

## Enhancing Trust, Integrity, and Efficiency in Research through Next-Level Reproducibility Impact Pathways

## Deliverable 2.1 – Stakeholder Communication & Engagement Plan

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#### **Executive Summary**

Dissemination, exploitation and communication play a vital role in TIER2 as primary means of ensuring knowledge transfer and uptake of results during and after the project's lifetime. The current Stakeholder Communication and Exploitation Plan (SCEP) is developed to define target-specific objectives and highlight concrete implementation actions.

The current version of the SCEP is being developed in M6 of the project (June 2023), with scheduled updates for M24 (December 2025) and M36 (December 2026). This version presents TIER2 target audiences, and how they will be engaged with clear, understandable, coordinated, and effective project-relevant messages, results and tools.

Additionally, the plan presents the main dissemination tools (website, press releases, scientific publications, social media, etc.), accompanied by descriptions, targets and evaluation measures for each.

To measure the effectiveness of the Dissemination, Exploitation and Communication (DEC) efforts, the SCEP also provides a preliminary list of tailored Key Performance Indicators (KPIs) which will be tracked and updated according to project progress and needs in the updated versions of the SCEP. An indicative time schedule for implementation and updates is provided.

#### **List of Abbreviations**

EU – European Union

SCEP - Stakeholder Communication and Engagement Plan

**KPIs - Key Performance Indicators** 

RIO – Research Ideas and Outcomes

RFOs – Research Funding Organisations

EOSC - European Open Science Cloud

SMEs – Small and Medium Enterprises

KERs – Key Exploitable Results

KO – Key Output

R&I – Research and Innovation

EUA - European University Association

ORE - Open Research Europe

H2020 – Horizon 2020

HE – Horizon Europe

PRs – Press Releases

DoA – Description of Action

#### 1. Introduction

TIER2 aims to centre epistemic diversity by investigating reproducibility in different scientific fields and through the lens of different stakeholder groups involved in the scientific process – **researchers**, **publishers**, **and funders**. Aside from a deeper understanding of reproducibility, the project also aims to develop novel tools for improving scientific integrity and reusability of results, and to create recommendations for stakeholders on best reproducibility practices.

To achieve these goals, the project employs a variety of innovative practices, such as co-creation of reproducibility tools together with funders, publishers, and researchers from different fields, assisting in the establishment of new Reproducibility Networks and utilising tools such as autoethnography to provide first-hand accounts of how reproducibility practices are implemented.

The TIER2 SCEP will highlight the best ways to effectively exploit, disseminate and communicate project results for a wide range of direct and indirect stakeholders and audiences. The document will highlight how to best engage participants from different stakeholder groups to take part in cocreation activities, how to advertise project result to the widest possible audience, what key messages TIER2 intends to communicate, what channels will be used for that purpose, and what Key Performance Indicators (KPIs) will be observed in the process.

Primary focus of this deliverable will be the plans for effective communication (promotion of results), dissemination (knowledge transfer and uptake), and exploitation (utilisation of results in policy, science, or industry).

#### 1.1.What is "Dissemination"

Dissemination in TIER2 refers to the proactive promotion of project results to the scientific community and other interested parties alike. Target audiences for dissemination activities include potential users of research outputs or reproducibility tools such as research integrity officers, publishers, or civil society among others. The primary objective is to maximise the uptake of project outputs which in turn contributes to the advancement of science and scientific efficiency in Europe and beyond.

The time frame of dissemination activities is throughout the duration of the project, as soon as there are actionable results or outputs to be promoted. Therefore, finer details for specific dissemination activities will be included in the updated versions of this deliverable in months 24 and 36.

#### 1.2. What is "Exploitation"

Exploitation refers to the utilisation of TIER2 results for policy making, research guidelines or commercial purposes. Aside from targeting the research community, TIER2 results aim to also be exploited by publishers, funders, reproducibility networks and other groups of interest. Successful exploitation of results can lead to innovation in the research funding and publishing pipeline, new legislation and trickle-down benefits to the EU research infrastructure, society and the economy.

The time frame for exploitation activities is once actionable results have been produced. Detailed exploitation strategies will be described in the updated versions of this deliverable in months 24 and 36.

#### 1.3. What is "Communication"

Communication efforts in TIER2 encompass promoting and sharing project activities and outcomes with a broad range of audiences. By doing this, the aim is to increase awareness of the project's mission and objectives, emphasising the significance of project outcomes to the European scientific landscape and to the research community at large. Therefore, communication activities should highlight the knowledge gaps and areas of improvement that the project will address. Since communication primarily targets a non-specialised audience, it is crucial to use accessible language and avoid scientific jargon. The project branding (Annex 2), website, social media and press releases are examples of communication tools that will be used throughout the project duration.

The time frame of communication activities is throughout the entire duration of the project. The communication strategy will be evaluated and adjusted as necessary in the updated versions of this deliverable in months 24 and 36.

#### 2. Who: TIER2 Target Groups

Targeted engagement with stakeholders and wider audiences is imperative for successful dissemination, engagement and communication of results. The list of target groups presented here is based on the outputs from project task 2.1 "Stakeholder Mapping" which focused on identifying and mapping TIER2 stakeholders according to their level of interest, involvement and potential benefit. The stakeholder mapping method utilises the principles of the 5R Framework which puts results, roles, relationships, rules and resources in focus. Table 1 presents a list of the identified stakeholders, ordered by their importance (as identified in task 2.1). The comprehensive stakeholder table from Task 2.1 can be found in Annex 1.

**Table 1**. TIER2 Target groups ordered by importance to the project, as identified in Task 2.1 "Stakeholder Mapping" (Annex 1) and the DoA.

Target Audience	Key Impact		
Research Funders (RFOs)	Innovative assessment framework and tools for prioritising, improving, and monitoring reusability of research results and artefacts; Practical policy and implementation guidelines to improve reproducibility and quality of research, helping to achieve a better allocation of funds.		

