



**This project received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 953152.**

---

**Project Acronym:** DIAGONAL

**Deliverable 7.7**  
**Plan for Communication, Dissemination and Exploitation of  
Project Results (PEDR)**

**Due date of Deliverable:** 31<sup>st</sup> January 2022

**Actual submission date:** 1<sup>st</sup> February 2022, **M18 Update 15 November 2022**

**Lead beneficiary for this Deliverable:** BNN

**Level of Dissemination:** Public

**Authors:** Susanne Resch, Barbara Haupt, Simone Jagersbacher-Uhl, Sabine Jung-Waclik,  
Caitlin Ahern

### Document Control

| Version | Date       | Changed by              | Reason for Change   |
|---------|------------|-------------------------|---|
| v0      | 17.01.2022 | Susanne Resch, BNN      | Creation of 1 <sup>st</sup> draft                                   |
| v1      | 27.01.2022 | Susanne Resch, BNN      | Finalization of 1 <sup>st</sup> draft to be shared with WP7 leader  |
| v2      | 01.02.2022 | Sabine Jung-Waclik, BRI | Input on exploitation and final review                              |
| v3      | 15.11.2022 | Caitlin Ahern, BNN      | M18 Update of KPIs table and meetings (updates indicated in orange) |

### Acknowledgement

The main work on this deliverable report was performed by BNN, task leader of Task 7.4 in WP7 on “Innovation Management: Communication, Dissemination and Exploitation”. Susanne Resch, scientific researcher at BNN, developed and further coordinates the overall communication and dissemination strategy within the DIAGONAL project, supported by Barbara Haupt and Simone Jagersbacher, graphic design and communication specialists at BNN. All project partners contributed input to the content that fed into the creation of the DIAGONAL PEDR.

### Abbreviations

|         |     |  |
|---------|-----|--|
| EU NSC  | ... | European NanoSafety Cluster  |
| CoRs    | ... | Communities of Research  |
| GDPR    | ... | General Data Protection Regulation                                   |
| GP      | ... | General Public   |
| HARNs   | ... | High Aspect Ratio Nanoparticles                                      |
| IC      | ... | Industry, innovation community and industry associations             |
| IG      | ... | Interest Groups and NGOs   |
| IPR     | ... | Intellectual Property Rights   |
| KPI     | ... | Key Performance Indicator  |
| MCNMs   | ... | Multi-component nanomaterials  |
| NGOs    | ... | Non-governmental organizations                                       |
| PEDR    | ... | Plan for Exploitation and Dissemination of Results                   |
| RC      | ... | Research Community   |
| R&D(&I) | ... | Research and Development (and Innovation)                            |
| REACH   | ... | Registration, Evaluation, Authorization and Restriction of Chemicals |
| SMEs    | ... | Small and medium-sized enterprises                                   |
| SRB     | ... | Standardization and Regulatory Bodies                                |
| S&TC    | ... | Scientific and Technical Committee                                   |
| WP      | ... | Work Package   |

## Table of Contents

|   |           |
|---|-----------|
| <b>Introduction.....</b>  | <b>5</b>  |
| <b>Description of Task .....</b>  | <b>6</b>  |
| <b>Description of Action.....</b>   | <b>9</b>  |
| Project Background and Objectives .....   | 9         |
| Objectives of the Plan for the Dissemination and Exploitation of Results (PEDR) ..... | 11        |
| <b>Results .....</b>  | <b>12</b> |
| Communication and Dissemination Plan.....   | 12        |
| Communication & Dissemination Tools.....  | 12        |
| Project Logo .....  | 13        |
| Project Website.....  | 14        |
| Project Brand Guideline .....   | 14        |
| Communication Toolkit & Dissemination Package.....                                    | 15        |
| Banner/Roll-up.....   | 15        |
| Flyer .....   | 15        |
| General Poster .....  | 16        |
| DIAGONAL Stakeholders .....   | 16        |
| Communication & Dissemination Strategy.....   | 19        |
| Internal Communication & Overall Project Cooperation.....                             | 19        |
| File Exchange and Data Storage.....   | 20        |
| Email/Telephone.....  | 20        |
| Reporting .....   | 20        |
| Deliverables.....   | 20        |
| Periodic Reports / Final Report.....  | 21        |
| Meetings .....  | 21        |
| External Communication & Dissemination.....   | 22        |
| Social Media in the Project.....  | 30        |
| Social Media Target Audience .....  | 31        |
| Social Media Strategy.....  | 31        |
| Publications .....  | 32        |
| Contractual Framework for Publications.....   | 32        |
| Internal Procedure for Publications.....  | 32        |
| Completed Communication & Dissemination Activities.....                               | 33        |
| Exploitation Plan.....  | 34        |
| <b>Conclusion.....</b>  | <b>36</b> |

|   |           |
|---|-----------|
| <b>References &amp; Bibliography</b> .....                          | <b>37</b> |
| <b>Annex</b> .....  | <b>38</b> |
| Annex 1. Brand guidelines.....                                      | 38        |
| Annex 2. Communication Toolkit.....                                 | 38        |
| Annex 2.1. Template presentation slides.....                        | 38        |
| Annex 2.2. Template deliverable report.....                         | 38        |
| Annex 3. DIAGONAL roll-up.....                                      | 38        |
| Annex 4. DIAGONAL project flyer.....                                | 38        |
| Annex 5. DIAGONAL Communication and Dissemination Log Template..... | 39        |

## Introduction

Professional communication, dissemination and exploitation are key elements to ensure that research projects' activities and results generate long-term impact. Effective communication and dissemination of project outcomes ensure the further use of generated results and maximize DIAGONAL's impact.

Within the DIAGONAL work plan, WP7 led by BRI is focused on "Innovation Management: Communication, Dissemination and Exploitation". One main aim of WP7, especially Task 7.4 on "Communication and Dissemination" led by BNN, is to ensure a consistent communication and dissemination of the project's activities and results, safeguarding optimal visibility and both a European and worldwide outreach to all relevant stakeholders (R&D community, industry, regulatory bodies and general society).

Deliverable 7.7 "Plan for Communication, Dissemination and Exploitation of Project Results (PEDR)" directly serves to achieve the following specific objectives within WP7:

- Communication, creating visibility and encouraging project outreach.
- Disseminating results to targeted stakeholders and the scientific community.
- Exploitation of results to foster innovation potential and innovation capacity.

## Description of Task

The DIAGONAL PEDR is part of Task 7.4 on “Communication and Dissemination”.

The aim of this Task is to plan, monitor and implement all project’s communication and dissemination activities as well as scientific publications. All Consortium partners contribute to this task. BNN as Task 7.4 leader coordinates the overall activities and will evaluate and optimize the project’s dissemination performance on regular basis. Internal updates and evaluations on the PEDR are planned for M18, M36 and M42.

Task 7.4 specifically addresses the following topics (as described in the DIAGONAL Grant Agreement):

“T7.4 will ensure appropriate communication and dissemination of DIAGONAL activities, its progress and results. Task leader BNN will coordinate all related activities, all project partners will contribute. The planned communication and dissemination activities will feed into the initial PEDR (Plan of Communication, Exploitation and Dissemination of Results) (D7.7).

All performed and planned actions will be monitored on an annual basis and will consider T7.2. inputs as soon as the results are produced regarding social acceptance. Basic communication means will include a public project website, project factsheets, press releases, participation and contribution to scientific conferences, the use of social media and the creation of scientific publications. BNN produces and publishes an e-newsletter four times a year with an established group of recipients (it reaches more than 12.000 recipients from the nano-community worldwide). DIAGONAL will contribute to this useful means of dissemination, by adding project-related news, activities and results (e.g., recent publications) to this newsletter.

A project website, registered with an 'eu' domain name, will be developed by UBU in order to provide a continuous update on the project progress, results, all public deliverables and publications (Open Access). The website will be maintained and updated regularly, and will remain active after the project with adapted content under the responsibility of the project coordinator.

The key scientific results will be published by the project partners of the consortium. DIAGONAL will ensure Open Access for all its publications, which is coordinated in this task by BNN. In addition to making selected publications available via Gold Open Access, public data and all publications emerging from DIAGONAL will be made freely available via public repositories and on the project website.

Proper data management will ensure efficient and ethical handling and use of the primary results as defined in the Data Management Plan (D2.1).

The American partner VIREO will participate in the dissemination of findings in the US, through established networks such as the EU/US Communities of Research, in quarterly newsletters, and through social media, including LinkedIn, Twitter, and blog posts.”

The PEDR summarizes the strategy and concrete actions that the DIAGONAL Consortium will follow in order to communicate, disseminate and exploit the project and its results, aiming to help maximize the impact of the project. The communication plan is integrated in the PEDR to increase the reciprocal impacts.

