This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 964248

Project Acronym: DeDNAed

Deliverable 8.3

First version of the exploitation and dissemination plan of results

Due date of Deliverable: 31.02.2022

Actual submission date: 21.02.2022

Lead beneficiary for this Deliverable: BNN

Level of Dissemination: Public

Document History

Version	Date	Edited by	Comment
1	01.12.2021	BNN, Nerea Argarate and Susanne Resch	1st draft
1.1.	28.01.2022	TECNALIA, Nerea Briz and Goran Bijelic	1st internal review and contribution
2.	16.02.2022	All partners	Review and creation of the 2nd draft
3.	21.02.2022	TUC, Julia Hann	Final review

Acknowledgement

The main work on this deliverable report was performed by BNN, leader of WP8 on "Marketing (Dissemination & Exploitation)". Nerea Argarate and Susanne Resch, scientific researchers at BNN, developed and coordinate the overall communication and dissemination strategy within the DeDNAed project and researchers from TECNALIA, Nerea Briz and Goran Bijelic, contributed to the Exploitation strategy. Additionally, all project partners contributed input and feedback to the creation of the DeDNAed PDER, and TUC, Julia Hann review the final version. This PDER report will be updated regularly in M24 and M36.

Abbreviations

AC	Atomic cluster
AFB1	Aflatoxin B1
bioRE	Biological recognition element
IL-6	Interleukin-6
LSP	Localized surface plasmon
NP	Nanoparticle
PoN	Point of need diagnostics
SERS	Surface Enhanced Raman Spectroscopy
SLB	Supporting lipid bilayers

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1. Introduction & background

Description of the task

The DeDNAed project has been awarded funding by the European Commission (EC), which requires the consortium to communicate the project and disseminate/exploit its results to specific stakeholders and a wider public community. Professional communication, dissemination and exploitation is a key element for successful marketing. Effective dissemination of project outcomes will ensure the use of results and maximize DeDNAed project impact.

Within the DeDNAed work plan, WP8 led by BNN is focussed on "Dissemination & Exploitation". The aim of WP8 is to ensure a consistent Dissemination & Exploitation of the project's scientific and technological results of the DeDNAed, safeguarding optimal visibility and both a European and worldwide outreach to all relevant stakeholders (R&D community, industry, regulatory bodies and general society). Deliverable 8.3 "Plan for Dissemination and Exploitation of Project Results (PDER)" directly serves to achieve the following specific objective within WP8:

- **Disseminate** all scientific/technological **results** to the scientific, technical and medical **community (O.8.1).**
- Ensure an ongoing collaboration of the consortium for **successful exploitation** of **innovations** also beyond the project period **(O.8.2).**
- To ensure **efficient management** of DeDNAed **project data (O.8.3).**

This document shall be understood as supporting means to fulfil all obligations agreed with in the grant agreement, explicitly the Articles listed below:

Article 26 — OWNERSHIP OF RESULTS

Article 27 — PROTECTION OF RESULTS — VISIBILITY OF EU FUNDING

Article 28 — EXPLOITATION OF RESULTS

Article 29 — DISSEMINATION OF RESULTS — OPEN ACCESS — VISIBILITY OF EU FUNDING

Article 30 — TRANSFER AND LICENSING OF RESULTS

Article 38 — PROMOTING THE ACTION — VISIBILITY OF EU FUNDING

The DeDNAed PDER is part of Task 8.1 on "Dissemination strategy & implementation" led by BNN and Task 8.2 on "Exploitation strategy" led by TECNALIA. The aim of these two tasks is to plan, monitor and implement all project's communication and dissemination strategy as well as the elaboration of the exploitation strategy. The PDER summarizes the strategy and concrete actions that the DeDNAed Consortium will follow in order to communicate, disseminate and exploit the project results, aiming to help maximize the impact of the project. The communication plan is integrated in the PDER to increase the reciprocal impacts.

Project background and objectives

The project "DeDNAed" is intended to develop a novel, **innovative biosensing platform** whose advantages and benefits are in terms of sensitivity, versatility and being ultrafast by an optical approach. The platform will be based on the assembly and integration of sensing elements (transducer and bioreceptor) by DNA origami. The DNA origami will serve as a "nano-breadboard" in order to precisely control the position of these elements and thus the sensor architecture at the nanometer scale. In particular, the precise positioning of the analyte into hot spot between plasmonic nanoparticles will lead to a significant increase in measured **surface enhanced Raman spectroscopy (SERS) signal**.

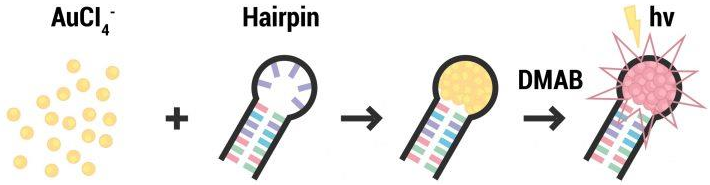

Figure 1. Schematic formation of fluorescent DNA-hosted Au-nanoclusters and the hairpin DNAs, single-stranded DNAs and fully matched DNAs.

For the sensing element, it is intended to integrate atomic clusters (AC) of metals into common biological recognition elements (bioRE) such as DNA aptamers or antibodies (Figure 1). The benefit of ACs is that they have improved fluorescence properties over normal nanoparticles (NPs) due to their higher surface/volume ratio. They are synthesised by a new enzymatic etching that does not denature the bioRE when it is subsequently installed[1]. In addition, plasmonic NPs are used to improve the optical signal of the target analytes captured by the bioRE. The excitation of the free electron gas enclosed in the NP, called localized surface plasmon (LSP), induces a strong amplification of the electromagnetic field in the vicinity of the NP surface. In strongly near-field coupled systems, this property is additionally enhanced and can be used to improve the Raman fingerprints of a RE and the analytes by a factor of 10^6 to 10^{10} depending on the plasmonic NP architecture[2,3]. This process is called Surface Enhanced Raman Scattering, SERS. However, this is only possible through the exact alignment of the NP to each other and the respective RE in the plasmonic hot spots. DNA origami as an inter- and intramolecular programmable carrier matrix enables the construction of such a near-field-coupled array for signal amplification by SERS with a resolution of up to 2 nm. It is folded from a single DNA strand and can take different 2D and 3D shapes[4,5]. So-called "sticky ends" can be used for fastening points on the surface of this structure. In this way, aligned NPs for signal amplification of the SERS can be arranged at a predetermined distance (see Figure 2) around the centrally positioned bioRE. This enables a highly