Publishers	New models of open publishing and review of articles, storing and providing data; Innovative threaded publications; Reproducible workflows for reviewing research datasets and code.		
Research Managers/Administrators	Reproducibility checklists, best practices and assessment frameworks to ensure high quality research output.		
Research Integrity Officers	Interventions for managing, assessing, and implementing reproducibility practices; Reproducibility checklists and reproducible workflows to implement.		
Research performing organisations	Reproducibility checklists for better reuse of data and results; Reproducibility management plans for FAIR management of data; Reproducible workflows for streamlined research progress.		
Scholarly/learned societies	Policy briefs and best practices for improved reuse and reuptak of results.		
Research Infrastructures	Reproducibility checklists, workflows and tools for implementation into ongoing scientific projects.		
Researchers	Reproducibility checklists, management plans and workflows for ensuring highest possible reuse of results and widest reach for research outputs; Threaded publications and other publishing and review innovations for FAIR publications and data management, as well as wider audience.		
European Open Science Cloud (EOSC)	All TIER2 tools are developed to be integrated in the EOSC, increasing its range of value-added services for increased reproducibility.		

Reproducibility Networks	Introduction to the next-generation reproducibility tools and methodologies; Synthesised information on best reproducibility practices to disseminate within individual networks.
Libraries/Library organisations	Tools for ensuring improved reuse and reuptake of research results which can be promoted and used; Innovative (threaded) publication methods.
Civil society organisations /General Public	Higher quality research outputs and a healthier, more transparent academic landscape.

#### 3. What: Project Results, Outputs and Impacts

TIER2 places the project's Pathways to Impact at the forefront of its communication and dissemination strategy, highlighting the role of key outputs, their expected outcomes, and the Key Exploitable Results (KERs) to measure them in achieving project goals. DEC efforts will therefore be focused on effectively communicating these outputs to their relevant target groups and stakeholders.

**Table 2:** Key project outputs as identified in the DoA.

Key Output (KO)	Description
KO1. Conceptual Framework	TIER2 will create a new framework for assessing reproducibility impact pathways across epistemic contexts, consolidating evidence on the uptake of reproducibility interventions and will provide an inventory of existing reproducibility tools/practices across contexts.
201	This enhanced theoretical/evidential basis will enable shared understanding and orientation on best practices for increasing reproducibility.

	TIER2 aims to create, pilot and implement eight ground-breaking new reproducibility tools. Initial plans presented in the DOA (currently under revision in line with the co-creation strategy), are:		
KO2. Innovative tools & practices	<ul> <li>For researchers: Reproducibility Checklists, Reproducibility Management Planning tools; Tools for reproducible workflows.</li> <li>For publishers: Workflows for review of data/code; tools &amp; standards for "threaded" publications.</li> <li>For funders: Reproducibility Promotion Plans; funder extension of the tool for Reproducibility Management Plans; Reproducibility monitoring dashboard.</li> </ul>		
	These solutions at the levels of policy, technology & practice will empower the key TIER2 stakeholders to take action and implement results.		
KO3. Increased capacity	<ul> <li>TIER2 aims to empower individuals and networks for long-term boost of their capacity by:</li> <li>The Reproducibility Hub – a sustainable, open knowledge base of results, methodologies and interventions related to reproducibility.</li> <li>Engaging &gt;1000 researchers, publishers &amp; funders to increase their skills via outreach, co-creation events and the Reproducibility Hub.</li> <li>Empowering 3 new national reproducibility networks in Widening Participation countries.</li> <li>The increased collaboration and alignment that can be achieved through these linkages aims to increase capacity for action and improve reproducibility across all actors.</li> </ul>		
KO4. Policy Roadmap	TIER2 will come up with a stakeholder roadmap on priorities for future reproducibility, including practical policy & implementation recommendations, guidelines and briefs for research funders, institutions, policy-makers, research administrators, integrity officers, publishers and researchers in Europe and beyond.  Creating future reproducibility scenarios will provide direction and momentum to unite stakeholders in sustainable efforts to address issues of reproducibility for the long-term.		

These Key Outputs, when utilised, will serve as a base for a number of short and medium-term outcomes which directly address the main concerns in reproducibility across contexts. The outcomes represent the desired effects that the project will exert, and the solutions it brings to the field of reproducibility.

The expected outcomes will then lead to a range of long-term impacts specified in the work programme's Destination, aimed at enhancing the EU R&I system, improving access to scientific literature, increasing interconnection of knowledge ecosystems, modernising the higher education sector and more. On a societal scale, enhancing the reliability of research outcomes that inform policy making will bolster confidence in science and research and innovation (R&I) outputs. From an economic standpoint, elevating the quality of scientific production will stimulate the reuse of these results within research and innovation, thereby facilitating a more potent integration of R&I outcomes into the economic sphere.

With the help of targeted DEC activities, the following expected outcomes (EO) and wider impacts (EOW) should become visible by, at the latest, 3 years after the end of the project:

 Table 3: Expected Outcomes of TIER2

Name	Level of influence (Based on Key Outcomes)
Structured Understanding of the underlying drivers of concrete and effective interventions - funding, community-based, technical, and policy - to increase reproducibility of the results & benefits of R&I	Expected Outcome (KO1, KO2 and KO3)
Effective solutions, policy-, technical- and practice-based, to increase the reproducibility of R&I results in funding programmes, communities and dissemination	Expected Outcome (KO2 and KO3)
Enhanced collaboration, alignment of practices and joint action by stakeholders to increase reproducibility, including but not limited to training, specialised careers and guidelines for best practice.	Expected Outcome (KO2, KO3 and KO4)
Increased proportion of reproducible results from publicly funded R&I	Expected Wider Impact (KO1, KO2, KO3, KO4)
Increased re-use of scientific results by research and innovation	Expected Wider Impact (KO3 and KO4)
Greater quality of the scientific production	Expected Wider Impact (KO1, KO2 and KO4)

#### 4. How: Tools and Channels

Engaging and informing the broad audience of TIER2 will be accomplished using a blend of traditional (press releases, social media, etc.) and innovative means (workshops, "Reprohacks", etc.) while also maintaining adaptability regarding tools based on the specific requirements of the

project. This strategy primarily focuses on external communication, detailing the tools and techniques that will be utilised. Within each segment, the strategy highlights how a specific tool is beneficial in the communication or dissemination of TIER2 outcomes.

