the website. According to the six-month dissemination reports from the project partners in M7 and M13, it has been shared or displayed virtually over 220 times. In total, the roll-up was displayed on two occasions, i) WP8 workshop held on 23/10/2020 and at the IS_MIRRI21 Management Backoffice/MIRRI Central Coordinating Unit (CCU) housed at the University of Minho in Portugal (Figure 4).



Figure 4. IS_MIRRI21 roll-up used in the workshop organised under WP8 in October 2020 (top) and IS_MIRRI21 Management Backoffice/MIRRI CCU (bottom).

Newsletter and Press release

As was indicated in the Outreach and Dissemination Strategy, biannual newsletters and press releases are used to communicate the project's progress and accomplishments as well as mark important announcements to the target audiences. The first newsletter was published on 28/08/2020 (Figure 5). The aim of this newsletter was to incisively introduce the IS_MIRRI21 as Horizon 2020 project, its objective, background, mission and vision, tasks, partners, its intention to reach out to the public and news about the Kick-off meeting. The newsletter was designed to have a scientific outlook with authentic images of microbial stains and scientific equipment provided by the project partners. The content was provided by several members of the consortium i.e. UMinho, IP, IAFB, BCCM/ULC and ULPGC-BEA. The newsletter was approved by the coordinator before its launch and received only positive feedback from the consortium. After its launch, the newsletter was posted on the project website and disseminated through the project social media channels. At the time of its launch, there were 102 confirmed subscribers. The newsletter was also sent to 1284 subscribers of the MIRRI Framework Programme 7 project newsletter (2012-2016) that expressed interest to continue engagement with the follow-up initiatives of MIRRI respecting the EU General Data Protection Regulation (GDPR). At the end of January, the first newsletter page has been visited 179 times on the website.



Figure 5. First (top) and second (bottom) IS_MIRRI21 Newsletter¹.

The second newsletter was developed in M12 and disseminated on 01/02/2021. This edition of the newsletter contains information with more depth into the activities of the project. The goal is to start illuminating the vision of IS_MIRRI21 in a simplified and chronological manner for the project stakeholders to understand the construction and mission of the project. The consortium partners provided content for the newsletter until the beginning of January. The sections of the newsletter pertain to:

¹ First and second IS_MIRRI21 Newsletter. Retrieved: 10/02/2021. Link: <https://ismirri21.mirri.org/resources/newsletters/>

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- MIRRI's status in the European Strategy Forum on Research Infrastructures (ESFRI) landscape and its advancements to be part of the European Research Infrastructure Consortium (ERIC);
- TNA first call launched on 25/01/2021;
- The IS_MIRRI21 Management Backoffice, the embryo of Central Coordinating Unit of MIRRI, which is now fully staffed and functional in Portugal, with the IT and Access Officers located, respectively, at UVEG-CECT and IP;
- Representation of IS_MIRRI21 in external events i.e. Science is Wonderful and International Microorganism Day 2020 online event;
- Announcements about upcoming internal events organised by the project partners; and
- Promotional and scientific materials and dissemination channels that have been developed by IS_MIRRI21.

Thus far, there are 10 press releases available on the project website. The aim of these news items is to inform and keep the target audiences and project partners in the loop on the events that have been arranged or attended by the partners and their general objective and outcomes. These press releases also serve as proof that the partners are active in their responsibilities to represent IS_MIRRI21 as well as MIRRI to external stakeholders and capture the attention of potential groups of audiences and members for MIRRI. SPI is responsible for the revision and publication of the news items ([News](#) section of the website) but the partners that represented IS_MIRRI21 in the external events or organised the events are required to provide a brief draft of the new piece (Figure 6). Highly relevant press releases are also published through the social media pages. The website analytics show that the press releases have been viewed 203 times by end of M12.

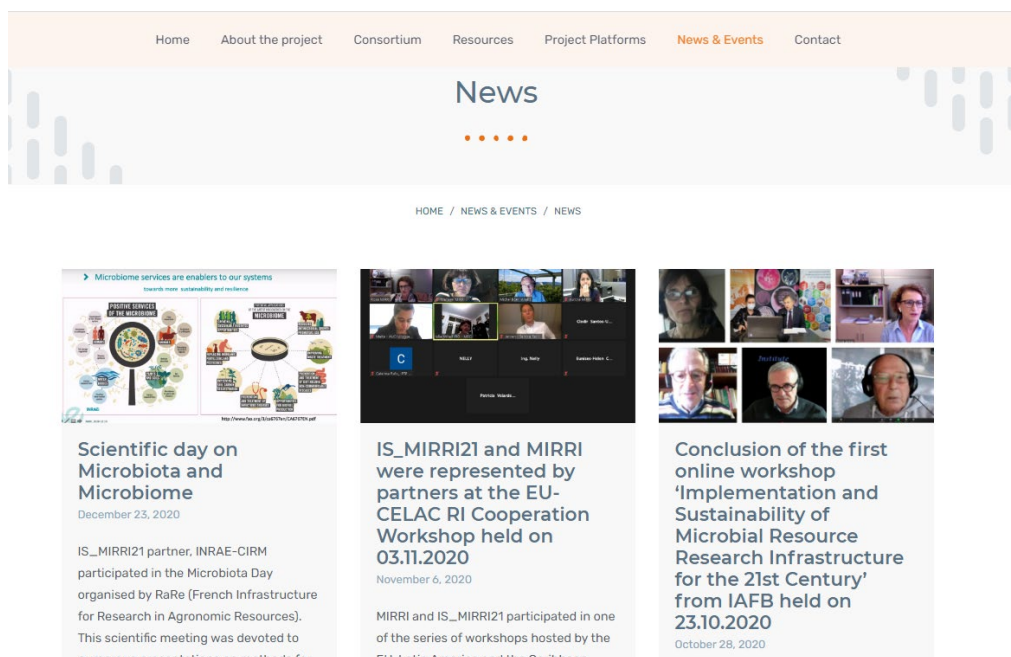


Figure 6. News page on the IS_MIRRI21 website.

Introduction video for IS_MIRRI21

The first animated video for the IS_MIRRI21 is currently under development and is foreseen to be released in April 2021. The video will be a 3-5 minutes long explanatory clip about IS_MIRRI21, its objectives, vision, mission, services, consortium members and its relation to MIRRI. The goal is to use the video on the project website and events webpages to describe the concept of the project in a short, intelligible and attractive manner. For the production of the video, SPI launched a call for tenders on 18/12/2020 that ended on 22/01/2021. SPI received three positive feedbacks from three local video production companies. The next steps entailed the identification of the most suitable production company based on the budget, quality of the proposal and efficiency, which was done in M13. This is to be followed by the refining of the video script, development and launch of the video. Following the description of action in the Outreach and Dissemination Strategy, the video will be in English.

Banners for announcements

Upon request, two banners were developed to launch calls for applications by the University of Minho for the position of an Executive Director for MIRRI and an IT Officer by University of Valencia - Spanish Type Culture Collection in July 2020 (Figure 7). The announcements were also disseminated through the social media pages. The banners were taken down after the deadline for the announcements had expired.

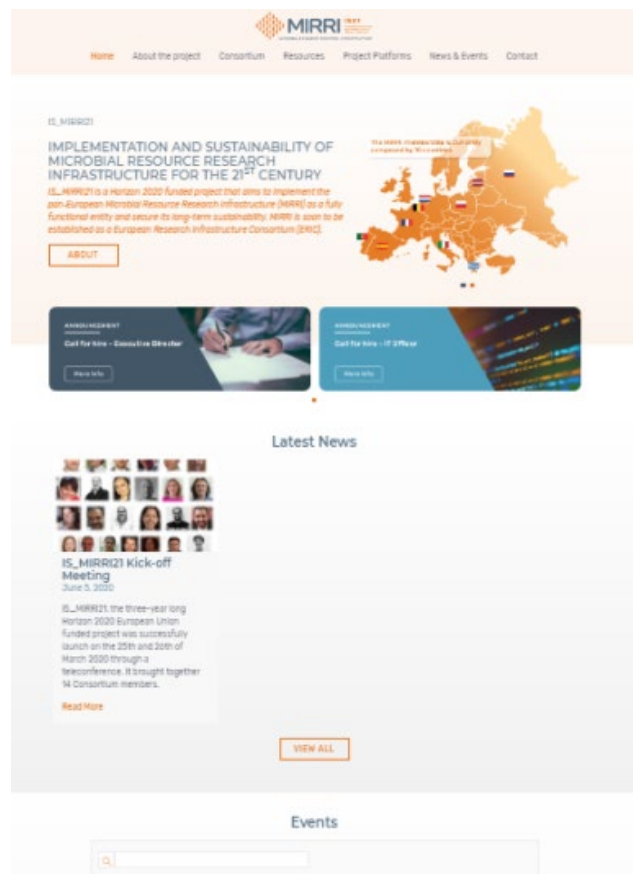


Figure 7. Banners used on the IS_MIRRI21 website to announce job vacancies.