[1] https://doi.org/10.1039/C4NR01323A
2 DOI: 10.1126/science.275.5303.1102
[3] https://doi.org/10.1103/PhysRevLett.78.1667
[4] https://doi.org/10.1016/j.chempr.2017.02.009
[5] DOI: 10.1038/nature24651

sensitive, specific and controllable detection of target binding by changing the Raman spectrum when there is an interaction between the target and the bioRE.

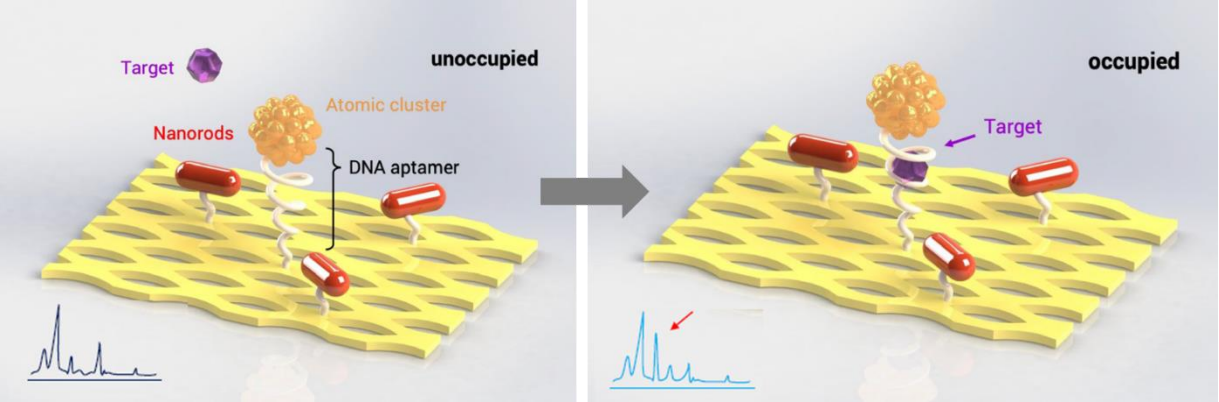

Figure 2. Schematic sketch of the change in the SERS signal upon binding of the analyte to the biological recognition element with ACs (e.g. DNA aptamer).

This sensor method is not bound to a specific biomarker molecule for the sensor element, but can be transferred to different marker molecules[6,7]. This means a high degree of flexibility in the area of application, from **medical technology** to **food monitoring**. In addition, a transfer of the DNA origami-based sensor platform to flexible, textile substrates are carried out using lipid bi-layers and the Langmuir-Blodgett method[8,9] for later integration into **wipe test or medical wearable** (Figure 3).

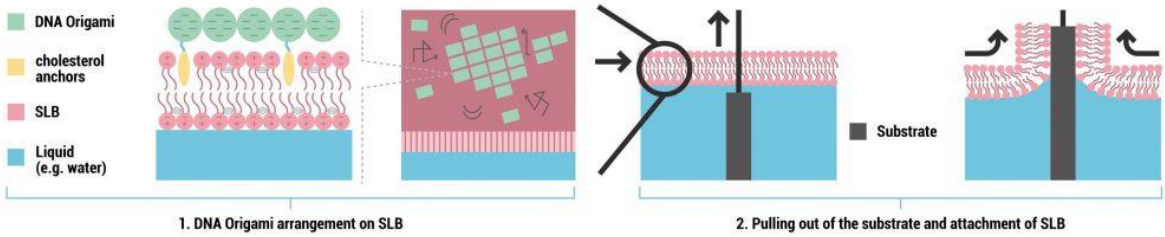

Figure 3: Schematic sketch of the large-scale arrangement of DNA origami-based sensor array on supporting lipid-bilayers (SLB) anchored by cholesterol units and the transfer mechanism to flexible substrate by LB.

[6] https://doi.org/10.1002/(SICI)1521-3773(19981102)37:20<2754::AID-ANIE2754>3.0.CO;2-3
[7] https://doi.org/10.1111/cbdd.12444
[8] https://doi.org/10.1038/ncomms9052
[9] https://doi.org/10.1021/acsnano.5b00161

The hypothesis of this project:

The precise localization of bioRE functionalized with ACs in a precisely aligned nanoarray consisting of min. three NPs on a DNA origami provides the basis for a biosensor platform based on SERS detection, which can selectively detect analytes from a solution without major time delays. This system can be further improved by a large-area arrangement of several biosensor units of the same orientation to structures similar to meta-surfaces, which leads to a signal multiplication. This system can be individually adapted through the integrated bioRE, which is validated by various proof-of-concepts with 4 different model analytes critical for current research and the implementation on both solid and flexible, textile substrates. This innovative sensor concept is the basis for **fast, highly sensitive, selective, individually adaptable and low-device biosensors**, which will set **new paradigms in point-of-need (PoN) diagnostics**, such as **food analysis** (aflatoxin) or **medical in-vitro diagnostics** (interleukin-6).

This results in the following **objectives**:

(1) Establishment of DNA origami as “nano breadboard” for recognition elements.
(2) Proof of signal enhancement through spatial alignment of recognition elements.
(3) Demonstration of detection of food containments and bio markers on novel sensor platform.
(4) Transfer of the sensor platform to a flexible substrate.

Objectives of the first Plan for the Dissemination and Exploitation of Results (PDER)

The aim of this PDER 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 PDER 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.
- **Disseminate to maximize knowledge diffusion** across Europe and internationally;
- **Exchange experience** with related projects and groups working in the field 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 project outcomes to the marketplace. Target groups here are 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.