#### 4.1.Branding

The TIER2 branding and visual identity serve as a base for all other project outlets and outputs. TIER2's visual identity manual can be found in Annex 2, and it features the project logo, fonts and visual elements. Additionally, corporate templates for presentations, milestones and deliverables were created to ensure an all-encompassing and uniform project identity.

#### 4.1.1.Promotional materials

Based on the style highlighted in the visual identity manual, a number of physical and digital promotional materials were created for the project and uploaded to the project website in the "Media center" tab for the partners and the public to use, including:

- One-pager a one-page summary of the most important project information (consortium members, goals, methods, etc). Suitable for engaging potential co-creation participants or other professionals.
- Five-slider a five-slide summary containing similar information as the one-pager which
  can be used by partners to give a brief introduction to TIER2 within other presentations at
  conferences, workshops or other events. Suitable for technical and non-technical
  audiences.
- Sticker a small sticker featuring the TIER2 logo and website domain. Suitable for conferences or any other public events with technical and non-technical participants and members of the general public.

Additional promotional materials are planned for presenting project outcomes at in-person events, including a poster, roll-up banner and flyer. Other promotional materials will also be developed throughout the length of the project as needed.

#### 4.2.Website

The <u>TIER2 website</u> was designed in accordance with the guidelines inside the TIER2 visual identity manual and it represents the central and most important tool for communication and dissemination of results of project-derived results, news and materials, including the project's objectives, work packages overview, consortium partners, publications, contact information and more.

The website's "News" tab is regularly updated with progress updates, calls for action, job vacancies at consortium partners, participation in events and other news in the realm of reproducibility and open science in which TIER2 participates and which can easily be shared to other platforms.

#### 4.3. Reproducibility Hub

The Reproducibility Hub will be developed as a sub-site of <u>The Embassy of Good Science</u> (hosted by TIER2 partner VUmc) and will collect outputs like reproducibility tools and best practices accumulated throughout the project's duration. The Hub will be organised as a wiki-style platform and will gather reproducibility tools and best practices for TIER2 stakeholders. It will feature curated checklists, training modules, in-depth articles and more. The work produced in WP4 and WP5 will be uploaded by the responsible task leads. The longevity of the Hub is ensured by its integration in The Embassy, which is committed to its long-term sustainability. This includes hosting workshops at domain-specific conferences and leveraging network effects from OpenAIRE, FAIRsharing, and Reproducibility Networks communities to update content after the project's duration.

The development of the Hub will start in Month 10 and will continue to incorporate TIER2-derived insights until the end of the project in Month 36. Therefore, more detailed information as well as performance indicators for it will be discussed and highlighted in updated versions of the SCEP.

#### 4.4.Social Media

Twitter and LinkedIn have been chosen as the main social media channels of TIER2, together with a YouTube channel for project-related videos which are then linked to the project website.

- Twitter @TIER2project
- LinkedIn @TIER2 Project
- YouTube @tier2project
- Website <u>tier2-project.eu</u>

A breakdown of the strengths and weaknesses of the above social media channels can be found in Table 4.

**Table 4.** A comparison of the strengths and weaknesses of TIER2's social media accounts and their impact on the project.

Social media	Specification	Impact within TIER2
Twitter	Strengths: Good for engagement with media outlets, policy makers, professionals and public interest groups. Has a large number of users. Users can be tagged in tweets to encourage dialogue and expand networks. Hashtags can be used to follow specific campaigns.  Weaknesses: Has limited character space with a free account. Uncertainty about Twitter's future as a platform.	<ul> <li>Generate interest and share ongoing news and activities through posts/tweets</li> <li>Personal messages</li> <li>Twitter Analytics</li> </ul>
LinkedIn	Strengths: Allows for creating a network and has a more professionally-oriented audience. It is search-engine friendly and	Generate interest and share ongoing news and activities within a

	does not have limitations in terms of characters per post. Research results can easily be brought to the attention of the business-oriented users. Through the LinkedIn analytics, one can follow the post's impact. Also, the platform allows for a fast establishment of credibility. LinkedIn is also useful for creating contact with early career researchers.	more professionally oriented audience.  Direct messages  LinkedIn Analytics  A large number of users
	Weaknesses: Creating a stable network is a rather difficult and time-consuming process, as the platform is being used by an extensive number of users. It also has a considerable amount of commercial content, making useful information difficult to receive engagement on.	ANGY
YouTube	Strengths: The largest broadcasting channel and can be linked to other social media platforms. It can also be used for sharing podcasts. Has a diverse audience.  Weaknesses: It is not suitable for bilateral engagement, which makes it more difficult and cost-inefficient to establish a good subscriber base.	<ul> <li>Share project video materials</li> <li>Audio-visual information about TIER2</li> <li>YouTube analytics</li> <li>A variety of users</li> </ul>

#### 4.4.1 Social media campaigns

The TIER2 social media channels are maintained and updated by the TIER2 communication team at Pensoft Publishers, ensuring consistent and streamlined communication of project outputs across social media platforms. Aside from project developments and news, the Pensoft team will curate and run social media campaigns on Twitter and LinkedIn. Social media campaigns are important for the following reasons:

- **Reach**: social media platforms are a large non-centralised space where a vast audience can be reached in order to communicate a message.
- **Engagement**: social media platforms are designed to increase engagement among userswhich is a useful aspect when trying to raise awareness about a topic.
- Targeting: social media platforms allow for targeting of specific audiences based on interests, institution, or language in order to communicate a message directly to the concerned stakeholders.
- Cost-effectiveness: social media is a free-to-use tool for engagement with users. Social
  media paid campaigns and advertising are less expensive than traditional advertising
  methods.
- **Measurability**: social engagement can be tracked on social media to monitor engagement and adjust strategies based on performance.
- **Virality**: social media allows for quick sharing and exchange of information that can reach multiple networks through re-sharing

 Increased brand awareness: social media campaigns can increase the visibility of a project and attract new potential stakeholders.