3.1.2. Informative dissemination materials

Educational video and multimedia

To efficiently engage with lay audiences locally and internationally, three types of interactive educational materials developed by IS_MIRRI21 partners are available on the project website:

1. An education video in English: This is a 23 minutes and 11 seconds long video titled 'Superbugs and amazing microbes'. It is a presentation about biological diversity, microorganisms and microbial studies, symbiotic relationship between microbes and humans, benefits and uses of microbial resources, antibiotics and prevention of antibiotic resistance, microorganisms in the food system and ecological sustenance. The video was produced by SPI, UMinho, UNITO and IP in September 2020 for the Science is Wonderful 2020 online event in which IS_MIRRI21 was participating (see Section 3.4.1). The purpose of this video is to transfer knowledge and reduce misconceptions and irrational fear of microorganisms in the society. The video has been played in several online external events attended by the IS_MIRRI21 partners including the International Microorganisms Day in Portugal 2020, the Science is Wonderful 2020 event, and the Spanish Bank of Alga/REBECA workshop. The video received positive feedback from the project partners and participants of the Science is Wonderful 2020 online event and is accessible from the project website ([Project videos](#)) and project YouTube Channel.
2. Infographic about the biological kingdoms: This is a simple infographic that showcases the two domains and six kingdoms in biology. The aim of this tool is to engage students and other lay audiences in events through fun and educational materials (Figure 8).
3. Two fun fact games: These two games are the product of collaborative effort between SPI and UMinho for internal events for lay audiences. These games were released in September 2020 and are available without charge on the project website. There is no age limit for the players but the goal is to use them to challenge and educate citizens using fun facts about microorganisms and life sciences (Figure 9).

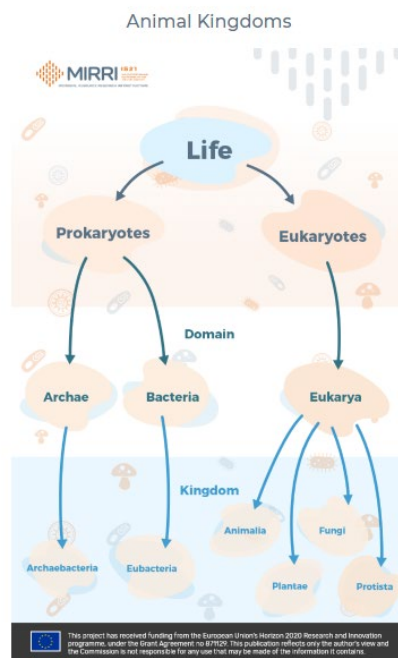


Figure 8. Infographic developed by IS_MIRRI21 for lay audiences.

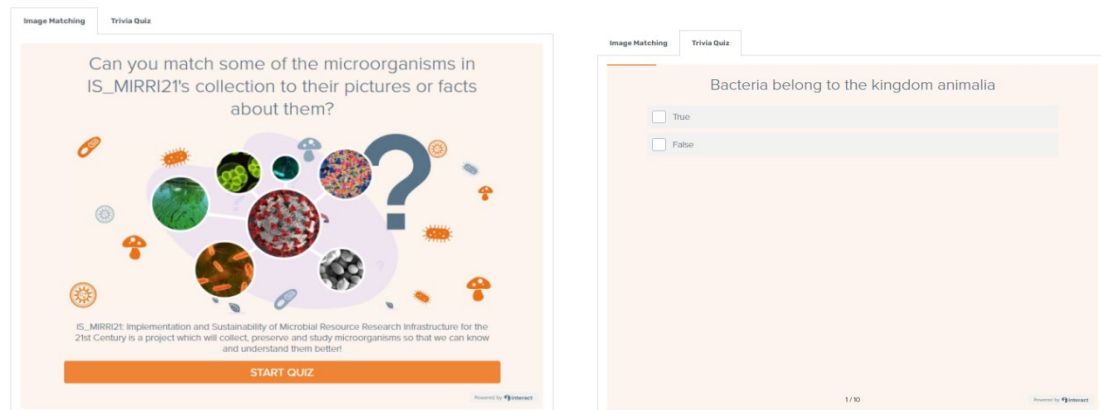


Figure 9. Two fun fact games developed by IS_MIRRI21 for lay audiences.

Scientific publications

Although IS_MIRRI21 as a project has not developed scientific studies yet, the project partners as members of academic institutes have published several scientific papers which are now available on the project website. This list includes one scientific article in Spanish from UVEG-CECT and 12 publications from various authors in English. The articles are recent publications in microbiomes, microbiology, genetics, molecular biology, biotechnology, biological material deposits and transfer models and Nagoya protocol. The two microbiomes papers are outcomes related with the participation of MIRRI in the “Funding and Policy Advisory Group” of the MicrobiomeSupport EU Horizon 2020 project (grant agreement No 818116). There are currently seven open access, four free access and two restricted access (subscription needed) publications on the project website under Scientific Publications. The full list and links to the publications can be found in Annex 5.1.

Transnational Access Programme (TNA) targeted materials

Two Transnational Access Programme calls are planned for the year 2021 and 2022. These are highly technical and academia-targeted calls under WP4 (Transnational Access to IS_MIRRI21) that target mainly users of IS_MIRRI21 services such as PhD students, postdocs, researchers or research engineers working or studying in recognised academic or research institutions, non-profit organisations or biotechnology companies. In preparation for the first call which was scheduled for 25/01/2021, SPI and WP4 leader (IP) started collaboration in July 2020 to begin the development of the key materials for the call. The content for these materials were provided by IP and SPI designed the final dissemination materials. The four dissemination tools developed for the first Transnational Access call in January 2021 were diffused through the project website and social media pages. The materials are:

- [TNA flyer](#): This is a four page publicity material for physical and virtual dissemination. The flyer has basic information about the call including the date of launch, aim, service providers, benefits and sponsors, workflows and contact (Figure 10). The flyer was first disseminated online on 18/12/2020.
- [TNA catalogue](#): This is a catalogue for the TNA programme that describes in detail the TNA access providers, workflows (research activities to develop R&I projects), products (strains and microbe-derived resources), services (experience and expertise from IS_MIRRI21 access providers) and facilities (state-of-the-art technology platforms). The template of the catalogue was developed by SPI and the content was approved by the project partners before its release on 17/12/2020.

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- [TNA portal](#): This is the TNA portal within the IS_MIRRI21 website. The first version of the TNA webpage was designed and incorporated onto the project website in September 2020 with only basic information about the TNA programme e.g. access providers, offers, sponsors and benefits of participation. The content was later expanded to cover all the information needed to participate in the programme as a user of IS_MIRRI21's services i.e. guidelines for participants, eligibility, instructions on how to apply, information on the evaluation and reporting process, etc. The complete TNA portal was finalised on 17/12/2020.
- TNA banner: This has been developed for the announcement of the first TNA call on 25/01/2021. The banner was designed to capture attention of potential participants, directing the participants from the Homepage of the project website to the TNA portal throughout the call from 25/01/2021 to 16/04/2021 (Figure 11).

IS_MIRRI21 WORKFLOWS

A combined set of research activities that will lead to the characterisation of microorganism-derived resources by exploiting the state-of-the-art facilities and expertise of IS_MIRRI21 research infrastructure.

This strategy will allow users to deepen their research and mature their innovations.

For more information about IS_MIRRI21 workflows, check our TNA catalogue available on: <https://ismirri21.mirri.org>

This project has received funding from the European Union's Horizon 2020 Research and Innovation programme, under the Grant Agreement n° 871129. This document reflects only the author's view and the Commission is not responsible for any use that may be made of the information it contains.

IS_MIRRI21 provides access to 14 microbial resources research facilities across Europe.

IS_MIRRI21 launches the first Transnational access (TNA) call on 25th January 2021

Having the aim of promoting transnational scientific cooperation and innovation, IS_MIRRI21 opens the first TNA call in 2021.