2. Communication and Dissemination activities

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 (bi)-monthly WP8 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. DeDNAed project Communication and Dissemination Strategy are presented below followed by the developed tools and performed communication activities during the first year of the project

Communication & Dissemination Strategy

Internal Communication

Overall Project Cooperation

DeDNAed 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. DeDNAed partners identified relevant stakeholders. These are divided into internal and external target groups, described in the following subsections.

Consortium partners

The DeDNAed Consortium consists of 7 international partners spreads across 4 countries. These are, Austria, France, Germany and Spain. Internal communication is important for information sharing and to keep motivation high around project Consortium members. This ensures successful dissemination and exploitation of research outcomes and engagement in spreading the project results. It is an extremely important element for delivering the goals of DeDNAed. WP leaders are encouraged to communicate regularly with their co-task participants and to organise discussion meetings concerning task progress, planning and implementation, and development of joint documentation, including input into periodic reports and deliverables. For the project management team, communication with the Consortium is on an *ad hoc* basis, as required, and is more formal via regular project meetings that provide updates on overall project progress. Internal communication Management is described in Deliverable 1.2. Project Quality Plan under section 8.

External Communication & Dissemination

All DeDNAed 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). WP8 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. 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 and dissemination, summarized in Figure 4 and Table 1.

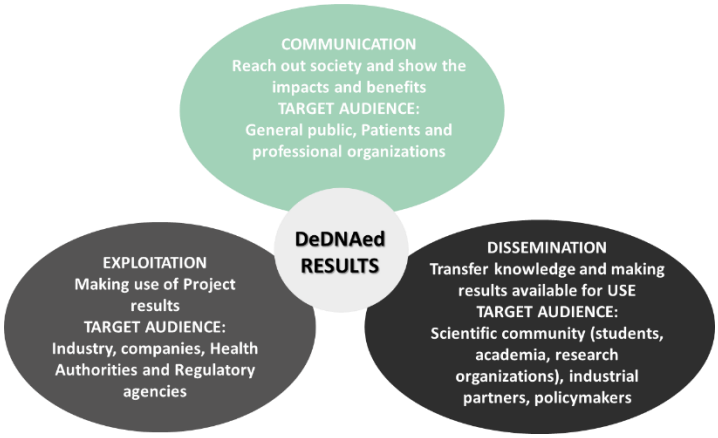

Figure 4. Concept of Communication, Dissemination and Exploitation

Table 1. Concepts of Communication, Dissemination and Exploitation.[10]

	Communication	Dissemination	Exploitation
Definition[11]	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) it **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	**Reach out to society and show the impact and benefits** of EU-funded R&I activities, e.g., by addressing and providing possible solutions to fundamental societal challenges.	**Transfer knowledge & results** with the aim to enable others to use and take up results, thus maximizing the impact of EU-funded research. Covers **project results only.**	**Effectively use project results** through scientific, economic, political or societal exploitation routes aiming to turn R&I actions into concrete value and impact for society.
When	Starts at the **outset of the project.**	Happens only once **results** are available.	Happens only once **results, services or products** are available.

[10] https://op.europa.eu/en/publication-detail/-/publication/3bb7278e-ebf3-11e9-9c4e-01aa75ed71a1/language-en
[11] EC Research & Innovation Participant Portal Glossary, Reference Terms. https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/support/glossary

Focus	**Inform** about and **promote** the project AND its results/success → Focus on the **whole project** (including results).	**Describe** and **ensure results available** for others to **use** → Focus on results **only.**	**Make concrete use** of research results (not restricted to commercial use)
Target Audience	**Multiple audiences** beyond the project's own community, including the media and general public. Multiplier effect.	**Specialist audiences** - 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.
Formal Obligations	Legal reference GA Article 38.1	Legal reference GA Article 29	Legal reference GA Article 28

Table 2 summarizes the initial communication and dissemination activities 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.

Table 2. Planned communication and dissemination activities.

Communication & Dissemination tools	Target audience	Objective	Measure/Target (KPI)	Expected Impact
Logo and Graphic charter DeDNAed Brand guidelines	All	Create a **visual identity** of the project	# documents with project brand	Raise awareness of the DeDNAed project
Project Website DeDNAed website launching	Public	**Core of external communication & dissemination activities** to all (public) stakeholders; Provides easy access to project information.	# website hits, page views, clicks # document views and downloads	Raise awareness of the DeDNAed project, provide and promote project information and its scope.

C&D Toolkit Project roll-up, flyer(s), slides, deliverable templates, general poster, etc.	Public	**Provide online and/or printed project information** for dissemination activities such as conferences, meetings and science hotspots.	# downloaded copies # printed copies # distributed copies	Raise awareness, engage the general public and scientific community and partners, and promote the project and EU funding.
Social Media (Twitter & LinkedIn accounts and Updates)	Public	General awareness of Project activities and partner efforts. **Community building**. Addressing defined **international target groups** via Twitter and LinkedIn.	Accounts activated with 2-3 posts/month, resulting in: # of followers # of postings # of impressions	Attract interest of industry and connect with stakeholders' pages and accounts in social media.
Press Releases	All	Professionally compiled information about the **project/results for distribution in (partner's) newsletters and basis for science journalists**.	# of Press releases # of downloads	Raise awareness of the DeDNAed project, provide and promote project information and its scope.
Scientific Journals	Scientific Community & industrial parties	Add **scientific credibility** to results by publishing in peer reviewed journals	# high impact publications (IF) # of citations # editorials based on research reports **# Open Access publications**	Raise awareness, inform and promote the results obtained to the scientific community, partners and industry.
Research data repository	Scientific Community & industrial parties	Publish in **open research data repository platforms** such as Zenodo.org.	# Open research documents shared # Linked communities	Open research data to make it possible for third parties to access, print, exploit, reproduce and disseminate data — via a research data repository.
Scientific Conferences	Scientific Community & industrial parties	**Dissemination of scientific results**	# scientific conferences #oral presentations, posters	Liaison with stakeholders and Present DeDNAed
Conferences, fairs and Exhibitions	Industrial parties, general public	Establish **connection with relevant stakeholders**, Engaging in direct, face-to-face communications choosing stakeholder-related events.	# conferences, fairs and exhibitions # presentations, posters, articles in newsletters, web/blog	Liaison with stakeholders and Present DeDNAed