One or multiple campaigns can run simultaneously, providing weekly posts on the project's social media channels. A preliminary list of social media campaign ideas can be found in Table 5.

**Table 5**. Preliminary list of possible TIER2 social media campaigns.

Campaign name	Description	Channels
Faces of the project	I institution focusing on their academic background	
Previous research	Highlighting a foundational academic article from the fields of reproducibility, open science or research integrity with the aim of promoting landmark literature at the centre of the project.	Twitter, LinkedIn
TIER2 Work	A brief overview of what each WP aims to achieve, as well	Twitter,
Packages	Packages as the main deliverables and KERs	
Other projects  Sister and related projects (OSIRIS, iRISE), as well as ones that have concluded (e.g ON-MERRIT).		Twitter, LinkedIn
Brief description of each TIER2 partner institution, TIER2 Partners including their main focus of work within the project and beyond, recent achievements, and ongoing projects.		Twitter, LinkedIn

#### 4.4.2 Developing a network

To facilitate the creation of a social media community around the project, TIER2 will focus its engagement with select personal and institutional social media channels. This aims to reach a wider audience for relevant news and events from the fields of open science and reproducibility, and to increase collaboration between similar initiatives. A preliminary list of such accounts can be found in Table 6.

**Table 6.** A preliminary list of relevant Twitter accounts to engage with.

Twitter account handle	Relevance	Account type	No. of followers
@tonyR_H	Project coordinator; Overlapping research interests	Expert	~2400
@klebel_t	Project manager; Overlapping research interests	Expert	~200
@schneider_jw	Partner; Overlapping research interests	Expert	~800
@SusannaASansone	Partner; Overlapping research interests	Expert	~3100
@ABannachBrown	Partner; Overlapping research interests	Expert	~800
@nataliamanola	Partner; Overlapping research interests	Expert	~600
@vergoulis	Partner; Overlapping research interests	Expert	~300
@athinacp	Partner; Overlapping research interests	Expert	~400
@elli_lib	Partner; Overlapping research interests	Expert	~800

@allysonlister	Partner; Overlapping research interests	Expert	~888
@dkowald1	Partner; Overlapping research interests	Expert	~400
@LexBouter	Advisory Board; Overlapping research interests	Expert	~1300
@catmacOA	Advisory Board; Overlapping research interests	Expert	~3000
@maura_hiney	Advisory Board; Overlapping research interests	Expert	~140
@SabinaLeonelli	Advisory Board; Overlapping research interests	Expert	~8200
@NaudetFlorian	Overlapping research interests	Expert	~2200
@RickyPo	Overlapping research interests	Expert	~8600
@hjhope	Overlapping research interests	Expert	~1600
@FAIRsharing_org	Overlapping research interests	Organisation	~2700
@EmbassySci	Overlapping research interests	Platform	~1500
@OxfordeResearch	Overlapping research interests	Organisation	~2200
@OpenAIRE_eu	Partner; Overlapping research interests	Organisation	~17 000
@EoscPortal	Overlapping research interests	Platform	~3200
@optima_open	Overlapping research interests	Project	~130
@NRIN	Overlapping research interests	Organisation	~1100
@resdatall	Overlapping research interests	Organisation	~14 000
@OSFramework	Overlapping research interests	Organisation	~40 000
@poiesis_project	Overlapping research interests	Project	~460
@PLOS	Overlapping research interests	Organisation	~160 000
@GermanRepro	Overlapping research interests	Organisation	~1500
@F1000	Assoc partner: Overlanning research		~2800

In total these accounts have a combined following of over 280 000 users from the fields of open science, science integrity, reproducibility, philosophy of science, etc. which may be interested in the tools and academic outputs of TIER2.

To help promote the creation of a network effect and increase the social media community around the project, TIER2 partners are encouraged to help increase the project's social media footprint by promoting social media posts, news, videos, and other outputs in their networks for maximum reach.

#### 4.5.TIER2 Newsletter

TIER2's project development will be documented and disseminated to relevant interested audiences through a bi-annual e-newsletter. The main themes of the newsletter will be:

- TIER2 project updates
- TIER2 participation (or organisation) of events
- Progress of TIER2 reproducibility tools and co-creation activities

- Important news from the field of reproducibility and research integrity
- Relevant updates from other projects (e.g., OSIRIS)

Consortium partners are responsible for informing the communication team of events and activities they plan or have organised to be featured. The newsletter will be created using Brevo / MailerLite software and is fully GDPR-compliant.

#### 4.6.Co-creation workshops & events

Co-creation workshops are two of the primary driving forces in generating TIER2 outputs and disseminating them with relevant stakeholders. Co-creation and interactive workshops are planned in WP2, WP3 and WP4 with different stakeholders in order to (1) envision ideal future reproducibility scenarios for each stakeholder group (WP4); (2) use "backcasting" techniques to identify the requirements for enabling these scenarios (WP4); (3) synthesise and validate TIER2 outputs for the main stakeholder groups & create recommendations and policy guidelines (WP3); (4) boost dissemination to stakeholders and provide training on the use of the Reproducibility Hub (WP2). Overall, co-creation workshops will gather information and ideas from stakeholders, and will validate the resulting project outputs.