Scientists from research organisations and companies (in the fields of biotechnology, agro-food, pharmaceuticals, environment, etc.) can apply for funded access to one or several of the 14 IS_MIRRI21 partner's facilities to carry out their research projects. Applicants must submit a research proposal which will be assessed by a panel of experts in microbiology based on scientific merit.

Applicants must contact the access officer for pre-feasibility evaluation of the project prior to the submission of the proposal.

Please contact the access officer at tra@mirri.org

The Transnational access includes:

- Technical and scientific support
- Administrative and logistic support
- Use of the services and platforms offered in the IS_MIRRI21 catalogue
- Hands-on training needed to access the facilities

The TNA programme sponsors:

- Access to the IS_MIRRI21 research infrastructures
- Travel expenses (one round trip/mission)
- Substance (reagents and accommodation for up to 30 days)
- Shipping costs of project materials from the IS_MIRRI21 facility to the home institution

Available research infrastructures cover:

- 1. Microbial resources: Access and culture from extreme environments, yeast, filamentous fungi, yeasts, cyanobacteria and microalgae.
- 2. Experimental facilities: Quality water, bioreactors, incubators, facilities, greenhouses, biogas, biogas production, cryo-freezers.
- 3. Expertise: Taxonomic, study and culture of microorganisms from diverse environments, natural and cultured microorganisms and high-throughput microorganisms.
- 4. Technology platforms: "Microorganisms flow cytometry", "Microbial biology, natural product", "Microbial ecology, genomics, whole genome sequencing and data analysis, and data analysis."
- 5. Antimicrobial screening: Antimicrobial, anti-viral, anti-fungal activities against several pathogens.

Figure 10. TNA flyer.

NOW OPEN

IS_MIRRI21 First Transnational Access Call

25 January to 16 April 2021

[More Info](#)

© Institut Pasteur/Chantal Le Bouguéneç, Laurent Debarbieux et Perrine Somme, Colorisation Jean

© Institut Pasteur

Figure 11. TNA first call banner.

3.1.3. Functional materials for the consortium

These sets of materials are editable templates, principally made for the consortium members to use for creation, diffusion or assessment of dissemination materials and activities. The templates are living documents and can be edited upon request by the partners. The aim of these materials is to guide and ease the process for the partners that are developing specific outputs and need instructions in order to attain consistent results e.g., developing news text, presenting IS_MIRRI21 to external audiences, etc. Table 3 shows the functional materials developed by WP7 for the consortium. All materials below are available on the synology server for internal use.

Table 3. Templates developed by WP7 for the consortium to use for different dissemination outputs.

Materials	Release date	Purpose and content
Standard PPT for IS_MIRRI21	09/09/2020	This is a brief presentation of 10 slides about IS_MIRRI21, demonstrating its objectives, work packages, partners, outcomes and contact. It has been adapted and used by partners to present IS_MIRRI21 at events such as the International Microorganism Day in 2020.
Certificate of participation	08/01/2021	This is a one-page certificate in English that can be used as evidence of participation or attendance for participants of internal project events such as workshops and webinars organised by project partners. This material has been used for the participants of WP8 workshop held on 23/10/2020 titled: <i>Implementation and Sustainability Microbial Research Resource Infrastructure for the 21st century.</i>
Word and PowerPoint Presentation templates	21/04/2020	The Word template is used for reporting and submission of deliverables and project reports in a consistent format for the whole consortium. This template has been used for the submission of deliverables in different WPs. The PPT template is used for presentations in internal consortium meetings and/or external events. This template is used on a regular basis by all partners for internal meetings.
WP7 Six months dissemination report template	10/08/2020	This template is developed and used by SPI as the leader of WP7 to collect reports of the dissemination actions taken by the partners contributing to WP7. This task is seen for the purpose of monitoring and assessing the impact and measuring KPIs every six months. This template was first used in M7 for the first six months of the project duration. The second template was sent to the partners in M13 to report on the second half of the first year of the project.
Press release templates	29/06/2020	This template is used by the project partners to autonomously develop text for news pieces about events and development within the IS_MIRRI21 project. The template contains instructions on how to write the script and which aspects to take into consideration. This template has been used for the 10 press releases that are published on the project website.
Collection of pictures	ongoing	This is a database of authentic pictures of scientific materials, microscopic images of microorganisms such as bacteria, bacteriophage, viruses, microalgae, fungus, yeast, etc., supplied by the majority of the partners. This

		collection of over 150 pictures is stored with their credits and copyright is acknowledged in all of the outputs in which they are used. The pictures have been used in the first and second project newsletters, project website and Standard PPT for IS_MIRRI21, among other documents. This is an open database for the partners to use the pictures and add to the collection.
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3.2. IS_MIRRI21 dissemination channels

Project website

The IS_MIRRI21 project website (<https://ismirri21.mirri.org/>) was designed by SPI and the alpha version was approved by all the partners before its launch on 05/06/2020. The website was last updated in November 2020 with the addition of new webpages for publication of scientific materials. The website houses the link to the MIRRI website, synology server and TNA portal.

The website currently has the following sections (Figure 12):

- Home: Introductory description of the project
- About the project: Objectives, work plan and overview;
- Consortium: Partners, Third parties and Advisory/Ethical boards;
- Resources: Promotional materials, Project videos, Newsletters, Project Reports, Scientific Publications, Non-Scientific Publications and External Publications;
- Project platforms: MIRRI website, Transnational Access programme, Collaborative Work Environment;
- News, Events and Calendar
- Contact.

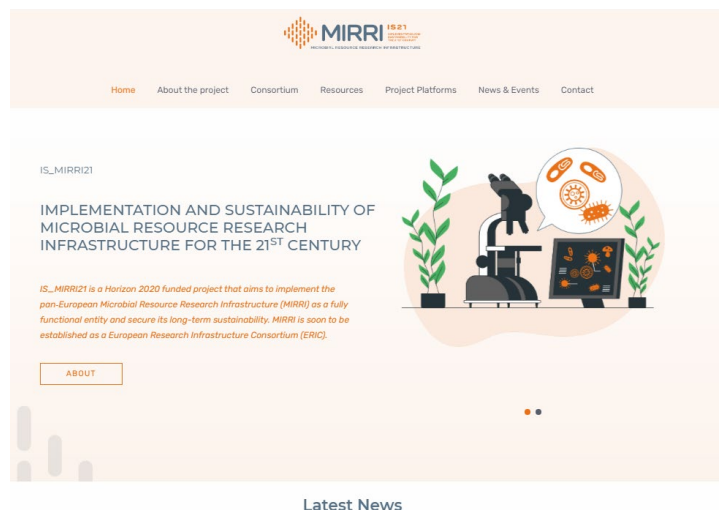


Figure 12. IS_MIRRI21 website home page.

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In addition to communicating the project's background information to all the project stakeholders, the website is used as the main channel for dissemination of news, events, announcements, scientific publications from partners, promotional materials such project brochure and TNA flyer, and informative materials e.g. games and videos. Announcements regarding the TNA calls and vacancies are made through banners on the homepage for maximum visibility (Figure 7). Thus far, two events have been organised by the partners of IS_MIRRI21 for WP4 in September 2020 and WP8 in October 2020, for which separate event webpages were created to give information about the events (Figure 13).

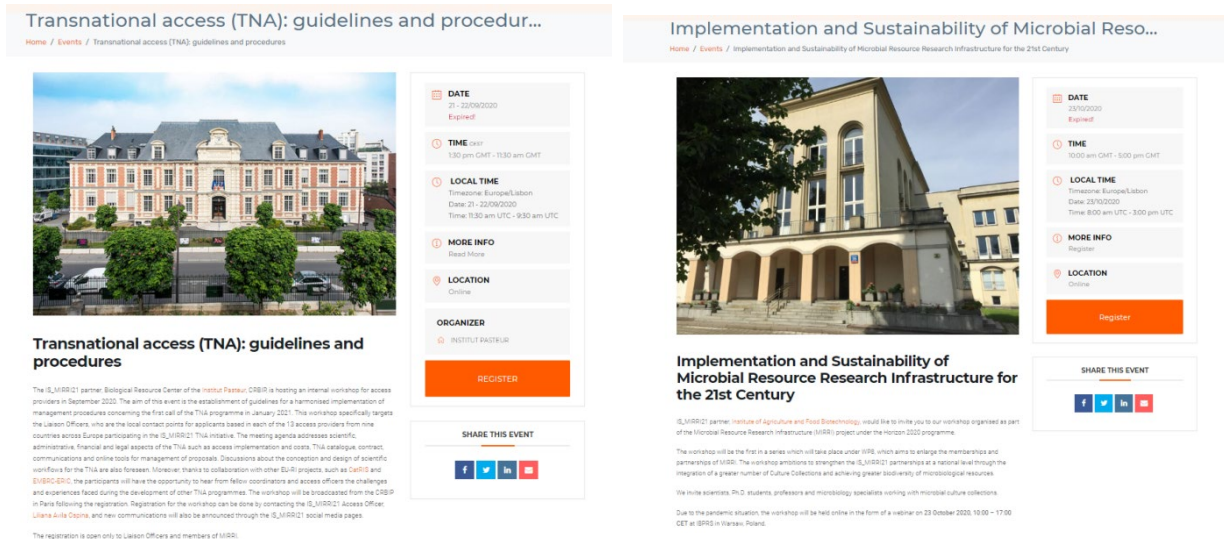


Figure 13. Event webpages for WP4 (left) and WP8 (right) workshops held in 2020.