Project Workshops, trainings (organization and participation)	Policy makers, Industrial parties & Scientific community	Encourage cross-disciplinary interaction and troubleshooting of project developments	# Project Workshops (scientific, non-scientific)	Liaison with stakeholders and Present DeDNAed
Platforms, Clusters and Associations (news, newsletters, presentations…)	Policy makers, Industrial parties & Scientific community	Establish connections with **clusters, platforms and Associations.**	# Project presentations as news in webpage, newsletters, oral presentations	Liaison with stakeholders and Present DeDNAed
Internal Workshops, Knowledge Transfer & Training Activities	Internal webinars for ensuring awareness and internal knowledge transfer.	Internal webinars for **ensuring awareness and internal knowledge transfer**.	# of webinars/ trainings # of training materials & recordings produced # of participants Evaluation of feedback of participants	Liaison with stakeholders and Present DeDNAed

Communication and Dissemination activities during the first year

Project Logo

All materials used for the dissemination and communication activities reflect a common visual identity, which is associated with the very first visual identity materials developed, i.e. the project logo. As a first step of the project branding, a project logo and icon were designed (see Figure 3-6). The DeDNAed logo is a combination of the project acronym and a DEDNAED icon, which consists of an origami face mask. This logo can be used with the corporate design colors as well as monochrome in black or white.

Figure 5. DeDNAed logo.

Figure 6. DeDNAed logo black.

Figure 7. DeDNAed logo white.

Figure 8. DeDNAed icon.

Project Website

All information regarding the project website, accessible at https://dednaed.eu/, is presented in detail in Deliverable 8.1. "Public project website online" submitted in month 5. The project website was launched in July 2021.

The following actions were carried out in order to construct the project's website, in close cooperation by Technische Universität Chemnitz and BioNanoNet Forschungsgesellschaft mbH:

- Purchase of domain (dednaed.eu)
- Purchase of webhosting and SSL certificate
- Selection and purchase of a website template
- Creation and implementation of the project's email address: info@dednaed.eu
- 'Coming soon' website online, including funding acknowledgement and contact information
- Selection of images to be implemented in the website
- Creation and implementation of the website structure:
    a. **Home**
    b. **Project**
        - Project summary
        - Objectives
        - Work plan
    c. **Consortium**
        - Map and logos of the project partners. Description of all partners' main tasks and contact information.
    d. **News and media**
        - Latest news and information. Tags: Events, News, Project outcomes
    e. **Contact**
        - Contact form that sends all requests to info@dednaed.eu
    f. **Footer**

- Funding acknowledgement
- Link to social media (Twitter & LinkedIn)
- Latest tweets
- Contact information
- Privacy policy
- Legal notice

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 DeDNAed brand and its components such as fonts, colours and images. It is presented in Annex 1.

Communication Toolkit & Dissemination Package

The DeDNAed "Communication & Dissemination 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 DeDNAed "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, (ii) meeting minutes, (iii) agenda, and (iv) Deliverable report) and are presented in Annex 2.

All communication and dissemination activities developed by every partner in DeDNAed 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 964248.

WP8 leader BNN will identify the need for further templates (e.g., for posters, fact sheets, leaflets, etc.) and develop them on demand.

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

Banner/Roll-up

A project roll-up has been created to provide an additional aid to communication and dissemination activities. It contains very basic information about the project.

The banner is visually oriented and its main purpose will be to gain audience attention and invite them to visit the project website. Its content will be very basic so as to be clear and easily understandable by the target end users. It will be available as soon as face-to-face events are feasible.

Flyer

A project flyer has been produced to inform about the DeDNAed project objectives and expected results. It will be used for online communication and dissemination, as well as to be distributed to the different stakeholder networks. The level of detail will be generic; therefore, it will be intended mostly for most of the stakeholders' network groups. The DeDNAed flyer will be electronical (as PDF), and could be also printed to be used during different events. It will be developed within the first year of the project and will be reviewed for update on a yearly basis to provide information on the project development.

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.

Social Media in the Project

DeDNAed created its social media accounts in June 2021. Social media will help to reach a wide, but targeted audience, maximizing impact and successful dissemination of the DeDNAed results. The project will continuously post content about project relevant issues. In WP8, content generation will be coordinated by requesting all project beneficiaries to provide content.

Table 3 summarizes the characteristics of the two popular social media networks that are used by the project, twitter[12] & LinkedIn[13]. The posts will provide updates on DeDNAed news, events and any information useful for project. 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 WP8.

Table 3. 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?
Twitter	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. 280-character messages including links (a URL is always altered to 23 characters). This excludes media attachments (phots, images, videos, etc.) and quoted tweets (displaying someone else`s tweet within your own). Sharing short comments, announcements that can instantaneously reach a large audience or retweeting relevant content.

[12] https://twitter.com/DeDNAed_project
[13] https://www.linkedin.com/company/dednaed/

LinkedIn 	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. A complete LinkedIn profile can help to connect with opportunities by showcasing the project's unique professional story through experience, skills, and education. Also, LinkedIn can be used to organize offline events, join groups, write articles, post photos and videos, and more.

The targeted **social media audience**, i.e., those who follow and who to invite others to follow the DeDNAed 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); DeDNAed 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.

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 DeDNAed research;
- Linking to any newsletter articles / blog posts DeDNAed produced;
- Promoting conferences DeDNAed 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 DeDNAed (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. An overview of the activities already performed and planned for the upcoming weeks/months is provided in Table 4.

Table 4. Pre-Planned activities during project runtime.