#### 4.7. Collaboration with relevant initiatives and projects

The success of TIER2 is not solely dependent on the partner's involvement in research and tool-creation activities within the project, but also on the engagement with relevant current and past projects and initiatives which share TIER2's alignment in the field of reproducibility. Identifying and actively engaging with the knowledge and tools generated by such projects, as well as the networks of actors involved in their creation, creates a network effect and increases the net positive impact. Specifically, TIER2 will closely collaborate with its sister projects iRISE and OSIRIS, funded under the same call. This collaboration will strengthen the dissemination of results by leveraging the combined networks of all three projects, and will ensure there is no overlap in project activities.

Additionally, identifying opportunities for joint dissemination of outcomes, best practices or collaboration on novel products can serve to enhance TIER2's DEC impact and reach. Any planned or organized collaborations, as well as their outcomes will also be promoted through social media, serving to amplify engagement.

**Table 7.** List of relevant projects and initiatives for joint activities, collaboration and cross-fertilization of results, methods and best practices.

Project	Institution	Year	Focus Area
BERD@NFDI	GESIS	-	Integrated analysis platform, Infrastructure
Data 4Impact	ARC	2017-2019	Assessment, Infrastructure, Impact
EnTIRe	VUmc	2017-2021	Platform for dissemination, Stakeholder hub, Research Integrity
EOSC-Life	UOXF	2019-2023	Data sharing, Data & metadata standards, Infrastructure

EpistemicProgress in Humanities	VUmc	2020-2023	Reproducibility, Replication
Grasp-OS	ARC	2023-2026	Open Science metrics
IntelComp	ARC, OpenAIRE	2021-	Science, Technology & Innovation policy, Infrastructure
iRISE	KNOW	2023-2026	Reproducibility, Community engagement
NFDI4Datascience	GESIS	2021-	Reproducibility, Research data lifecycle, Infrastructure
ON-MERRIT	KNOW	2019-2022	Open Science, Responsible research & innovation, Equity
OpenUP	KNOW, ARC	2016-2019	Open Science, Open peer review, Science communication
<u>OSIRIS</u>	KNOW	2023-2026	Reproducibility, Community engagement
<u>PathOS</u>	ARC, KNOW, OpenAIRE	2022-2025	Open Science for science, economy & society, Reusability
POIESIS	AU	2022-2025	Research integrity, Open Science, Public trust in science
Quali-FAIR	KNOW	2023-	FAIR data, reproducibility in qualitative research
Reproducibility Networks	KNOW	2023-	Reproducibility, capacity building, training
RTD/2020/SC/010 - Reproducibility	ARC, KNOW	2021-2022	Reproducibility
SARS	ARC	2020-2022	Horizon Europe Key Impact Pathways & related indicators, Open Science
SARI MOAP RTD/2019/SC/021	ARC	2020-2022	Open Science, Impact, Open Access
<u>SSHOC</u>	GESIS	2019-2022	Data sharing, Confidential data, EOSC
SOPs4RI	AU, VUmc	2019-2022	Research Integrity, guideline development, co-creation
VIRT2UE	VUmc	2018-2021	Research Integrity
<u>UKRN</u> UKRI- funded project	UOXF	2019-2024	Reproducibility, Community engagement

#### 4.8.Press releases

Press releases (PRs) are short pieces of information outlining the main information that can be used by journalists or other media professionals. PRs will be published in cases of TIER2 events, activities or outputs that could be of interest to the general public or the media sector.

TIER2 press releases have already been published about the project's kick-off meeting in February 2023 on the EurekAlert! and AlphaGalileo platforms. Press releases are written by the communications team at Pensoft, in collaboration with all project partners.

#### 4.9. Policy briefs

Policy briefs are key tools for presenting results of scientific research to a non-specialized audience. They are concise documents addressing urgent issues and evidence-based policy advice for decision makers. Policy briefs use clear and accessible language and highlight specific policy changes that are needed to achieve a certain goal (e.g. increased reuse of results in the EU R&I context).

Two policy brief deliverables are planned for month 12 and month 36, respectively, and an additional set of policy briefs will be produced, aimed at stakeholders (funders, institutions, policy-makers and publishers), as well as specific domains (life science, computer science, social science). By leveraging the connections with institutions and umbrella bodies such as Science Europe and the European University Association (EUA), TIER2 will aim to ensure that relevant policy briefs are distributed to senior management of RPOs, the research administrators and governance teams of RPOs, and other relevant organisations.

#### 4.10. Scientific publications

TIER2-derived publications will be published in open access journals (open peer review venues should be prioritised when possible), with the aim of facilitating transparent and accessible knowledge exchange and influencing wider scientific progress in the field.

At a minimum, articles will be published in Green Open Access (self-archiving) deposited in an OpenAIRE compliant repository (e.g. Zenodo) at the time of submission (pre-print) and updated with Author Manuscript (post-print). Alternatively, Open Research Europe (ORE) will be utilised, which offers an open peer review process.

#### 4.10.1. OA collection in the Research Ideas & Outcomes (RIO) journal

To contribute to the open science theme of the project, TIER2 results will be shared in an Open Science Collection in the Research Ideas and Outcomes (RIO) journal. The RIO collection will host all relevant project outputs such as datasets, milestones, workflows, etc, thus ensuring transparency in the research process by featuring all meaningful intermediate research results. All project outputs in RIO are reusable, openly accessible and citable, therefore contributing to the findability, accessibility, interoperability, and reusability (FAIR) principles of the project.

#### 4.11.External conferences/workshops

Throughout its duration, TIER2 will attend events aimed at enhancing its visibility and ensuring successful dissemination and exploitation of its results. This will include participation in scientific conferences, workshops or events in the fields of open science and reproducibility where TIER2 will be presented or will organize an activity (reprohack, training event, etc).