The website analytics extracted in January 2021 is shown on Figure 14. The findings indicate the website had 4233 views since its launch with over 70% of the views coming from new visitors. As is seen on the graph below, the views spiked in June and between September and October 2020. The first spike is understood to be as a result of launching the website and visitation from partners and networks. However, the heightened interest from the target audiences in September and October was triggered by the two internal events which were organised under WP4 and WP8 in September and October 2020 and the participation of IS_MIRRI21 in the Research and Innovation Days side event, Science is Wonderful and International Microorganism Day in the last two weeks of September 2020. According to the web analytics, the majority of viewers are from Portugal, followed by Italy and Poland with above 10% of the views.

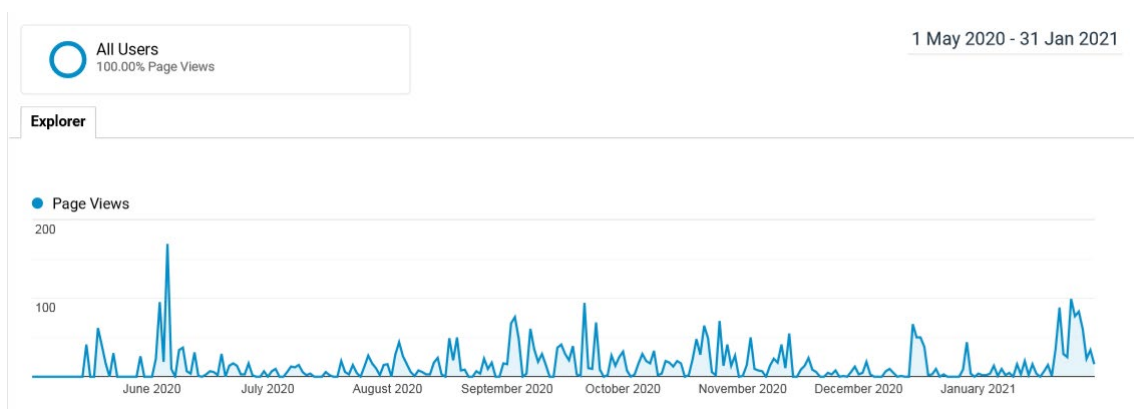


Figure 14. IS_MIRRI21 website analytics (M1-M12).

The website is also gaining interest from stakeholders in countries such as United Kingdom, United States of America and Germany, which do not belong to MIRRI or the IS_MIRRI21 consortium (Table 4).

Table 4. Top-10 IS_MIRRI21 website users (M12).

#	Countries	Users of IS_MIRRI21 website (%)
1	Portugal	23.3%
2	Italy	14.2%
3	Poland	13.6%
4	France	8.8%
5	Belgium	8.5%
6	Spain	8.8%
7	United States of America	4.2%
8	Germany	2.7%
9	Greece	2.4%
10	United Kingdom	2.1%

Social media channels

There are five social media channels for IS_MIRRI21:

- Twitter: https://twitter.com/MIRRI_live
- LinkedIn (showcase page): <https://www.linkedin.com/feed/update/urn:li:activity:6745680540843708416>
- Facebook: <https://www.facebook.com/mirri.esfri/>
- ResearchGate: <https://www.researchgate.net/project/IS-MIRRI21-Implementation-and-Sustainability-of-Microbial-Resource-Research-Infrastructure-for-21st-Century>
- YouTube Channel: <https://www.youtube.com/user/MicrobialResourceRI>

Twitter, Facebook and LinkedIn are the most actively used channels for the dissemination of messages for IS_MIRRI21. As IS_MIRRI21 and MIRRI share a stakeholder base, the existing dissemination and communication channels of MIRRI i.e. Twitter and Facebook were revamped in aesthetics and designation for IS_MIRRI21. In this manner, the followers of MIRRI were not lost and can continue to receive information about the progress of MIRRI through IS_MIRRI21. Nevertheless, a new showcase page for LinkedIn (associated with the SPI company page), YouTube channel and ResearchGate were opened in June 2020. However, it was later realised that as MIRRI is an existing organisation, it was more practical to have a new company page for MIRRI with a new LinkedIn showcase page for IS_MIRRI21 which is linked to the MIRRI company page. The new MIRRI page would allow the member partners of MIRRI to connect their LinkedIn personal pages to the MIRRI company page (see Section 3.3). As a result, a company page was set up for MIRRI (<https://www.linkedin.com/company/microbial-resource-research-infrastructure/>) together with a new showcase page for IS_MIRRI21 in November 2020. In order not to lose the followers of the first showcase page for IS_MIRRI21, messages were posted on the LinkedIn pages and private messages were sent to followers informing them to subscribe to the new MIRRI company and IS_MIRRI21 showcase pages. The LinkedIn group for MIRRI which was used in the preparatory stage of MIRRI (FP7 project, 2021-2016), has been open but not actively used by the members and thus, it has been left inactive from December 2020 onwards.

D7.1: Outreach and Dissemination Strategy

IS_MIRRI21 is using the celebration of special occasions such as the recognised dates for scientific breakthroughs, birth of scientists that have significant contribution in biology and international campaigns related to microbiology, among others (Figure 15). A calendar has been provided to the consortium to propose special occasions that IS_MIRRI21 could support through social media campaigns or launching public engagement events targeting lay audiences.

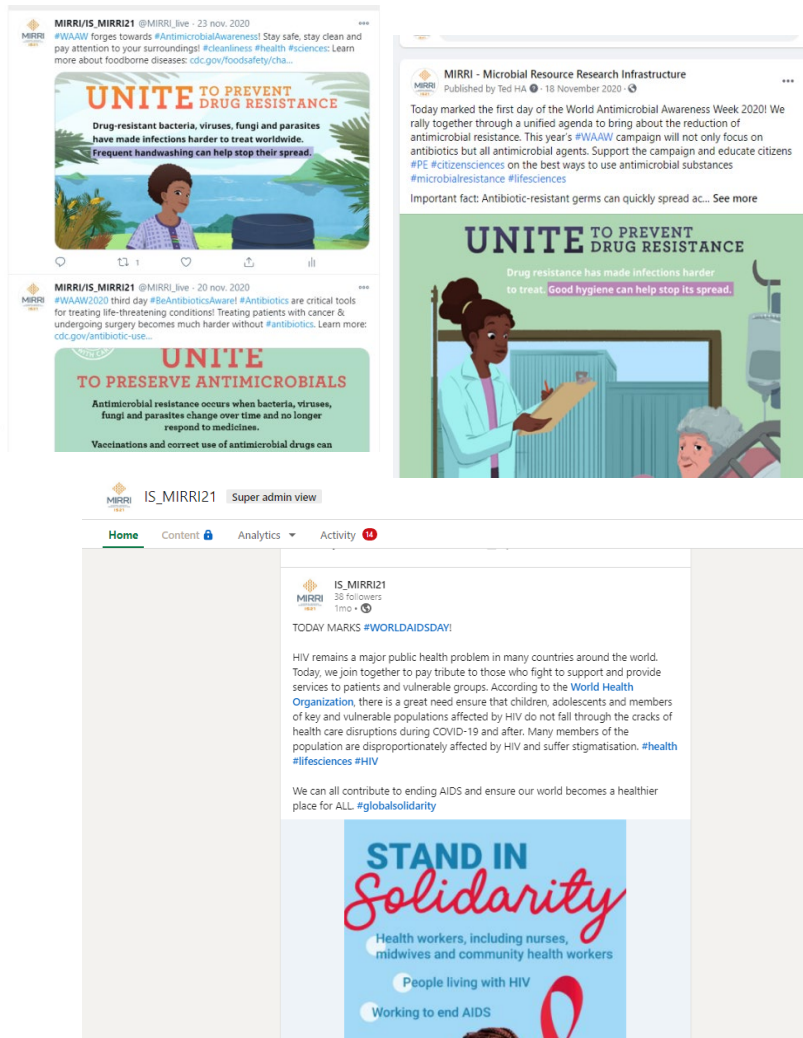


Figure 15. IS_MIRRI21 social media campaign for the #World Antimicrobial Awareness Week (top) and #WorldAIDS Day (bottom).