Project Runtime	Date (dd.mm.yyyy)	Posted?	Description of Activity
M04	jun-21	X	Set of Social Media Accounts
M04	09/06/2021	X	PIN Acknowledgement
M04	09/06/2021	X	"We have launched" posting
M05	14/07/2021	X	"Let's get social" posting
M05	26/07/2021	X	Launching of Project Website
M6-M8	25/08/2021	X	Project Partners
M8-M9	28/10/2021	X	Project Summary
M10	02/12/2021	X	Objectives
M10	15/12/2021	X	Announcement of WP presentation
M10	18/12/2021	X	WP presentation (starting WP1)
M11	18/01/2022	X	Project Flyer
M12	17/02/2022	X	WP presentation (WP2&WP3)
M12-18	21/02/2022	X	Get to know partners laboratories, research groups, singular equipment
			Project results (public deliverables if relevant for the community)
			Quiz with "Glossary" term
			Promotion of events, news (website and social media)
			Promotion of communication & dissemination material

DeDNAed Stakeholders

DeDNAed target audiences and general stakeholder groups are (i) large industry/SMEs/innovators, (ii) the scientific community, (iii) state agencies/regulators/policy makers, and (iv) the general public, civil society organisations and media. DeDNAed consortium plans also to disseminate results within clusters and stakeholders. This is complemented by the organization and attendance of workshops and partnering days for the different clusters & networks. The clusters that are considered and a responsible contact person in DeDNAed consortium are listed in Table 5. The contact partner is to be present in cluster/network events, and chooses how to reach to the cluster/network. All stakeholder engagement activities will be performed GDPR compliant.

Table 5. Stakeholder and Clusters.

Stakeholder	Regional, national, european	Contact person
EU NanoSafety Cluster https://www.nanosafetycluster.eu/nsc-overview/nsc-structure/coordination-team/	European Cluster	BNN, Andreas Falk (Ceo) – Co-coordination
Nanomedicine Austria https://www.bionanonet.at/support/alliances-clustering/nanomedicine-austria/	National platform, Austria	BNN, Susanne Resch, National platform *Coordinator*
Photonics Austria https://www.photonics-austria.at/en/home-english/	National Platform, Austria	BNN, Andreas Falk (CEO), member
BNN Association https://www.bnn.at/association/structure/	International Association, *The BNN mbH counts with the BioNanoNet association that compiles currently 66 international members (research centres, universities and industry).*	BNN, Andreas Falk (CEO)
Biosaxony https://www.biosaxony.com/en/about-us	National Cluster, (Dresden, Germany)	KSI-Meinsberg, Andreas Heerwig
DECHEMA https://dechema.de/en/	National expert Network for chemical engineering and biotechnology (Frankfurt am Main, Germany)	KSI-Meinsberg, Andreas Heerwig
Forschungsgemeinschaft Technik und Glas e.V http://f-t-g.org/	Research association for technology and glass, as a non-profit sponsoring association (Bronnbach, Germany)	KSI-Meinsberg, Andreas Heerwig
Arbeitskreis Mikrosystemtechnik für die Biotechnologie http://www.biomst.eu/index_d.html	National network	KSI-Meinsberg, Andreas Heerwig
AMA Verband für Sensorik und Messtechnik e.V. https://www.ama-sensorik.de/	Network for the key sector of sensor and measurement technology.	KSI-Meinsberg, Andreas Heerwig

Healthy Saxony https://www.healthy-saxony.com/	National Communication platform for the promotion of (cross-network) cooperation in the health care industry in Saxony, Germany	Technical University Chemnitz, Andreas Moschhauser
IVAM e.V. https://www.ivam.de/	Professional association for microtechnology, Germany	Technical University Chemnitz, Andreas Moschhauser
Silicon Saxony https://www.silicon-saxony.de/home/	Microelectronics and IT cluster, Germany and Europe	Technical University Chemnitz, Danny Reuter
Europäische Forschungsgesellschaft Dünne Schichten eV - EFDS https://www.efds.org/	National Network in the field of thin-film technology, Germany	Technical University Chemnitz, Danny Reuter

Newsletter: Partner BNN produces and publishes a newsletter four times a year, with an established and growing group of recipients (it reaches more >11,000 recipients worldwide). DeDNAed will be offered to contribute to this useful means of dissemination, by adding project-related news, activities, and results (e.g., recent publications, services, etc) to this newsletter.

Scientific Publications and events

The project results are disseminated to the scientific community by scientific publications in high-tier peer reviewed general and specialized journals (e.g., *Biosensors and Bioelectronics*, *Nanoscale*, *Nanoletters, ACSNANO, Langmuir, JACS, ACS Applied Materials and Interfaces and others)* and conferences (e.g., *European Biosensors Simposiums, BIOCHIP Berlin and others)* to inform the scientific community about cutting-edge results, stimulate scientific discourse, and raise visibility. Technological parts of the research are published in the relevant industrial journals. The preferred strategy for peer-reviewed open access scientific publication is the **green or gold open access**.

As required by Article 29.1 of the GA, if a beneficiary intends to disseminate results during the project of for a period of 1 year after the end of the project, it must give at least 21 calendar days advance notice to the other beneficiaries and sufficient information on the results that will be disseminated. Objections to publication must be received within 14 days of receiving the notification of intention to disseminate. Further details on how to deal with objections are agreed upon in the CA.

Open Research data

Additionally, the Article 29.2 sets out the rules for the open access on digital research data. Beneficiaries of actions participating in the Open Research Data Pilot (ORDP) must give open, free-of-charge access to the end-user to digital **research data** generated during the action. Without compromising the exploitation strategy, results of DeDNAed will be disseminated by the OpenAire platform Zenodo. Scientific publications and public deliverables of DeDNAed project will be made openly available by the **repository platform Zenodo.org**.