So far, TIER2 has identified the following events to present the project and its goals:

- Metascience Conference 2023 presented
- Open Science fair 2023 poster abstract submitted
- Elixir All Hands 2023 poster abstract accepted

- STI Conference 2023 "Mapping the sustainability discourse" submission accepted
- World Conference on Research Integrity (2024) plenary symposium provisionally accepted – title the Future(s) of reproducibility

#### 4.11.1.Other public outreach events and initiatives

TIER2 will aim to participate in a number of public outreach events and initiatives which can facilitate knowledge transfer and introduce the project to a wide audience on a local, national or international level. Below is a list of events which can be utilized by TIER2 for this purpose:

- Researchers' Night a yearly EU-wide public event held in September in multiple locations in over 20 countries.
- International Open Access Week a global event held in October, providing an opportunity for open access advocates to engage their communities and raise awareness on open access initiatives.
- Local museum nights Usually held annually in cities around the world, these events provide a way for engaging with the general public and increasing the reach of results.

#### 4.12.Infographics

Infographics provide an accessible, visual way of presenting project findings in both a physical and digital format. TIER2 findings that can be presented in an infographic format include the Reproducibility checklists for researchers, publishers and funders. Digital infographics can leave a lasting online footprint of the project and can be distributed on a variety of platforms, including the Reproducibility hub, partners' websites, social media and within Reproducibility networks. Physical infographics can be used for dissemination of results within universities, research institutes, conferences and other in-person events.

#### 5. Engaging Co-Creation Communities

Since many of TIER2's planned activities depend on input from stakeholders outside of the consortium (publishers, funders, researchers, etc.), targeted engagement with those groups is imperative for the project's success. Attracting participants for co-creation or other TIER2 events will be done via:

- Open calls posted on the project website and shared on the institutional, project and personal social media channels of the consortium.
- Direct contact with individuals or organisations which may be interested in participation.
- Exploiting consortium ties with research infrastructures, organisations and initiatives such as RDA, ELIXIR, EOSC.
- Leveraging participation in conferences, symposia, reproducibility network events, ReproducibiliTeas or other events to involve and recruit potential participants.
- Utilizing "Snowball sampling" by reaching out and asking participants for assistance in identifying individuals or organizations that can be involved.

• Engagement of wide audiences including potential participants through social media activities & announcements.

Using a wide range of means for identifying and recruiting participants will result in the largest possible reach and a high number of willing participants.

#### **6. Key Performance Indicators**

Key Performance Indicators (KPIs) are a valuable tool for measuring progress toward specific objectives. KPIs will quantify performance of TIER2 dissemination, communication and exploitation activities. Table 8 shows KPIs for the first 2 years of the project. KPIs will be reflected on and updated in the second and third versions of the deliverable (M24 and M36).

**Table 8.** Key performance indicators of the TIER2 dissemination, exploitation and communication activities. \*D – Dissemination; E – Exploitation; C – Communication

Туре	Tool: Target(s)	Impact	24-Month KPI
C,D	Promotional Materials: All	Promotional materials are used to create awareness and stimulate engagement with the project by including its goals, results and contact information (website, social media, etc.)	>500 total stickers, brochures, flyers distributed (downloaded or in- person)
C,D,E	Project website: All	The objective is to inform and involve interested parties by providing general information about the project and its primary outcomes. Additionally, to ensure easy access to important project publications and key findings.	News items: 25; Total visits > 1000; Geographical distribution: Europe & beyond
D,E	Reproducibility Hub: All except general public	Dissemination and long-term hosting of project results and recommendations	>250 monthly visits
C	Social Media: All	Create a community around TIER2 and inform members about project developments, results, participation in events, etc.	Total Posts: >150; Total Reposts: >250; Followers: >300/year (Twitter), >150/year (LinkedIn) Impressions: >15000/year
C,D,E	Newsletter: All	Regular dissemination of project outputs, events, news, calls for action, etc for interested stakeholders.	4 newsletters distributed

D	Collaboration with relevant initiatives and projects: Researchers, Reproducibility networks, RPOs, RI	Cross-fertilization of practices, results and experience. Network effect leading to a wider audience and stronger impact.	>4 joint events, workshops, seminars or co- creation activities with other projects and relevant initiatives
C,D	Press Releases: All	Press releases will help disseminate project results on a national (local media & newspapers), as well as international scale (global media venues).	>4 Press releases in EurekAlert! and AlphaGalileo >4 external PRs
C,D,E	Policy Briefs: Researchers, Funders, Publishers, Reproducibility Networks, RI, RPos, Research administrators, Research Integrity officers	Policy briefs will contain targeted, synthesized information regarding TIER2 outputs, best practices, and recommended policy interventions for improved reproducibility results.	>2 policy briefs distributed to relevant stakeholders
C,D,E	Scientific Publications: All except general public	Publications in leading peer-reviewed journals related to reproducibility, research integrity, research policy will form the primary outlet for disseminating project results and facilitating knowledge transfer and uptake.	>7 publications (at least submitted or in review)
D,E	Co-creation workshops and events: Researchers, Publishers, Funders, Research integrity officers, Research administrators	Collaboration and stakeholder participation for creation and uptake of curated reproducibility tools for different contexts	>15 co-creation workshops with stakeholders; >3 Reprohack events >500 researchers, funders & publishers engaged

D,E	Horizon Results Tools	The Horizon Results tool may be used when TIER2 KERs are finalized and ready to be exploited and/or commercialised.	To be decided for M24 deliverable update
C,D	External conferences & Public Outreach Events: All	Disseminating TIER2 outputs in front of a wide audience and connecting with other relevant H2020 & HE projects at conferences and workshops on Open science, RI, Reproducibility, etc, as well as open lectures, science communication events & researcher's night events	>20 conferences / workshop participations >6 public outreach events
C,D	Podcasts: All	Informal, long-format way of presenting key results or interesting experiences from the project.	To be decided for M24 deliverable update
C,D	Infographics: All	Visual way of synthesizing key results and outputs. Suitable for physical and digital distribution	>1 infographic >25 downloads >50 physical copies printed and distributed