The PEDR serves as a guideline for the Consortium for the communication, dissemination and exploitation activities to be carried out during the entire DIAGONAL project runtime, ensuring that the project partners will take a proactive role in the effort to maximize the outreach of the project by participating in relevant activities (e.g., workshops, conferences, exhibitions, industrial fairs/trade fairs, webinars, trainings, bilateral discussions, public events, etc.), as well as publishing project results in relevant journals and conferences to allow high international visibility of the project. This task will also track publications to ensure compliance with open access requirements.

Projects results play a key role for communication, dissemination and exploitation and they are essential when performing any relevant activities. Generally, the term 'results' within H2020 projects is defined as "any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected, which are generated in the action as well as any attached rights, including intellectual property rights."<sup>1</sup> This includes all project outcomes that may be used by the project partners or relevant stakeholders. Furthermore, they can be commercially exploited (i.e., products/services/tools) or act as starting point for further research (e.g., data, knowledge, technology, methods, etc).

In DIAGONAL, communication and dissemination will inform the nanosafety research community as well as industry and regulatory bodies on project outcomes relevant for the topic Safe-and-Sustainable-by-Design of complex nanomaterials (such as multicomponent nanomaterials (MCNMs) or high aspect ratio nanoparticles (HARNs)) and other advanced materials. The communication and dissemination strategy will ensure that all knowledge generated during the lifetime of the project will be successfully disseminated/transferred to the most appropriate target groups. All forms of communication employed, including for example production of newsletter articles by BNN, are designed to reach out to a global audience.

The impact of the PEDR will be measured using appropriate indicators for each action. This document will serve as a "living document" throughout the project, guiding the communication and dissemination effort carried out by the consortium. At the end of the project, all the dissemination and communication activities carried out for all relevant stakeholders will be summarized. Moreover, the PEDR will be internally updated throughout the project in M18, M36 and M42.

D7.7 is structured to move from a general perspective to a detailed plan of action. After a short description of the DIAGONAL project and the objectives of this PEDR, the section 'results' presents the communication, dissemination and exploitation plans. Subsection 1.1,

---

<sup>1</sup> EC Research & Innovation Participant Portal Glossary, Reference Terms.

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/glossary>

'Communication and dissemination tools' concerns the materials that will be used for communication and dissemination purposes. Subsection 1.2 addresses the project stakeholders, with an initial identification of the main ones. Subsection 1.3 addresses the DIAGONAL communication and dissemination strategy in detail and presents an overview of planned activities including conferences, workshops and meetings, networking activities, publications and social media activities. Finally, an initial approach to the exploitation of the project results is given.



## Description of Action

### Project Background and Objectives

DIAGONAL aims to bring new methodologies to guarantee long-term nanosafety along the multicomponent nanomaterials (MCNMs) and High Aspect Ratio Nanoparticles (HARNs) life cycle: from design and production to their application into nano-enabled products, the product use and end of life phases.

To be able to do so, DIAGONAL will analyze the materials' physicochemical properties, toxicology, behavior, and environmental exposure, as well as human safety along their life cycle. For that, the project will develop and validate multi-scale modelling tools able to predict and characterize nano-specific properties.

Additionally, DIAGONAL will build on seven industrial cases facilitating the re-design of nanomaterials, nano-enabled products design and manufacturing processes. The project will also approach the standardization of risk management, assessment and governance facilitating their use by industry.

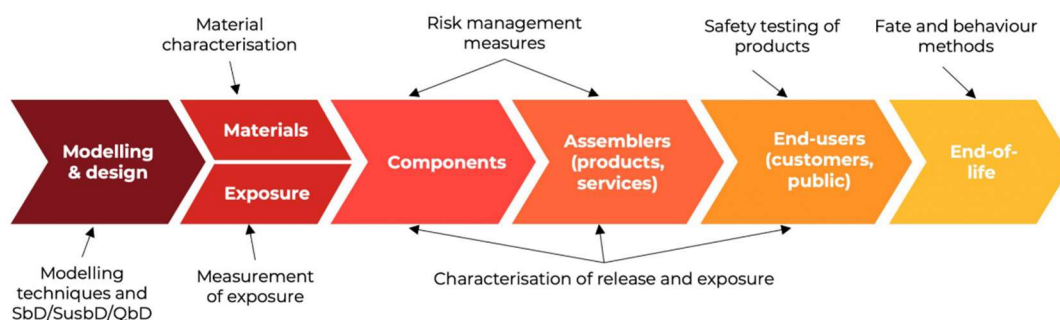


Figure 1. Different stages that are addressed by DIAGONAL's approach to guarantee safe MCNMs and HARNs along their life cycle.

DIAGONAL aims to bring new methodologies to guarantee long-term nanosafety. How? By filling the gap in:

- Risk Assessment
- Risk Management
- Risk Governance

The project relies on experimental and modelling research to understand and ultimately predict interactions among the nanomaterial components and their transformation products with the environment, promoting a better understanding of potential adverse effects on human health and biota.

DIAGONAL will contribute to build a trusted environment for industries, especially SMEs, to fulfil REACH<sup>2</sup> requirements, helping to increase the safety of nano-enabled products along their life cycle, while encouraging more industries to start using nanomaterials at reduced business-related risks.

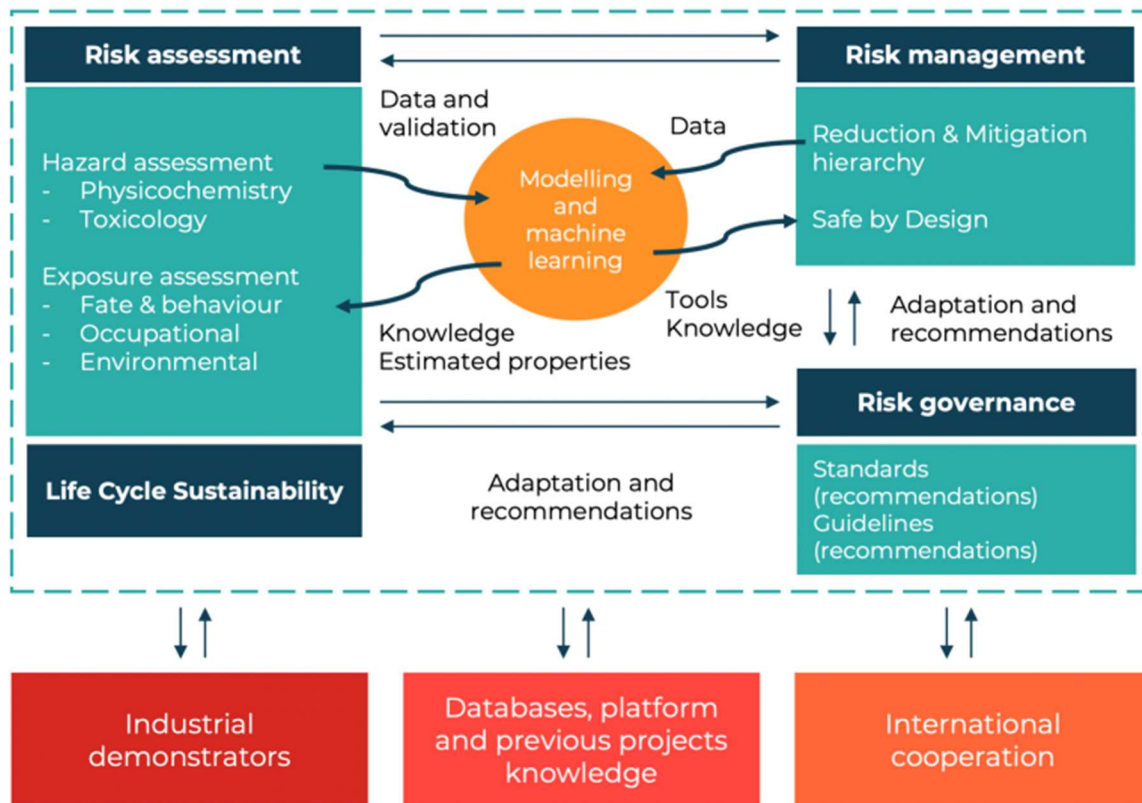


Figure 2. DIAGONAL concept and topics that are addressed.

Further information and more details on the project, e.g., the DIAGONAL demo cases and collaboration with other initiatives, are presented in the project website<sup>3</sup>.

<sup>2</sup> Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) is a European Union regulation that addresses the production and use of chemical substances, and their potential impacts on both human health and the environment.

<sup>3</sup> <https://www.diagonalproject.eu/>

## Objectives of the Plan for the Dissemination and Exploitation of Results (PEDR)

The aim of this PEDR is to bring the project's aims and objectives to the attention of targeted stakeholders, thus maximizing the potential of the project results beyond its lifetime.