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The analytics of the social media pages from end of January are seen on Table 5.

Table 5. Analytics from the social media pages of IS_MIRRI21.

Social media channels	Before launch of IS_MIRRI21	After launch of IS_MIRRI21		Hashtags used
	Followers	Followers	Posts	
Twitter	400	500	57	#EU_RIs; #lifesciences;
Facebook	650	733	57	#science; #LSRIs;
LinkedIn	-	45	61	#microbiology; #research; #RI;
IS_MIRRI21 page	-	-	-	#TNA; #workshop; #Call;
ResearchGate	-	7	5	#H2020; #publicengagement;
YouTube Channel	-	67	3	

Some of the observations made from the social media pages are:

- Twitter has registered a faster increase in followers than the other social media channels.
- Posts regarding events organised by the project partners gain the most traction and interaction with the posts spikes around the duration of the event.
- Posts relating to the TNA programme and TNA call attract the highest number of visits on the social media pages.
- Naming and tagging specific organisations in the posts widens the outreach of the message.
- The IS_MIRRI21 partners are active in visiting the pages frequently and reporting the messages for broader outreach.

In addition to the dissemination through the project social media channels, as contributors to WP7's implementation, all the partners and third parties perform dissemination of MIRRI and IS_MIRRI21 through their organisational website and social media pages autonomously. Through the six month dissemination reports gathered, partners such as UVEG-CECT, IP, CCG, ULPGC-BEA and UNITO have contributed through website, LinkedIn, Facebook and Twitter to disseminate the project brochure, TNA calls, press releases and newsletters.

3.3. MIRRI promotion and dissemination

The promotion of IS_MIRRI21 and MIRRI move in parallel streams as MIRRI is a Research Infrastructure (RI) which is being implemented through the IS_MIRRI21 project. Keeping this in mind, several materials and channels have been designed and developed solely for the promotion of MIRRI to become a European Research Infrastructure Consortium (ERIC).

Promotional materials

MIRRI as the key output of IS_MIRRI21 is an essential ingredient in the promotion of IS_MIRRI21's activities and results. Nevertheless, it is vital that MIRRI increases its recognition as an independently functioning entity among the stakeholders of IS_MIRRI21 and close networks. In this light, the original MIRRI logo was adapted by SPI in M12 to add 'Partner of' above the logo for the official partners of MIRRI to use it in their promotion of MIRRI. This, consequently, would create a higher recognition of MIRRI as a fully functional RI among the networks and associates of the MIRRI partners (Figure 16). At the time of this report writing, at least one of the partners (e.g. UVEG-CECT) of MIRRI has used the adapted logo on their organisational website.



Figure 16. Adaptation of the original MIRRI logo with 'Partner of' for the members of MIRRI.

In addition, a press kit for the introduction and dissemination of MIRRI is under development. The press kit consists of three articles, i) MIRRI standard PowerPoint Presentation, ii) one page infographics about MIRRI with key facts and figures, and iii) one page profile description of MIRRI. The purpose of the press kit is to present MIRRI in one package to potential members and journalists with interest in creating synergies or supporting MIRRI as a RI. The press kit is foreseen in March 2021.

Dissemination channels

The MIRRI official website (<https://www.mirri.org/>) is under refurbishment to revitalise the key features of the portal. The new MIRRI website is part of Gate 1 of the Collaborative Work Environment - CWE (WP6). SPI as the leader of WP7 has supported development of MIRRI website to adopt a similar layout and design as the IS_MIRRI21 website. The website should be live in the first half of the second year of the project. However, the task of renovating the website is performed by CCG with the support of UVEG-CECT on the content and the infrastructure configurations, under WP6.

In terms of social media, SPI launched a MIRRI LinkedIn company page (<https://www.linkedin.com/company/microbial-resource-research-infrastructure/>) in M10 that is now maintained by UMinho (Table 6). The company page allows the member of MIRRI to link their LinkedIn pages to it and acknowledge their association to the RI. In addition, news that are more relevant for the future users of MIRRI are disseminated through this page to reach out to the long-term target audiences. In the coming months, the LinkedIn page will be used to introduce the members of MIRRI to the followers with a brief description of the member organisations prepared by the partners. The partners of MIRRI have been requested to provide a brief introduction of the organisation with a picture of the institutions for the promotion of MIRRI in the future. The posts will be made on Facebook and LinkedIn starting in February 2021, after the deadline for submission of the scripts.

Table 6. MIRRI LinkedIn company page statistics until M12.

Social media channel	Followers	Posts
MIRRI LinkedIn company page	260	25

3.4. Internal and external events

Events, either organised or attended, by the partners are key activities for the engagement of stakeholders and publics. Due to the outbreak of COVID-19, events have been limited to online means. The consortium has an online spreadsheet on the synology server in which all upcoming and past events are recorded. All the partners are required to inform about new events to WP7 leaders for promotion via the project dissemination channels and update the file on the synology server if and when needed.

3.4.1. Internal outreach and other targeted activities

Since the launch of the project, two internal events have been organised and successfully conducted under WP4 and WP8. The events were actively diffused through press release and social media pages, before, during and after the workshops.

WP4: This workshop titled 'TNA: guidelines and procedures' was organised by IP and conducted over a two-day run on 21/09/2020 and 22/09/2020. The aim was to communicate to Liaison Officers and other IS_MIRRI21 members the policies and procedures needed for the implementation of the Transnational Access pilot programme in the two TNA calls planned for 2021 and 2022. The workshop was attended by a total of 40 people in the course of two days.

WP8: This workshop titled 'Implementation and Sustainability of Microbial Resource Research Infrastructure for the 21st Century' was organised and broadcasted by IAFB on 23/10/2020. The event aimed to integrate Culture Collection partners from a variety of fields as Potential Partners for the pan-European RI, MIRRI. The workshop was attended by a total of 64 people. Eight participants of the workshop were provided a Certificate of Participation by IAFB.

3.4.1. External events and other targeted activities

Participation in external events

The partners of IS_MIRRI21 have thus far participated in 24 external events including seminars, summits, assemblies, conferences, and workshops (Table 7). These events were organised by various networks of the consortium and renowned international conferences e.g. European Research and Innovation Days, Portuguese Society of Microbiology, Afiche Simposio, Biotech Atelier, Belgian Society of Microbiology, 4th Microbiome Movement and Group of interests EU-CELAC, among others and were conducted virtually due to the COVID-19 pandemic. These external events are scouted by all partners of IS_MIRRI21 and their third parties and all partners are informed about them by email.

Table 7. List of events attended by IS_MIRRI21 and MIRRI partners (M1-M12)

Name of event	Organiser	Type of dissemination	Representatives of IS_MIRRI21/MIRRI
Science is Wonderful	European Commission	<ul style="list-style-type: none"> Open booth Educational video Live presentation of project Promotional materials 	SPI; MINHO; UNITO; IP; INRAE-CRIM
International Microorganism Day	Federation of European Microbiological Societies (FEMS)	<ul style="list-style-type: none"> Educational video Live presentation of project Promotional materials 	UMinho
New Technologies and Innovations Day	Academic Centre & House of Science of University of Latvia	Live presentation of project	UL
Afiche Simposio event	Afiche Simposio	Live presentation and representation of the project	UMinho
Biotech Atelier workshop	Biotech Atelier	Live presentation and representation of the project	UVEG-CECT
5th General Assembly of RARe	French Infrastructure for Research in Agronomic Resources (RaRe)	Live presentation and representation of the project	INRAE-CRIM
Belgian Society of Microbiology	Belgian Society of Microbiology	Live presentation and representation of the project	BELSPO
Workshop: Biodiversity and Climate Change	EU-CELAC Cooperation	Live presentation and representation of the project	IAFB
Workshop: Food security	EU-CELAC Cooperation	Live presentation and representation of the project	BELSPO
Microbiome, Health & Disease: Research, Regulatory & Policy	4th Microbiome	Live presentation and representation of the project	UMinho
REBECA workshop	Red de Excelencia en Biotecnologia Azul	<ul style="list-style-type: none"> Live presentation and representation of the project Educational video 	BEA

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		<ul style="list-style-type: none"> Promotional materials 	
Scientific day on Microbiota: Estrategia de Impulso de la Biotecnología Azul en la Macaronesia: Hoja de ruta 2020-2030	French Infrastructure for Research in Agronomic Resources (RaRe)	Live presentation and representation of the project	INRAE-CIRM
Africa-Europe Symposium on Research Infrastructures	Expanding research infrastructure visibility to strengthen strategic partnerships (RI_VIS)	<ul style="list-style-type: none"> Open booth Educational video Promotional materials 	BELSPO; IP; SPI
ERIC Forum meeting 2021	ERIC Forum	Representation of the project	UMinho
Management of biopolymers-producing microorganisms within the Unimore Microbial Culture Collection	University of Modena and Reggio Emilia Department of Life Sciences	Live presentation and representation of the project	UNITO - UNIMORE
Selezione di ceppi microbici altoproduttori di cellulosa microbica	University of Modena and Reggio Emilia Department of Life Sciences	Live presentation and representation of the project	UNITO - UNIMORE
Duties and opportunities for culture collections after the entrance into force of the new EU regulations on ABS	Biotech4Ocean	Live presentation and representation of the project	UNITO
Conservazione, tutela e valorizzazione della agrobiodiversità microbica della Sardegna	MicroBioDiverSar project: Sardinia Region and the Italian Ministry for Agriculture Policies	Live presentation and representation of the project	UNITO
Management and exploitation of bioresources: the fundamental roles of the Microbial Culture Collections	University of Modena and Reggio Emilia Department of Life Sciences	Live presentation and representation of the project	UNITO - UNIMORE
MicroBioSpain: la colección de microorganismos españoles accesible	UVEG-CECT and CNTA	Live presentation and representation of the project	UVEG-CECT
II Simposio Chileno de Valoración y Conservación de los Recursos Microbianos	Instituto de Investigaciones Agropecuarias (INIA), Banco de Recursos Genéticos Microbianos (BRGM) y Universidad	Live presentation and representation of the project	UVEG-CECT

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	Católica del Maule		
Il ruolo delle collezioni microbiche e dei networks dei Centri di Risorse Biologiche nello sviluppo delle biotecnologie	University of Modena and Reggio Emilia Department of Life Sciences	Live presentation and representation of the project	UNITO - UNIMORE
MIRRI: A coordinated platform to manage microbial resources to support research in biotechnology	IR ESFRI: University of Milano - Bicocca	Live presentation and representation of the project	UNITO
Informative report regarding to IS_MIRRI21 mission and main tasks of MSCL-UL partnership	Department of Microbiology and Biotechnology Faculty of Biology, Institute of Microbiology and Biotechnology, and Latvian Society for Microbiology.	Live presentation and representation of the project	UL

Through participation in the external events, interest in membership of MIRRI has been raised and the partners of MIRRI have been contacted by a potential member from Luxemburg requesting for a formal conversation in November 2020 (the request was handled by UMinho, IAFB, UVEG-CECT and BELSPO). In addition, through UL's participation in external events, face to face consultations with target users and stakeholders from Madara Cosmetics JSC Ltd., Silvanols Ltd., Alternative plants Ltd., Best berry Ltd., and L.E.V. Ltd. were conducted between 01/06/2020 and 23/07/2020 in respect to the services of IS_MIRRI21. Participation in exceptional and distinguished events such as Science is Wonderful 2020 event of the Research and Innovation Days and International Microorganism Day organised by the FEMS has given an opportunity to IS_MIRRI21 and MIRRI to be visible and gather new interest from diverse stakeholder classes. As an example of how the project partners jointly organised outreach activities through external events, below is a detailed account of the action taken to realise the participation of IS_MIRRI21 in the Science is Wonderful event of the European Research and Innovation Days.

IS_MIRRI21's participation in the Science is Wonderful 2020 event

In the Science is Wonderful event, IS_MIRRI21 made a bid for a virtual exhibition booth with a proposal to engage citizens by way of exercises about microorganisms' effect on human lives. The event took place online from 22/09/2020 to 24/09/2020 with 40 international projects that secured a booth at the exhibition to engage children, citizens and stakeholders throughout the three intensive days of the event. In preparation for the event, the booth was designed to reflect the visual identity and four IS_MIRRI21 partners (SPI, UMinho, UNITO and IP) collaborated to develop an educational video entitled 'Superbugs and amazing microbes' about microorganisms and their effects on humans and the environment for display on the booth. In addition, IS_MIRRI21 held nine live presentations (seven in English and two in Portuguese) via Zoom which were accessible through the virtual booth of IS_MIRRI21 on the platform of Science is Wonderful and directly interacted with 29 participants. Throughout the three days of the event, the partners and

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collaborators of IS_MIRRI21 conversed with many target audiences about the project's vision and activities from the stance of the virtual booth. The event showed great levels of creativity and encouragement toward public engagement and science education. A social media campaign was launched on the IS_MIRRI21 twitter, Facebook and LinkedIn pages throughout the event (Figure 17).

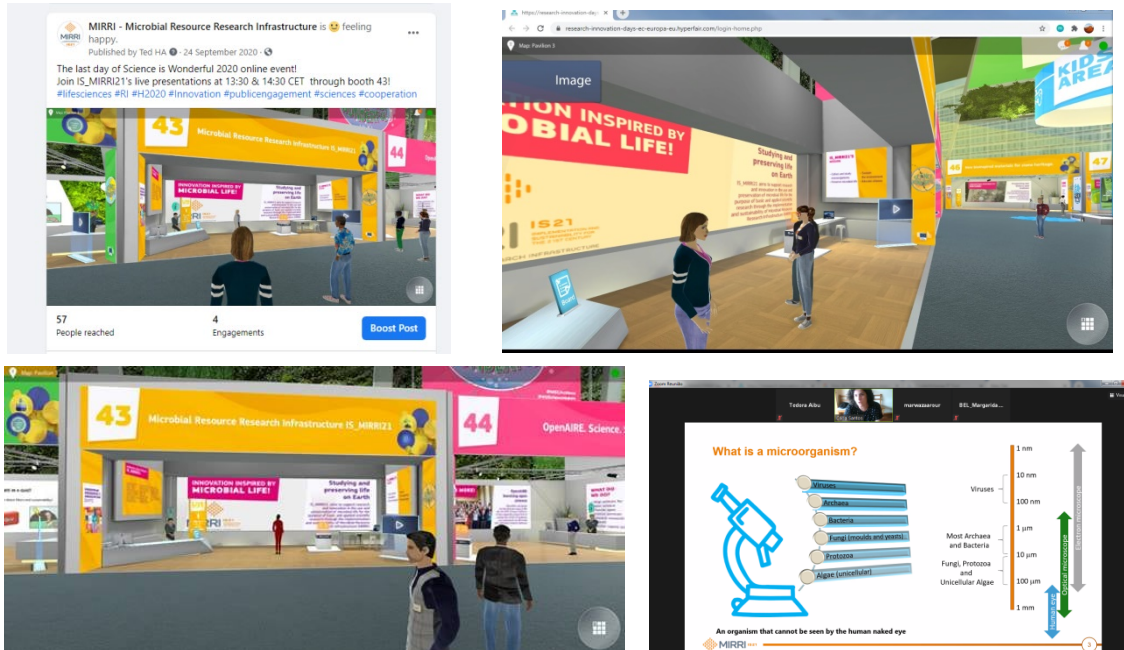


Figure 17. IS_MIRRI21's booth at the Science is Wonderful 2020 event.

IS_MIRRI21's Proposal for Science is Wonderful

Superbugs and amazing microbes

A PowerPoint interactive presentation on superbugs and how they affect human lives. This presentation will be oriented towards citizens with basic knowledge of human physiology and microbiology. The content will include: what superbugs are; how they are formed; how they affect human health; why we are susceptible to them; how to prevent infections; how drugs to combat them are being developed; what scientists expect to be their effect on human lives in the coming decades; and what citizens can do to protect themselves and contribute to scientific research. Depending on the platform, the presentation can be recorded or presented live. Q&A and discussion session will proceed.

IS_MIRRI21 has also participated in activities of other EU funded projects such as MicrobiomeSupport for the World Microbiome Days 2020. Three IS_MIRRI21 partners, IP, UNITO and INRAE contributed experts in microbiology acting as [#MicrobiomeAmbassadors](#) for the online campaigns in view of engaging and connecting with lay audiences and promote the scientific study, recognition and security of microbial life and scientists' contribution to the field (Figure 18).

D7.1: Outreach and Dissemination Strategy



Figure 18. Three partners of IS_MIRRI21 participate in the World Microbiome Day 2020 competition as #MicrobiomeAmbassadors.

Local promotion of IS_MIRRI21 and MIRRI

IS_MIRRI21 and MIRRI were represented on a national television show in Portugal by the coordinator of IS_MIRRI21, UMinho, to promote the solutions and advantages that a pan-European RI such as MIRRI present to the current fragmentation of microbial resources across European Culture Collections. Two interviews were conducted in Portuguese on the most viewed TV channels in Portugal, RTP 3 ([Rádio e Televisão de Portugal](#)) and Porto TV. The interviews have been posted on the [website](#) and YouTube Channel (Figure 19). IS_MIRRI21 was also locally promoted by UMinho through the university press in the local language and through radio interviews with the project coordinator in M1.



Figure 19. Professor Nelson Lima from the UMinho talks about IS_MIRRI21 and MIRRI on RTP 3 Portuguese channel (left) and Porto TV (right).



4. Action plan and Next steps

4. Action plan and next steps

An action plan was proposed in D7.1 to serve as a guide for the timely implementation of activities and actions for the dissemination and outreach related tasks of the project. The implementation of some tasks such as the organisation of interactive events for lay audiences and participation in grand physical events has been affected by COVID-19. Nevertheless, for the continuous and successful implementation of all the actions, an overall tentative action plan for the remaining months of the project is shown in Table 8.

Table 8. Action plan dissemination and outreach strategy for the remaining months of the project.

#	Promotional tools and channels	Action	Tentative timeline	Contributing Partners
1	Project website	Regular updates to the project website	January 2021 - January 2023	SPI
		Updates to the TNA webpage for the second TNA Call	November/December 2021	SPI (update), WP4 partners (content)
		Integration of the preliminary version of CWE	July 2021	SPI, support of WP6, UMinho
2	TNA Calls	Promotion of the 1st TNA call	January - April 2021	All partners (SPI to manage the dissemination tools)
		Final version of 2nd TNA call flyer	December 2021	SPI (design), WP4 partners (content)
		Promotion of the 2nd TNA call	November 2021 - March 2022	All partners (SPI to manage the dissemination tools)
3	Project promotional materials	Final version of project brochure in French, Italian and Russian	March 2021	SPI (design), INRAE (translation)
		Final version of project roll-up in French, Italian and Russian	March 2021	SPI (design), INRAE (translation)
		Final version of the introductory video on IS MIRRI21	April 2021	SPI
4	Informative dissemination materials	Multimedia: Infographics and games for IS_MIRRI21	January 2021 - January 2023	SPI, support of all partners
		Publish scientific materials on the project website	January 2021 - January 2023	SPI, support of all partners
		Final version of the explanatory video on the CWE	April - May 2021	SPI, UMINHO, All Partners
		Final versions of 5 to 10 video capsules related to microbes and their roles in society	January 2022	BELSPO, All Partners
		Short educational videos for lay audience	January 2021 - January 2023	SPI, support of all partners
5	News	Final versions of remaining Newsletters	M18, M24, M30, M36	SPI, All partners (content development)
		Press releases	January 2021 - January 2023	All partners
		MIRRI Press Kit	March 2021	SPI, UMINHO, All Partners
6	Social media	Posts on Twitter, Facebook and LinkedIn	January 2021 - January 2023	SPI, support of all partners

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		Promotion of the MIRRI partners on social media	February 2021 - June 2021	SPI, all partners of MIRRI (provide description)
7	Internal events	WP3 webinar on ISO 20387:2018	March 2021	KNAW (organise), SPI (support)
		WP3 workshop on ABS	June 2021	KNAW (organise), SPI (support)
		WP3 workshop on Biosecurity WS	June 2021	KNAW (organise), SPI (support)
		WP3 workshop on ISO 20387:2018	June 2021	KNAW (organise), SPI (support)
		WP3 workshop for mBRCs and international experts	January 2022	KNAW (organise), SPI (support)
		WP4 Symposium 1	January 2022	UVEG-CECT, SPI supports
		WP4 Symposium 2	July 2022	UVEG-CECT, SPI supports
		WP8 six workshops for mBRCs	January 2021 - January 2023	IAFB, support of all partners
		WP8 first International workshop	September 2021	IAFB, support of all partners
		Public engagement events	January 2021 - January 2023	UMINHO, support of all partners
8	External events	Participation in external events	July 2020 - January 2023	All partners
9	Direct consultancy	Direct consultancy, contacting stakeholders	January 2021 - January 2023	UMINHO, All partners
10	Project final conference	Project final conference	June 2022 - January 2023	UMINHO, BELSPO
		Development of the project final conference	June 2022 - January 2023	SPI, support of all partners
11	Surveys	Developing the dissemination design and communication	January 2021 - January 2023	SPI, inputs from WP3/WP4/WP8

KPIs and Impact evaluation and monitoring

Quantitative indicators

Impact assessment is a key factor for monitoring the outcomes of the dissemination and outreach activities. Impact evaluation is carried out throughout the lifespan of the project. KPIs are important quantitative indicators used by the project to gauge the outreach capacity of the project and its partners. In order to keep the consortium in the same loop regarding the dissemination and outreach activities, a conference call is organised every two months by SPI as the leader of WP7 to inform of the current developments in the WP and gather their insights and recommendations. Thus far, four calls have been made since the launch of the project. In addition, regular communication with partners is carried out through the Project Steering Committee and General Assembly meetings. Table 9 below presents the main quantitative targets defined for the project lifetime.

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Table 9. The quantitative indicators and results of IS_MIRRI21 dissemination activities (M12).

Measures	Indicators	Target	Met
IS_MIRRI21 website	Number of visitors	10000	4233
	Number of news articles (Press release)	-	10
	Visits to multimedia (Games)	-	78
IS_MIRRI21 YouTube Channel	Number of views	-	113
LinkedIn, Facebook, Twitter, ResearchGate and YouTube	Number of followers	2000	1285
Scientific publications	Number of publications and articles	30	13
Email dissemination (Newsletters)	Number of subscribers	500	103
Brochures / flyers	Number of brochures / flyers distributed	2000	226
Participants in MIRRI events (online/offline)	Number of participants in all dissemination events organised	1000	100
External events, conferences and workshops	Number of external events attended	50	24

Qualitative indicators

The other forms of indicators used are qualitative indicators that provide information on the quality of the dissemination and communication activities. These indicators include direct feedback from participants and followers, group perspective, recommendations and suggestions made on activities, ideas about the success or drawbacks of outcomes or suggestions for the future. Thus far, the IS_MIRRI21 partners have directly interacted with key and potential stakeholders through internal and external events. The feedback from the WP4 and WP8 was generally positive based on the interest and interaction shown during the workshops. However, the participants of WP8 were given an anonymous survey to express their satisfaction after the workshop. From the 22 responses received, 33.3% expressed the desire to receive continuous updates on the project, 76.2% expressed the workshop met their expectations, 81% expressed their satisfaction with the workshop outcomes and 85.7% expressed they would recommend the workshop to colleagues. For external events, based on the feedback obtained in the virtual contact with the participants for the Science is Wonderful event, the presentations had a positive stance and recommendations of topics (e.g. use of microorganisms in the productions of probiotics) to present in the future were also suggested by the participants.

Learning outcomes and recommendations

The first year of the IS_MIRRI21 project was gravely affected by the COVID-19 pandemic in terms of enacting or showing presence in-person consultations and physical events. However, the production of promotional and dissemination materials, which are co-developed with the project partners, was not affected and tends to move at the anticipated pace. Nevertheless, when the project starts to edge to its end and a handful of its major outputs (MIRRI's Research and Innovation Agenda, Transnational Access programme and Education and Training programme, Collaborative Work Environment) are taking shape, the grouping and stratification of target stakeholders will need to be revised. Further identification of individual target audiences (which are currently grouped into five, see Chapter 2) will be done based on the type of external stakeholders i.e. in terms of profession, geographic distribution and the interest they show in the services, offers and outcomes IS_MIRRI21 and MIRRI. As a result, after the identification of these specific target audiences (e.g. PhD students, SMEs dealing with bioremediation, cluster members in the bioindustry, etc.), the approach to the dissemination of the project activities, especially concerning the development of targeted long and short-term dissemination materials (e.g. scientific papers, promotion of services, targeted social media posts) and scouting/organising of events that would interest the explicit target audiences would be redefined to meet the needs of the target audiences with a higher interest in the project.

In view of how communication and engagement with stakeholders have been altered due to the pandemic, the project consortium is putting more effort into scouting online events and seeking ways to co-create and co-organise events with European initiatives such as H2020 project Expanding research infrastructure visibility to strengthen strategic partnerships (RI_VIS)², international initiatives e.g. La Federación Latinoamericana de Colecciones de Cultivos (FELACC)³ and the World Federation of Culture Collections (WFCC)⁴. The project partners will continue to actively push towards higher visibility of IS_MIRRI21 and MIRRI by integrating the promotion of the project and RI into their presentation in local events using local languages e.g. Italian. In addition, public engagement events organised solely by the IS_MIRRI21 partners for the engagement of lay audiences. As the new normal is virtually influenced, interaction through social media is given more attention and partners are frequently asked to provide new content for publication. As a campaign to engage professionals in the bioindustry, short posts and press releases will be developed to present the scientific papers authored by the consortium member in a succinct format.

In the current global health state that we are in, the social media and website channels are the main means of communication that IS_MIRRI21 has for the dissemination to external stakeholders. As can be seen on the website and social media analytics, highly specific activities organised by the consortium tend to attract a greater level of attention and interaction. This shows that IS_MIRRI21 and MIRRI offer very specific services that interest specific groups of stakeholders related to academia or the bioindustries. To widen IS_MIRRI21 and MIRRI's visibility among these groups, WP7 will scout LinkedIn and Facebook groups, and expert discussion forums that focus on thematic areas related to microbiology, biotechnology, pharmaceuticals and other specialisation areas of IS_MIRRI21 and MIRRI.

The dissemination about the targeted internal events (i.e. augment the membership of MIRRI under WP8 or the TNA calls under WP4 or evaluation of MIRRI CWE by the end-users under WP6) need to be diffused further through the support of the partners' organisations. It is essential for the partners to repost the social media messages to boost knowledge about the events among key and potential target audiences.

² Expanding research infrastructure visibility to strengthen strategic partnerships (RI_VIS). Retrieved: 30/01/2021. Link: <https://ri-vis.eu/network/rivis/home>

³ La Federación Latinoamericana de Colecciones de Cultivos (FELACC). Retrieved: 30/01/2021. Link: <http://felacc.cinvestav.mx/>

⁴ World Federation of Culture Collections (WFCC). Retrieved: 30/01/2021. Link: <http://www.wfcc.info/>



5. Annex

5. Annex

5.1. List of the 13 scientific articles available on the IS_MIRRI21 webpage

Authors	Title (Year)	Type of access	Digital Object Identifier
Shi W, Sun Q, Fan G, Hideaki S, Moriya O, Itoh T, Zhou Y, Cai M, Kim SG, Lee JS, Sedlacek I, Arahall DR, Lucena T, et al.	A high-quality type strain genome database for microbial phylogenetic and functional research (2020)	Open Access content	doi: 10.1093/nar/gkaa957.
Sanz-Sález I, Salazar G, Sánchez P, Lara E, Royo-Llonch M, Sà EL, Lucena T, Pujalte MJ, Vaqué D, Duarte CM, Gasol JM, Pedrós-Alió C, Sánchez O, Acinas SG	Diversity and distribution of marine heterotrophic bacteria from a large culture collection (2020)	Open Access content	doi: 10.1186/s12866-020-01884-7.
Pascual JA, Ros M, Martínez J, Carmona F, Bernabé A, Torres R, Lucena T, Aznar R, Arahall DR, Fernández F	Methylobacterium symbioticum sp. nov., a new species isolated from spores of Glomus iranicum var. tenuihypharum. Curr Microbiol (2020)	Subscribed content	doi: 10.1007/s00284-020-02101-4.
Lucena T, Sanz-Sález I, Arahall DR, Acinas SG, Sánchez O, Pedrós-Alió C, Aznar R, Pujalte MJ	Mesonina oceanica sp. nov., isolated from oceans during the Tara oceans expedition, with a preference for mesopelagic waters (2020)	Subscribed content	doi: 10.1099/ijsem.0.004296.
Arahall DR.	Opinions (2020)	Free content	doi: 10.1099/ijsem.0.004390.
Lucena T, Arahall DR, Sanz-Sález I, Acinas SG, Sánchez O, Aznar R, Pedrós-Alió C, Pujalte MJ	Thalassocella blandensis gen. nov., sp. nov., a novel member of the family Cellvibrionaceae. Int J Syst Evol Microbiol (2020)	Free content	doi: 10.1099/ijsem.0.003906.
Gerard Verkley, Giancarlo Perrone, Mery Piña, Amber Hartman Scholz, Jörg Overmann, Aurora Zuzuarregui, Iolanda Perugini, Benedetta Turchetti, Marijke Hendrickx, Glyn Stacey, Samantha Law, Julie Russell, David Smith, Nelson Lima	New ECCO model documents for Material Deposit and Transfer Agreements in compliance with the Nagoya Protocol (2020)	Open Access content	doi: 10.1093/femsle/fnaa044.
Hernández-Alcántara, AM, Pardo, S, Mohedano, ML, Vignolo, GM, de Moreno de LeBlanc, A, LeBlanc, JG, Aznar, R, López, P	The Ability of Riboflavin-Overproducing Lactiplantibacillus plantarum Strains to Survive Under Gastrointestinal conditions	Open Access content	doi: 10.3389/fmicb.2020.591945.

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	(2020)		
Infante-Domínguez C, R. de la Haba R, Corral P, Sanchez-Porro C, Arahal DR, Antonio Ventosa	Genome-based analyses reveal a synonymy among <i>Halorubrum distributum</i> Zvyagintseva and Tarasov 1989; Oren and Ventosa 1996, <i>Halorubrum terrestre</i> Ventosa et al. 2004, <i>Halorubrum arcis</i> Xu et al. 2007 and <i>Halorubrum litoreum</i> Cui et al. 2007. Emended description of <i>Halorubrum distributum</i> Zvyagintseva and Tarasov 1989; Oren and Ventosa 1996. <i>Int J Syst Evol Microbiol</i> (2020)	Open Access content	doi: 10.1099/ijsem.0.003956.
Arahal DR	Opinions 97, 98 and 99 (2020)	Free content	doi: 10.1099/ijsem.0.003921.
Rodrigo-Torres, L., Aurora Zuzuarregul, MA, Coronado, JML, Novella, RA	StrainsApp: el catálogo de microorganismos españoles accesible “on-line”	Free content	https://bit.ly/3c4wMN6
Berg, G., Rybakova, D., Fischer, D., Cernava, T., Champomier-Vergès, M.-C., Charles, T., Chen, X., Cocolin, L., Eversole, K., Herrero-Corral, G., Kazou, M., Kinkel, L., Lange, L., Lima, N., Loy, A., Macklin, J.A., Maguin, E., Mauchline, T., McClure, R., Mitter, B., Ryan, M., Sarand, I., Smidt, H., Schelkle, B., Roume, H., Kiran, S.G., Selvin, J., Souza, R.S.C., Overbeek, L. van, Singh, B.K., Wagner, M., Walsh, A., Sessitsch, A., Schloter, M.	Microbiome definition re-visited: old concepts and new challenges (2020)	Open Access content	doi: doi.org/10.1186/s40168-020-00875-0.
Ryan, M.J., Schloter, M., Berg, G., Kostic, T., Kinkel, L.L., Eversole, K., Macklin, J.A., Schelkle, B., Kazou, M., Sarand, I., Singh, B.K., Fischer, D., Maguin, E., Ferrocino, I., Lima, N., McClure, R.S., Charles, T.C., de Souza, R.S.C., Kiran, G.S., Krug, H.L., Taffner, L., Roume, H., Selvin, J., Smith, D., Rybakova, D., Sessitsch, A.	Development of microbiome biobanks: challenges and opportunities (2021)	Open Access content	doi: 10.1016/j.tim.2020.06.009.



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