### 7. DEC Coordination & Reporting 7.1.Coordination

As lead of WP2, Pensoft takes responsibility for coordinating DEC activities, ensuring a timely and coherent flow of project news, events and results to relevant stakeholder groups, and reporting the results of DEC efforts to the TIER2 Project Steering Committee. Pensoft has the following obligations:

- Coordinate and monitor DEC activities
- Ensure regular content for the various dissemination channels described in the SCEP
- Provide customised DEC materials (promotional materials, infographics, videos, etc)
   according to project needs

For best results, all other partners are expected to participate in dissemination, exploitation and communication activities that contribute to popularising the project and its outcomes. This can be done in the following ways:

- Making use of their own personal and/or institutional networks and websites to promote the project.
- Taking advantage of relevant conferences or other meetings to present the project and distribute dissemination materials.

 Regularly providing TIER2-related content to the dissemination team to be posted on the official TIER2 channels or website.

#### 7.2. Reporting

Four reporting forms have been created for the TIER2 consortium to report different DEC activities or usage/creation of new datasets. These forms are essential for creating a coherent overview of activities, and to ensure seamless project reporting of DEC during the review period. The individual forms can be found in the project's Teams environment for easy access.

- **Datasets Form** to be filled when partners publish a new dataset.
- Publications Form to be filled when partners publish a new TIER2-related article.
- **Dissemination Activities Form** to be filled when partners have disseminated a TIER2 output.
- Communication Activities Form to be filled when partners have engaged in general communication activities related to TIER2 (interviews, social media, events for the general public).

#### 8. Conclusion

Communication, Dissemination and Exploitation of scientific results is a dynamic process dependent on a number of factors as well as inter-consortium cooperation. The current strategy outlines the main parameters and timeline according to which DEC activities will be carried out during the project to ensure knowledge transfer and uptake of results during and after the project duration. Regular updates and reflection throughout the project will guarantee the application of the right tools and channels, as well as the conforming of target KPIs identified in the document.

#### **Annex 1 - Stakeholder Mapping Table**

## Tier2 Stakeholder Engagement Table Stakeholder engagement by key project output

**Created by**: Natalia Manola, Nicki Lisa Cole and Alexandra Bannach-Brown **March 2023** 

This table should be used to guide stakeholder engagement in the co-creation and dissemination of key project outputs. Stakeholder primacy for each output is indicated in italics, and the table is organized from the top-down in terms of decreasing level of stakeholder primacy to the project. It is a living document that may be updated by those responsible for managing stakeholder engagement and those conducting activities that involve stakeholders in co-creation, engagement or dissemination.

OUTPUTS / STAKE- HOLDER	REPRODUCIBILITY IMPACT PATHWAYS	INNOVATIVE TOOLS & PRACTICES	NETWORK & INCREASED CAPACITY	POLICY ROADMAP (RECOMMENDA TIONS)	METHODS/CHANNELS/PLAT FORMS FOR ENGAGEMENT
Research	Primary	Primary	Primary	Primary	Co-creation, Repro-Hub,
Funders	Awareness in the	Co-creating, testing	Key member to	Co-creation,	Website, Social media,
(RFOs)	beginning and	and using tools,	ensure activities are	uptake, endorse	conferences, policy briefs
	adoption towards the end	dissemination	aligned		
Publishers	Primary	Primary	Primary	Primary	Co-creation, Repro-Hub,
	Awareness in the	Co-creating, testing	Key member to	Co-creation,	Website, Social media,
	beginning and	and using tools,	ensure activities are	uptake, endorse	conferences, policy briefs
	adoption towards the	dissemination	aligned		
	end				
Research	Primary	Primary	Primary	Primary	Repro-Hub, Website, Social
Managers/Ad		Signpost best		Uptake	media, conferences, policy briefs,
ministrators		practices,			scientific publications

#### D2.1 – Stakeholder Communication & Engagement Plan

Research integrity officers	Utilize output to support and assess repro interventions  Primary Utilize output to support and assess repro interventions	disseminate training and support, provide access to tools, dissemination  Primary Signpost best practices, disseminate training and	Participate in RNs to expand and promote participation  Primary Participate in RNs to expand and promote participation	Primary Co-creation, uptake, endorse	Repro-Hub, Website, Social media, conferences, policy briefs, scientific publications
		support, provide access to tools, dissemination			
Research performing organizations (exec/policy makers) (RPOs)	Primary Utilize output to take action e.g. funds allocation, assessment of research, etc	Secondary Support uptake of tools and practices	Primary Signposting, funding training & support, rewarding repropractices	Primary Endorse and uptake	Website, Social media, policy briefs
Scholarly/lear ned societies	Primary Utilize output to take action, e.g., host/support events focused on increasing reproducibility, give awards for it	Secondary Recruitment source for co-creation, signpost best practices, link to resources	Primary Participate in RNs to expand and promote participation	Primary Endorse, action/implement, and amplify	Website, Social media, conferences
Research Infrastructure s	Tertiary Utilize output to take action	Primary Recruitment source for co-creation, Showcase the tools	Primary Signposting/providin g training	Secondary Endorse	Website, Social media, conferences
Researchers	Secondary	Primary	Primary Participate in and make use of resources	Secondary Endorse (?) and uptake	Co-creation, Repro-Hub, Website, Social media,