Zenodo supports the sharing, curation and publication of data and software. It assigns all publicly available uploads a DOI to make the data set easily and uniquely citeable. Zenodo supports making the data findable by allowing harvesting of all content via the OAI-PMH protocol; citation information is also passed to DataCite and onto the scholarly aggregators. Furthermore, OpenAIRE integrates into existing reporting lines to the EU Commission, allowing the funding body to be notified when data is shared. Finally, Zenodo allows the creation of collections, which could be used to increase the cross-visibility of data sets created within the DeDNAed project. All these features make it an ideal choice in order to gain the desired visibility and accessibility for DeDNAed data. Peer-reviewed publications will be made available based on journal requirements.

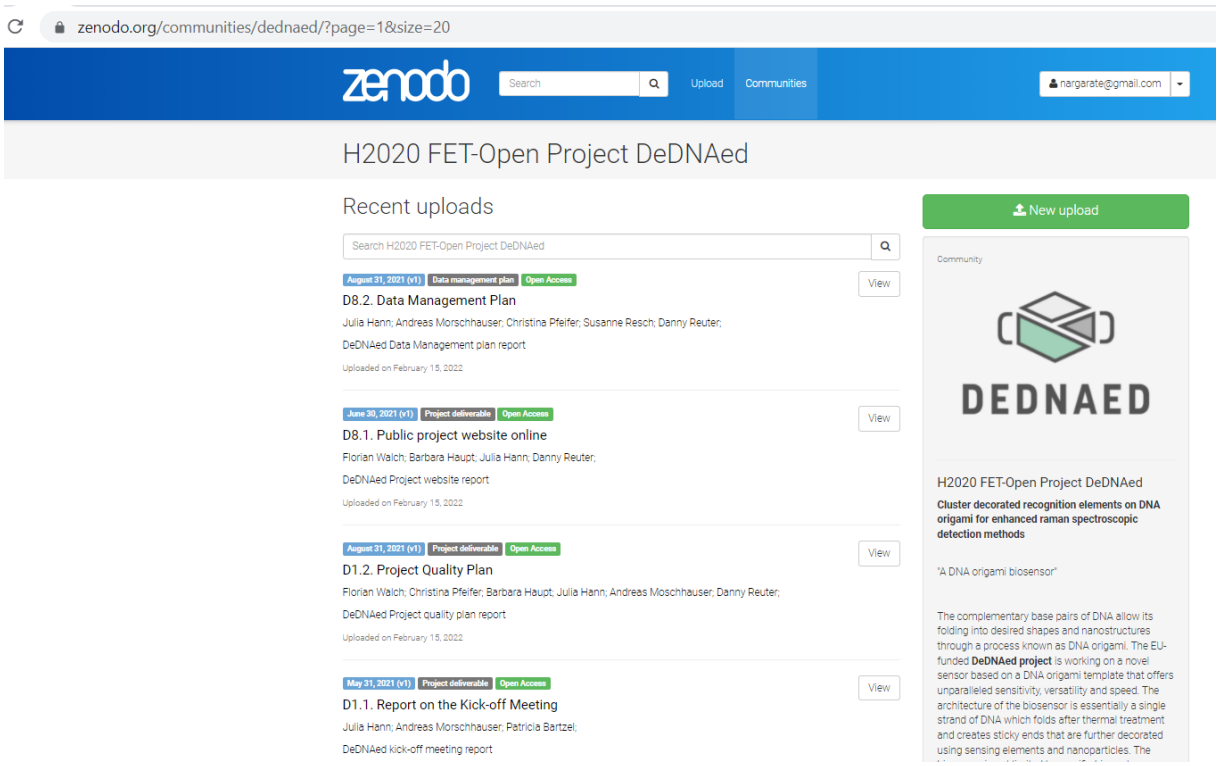

Figure 9. DeDNAed Zenodo repository created.

The European Commission has lately launched the Open Research Europe[14]. As an open access publisher, it might be very useful for the project outcomes of DeDNAed. As this is at a very early stage, the DeDNAed Consortium will discuss the possibility of using this platform for publication over the coming months.

[14] https://open-research-europe.ec.europa.eu/

Conferences, Fairs, non-scientific and public events

Relevant industrial conferences, exhibitions and fairs such as *Medica*, *EuroNanoForum*, *Clinam* and *MedFit* will be of interest of the DeDNAed partners to make the research visible and raise awareness of key industrial actors in the project technological field.

Public events for promotion of tailored events for young researchers and networks. Participation in scientific events to general public (including kids, students, patient foundations...) such as "Science days", "European Researchers Night", "Science week", "World disease day…" will be fostered. Attendance to conference, fairs and participation in events will be monitored in the EIC_DeDNAed_CommDiss_Log.

iMMM Partner contribution:

- "European Researchers Night" the 24 of september 2021, France.

KSI- Partner contribution:

- Annual report of the KSI called "Jahresbericht", summarizes all research activities of the institute.
- Monthly colloquium of the institute: scientific talks of KSI or other researchers; participation is open for all interested persons

TECNALIA Partner contribution:

- News in Tecnalia webpage: https://www.tecnalia.com/en/news/tecnalia-participates-in-the-development-of-a-platform-based-on-the-assembly-of-detection-elements-via-dna-origami

Educational activities, synergies, attendance to funding events and others

The university partners take part in activities in their degree programs and will inform and engage students in the field of innovative biosensors. Synergies will be continuously sought with existing and new networks. DeDNAed participants will participate in events that target developing research strategies beyond DeDNAed project. Educational activities, new networks and synergy activities and attendance to funding events and others will be monitored in the EIC_DeDNAed_CommDiss_Log.

Monitoring Communication and Dissemination activities

Although WP8 will coordinate the communication and dissemination activities, all DeDNAed project partners are expected to actively participate in activities. To monitor them, a template "**EIC_DeDNAed_CommDiss_Log.xlsx**" (Annex 3) 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
- 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
- Content, brief description, purpose
- No. of views, attendees and/or prints (add time period)
- Type of audience addressed:
    - Scientific community (higher education, research)
    - Industry
    - Civil society
    - General public
    - Policy makers
    - Media
    - Investors
    - Customers
    - Other
- Related Open Access documents (to be potentially shared at e.g., project website)
- External link to activity (if relevant)
- Link to event at project webpage
- Countries addressed
- Language of activity
- Project internal/external activity
- Comments

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

- Type (select from dropdown list)
- Title
- Author(s)
- Title of Journal/Proceedings/Books series/Book (for book chapters)
- Year
- Page reference
- DOI
- Repository link
- Open Access Status (Green/Gold)
- Date to release on project website
- 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 communication and dissemination activities will be updated regularly and compiled within the regular PDER updates at M24 and M36.