The objectives of the PEDR are therefore to:

- Raise public awareness about the project, its expected outcomes within defined target groups, using effective communication means and tools;
- Disseminate for understanding: Inform the audiences that potentially benefit from the project outcomes. It is important that these audiences have a clear understanding of what DIAGONAL is focusing on;
- Disseminate to maximize knowledge diffusion across Europe and internationally;
- Exchange experience with related projects and groups working in the field such as the European NanoSafety Cluster (EU NSC), to capture synergies, minimize duplication of work and maximize collaboration potential;
- Disseminate for action to those groups that can influence and bring about change in their organisations. Target groups include the R&D industry, SMEs, NGOs, consumers, regulatory and policy agencies, insurers, etc.;
- Disseminate for marketing, to bring DIAGONAL outcomes to the marketplace. Target groups here are academic as well as industrial end users;
- Ensure open access to all peer-reviewed scientific publications relating to the project results;
- Utilization of project results in further research activities other than those covered by the action concerned, or in developing, creating and marketing a product or process, or in creating and providing a service, or in standardization activities.

## Results

### Communication and Dissemination Plan

An integrated communication campaign was designed and launched by the Consortium utilizing a variety of instruments and relations to communicate the project's success stories along with the overall framework within its implementation is funded. Through the exploitation of mainstream communication channels, the Consortium will increase awareness and enhance societal perception on how Research and Innovation can tackle emerging challenges and positively impact the society, while increasing visibility and information flow on the vital role of H2020 and EU funded research in realizing and achieving ambitious EU-side societal, economic and sustainable growth goals. The communication plan will be continuously updated to integrate the findings of the stakeholder and acceptance analyses (T7.2), implementing communication measures and tools to maximize social acceptance considering cognitive and awareness raising issues as well as risk perceptions.

The main goals of the communication activities are:

- To promote the project goals, developments and results.
- To provide targeted information to multiple audiences (including the media and the public), in a strategic and effective manner.
- Inform and reach out to society as a whole.
- Communicate how EU funding contributes to tackling societal challenges.

The DIAGONAL communication campaign instruments include (i) the development of a Corporate Identity (logos and layouts) that was developed by M2, (ii) a dedicated website operational from M4 and for two years after the project's ending, (iii) social media channels such as Twitter and LinkedIn that will be up and running from M3, (iv) newsletter contributions issued every 6 months, (v) press releases and appropriate material to engage media and journalists, (vi) participation and presentation of the project and its results in Innovation and Networking events and technological fairs and exhibitions, (vii) participation and presentation of the project in other networks and groups, not directly linked to the project, where project partners have strong links and involvement, (viii) in-house presentations to existing clients and collaborators and brainstorming for further extending DIAGONAL solutions to other applications and markets.

### Communication & Dissemination Tools

Effectiveness in reaching the target audiences and the impact of the communication and dissemination activities will be assessed on a regular basis as the project progresses, e.g., in regular bimonthly organized WP7 meetings. To achieve the full potential of the project, a focus on the individual communication requirements of various audiences associated with the project will be maintained.

The developed tools and performed communication activities until M9 are presented below. All materials used for the communication and dissemination activities reflect a common visual identity, which is associated with the very first visual identity materials developed, i.e., the project logo.

### Project Logo

As a first step of the project branding, a project logo was designed (see Figure 3-6). The logo variations are publicly accessible at the project website.<sup>4</sup>



Figure 3. DIAGONAL logo.



Figure 4. DIAGONAL logo inverted.

---

<sup>4</sup> <https://www.diagonalproject.eu/downloads/>

The logo consists of the word "DIAGONAL" in a bold, sans-serif font, stacked in three lines: "DIA", "GO", and "NAL".

Figure 5. DIAGONAL logo black.



Figure 6. DIAGONAL logo white.

### Project Website

All information regarding the project website, accessible at <https://www.diagonalproject.eu/>, is presented in detail in Deliverable 7.6 "Public DIAGONAL website". The project website was launched in August 2021, i.e., in month 4 of the project runtime.

### Project Brand Guideline

To create a recognizable project brand and a coherent image when communicating, a brand guideline for the project has been implemented, which shows how to use the DIAGONAL

brand and its components such as fonts, colours and images. It is publicly available at the project webpage<sup>5</sup> and presented in Annex 1.

### Communication Toolkit & Dissemination Package

The DIAGONAL “Communication Toolkit” is a collection of materials (created by project partner BNN, in conjunction with the project coordinator) that focus on results and outputs over the course of the project. This material is and will be used to support communication and dissemination activities.

The DIAGONAL “Communication Toolkit” compiles a set of templates that are used by all project partners for internal and external communication purposes (i.e., (i) presentation slides and (ii) Deliverable report). These two template documents are presented in Annex 2.

All communication and dissemination activities developed by every partner in DIAGONAL will be properly registered through the templates that have been prepared for this purpose.

All presentations or other outputs and publications will have the following standard text included at the bottom (or in the acknowledgements for publications):



This project has received funding from the European Union’s Horizon 2020 research & innovation programme under grant agreement No 953152.

Further dissemination materials, created in English, are presented in detail in the next subsections.

In general, any printing of materials will be kept to a minimum, in line with the UN sustainable development goals. In preference, electronic versions will be distributed where possible, although some printed materials will be required for dissemination during face-to-face conferences, workshops and other events.

### Banner/Roll-up

A project roll-up was created to provide an additional aid to communication and dissemination activities. It contains very basic information about the project and is presented in Annex 3.

The banner is visually oriented and its main purpose is to gain audience attention. Its content is clear and easily understandable to all target groups.

### Flyer

A project flyer was created (presented in Annex 4) to inform about the DIAGONAL project objectives and expected results. It is used for online communication and dissemination and will also be distributed to the different stakeholder networks at, e.g., thematically relevant

---

<sup>5</sup> <https://www.diagonalproject.eu/downloads/>

conferences. The DIAGONAL flyer is available electronically (as PDF) and can be also printed on demand.

## General Poster

In light of the still ongoing COVID-19-related travelling restrictions a general project poster has been postponed for now. We will revisit this issue regularly and generate this poster, if needed.

## DIAGONAL Stakeholders

DIAGONAL target audiences and general stakeholder groups are (i) research community, (ii) industry, innovation community and industry associations, (iii) standardization and regulatory bodies, and (iv) the general public, civil society organisations and media.

DIAGONAL has preliminary identified the target groups of stakeholders to which dissemination activities will be directed to as:

- **Research Community (RC).** A key actor to mainstream the dissemination of the project results will be the NSC. It will be also important to establish communication channels with research communities from other countries active in OECD processes (USA, Canada, Australia, Brazil, Japan, etc.). Here, the EU-US CoRs will be targeted. Two US chairmen of the Risk Assessment and the Exposure through Product Life CoRs are part of the Advisory Board (Mark R. Wiesner from Duke University and Paul Westerhoff from Arizona State University). In addition, Arno Gutleb (LIST) is also chairman of the Human Toxicology CoR. Finally, the Thailand National Nanotechnology Center is part of the Advisory Group.
- **Industry, innovation community and industry associations (IC).** The nanomaterial / nano-enabled products manufacturers and the downstream industries need to be encouraged to adopt a SbD approach. These target groups, as explained in the 2.1 Expected impact section, will be key to mainstream the adoption of the project results by the industry, with a special emphasis on SMEs. It can be highlighted the networks where the partners are member, like the NANOfutures ETTIP, the NSC, the Nanotechnology Industries Association, SusChem, the EPPN, ETPIS (Technology Platform on Industrial Safety), EIT Raw Materials or the ETP Nanomedicine. The industry will be reached through the consortium connection with associations, OITB projects and specific dissemination and communication activities of the project.
- **Standardisation and Regulatory Bodies (SRB).** The scientific work outputs will be translated into specific recommendations and guidelines for nano-risk governance working groups. This is why the involvement of CEN/CENELEC, ISO, ECHA, DG Research, EFSA or OSHA, among others, will be necessary. Some partners are already active participants in such bodies, like ISQ (secretary in the Portuguese Technical Committee 194 which participates in the work carried out by CEN 352 and ISO 229) or BNN (collaborating in the Austrian Standards Institute Working Group (ASI AG) on "Nanotechnologies & Nanomaterials"; the ISO/TC 229 Nanotechnologies, CEN/TC 352 Nanotechnologies and CEN/TC 137 assessment of workplace exposure to chemical and



biological agents). On the other hand, connection with public institutions will be established. As a matter of fact, the German Federal Institute for Occupational Safety (BAuA) is part of the AB, and a relevant EU regulatory body will be additionally invited to the AB. Additionally, OECD Working Party on Biotechnology, Nanotechnology and Converging Technologies (BNCT) supports the project through a Letter of Interest. Besides, partners as QSAR Lab usually assist as national representatives and experts to forums like High Level Group of EU Member States and Horizon 2020 Associated Countries on Nanosciences, Nanotechnologies and Advanced Materials or the OECD Working Groups on safety of nanotechnology.

- **Interest Groups and NGOs (IG).** Non-governmental organizations and the interest groups at not only European but also the national levels are important, and their viewpoints need to be heard during the development process of the nano-assessment strategy. These may include consumer associations and other environmental / animal defence associations.
- **General Public (GP).** Special attention should be paid to the way that scientific research findings are communicated to the general public, especially regarding the improvement of social acceptance and the explanation of the work undertaken by the European Union to grant consumers' safety. Additionally, DIAGONAL has gathered the support from several organisations and projects, which will be key to start building the community of actors around DIAGONAL, crucial for the successful completion of the project objectives.



Figure 7. Organizations supporting DIAGONAL.

The specification of relevant stakeholder organizations within each stakeholder group will be done together with the exploitation development as well as in close collaboration with WP2 (i.e., Task 2.2 on "Liaison management, stakeholder engagement & international

cooperation”) and included into the next updated of the PEDR. All stakeholder engagement activities will be performed GDPR compliant.

### Key messages

Research and innovation outcomes produced along the project will be translated into key messages to be transmitted through the available communication and dissemination channels to the targeted audience groups. Preliminary, the DIAGONAL Consortium described the key messages to be communicated as shown in Table 1.

The main goal of the dissemination plan is to set a strategic approach to exchange knowledge and transfer the project outcomes with the aim to enable others to use and take up results, thus maximising its impact. The dissemination plan is divided in three layers, backing up the development of the R&D activities:

- **Awareness layer (M1 – M18).** Dissemination needs at the first layer involve awareness of the project objectives and expected results addressed to other EU funded projects, universities, institutions, scientific communities, stakeholders and relevant networks, where the required information can be identified and collected. This stage is closely related to the communication activities, as described in the next chapter. In this context, it is crucial to establish the proper working relations with stakeholders and related initiatives.
- **Scientific cooperation (M6 – M42).** The second layer aims to establish the necessary communication channels between the consortium and other stakeholders to facilitate the exchange of information and knowledge transfer. On one hand, it will enable the management of external information through technical communications, meetings, etc., in order to continue steering the research work of the project. On the other hand, it will enable the transfer of knowledge to the targeted communities (NSC, Malta Initiative, other projects, etc.).
- **Replication and exploitation layer (M36 – M42).** The third layer is highly interlinked with WP7 and the project objective of mainstreaming the tools for its adoption by industry. Also, regulation and standardisation bodies will be tackled to integrate the recommendations and guidelines developed into the governance scenario. This layer will be characterised by strong presence of the project partners in industrial events and workshops, political conferences, but also by dedicated dissemination materials targeted for the industry and the policy framework.

Table 1. Key messages of the project addressing different target groups.

| Layer                       | Key messages                                     | Target group | Key channels & tools   |
|-----------------------------|--|--------------|--|
| <b>Awareness (M1 – M18)</b> | Project objectives, expected impacts and results | All          | Project website, project factsheets, newsletter contributions, social media (LinkedIn and Twitter) |

|   |  |             |   |
|---|--|-------------|---|
|   | First results: main knowledge & data gaps on MCNMs/HARNs   | RC, SRB     | Scientific publications in relevant journals, contributions to scientific events (e.g., presentations at conferences)   |
| <b>Scientific cooperation (M6 – M42)</b>          | Modelling approaches, advancements and results             | RC, IC, SRB | Workshop and/or webinar, scientific publications in relevant journals, workshop and/or webinar, contributions to scientific events (e.g., presentations at conferences)     |
|   | Risk assessment and management results and recommendations | RC, IC, SRB | Workshop and/or webinar, scientific publications in relevant journals, contributions to scientific events (e.g., presentations at conferences)                              |
|   | Risk governance results and recommendations                | RC, SRB     | Workshop and/or webinar, scientific publications in relevant journals, contributions to scientific events (e.g., presentations at conferences)                              |
| <b>Replication &amp; exploitation (M36 – M42)</b> | Best practices, final conclusions, lessons learnt          | All         | Project website, project factsheets, newsletter contributions, workshop and/or webinar, scientific publications in relevant journals, social media (LinkedIn and twitter)   |
|   | Computational and SbD tools                                | RC, IC, SRB | Project website, scientific publications in relevant journals, contributions to scientific events (e.g., presentations at conferences), social media (LinkedIn and twitter) |

### Communication & Dissemination Strategy

A strategically planned communication process started with the project kick-off and will continue throughout its entire lifetime. All subtopics that are contributing to the overall DIAGONAL communication and dissemination strategy are described in detail on the next pages.

### Internal Communication & Overall Project Cooperation

DIAGONAL's success depends on an open and clear communication between all participants ensuring each participant is kept up-to-date on work progress, next steps, outcomes of meetings and task allocation.

The project coordinator and the project management team offer administrative support for all partners: support in administrative matters, including the preparation of reports, host web-

conferences, organisation of meetings, keep addresses, send reminders for dates and events, organize documentation, provide individual templates for reports and financial statements, provide training on administrative procedures and streamline the reporting.

### File Exchange and Data Storage

The project coordination team has created a restricted-access/password protected area for internal documentation and exchange of information using a protected project file server.

This file server is employed for storing confidential documents, data and information. The documents are organised by an appropriate structure, set up by the project coordinator. It contains all documentation (Grant Agreement, Consortium Agreement and all EC communications), contact details of all participants, project logo and templates, project meeting information (agenda, minutes, presentations), final versions of deliverables and milestones, activity reports, monitoring reports, dissemination documentation, marketing material, etc.

The file server is managed by UBU, all project partners can upload and access documents and information.

### Email/Telephone

In addition to the project's file server and face-to-face meetings (COVID-19 permitting), the Consortium will use additional communication channels to enhance teamwork between physical meetings and maintain open and transparent communication: e-mails and phone calls for regular and daily communication and (video) conferences (e.g., via MS Teams, GoToMeeting or others).

### Reporting

The status-quo of the internal communication is reflected in the reporting activities of the project. There are mainly two different official paths for sharing progress information between the partners and the EC: deliverables and periodic reports, both described in detail in the following subsections.

### Deliverables

The list of deliverables is described in the section 1.3.2 – “WT2 List of deliverables” of the Annex 1 (Part A) of the Grant Agreement (GA), pages 6-11. Within DIAGONAL there is an internal review process of deliverables. Once all relevant partners have given their feedback for the concrete deliverable, it will be sent for internal review to the WP leader and to the project coordination team. After finalization of the deliverable, it will be uploaded to the participant portal by the project coordinator.

## Periodic Reports / Final Report

As required by Article 20 of the GA, a report summarizing scientific progress, management and financial issues will be submitted to the EC after months 19, 37 and 43. Hence, all partners will submit reports to the project coordinator strictly in accordance with the guidelines and rules provided by the EC. The coordinator will verify these reports and submit them to the EC via the SYGMA system in the Participant Portal.

## Meetings

Table 2 and 3 show the DIAGONAL meeting plan, with regular meetings planned for monitoring the performance of the project. Due to the COVID-19 pandemic situation it is not possible to state whether those meetings will be virtual or physical.

Table 2. Tentative project meeting plan.

| Month (Project Runtime) | Date               | Type of Meeting                | Location      |
|-------------------------|--------------------|--------------------------------|---------------|
| M1                      | 4 & 12 May 2021    | Kick-Off Meeting               | Virtual       |
| M9                      | 12-13 January 2022 | General Assembly               | Virtual       |
| M14                     | 24 June 2022       | General Assembly               | Limassol (CY) |
| M18                     | 15 December 2022   | Review Meeting                 | Virtual       |
| M24                     | April 2023         | General Assembly               | Burgos (ES)   |
| M30                     | October 2023       | General Assembly               | tbd           |
| M36                     | April 2024         | Review Meeting                 | tbd           |
| M42                     | October 2024       | Review Meeting & Final Meeting | tbd           |

Table 3. List of regular meetings.

| Frequency        | Type of Meeting                                | Location  |
|------------------|--|---|
| Every 6 months   | General Assembly                               | Virtual / f2f (if possible, at least once per year) |
| All three months | S&TC regular meetings                          | Virtual   |
| (Bi-)Monthly     | WP regular meetings                            | Virtual   |
| As necessary     | Ad hoc meetings, for urgent issues             | Virtual   |
| As necessary     | Project Coordinator / DIAGONAL Project Advisor | Virtual / f2f                                       |

## External Communication & Dissemination

All DIAGONAL partners will communicate and disseminate relevant project results to the relevant audiences by appropriate means unless there are unresolved issues with intellectual property rights (IPR). WP7 manages all communication and dissemination efforts, and has an obligation to protect IPR of project outcomes. Each project partner aspires to use open access for all peer-reviewed scientific publications describing their results in line, with provisions of Article 29 and 38 of the Grant Agreement.

To develop an efficient Communication, Dissemination and Exploitation Strategy for the project and create successful and targeted action plans, we begin by describing the concepts of and differences between communication, dissemination and exploitation, summarized in Table 4.

Table 4. Concepts of Communication, Dissemination and Exploitation.<sup>6</sup>

|                         | Communication  | Dissemination   | Exploitation   |
|-------------------------|--|---|--|
| Definition <sup>7</sup> | Communication on projects is a strategically planned process that starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results. It requires strategic and targeted measures for communicating about (i) the action and (ii) its results to a multitude of audiences, including the media and the public and possibly engaging in a two-way exchange. | The public disclosure of project results by any appropriate means (other than resulting from protecting or exploiting the results), including scientific publications, videos and any other medium. | The utilization of results in further research activities other than those covered by the action concerned, or in developing, creating and marketing a product or process, or in creating and providing a service, or in standardization activities. |
| Objectives              | <b>Reach out to society and show the impact and benefits</b> of EU-funded R&I activities, e.g., by addressing and providing possible solutions to fundamental societal challenges.   | <b>Transfer knowledge &amp; results</b> with the aim to enable others to use and take up results, thus maximizing the impact of EU-funded research.<br><br>Covers <b>project results only</b> .     | <b>Effectively use project results</b> through scientific, economic, political or societal exploitation routes aiming to turn R&I actions into concrete value and impact for society.  |

<sup>6</sup> <https://op.europa.eu/en/publication-detail/-/publication/3bb7278e-ebf3-11e9-9c4e-01aa75ed71a1/language-en>

<sup>7</sup> EC Research & Innovation Participant Portal Glossary, Reference Terms.  
<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/glossary>

|                           |   |  |   |
|---------------------------|---|--|---|
| <b>When</b>               | Starts at the <b>outset of the project</b> .  | Happens only once <b>results</b> are available.  | Happens only once <b>results, services or products</b> are available.   |
| <b>Focus</b>              | <b>Inform</b> about and <b>promote</b> the project AND its results/success → Focus on the <b>whole project</b> (including results). | <b>Describe</b> and <b>ensure results available</b> for others to <b>use</b> → Focus on results <b>only</b> .  | <b>Make concrete use</b> of research results (not restricted to commercial use)   |
| <b>Target Audience</b>    | <b>Multiple audiences</b> beyond the project's own community, including the media and general public. Multiplier effect.            | <b>Specialist audiences</b> - Groups that may use the results in their own work, including peer groups, industry, professional organisations, policy-makers. | People/organizations including project partners themselves that make concrete use of the project results, as well as user groups outside the project. |
| <b>Formal Obligations</b> | Legal reference GA Article 38.1   | Legal reference GA Article 29  | Legal reference GA Article 28   |

Table 5 builds a key document of the PEDR as it summarizes the overall communication and dissemination aims of the project. All actions have been allocated to communication media and provided with appropriate resources (time and money). The impact of these activities will be measured by Key Performance Indicators (KPI) which may lead to a re-planning of the strategy followed. The project performance towards the envisaged KPIs will be monitored in M18, M36 and M42, to ensure timely and appropriate corrective measures if needed.

In the following table, green refers to targets already achieved. Orange indicated changes made to targets (e.g. trade fairs target lowered due to decreased interest in trade fairs considering the pandemic).

For a detailed list of activities carried out in RP1, please see the Communications & Dissemination log, found as an annex in the technical report.

Table 5. DIAGONAL planned communication and dissemination activities including evaluation via KPIs.

| Project outcome, Timing, Leader   | Activity/Specification  | Target Group(s) | Measurements, KPIs   | Target No. until project end  | Evaluation M18  | Evaluation M36 | Evaluation M42 |
|---|---|-----------------|--|---|---|----------------|----------------|
| <b>Communication Toolkit &amp; Dissemination Pack</b><br>Project roll-up, flyer(s), general poster, etc.<br>(M4 until end of project / Budget reserved for printing, content/design by WP7 / BNN) | Provide online and/or printed project information for communication & dissemination activities, e.g., at events such as conferences, meetings and science hotspots. | All             | Google-based analysis <ul style="list-style-type: none"> <li># of downloaded copies</li> <li># of printed copies</li> <li># of distributed copies</li> </ul> | <ul style="list-style-type: none"> <li>100 downloaded flyer/poster</li> <li>300 printed flyers (if needed)</li> <li>300 distributed flyer (if printed)</li> </ul> | <ul style="list-style-type: none"> <li>69 downloads</li> <li>250 printed flyers</li> <li>100 distributed flyers</li> </ul>  |                |                |
| <b>Website</b><br>(M4 until the end of project / Budget reserved for technical implementation, content design and updates by WP7 / BNN)   | Provides easy access to project information; Core of external communication & dissemination activities to all (public) stakeholders.                                | All             | Google analytics <ul style="list-style-type: none"> <li># of website users</li> <li># of website sessions</li> </ul>   | <ul style="list-style-type: none"> <li>3500 website users</li> </ul>  | <ul style="list-style-type: none"> <li>1074 users</li> <li>1546 sessions</li> </ul>   |                |                |
| <b>Social media</b><br>(M1 with increase towards the 2 <sup>nd</sup> half of the project / Postings implemented by WP7 / BNN)   | Addressing defined international target groups via Twitter and LinkedIn.  | All             | Twitter statistics, LinkedIn analytics <ul style="list-style-type: none"> <li># of followers</li> <li># of postings</li> <li># of impressions</li> </ul>     | <ul style="list-style-type: none"> <li>Twitter: 100-150 followers, &gt;20,000 impressions</li> <li>LinkedIn: 150-200 followers,</li> </ul>                        | <ul style="list-style-type: none"> <li>93 Twitter followers; 10,988 impressions</li> <li>205 LinkedIn followers;</li> </ul> |                |                |



|   |   |   |   |   |   |  |  |
|---|---|---|---|---|---|--|--|
|   |   |   |   | >25.000 impressions   | 23,379 impressions  |  |  |
| <p><b>Newsletter</b></p> <p>(M1 until end of the project; at least two newsletter contributions per year, coordinated within WP7 / BNN)</p>   | <p>Increase the project's visibility to all stakeholders by making use of already established newsletters, e.g., BNN NEWSLETTER, EU NSC newsletter, etc.</p>                  | <ul style="list-style-type: none"> <li>• RC</li> <li>• IC</li> <li>• SRB</li> <li>• IG</li> </ul> | <ul style="list-style-type: none"> <li>• # of newsletter contributions released</li> <li>• # of newsletter reach/receivers</li> <li>• # of newsletter views</li> <li>• # of newsletter downloads</li> </ul> | <ul style="list-style-type: none"> <li>• 7 newsletter contributions released</li> <li>• 500 newsletter views</li> </ul>         | <ul style="list-style-type: none"> <li>• 6 newsletter contributions</li> <li>• 2056 newsletter views</li> </ul>                                     |  |  |
| <p><b>Press Releases</b></p> <p>(M1 until end of the project; at all major results / Press departments of participants, tracking by WP7 / UBU)</p>                                    | <p>Professionally compiled information about the project/results for distribution in (partner's) newsletters and basis for science journalists.</p>                           | <ul style="list-style-type: none"> <li>• All</li> </ul>   | <ul style="list-style-type: none"> <li>• # of press releases</li> <li>• # of views on the website &amp; social media</li> </ul>   | <ul style="list-style-type: none"> <li>• 2 press releases</li> <li>• 50 website views; 1000 social media impressions</li> </ul> | <ul style="list-style-type: none"> <li>• 2 press releases</li> <li>• 33 website views; 791 social media impressions</li> </ul>                      |  |  |
| <p><b>Scientific Publications</b></p> <p>(M1 with increasing effort towards the 2<sup>nd</sup> half of the project / Publication fees as budgeted by each partner / All partners)</p> | <p>Add scientific credibility to results by publishing in peer reviewed journals and open research platforms, respecting the H2020 obligation for open access publishing.</p> | <ul style="list-style-type: none"> <li>• RC</li> <li>• SRB</li> <li>• IC</li> </ul>               | <ul style="list-style-type: none"> <li>• # of publications</li> <li>• Journal's impact factor</li> <li>• # of citations</li> </ul>  | <ul style="list-style-type: none"> <li>• 20 scientific publications published</li> </ul>  | <ul style="list-style-type: none"> <li>• 7 scientific publications</li> <li>• 5.253 average journal impact factor</li> <li>• 0 citations</li> </ul> |  |  |

|  |  |   |   |  |  |  |  |
|--|--|---|---|--|--|--|--|
| <p><b>Project Fact Sheets</b><br/>(M12 until end of project / Budget reserved for printing, content/design by WP7 / UBU &amp; BNN)</p>   | <p>Providing online and/or printed project information for dissemination activities such as conferences, meetings and science hotspots.</p>  | <ul style="list-style-type: none"> <li>• RC</li> <li>• SRB</li> <li>• IC</li> </ul> | <ul style="list-style-type: none"> <li>• # of downloaded copies</li> <li>• # of printed copies</li> <li>• # of distributed copies</li> </ul>  | <ul style="list-style-type: none"> <li>• 50 downloaded copies</li> </ul>                                     | <ul style="list-style-type: none"> <li>• Not yet made</li> </ul>     |  |  |
| <p><b>DIAGONAL Workshops &amp; Training Activities</b><br/>(M1 with an increase towards the 2<sup>nd</sup> half of the project / Content provided by all technical WPs / All partners)</p> | <p>Workshops aim (i) to establish scientific cooperation with targeted research projects &amp; initiatives and to disseminate project results on RA, RM and RG; (ii) to disseminate the project results among targeted industrial stakeholders towards the end of the project.</p> | <ul style="list-style-type: none"> <li>• RC</li> <li>• SRB</li> <li>• IC</li> </ul> | <ul style="list-style-type: none"> <li>• # of workshops/trainings</li> <li>• # of training materials produced</li> <li>• # of participants</li> <li>• Evaluation of feedback of participants</li> </ul> | <ul style="list-style-type: none"> <li>• 4 workshops held</li> <li>• &gt;25 workshop participants</li> </ul> | <ul style="list-style-type: none"> <li>• 2 workshops held</li> </ul> |  |  |
| <p><b>DIAGONAL Webinars &amp; Knowledge Transfer:</b><br/>(M1 with an increase towards the 2<sup>nd</sup> half of the project / Content provided by all technical WPs / All partners)</p>  | <p>Webinars aim (i) to establish scientific cooperation with targeted research projects &amp; initiatives and to disseminate project results on RA, RM and RG; (ii) to disseminate the project results among targeted industrial stakeholders towards the end of the project.</p>  | <ul style="list-style-type: none"> <li>• RC</li> <li>• SRB</li> <li>• IC</li> </ul> | <ul style="list-style-type: none"> <li>• # of webinars</li> <li>• # of participants</li> <li>• # of recordings produced</li> <li>• Evaluation of feedback of participants</li> </ul>                    | <ul style="list-style-type: none"> <li>• 4 webinars held</li> <li>• &gt;25 webinar participants</li> </ul>   | <ul style="list-style-type: none"> <li>• 0 webinars held</li> </ul>  |  |  |

|  |  |   |   |   |  |  |  |
|--|--|---|---|---|--|--|--|
| <p><b>Scientific Conferences attended by DIAGONAL</b></p> <p>(M1 until project end / Participation coordinated by WP2 &amp; monitored by WP7 / All partners)</p> | <p>Expand the knowledge gained through the project.</p>  | <ul style="list-style-type: none"> <li>• RC</li> <li>• IC</li> <li>• SRB</li> <li>• IG</li> </ul> | <ul style="list-style-type: none"> <li>• # of conferences attended</li> </ul>                         | <ul style="list-style-type: none"> <li>• 20 conferences attended</li> </ul>                                     | <ul style="list-style-type: none"> <li>• 8 conferences attended</li> </ul>                                     |  |  |
| <p><b>Trade Fairs</b></p> <p>(M1 until project end / Participation coordinated by WP7 / All partners)</p>  | <p>Increase engagement with industries at targeted trade fairs.</p>                                    | <ul style="list-style-type: none"> <li>• IC</li> </ul>  | <ul style="list-style-type: none"> <li>• # of trade fairs attended</li> </ul>                         | <ul style="list-style-type: none"> <li>• 2 trade fairs attended</li> </ul>                                      | <ul style="list-style-type: none"> <li>• 0 trade fairs attended</li> </ul>                                     |  |  |
| <p><b>Meetings with standardization bodies</b></p> <p>(M1 until project end / Coordinated by WP2 &amp; WP6 / All partners)</p>                                   | <p>Directed to contribute to the OECD Malta Initiative, REACH reviews and future R&amp;D roadmaps.</p> | <ul style="list-style-type: none"> <li>• SRB</li> <li>• RC</li> </ul>                             | <ul style="list-style-type: none"> <li>• #of meetings attended</li> </ul>                             | <ul style="list-style-type: none"> <li>• 4 meetings attended</li> </ul>   | <ul style="list-style-type: none"> <li>• 1 meeting attended</li> </ul>   |  |  |
| <p><b>Reports and deliverables</b></p> <p>(M1 until project end, monitored by the project coordination team in WP1 / UBU)</p>                                    | <p>According to the requirements of the EC, demonstrating the project's progress</p>                   | <p>Project partners</p>   | <ul style="list-style-type: none"> <li>• Reports/Deliverables on the EC participant portal</li> </ul> | <ul style="list-style-type: none"> <li>• 53 Deliverables submitted</li> <li>• 12 Milestones achieved</li> </ul> | <ul style="list-style-type: none"> <li>• 12 deliverables submitted</li> <li>• 3 milestones achieved</li> </ul> |  |  |

Although BNN will coordinate the communication and dissemination activities, all DIAGONAL project partners are expected to actively participate in activities. To monitor them, a template “DIAGONAL\_WP7\_Comm&Diss\_Log.xlsx” (presented in Annex 5) was created by BNN and shared with all partners on the shared file server. The categories to choose as type of communication and dissemination activity are based on the periodic reporting required in the EC Participants’ Portal.

The following information will be reported by all partners:

- Project runtime (month xx)
- Date/time period (dd.mm.yyyy)
- Partner (Acronym) (lead partner in bold)
- Location/Repository
- Communication & Dissemination Activity:
  - Project Meeting
  - Organisation of a conference
  - Organisation of a workshop
  - Press release
  - Non-scientific and non-peer reviewed publications (popularised publications)
  - Exhibition
  - Flyer
  - Training
  - Social media
  - Website
  - Communication campaign (e.g., radio, TV)
  - Participation to a conference
  - Participation to a workshop
  - Participation to an event other than a conference or workshop
  - Video / Film
  - Brokerage event
  - Pitch event
  - Trade fair
  - Participation in activities organised jointly with other H2020 project(s)
  - Other
- Title of event/newsletter etc.
- Content/Brief description/Presentation title etc.
- No. of persons reached (e.g., participants, prints, views, etc.)
- Type of audience addressed:
  - Scientific community (higher education, research)
  - Industry
  - Civil society
  - General public
  - Policy makers
  - Media
  - Investors
  - Customers

- Other
  - External link to activity (if relevant)
  - Link to news/event at DIAGONAL webpage
  - Countries addressed
  - Comments

A different template is used to monitor the publications specifically, also based on the form at the EC Participants' Portal:

- Type
  - Article in Journal
  - Publication in conference proceedings/workshop
  - Book/Monograph
  - Chapter in a book
  - Thesis/Dissertation
  - Other
- Title
- Author(s)
- Title of Journal/Proceedings/Books series/Book (for book chapters)
- Year
- Page reference
- DOI
- Repository link
- Open Access Status (Green/Gold)
- Comments

Several activities are planned to engage with relevant stakeholders. These activities will be potentially merged with sister projects' activities or conferences to better interact with the relevant stakeholders and to join efforts with other ongoing activities, reaching a wider community, thus saving and aligning resources. The liaison management with other (NMBP) projects is performed in WP2 and thus closely linked with Task 2.2 and Task 2.3. The communication and dissemination activities will be updated regularly and compiled within the regular internal PEDR updates at M18, M36 and M42.

All communication and dissemination activities comply with the GDPR rules and are aligned with the privacy policy of the project.

All relevant-for-the-community communication and dissemination activities will be reported on the website and/or social media channels of the project.

DIAGONAL will organize workshops/webinars/events/etc. to engage with the different stakeholder groups. Registration forms allow the participants to sign-up for these activities/events organized by the project. Personal information (e.g., name, email-address, affiliation, etc.) collected for such events will be accompanied by relevant permissions and details of how personal data will be handled (i.e., used, stored and destroyed). This data will not be shared with third parties. Registration and participant lists will be kept electronically on a secure server. Physical signature lists of attendees at face-to-face meetings, such as Consortium Meetings, will be kept in a secure cabinet. The webinars and workshops and other online events organized by DIAGONAL may be recorded for training purposes. Therefore,

permissions will be requested from participants prior to the start of the meetings. In any case, only relevant data will be kept and processed during the project and will be limited to the purposes of DIAGONAL, in accordance with the 'data minimization principle'.


In addition, attendance to conferences through active participation and sending of abstract will be promoted within the project. Already identified interesting external events to attend are EU-US CoRs meetings, annual meetings of the SETAC-EU, Graphene 2022, IDTechEX, INNOPROM, NANOTECHNOLOGY, Foundations of Systems Biology in Engineering, NANOTECHNOLOGY, EuroNanoForum, Industrial Technologies, NanoTech, ICNANO, NANOSAFE, NanoTox, International Particle Toxicology Conference (IPTC), ICOETOX, NANOEH, CLINAM, ETPN Conference, NanoMed Europe, EUFEPS Conference, BioNanoMed, BIO CERAMICS Conference, nanoFIS, and ICANN 2021. Additionally, all the partners will continuously identify and interact with national and local events of interest as appropriate.

### Social Media in the Project

Social media will help to reach a wide, but targeted audience, maximizing impact and successful exploitation of the DIAGONAL results. The project will continuously post content about project relevant issues. In WP/, content generation will be coordinated by requesting all project beneficiaries to provide content.


Table 6 summarizes the characteristics of the two popular social media networks that are used by the project, twitter<sup>8</sup> & LinkedIn<sup>9</sup>. The posts will provide updates on DIAGONAL news, events and any information useful for project promotion to stakeholders. The main aim of using social media is to increase and retain the interest of multiple audiences and to engage new ones. Twitter and LinkedIn will be also used to amplify the content generated in the project webpage. To encourage all partners to share social media content, there will be constant reminders at all meetings of WP7.

Table 6. Overview of the characteristics of the two social media platforms used in the project.

| Platform  | Description – What is it and how can it be used?  |
|---|---|
| <p><b>Twitter</b></p>  | <p>Twitter is a public forum where anyone can write and share short messages called 'Tweets'. Twitter members can broadcast tweets and follow other users to receive their tweets.</p> <p>280-character messages including links (a URL is always altered to 23 characters). This excludes media attachments (photos, images, videos, etc.) and quoted tweets (displaying someone else`s tweet within your own).</p> <p>Sharing short comments, announcements that can instantaneously reach a large audience or retweeting relevant content.</p> |

<sup>8</sup> <https://twitter.com/DIAGONALproject>

<sup>9</sup> <https://www.linkedin.com/company/diagonalproject>

|  |   |
|--|---|
| <p><b>LinkedIn</b></p>  | <p>LinkedIn is the world's largest professional network on the internet. It can be used to find the right job or internship, connect and strengthen professional relationships. LinkedIn can be accessed from a desktop, LinkedIn mobile app, mobile web experience, or the LinkedIn Lite Android mobile app.</p> <p>A complete LinkedIn profile can help to connect with opportunities by showcasing the project's unique professional story through experience, skills, and education.</p> <p>Also, LinkedIn can be used to organize offline events, join groups, write articles, post photos and videos, and more.</p> |
|--|---|

## Social Media Target Audience

The targeted **social media audience**, i.e., those who follow and who to invite others to follow the DIAGONAL profiles, are people who are likely to be interested in the project. We identified three main types of audience: (i) lay people (no special expert knowledge, i.e., general public); (ii) managerial people (may have more knowledge than the lay audience about the subject); (iii) experts (most demanding audience in terms of knowledge). DIAGONAL target audiences are (i) the scientific community, (ii) large industry, SMEs and innovators, (iii) state agencies, regulators, policy makers, and (iv) the general public, civil society organisations and media. Once the project progresses and specific content and updates are available, the postings will be tailored to the specific target group by using relevant hashtags.

## Social Media Strategy

The social media strategy aims to:

- Identify and engage people and organizations active in fields related to project activities;
- Increase recognition of the project through social media;
- Spread news and other content about the project such as research articles, public deliverables, marketing material, project content, activities, news, results, etc.;
- Engage social media followers; and
- Create interactive forums at an international level.

The project will communicate continuously throughout its lifetime by:

- Launching posts;
- Releasing news items that feature DIAGONAL research & outcomes;
- Linking to any newsletter articles / blog posts DIAGONAL produced;
- Promoting conferences DIAGONAL will be represented at (interesting oral talks, posters, discussions, etc.);
- Inviting followers for dedicated feedback;
- Publishing interesting news items within the scope of the project;
- Publishing interesting images related to the project topics;
- Reporting new publications or resources produced by the project;
- Replying to relevant tweets by other people;

- Retweeting relevant tweets of other people, projects and organizations;
- Conducting mini-surveys on topics related to the DIAGONAL activities (e.g., users have to vote via choosing an answer or by clicking on 'like', 'applause' or 'heart', etc.);
- Promoting project partner organisations and their staff;
- Presenting WPs and their progress;
- Posting partners' testimonials;
- Any other useful information.

Some social media activities are pre-planned to maintain regular posts in between periods with no special news.

## Publications

DIAGONAL aims to create 20 scientific publications along its runtime. Some partners have already depicted the journals where to publish their peer-reviewed articles: Environmental Science and Technology, Cell Systems, Green Chemistry, Nature Nanotechnology, Journal of Nanobiotechnology, International Journal of Hygiene and Environmental Health, Environmental Science: Nano, NanoImpact, Spectroscopic journals, BMC Systems Biology, International Journal of Life Cycle Assessment. BNN together with the DIAGONAL coordination team will coordinate and monitor the progress from all partners on that topic.

## Contractual Framework for Publications

Partners will disseminate project results to the public, including via scientific publications.

The following paragraphs of the GA specify communication and dissemination obligations:

- Article 29 – Dissemination of results – Open Access – Visibility of EU funding (pages 49-50 of the GA); and,
- Article 38 – Promoting the action – Visibility of EU funding (pages 57-59 of the GA).

Project partners are committed to Open Access publication as far as possible – the preferred option is Gold Open Access, but self-archiving via Green Open Access is also encouraged. The strategy that DIAGONAL, as a project, will follow for publications will be discussed internally within the consortium and at upcoming S&TC meetings.

## Internal Procedure for Publications

As required by Article 29 of the GA, if a beneficiary intends to disseminate results, it must give at least 45 days advance notice to the other beneficiaries and sufficient information on the results that will be disseminated. Objections to publication must be received within 30 days of receiving the notification of intention to disseminate. Further details on how to deal with objections are agreed upon in the CA.

All disseminated materials from DIAGONAL will be available for download through the project's website. All outcomes should be assigned a DOI and be published under a Creative Commons



License for re-use. Peer-reviewed publications will be made available based on journal requirements.

The European Commission has lately launched the Open Research Europe<sup>10</sup>. As an open access publisher, it might be very useful for the project outcomes of DIAGONAL. As this is at a very early stage, the DIAGONAL Consortium will discuss the possibility of using this platform for publication over the coming months.

### Completed Communication & Dissemination Activities

Main DIAGONAL activities (dissemination material, events, workshops, newsletters, etc.) are announced in the "News" section of the project website<sup>11</sup> as well as in the social media channels of the project (LinkedIn & Twitter).

Furthermore, all activities by all partners are compiled and regularly updated using the template list "DIAGONAL\_WP7\_Comm&Diss\_Log\_Template.xlsx" (Annex 5).

---

<sup>10</sup> <https://open-research-europe.ec.europa.eu/>

<sup>11</sup> <https://www.diagonalproject.eu/news/>

## Exploitation Plan

The Horizon 2020 program defines 'Exploitation'<sup>12</sup> as the "utilization of results in further research activities other than those covered by the action concerned, or in developing, creating and marketing a product or process, or in creating and providing a service or in standardisation activities". Exploitation is about making use of the results; but before exploiting, an exploitation planning is needed for recognizing the exploitable results and their stakeholders. Exploitation can be commercial, societal, political, or for improving public knowledge and action. Project partners can aim at exploiting the project results themselves or facilitate exploitation by others. Furthermore, exploitation concretizes the value and impact of the R&D&I activity for societal challenges.

The exploitation strategy will be mainly addressed in Deliverable 7.5, "Exploitation roadmap", due in M38. The Exploitation Plan has the objective to define the strategy to multiply the impact of the proposed solutions and innovations of the DIAGONAL project, to be prepared for the transition towards industrial and commercial uptake in order to fully achieve the expected impacts. The Exploitation Plan describes the activities to be undertaken (how and by whom) in order to ensure the exploitation beyond the project itself.

Overall objectives of the exploitation task (T7.3 Economic sustainability and exploitation, starting in M16) are fostering exploitation by ensuring contacts to stakeholders, collecting needs & requirements, identifying challenges for implementation, summarizing impact, and to further developing the exploitation plan and establishing the exploitation strategy based on the results from WP2, 3, 4, 5 and 6.

Key approaches and tools to identify exploitation paths beyond the project comprise:

- A **target outcomes table of key exploitable results** describes the features of the method / material / product / service that are the outcome of the project.
- A **Stakeholder Matrix** has become the standard tool for giving a comprehensive picture of the community of researchers, potential users, buyers and influencers in an application field. The exploitation target groups are subsets of the dissemination target groups (identified in T2.3) and will be continuously specified in greater detail during the project,
- The initial SSbD **Value Chain** established in T2.4 will be continuously updated in dependence of new project results generated.
- **Selection of the most promising demonstrators** in T7.1 "Cases for sustainability by design" based on predefined KPIs obtained from the brief market analyses in T2.4 "Identification of SMEs needs and market analysis", T7.2 "Assessment of social sustainability of MCNMs & HARNs", KPIs for risk management from WP6 as well as relevant SDGs and environmental KPIs from Task 5.2 "Life Cycle Sustainability concept integration".
- Follow up on brief market analysis for each demonstrator (T2.4) with an **in-depth market analysis** for the promising demonstrators selected in T7.1

---

<sup>12</sup> [https://ec.europa.eu/research/participants/data/ref/h2020/other/events/2017-03-01/8\\_result-dissemination-exploitation.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/other/events/2017-03-01/8_result-dissemination-exploitation.pdf)

- **Lean Canvas Business Planning** for the most promising demonstrators selected in T7.1
- **Identification of exploitation options**, e.g.: further internal research, collaborative research, internal product development, internal service development, licensing, assignment, joint venture, spin-off
- **Identification of funding options** for the most promising demonstrators at dedicated events as well as based on database research (e.g., identification of suitable crowdfunding platforms via <http://crowdfunding4innovation.eu/platforms>) and publicly funded R&D projects.
- Identification of critical IPR issues and development of an **IPR strategy** for the selected demonstrators

In order to gather content for the DIAGONAL exploitation strategy and the related exploitation activities, information needs to be collected from various stakeholder groups along the value chain and via different methodological approaches. The main activities for the development of the exploitation strategy comprise:

- Interviews with different stakeholder groups (project internal and external) in person or via phone/internet
- Organization of and participation in exploitation-related workshops
- Attending conferences
- Supporting activities related to the further use of IP generated in DIAGONAL
- Identification of further research areas and promising industry sectors

The International Project Advisory Board and project partners help establish contacts to project external experts and stakeholders.

Exploitation activities and results will be communicated and disseminated in T7.4. A special emphasis during the interviews will be placed on economic factors (e.g., size of the target market, willingness to pay) to generate and collect input data for the planned LCC in WP5 (in particular subtask 5.2.2). Exploitation activities will ultimately contribute to the exploitation of the project results beyond the project end and concretize the value and impact of the R&D&I activity for societal challenges.

## Conclusion

This PEDR provides DIAGONAL with a solid framework for communicating, disseminating and exploiting project results and activities. The DIAGONAL Consortium will use this document as an initial strategy that will be further revised and updated as dissemination materials and specific strategies are evaluated to reach effectiveness in targeting stakeholders and in aligning with stakeholder interests and problems. Moreover, exploitation efforts will become more specific and will put into practice along the project runtime.

The PEDR captures and schedules all communication and dissemination activities of the project that support engagement of new stakeholders and increase public awareness of the project and its outcomes. It will assist the project partners by defining communication goals, objectives and strategies by outlining specific dissemination events in which to participate and dissemination activities to perform.

Upcoming updates of the PEDR will explain how the project plans to guide the consortium partners through the exploitation process of DIAGONAL results to achieve the expected impacts. In conclusion, the DIAGONAL PEDR employs diverse communication channels, ranging from a project website and social media accounts, etc., through to participation in events (conferences, workshops, meetings, events, joint activities with relevant EU projects, etc.) to maximise internal communications and external interactions with stakeholders.

In general, the performance regarding communication and dissemination of results during the first nine months of the project were sufficient. All main communication and dissemination tools such as (i) the project branding, (ii) relevant templates, (iii) the DIAGONAL public project website, (iv) twitter and LinkedIn social media profiles, (v) a project flyer as well as (vi) a roll-up, were created. As soon as new findings and results are available, the measures described in the PEDR apply.

As leader of Task 7.4, BNN will continuously monitor and coordinate future communication and dissemination activities. WP7 leader BRI will ensure appropriate innovation management and develop exploitation strategies in close collaboration and knowledge exchange with the DIAGONAL Consortium. All project partners will be encouraged to perform further outreach activities and spread the word about the DIAGONAL's progress in their communities. The PEDR will be updated regularly, with the next internal update in [M36](#).

## References & Bibliography

“Making the most of your H2020 project”, online retrieved on 25th January 2022,  
<https://op.europa.eu/en/publication-detail/-/publication/3bb7278e-ebf3-11e9-9c4e-01aa75ed71a1/language-en>

“EC DG R&I – How to make full use of the results of your Horizon 2020 project”, online retrieved on 25th January 2022,  
[https://ec.europa.eu/research/participants/data/ref/h2020/other/comm/20210330\\_how-to-make-full-use-of-the-results-of-your-project\\_h2020\\_en.pdf#page=1&zoom=auto,-98,848](https://ec.europa.eu/research/participants/data/ref/h2020/other/comm/20210330_how-to-make-full-use-of-the-results-of-your-project_h2020_en.pdf#page=1&zoom=auto,-98,848)

“The Social media guide for EU funded R&I projects”, online retrieved on 25th January 2022,  
[https://ec.europa.eu/research/participants/data/ref/h2020/other/grants\\_manual/amga/soc-med-guide\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/other/grants_manual/amga/soc-med-guide_en.pdf)

## Annex

### Annex 1. Brand guidelines.



DIAGONAL\_Brand  
Guidelines.pdf

### Annex 2. Communication Toolkit.

#### Annex 2.1. Template presentation slides.



DIAGONAL\_templat  
e\_PRESENTATION.ppt

#### Annex 2.2. Template deliverable report.



DIAGONAL\_templat  
e\_DELIVERABLE\_x.x.x\

### Annex 3. DIAGONAL roll-up.



DIAGONAL\_Roll\_Up  
.pdf

### Annex 4. DIAGONAL project flyer.



DIAGONAL\_Trifold\_  
Flyer.pdf

### Annex 5. DIAGONAL Communication and Dissemination Log Template.

Excel Sheet #1.

List of Communication & Dissemination activities related to the DIAGONAL project, in chronological order.

| Start Date (dd.mm.yy) | End date (dd.mm.yyy) | Partner (Acronym) (lead partner in bold and main contact person) | Location (or Online) | Comm. & Diss. Activity (select from drop-down list) | Title  | Content/Brief description/Purpose   | Estimated Number of Attendees                     |          |               |                |               |       |           |           |       |      | Costs | Comments  | Access documents (to be potentially shared at e.g.) | External link to activity (if relevant) |
|-----------------------|----------------------|--|----------------------|---|--|---|---|----------|---------------|----------------|---------------|-------|-----------|-----------|-------|------|-------|---|---|---|
|                       |                      |  |                      |   |  |   | Scientific community (higher education, research) | Industry | Civil society | General public | Policy makers | Media | Investors | Customers | Other |      |       |   |   |   |
| 26/07/2021            | 26/07/2021           | BNN, Susanne Resch   | Online               | Press release                                       | DIAGONAL, a project bringing new methodologies to guarantee long-term nanosafety | Press release on website  | 500   | 200      | 10            | 50             | 20            | 10    | 0         | 0         | 0     | 0.00 |       |   |   |   |
| 01/09/2021            | 12/05/2022           | ICCRAM   | Online               | Social media  | 36 Social Media publications (LI, FB, TW)  | Post related to the Diagonal project  | 6.000   | 0        | 0             | 4200           | 0             | 0     | 0         | 0         | 0     |      |       |   |   |   |
| 24/09/2021            | 24/09/2021           | ICCRAM   | Burgos (Spain)       | Workshop  | "Understanding our environment"  | ICCRAM team made diferent activities with children due to the European Researchers' Night | 100   | 0        | 0             | 225            | 0             | 0     | 0         | 0         | 0     |      |       | 3439 reach people only in <a href="https://www.facebook.com/...">https://www.facebook.com/...</a> |   |   |

Excel Sheet #2.

List of Scientific Publications related to the DIAGONAL project.

| # | Type (select from dropdown list) | Title  | Author (s)   | Title of Journal/Proceedings/Books series/Book (for book chapters) | Number, date or freq. of the Journal/Proc./Book | Is peer-reviewed? (Y/N) | Is Open Access? (choose from dropdown)                 | DOI   | Repository Link   | Year | Page ref. | Journal Impact Score | # Article views | # Citations | Published on DIAGONAL website? | Published on social media? | Imported to EC Portal? |
|---|----------------------------------|--|--|--|---|-------------------------|--|---|---|------|-----------|----------------------|-----------------|-------------|--------------------------------|----------------------------|------------------------|
| 7 | Article in Journal               | High Catalytic Efficiency of a Nanosized Copper-Based Catalyst for Automotives: A Physicochemical Characterization           | Mathioudakis, G.N.; Kourtelesis, M.; Lada, Z.G.; Andrikopoulos, K.S.; Sygellou, L.; Dracopoulos, V.; | Molecules  | 2022, 27, 7402.                                 | Yes                     | Green Open Access (pls add embargo date if applicable) | 10.3390/molecules27217402   | <a href="https://www.mdpi.com/1420-3049/27/21/7402">https://www.mdpi.com/1420-3049/27/21/7402</a> | 2022 |           | 4.927                | 63              | 0           | YES                            | YES                        | YES                    |
| 8 | Article in Journal               | Low Toxicological Impact of Commercial Pristine Multi-Walled Carbon Nanotubes on the Yeast <i>Saccharomyces cerevisiae</i> . | Matteo Poddighe; Santiago Aparicio; María Suarez-Diez; Juan Antonio Tamayo-Ramos; Juan Antonio       | Nanomaterials  | 11(9)   | Yes                     | Green Open Access (pls add embargo date if applicable) | <a href="https://www.mdpi.com/2079-4991/11/9/2272#">https://www.mdpi.com/2079-4991/11/9/2272#</a> | <a href="https://www.mdpi.com/2079-4991/11/9/2272#">https://www.mdpi.com/2079-4991/11/9/2272#</a> | 2022 |           | 4.921                | 805             | 0           | YES                            | NO                         | YES                    |