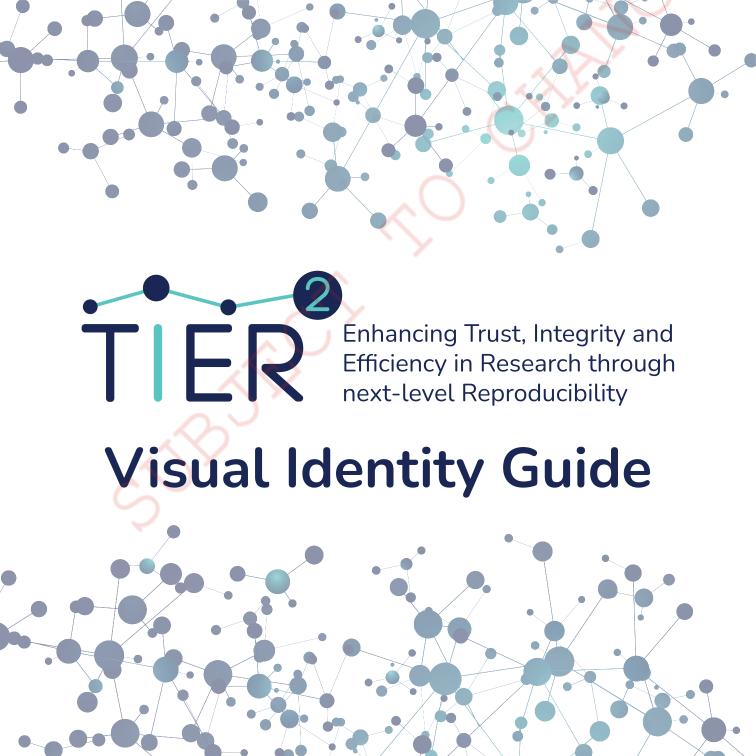
#### D2.1 – Stakeholder Communication & Engagement Plan

	Awareness and use to	Co-creating, testing	provided by RNs,	<i>y</i>	conferences, scientific
	inform reproducible	and using tools,	champion use of	Y. 7	publications, guidelines
	research	dissemination	relevant repro tools	· *	
			to their network		
Repro	Secondary	Secondary	Primary	Secondary	Repro-Hub, Website, Social
Networks	Utilize output to take	Recruitment	Key member to	Endorse/amplify	media, conferences, scientific
	action e.g.	source, and	ensure grassroots		publications
	strengthening	signpost/showcase,	uptake/Signposting/		
	researcher networks	dissemination	providing training		
Libraries/libra	n/a	Secondary	Secondary	Secondary	Repro-Hub, Website, Social
ry		Showcase and	Participate to learn	Uptake	media, conferences
organizations		signpost to	and diffuse		
		training, support	knowledge/practices		
		researchers in			
	(	testing tools,			
		dissemination			
CSOs/general	Tertiary	Tertiary	n/a	Secondary	Website, social media,
public	Public awareness	Public awareness		Public awareness	traditional media, Repro-Hub,
	through media	through media		through media	Website, Social media, public
	promotion	promotion		promotion	outreach events

#### **Annex 2 - Visual Identity Guide**



Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the EU nor the EC can be held responsible for them.



3 LOGO

6 COLOUR PALETTE

8 FONTS

10 VISUALS







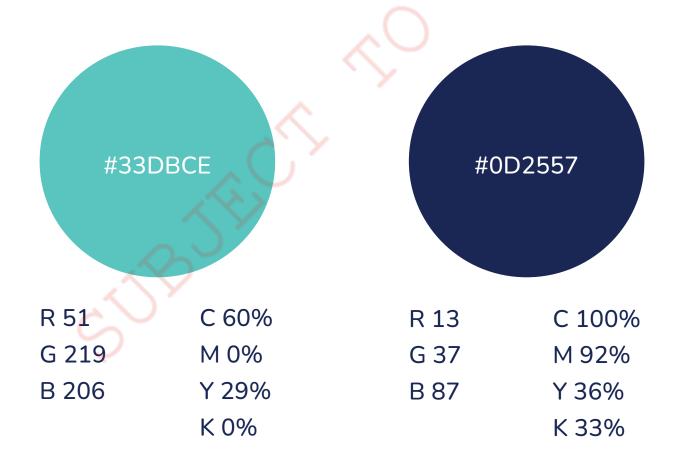


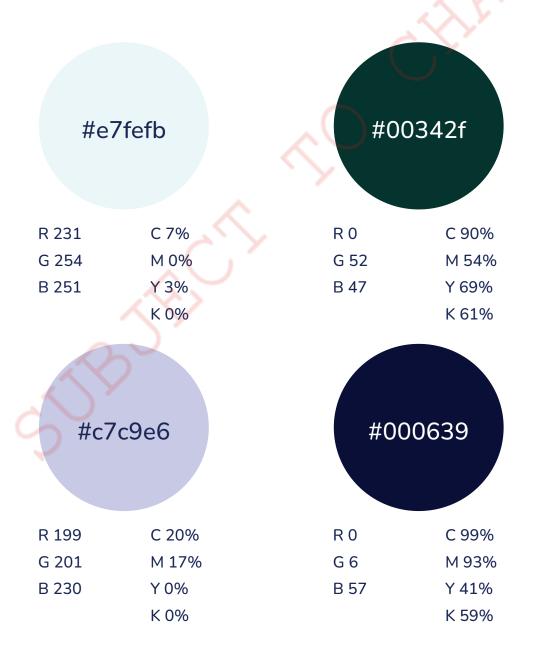


In order for the TIER2 logo to be clearly legible in the context of surrounding graphics and information, the spacing rules must be followed:

No graphic element which is not part of the TIER2 logo may be placed in the area "x" surrounding it. This area, also called the "area of isolation," is derived by using the typographical component of the TIER2 logo's height and the letter "x" as a unit of measurement.

The grid surrounding the TIER2 logo helps to visualize the distance and spacing protecting it in a layout for print or digital media.





FONTS • Logo

# Code Pro - Normal Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Nunito – Regular

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

## Heading 1 – Gilroy Semibold 24 pt Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Heading 2 – Gilroy Medium 20 pt

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Heading 3 - Nunito Bold 16 pt

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz

Body text: Nunito 11 pt

Regular: Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz Italic: Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz Bold: Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz Bold Italic: Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm NN Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz