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.

Completed Communication & Dissemination Activities

Main DeDNAed activities (dissemination material, events, workshops, newsletters, etc.) are announced in the "News & Media" section of the project website as well as in the social media channels of the project (LinkedIn & twitter). Furthermore, all activities by all partners are compiled and regularly updated in the list "DeDNAed_Communication&Dissemination_Log.xlsx" (Annex 3).

3. Exploitation plan

This document describes the initial Exploitation Plan customized for the DeDNAed project. The Exploitation Plan will be periodically updated throughout the project lifetime, second version (D8.5) due month 24, and final version (D8.7) due month 36. The partners in DeDNAed project must, in accordance with the article 28.1 in GA, take necessary measures to ensure the exploitation of the project results up to 4 years after the end of the project.

The Exploitation Plan aims to cover the most important topics concerning how the project results that will be generated during the project lifetime could be exploited, including exploitation results identification by each of the partners in the consortium, types of exploitation, and the most suitable platforms for each type of exploitation.

The first version of the exploitation plan includes a list of the exploitable results that have been identified in the GA and refined during the first 12 months of the project, detailed information about each exploitable result will be updated in the future versions of exploitation plan throughout the project

lifetime as a live document. As for the actual exploitation strategy for each exploitable result, it will be better evaluated at later stage of the project.

Innovation objectives of DeDNAed project

Combination of the advantages of SERS and DNA origami can be applied to new generation of biosensors, creating highly ordered 2D arrays from at least three NPs in order to create hot spots of defined quantities and local distribution in the light-exposed areas. In this way, the positioning of the bioRE in the light-exposed hotspots of the NPs enables the respective analyte to be detected qualitatively and quantitatively directly from a supernatant solution. The heterogeneous functionalization consisting of a highly ordered SERS array and an individually adaptable bioRE as a biosensor has not yet been described in the literature and offers great innovation potential due to its selectivity and sensitivity as well as its speed and individuality.

DeDNAed is therefore trying to answer those challenges and set its main innovation objectives as:

- Using the variability of the DNA origami as a binding matrix for various bioRE and NP offers the possibility to construct individual structures and arrays and to adapt them to the requirements of the measurement method.
- Integrating several heterogeneous bioRE, the additional function of multivalent binding of a target can be supplemented, so that the selectivity towards foreign bones within the analyte solution can be increased.
- Increasing the universal applicability of the sensor platform using flexible substrates in addition to solid substrates by means of lipid-bilayers for use in textiles or as wipe test.

The detection of various model analytes with high research relevance such as interleukin-6 (IL-6), aflatoxin, cancer DNA and recombinant surface proteins of influenza is intended to verify the high application potential of the sensor platform in the point-of-care diagnosis.

Next table show the key exploitable results (KERs) template (table 1). Each WP leader will collect the information provided by partners involved in each work package each 12 Months.

Table 1. KERs template

No.	**KER Tittle**	**Short description**	**Partners (leader and contribution)**	**Currently IP format**	**TRL and additional research required**
Number of KER	Descriptive words and sentences that exactly remark the core content of the KER	Comprehensive description, making the KER fully understandable. Include relevant specific details.	Name of the partners owner of the IP	In which format is the IP currently. Procedure/protocol/technical manual; poster or dissertation in a conference / workshop; book chapter, thesis; published paper; software; prototype/product; multimedia; patent	Actual Technology Readiness Levels (TRL) and required future research

At month 12, first 3 KERs have been identified:

No.	KER Tittle	Short description	Partners (leader and contribution)	Type	TRL and additional research required
1	Cluster decorated, DNA origami compatible DNA based bioRE	Development of DNA oligonucleotide sequences with three sequences with independent functionalities, incorporating semiconductor and metallic clusters under physiological conditions.	CICB	synthesis protocol	TRL4, requires further proof of feasibility and proof of concept integration into DNA origami system
2	Cluster decorated, DNA origami compatible Antibody based bioRE	Integration of atomic clusters in the structure of an antibody under physiological conditions and maintaining the affinity of the antibody for target analyte.	TEC and CICB	Synthesis protocol	Actually TRL3 for the methodology, adaptation of the method for IL6 antibody during the project.
3	DNA origami sensor platform based on SERS detection	bioRE functionalized with ACs in a precisely aligned nano array consisting of min. three NPs on a DNA origami for a detection of analytes by SERS detection.	All	Demonstrator	TRL1, development of proof of concept prototype.

The management of the exploitation and the detailed elaboration of the exploitation strategy will be handled by the Innovation and Exploitation manager (IEM), Goran Bijelic from Tecnalia. The main responsibilities of the IEM are: to identify all results with exploitation potential; to define best manner to manage intellectual property; and to find exploitation opportunities for DeDNAed solutions.

Exploitation plan structure

This part sets out the general structure of the Exploitation Plan which will be applied to each final KER and will be elaborated into details in future versions of Exploitation Plan (D8.5, due M24; D8.7, due M36). The information is collected from the consortium partners, and the contents may evolve throughout the project lifetime along with the development of the KER.

Exploitable innovations and ambitions

This section describes the novelty value of the innovations generated in the project as well as their advantages and disadvantages compared to existing similar technologies or products in the industry and market.

Objective of exploitation

This section explains the value that each partner would like to get from the exploitation of the innovations. The objective may be for scientific, societal, educational, or economic purposes.

Exploitation strategy

Together with the Market analysis (M36) and Business Plan (M36) the exploitation strategy will define the paths how the innovations of the project can be exploited and delivered to the market, during the

project lifetime and after the end of the project. The Exploitation strategy will consist of: Target applications, customers or users; Exploitation routes and timeline; and responsibility.

IPR management

It is essential to have a proper IPR management for partners to effectively exploit the project results without violating the IPR of others. At current stage, it is still too early to provide concrete details about IPR management while the results are still in the process of development. In the future versions of the Exploitation Plan, the need for protection of the KERs generated in the project (IP) will be assessed. Basic rules of the ownership allocation have been set out in the article 26 in the GA, considering that some exploitable results will be generated by more than one partner, the methodology to allocate the IP ownership should be established in fair and reasonable condition based on each partner's contribution towards the foreground IP development in the later stage of the project.

EXPLOITATION PLAN MONTH 12: cluster decorated, DNA origami compatible DNA based bioRE

Exploitable innovations and ambitions

Development of DNA oligonucleotide sequences with three sequences with independent functionalities, incorporating semi-conductor and metallic clusters under physiological conditions. The three functional segments are: 1) The DNA sequence complementary to corresponding sequence in DNA origami for attachment to the latter; 2) The sequence which is able to stabilize formation of semiconductor /or metallic atomic clusters, functioning as a specific marker eg. for optical analysis; 3) The sequence of DNA probe/DNA aptamer for specific binding with the target analyte. This methodology is being tested for the detection of aflatoxin, as one of the most carcinogenic substances produced by plant-infesting molds.

Innovation properties and benefits: the novelty of this system lies in the incorporation of three functional segments in one bio-compatible platform based on single-stranded DNA. This benefits the ease of the synthesis, which in turn increases biocompatibility by avoiding further, potentially denaturing, reactions. Furthermore, does the use of three functional groups increase the modularity of the system, with each functional group being independently adjustable to fit and adjust the needs of the overall system.

Limitations: the system is mainly limited by the need to avoid cross-functionalities between the three elements, meaning that the specific functionality of one element imposes restrictions on the design of the other two and vice versa. These limitations can be addressed in the design stage, but each specific system interaction needs to be tested for the occurrence of eventually unpredicted interactions or inhibitions between the three parts.

Objective of exploitation

Scientifically, the cluster decorated, DNA origami compatible DNA based bioRE is expected to generate knowledge on labelling of bioRE and a usefulness like a biosensing elements, superior than current state-of-the-art. Economically, CICB contemplates monetizing the results through license.

Exploitation strategy

Exploitation routes will be further evaluated at a later stage of the project. At current stage, the involved partners CICB are planning to exploit this KER by using it for further collaborative research or licensing the IP rights. The expected TRL by the end of project will reach level 4. In the long-term, production and commercialization are also under consideration in the case that additional partners will be involved through industrial cooperation agreement(s).

IPR management

Background IP from CICB are required to develop the cluster decorated, DNA origami compatible DNA based bioRE. CICB has 2 patents in the field and knowledge and practical expertise in the design, synthesis and characterization of cluster decorated DNA based bioRE.

At the current stage, trade secret and patenting are the two potential protections that are under consideration. The scope of IP protection will be further defined in later stage of the project. Cluster decorated, DNA origami compatible DNA based bioRE will be developed by CICB.

EXPLOITATION PLAN MONTH 12: cluster decorated, DNA origami compatible Antibody based bioRE

Exploitable innovations and ambitions

This KER consists on the synthesis of semiconductor and metallic clusters using an antibody as scaffold under non-denaturing conditions. The secondary structure of the antibody does not suffer any alteration during the synthesis and therefore the antibody maintains its binding ability for antigen. The antibody carrying atomic clusters can be used in immunoassays acting as a probe, incorporating the biorecognition element and the transducer.

Atomic clusters (ACs) have attained great attention in the last few years due to their size dependent optical and chemical properties. Nowadays, a large number of methods using proteins as scaffold have been developed for ACs synthesis. Usually the synthetic conditions for the synthesis of NCs stabilized with proteins require extreme conditions of pH or temperature. These conditions cause the denaturalization of the proteins and end up in the loss of their biological functions. The innovation relies in the physiological conditions used during the synthesis, which do not affect the antibody structure. The resulting antibodies still maintain the affinity for target analyte. Incorporate both a recognition component (to sense selective interaction with the bioanalyte) and a transducer component (to deliver the corresponding interaction).

Innovation properties and benefits: the use of ACs embedded in the antibody structure offer advantages in terms of sensitivity and results in the development of new efficient strategies for the detection system of immunoassays. Traditionally antibodies for immunoassays applications are labelled with natural enzymes with the inherent disadvantages associated with the use of enzymes, like high susceptibility to environmental variations, easy denaturation and digestion, costly and time-consuming preparation and purification. Moreover, it is needed a crosslinking reaction between the enzyme and the antibody which generate non-desired species by random coupling that causes high back-

ground signals due to non-specific absorption. By the introduction of the ACs into the antibody structure this drawback disappears, and the signal-to-noise ratio decreases and thus the sensitivity increases. The use of ACs as antibodies labels also offer advantages in long term storage in comparison with traditional antibodies labels.

Limitations: the methodology is robust when polyclonal antibodies are used as scaffold, the synthetic route has been applied in various polyclonal antibodies with a positive result. However, when monoclonal antibodies are used, they get denaturalised during the synthesis and also, they loss their biological functions and thus, the affinity for target analyte suffers a huge decrease and practically disappear.

Objective of exploitation

Scientifically, the cluster decorated, DNA origami compatible Antibody based bioRE is expected to generate knowledge on labelling of bioRE and a usefulness like a biosensing elements for immunoassays, superior than current state-of-the-art. Economically, CICB and TEC contemplates monetizing the results through license (process already patented).

Exploitation strategy

Exploitation routes will be further evaluated at a later stage of the project. At current stage, potential exploitation routes under considerations include use for further research, develop and sell the new product/service, and license IP rights. The expected TRL by the end of project will reach level 4 for the detection of IL6. In the long-term, production and commercialization are also under consideration in the case that additional partners will be involved through industrial cooperation agreement(s).

IPR management

Background IP from CICB and TEC are required to co-develop the cluster decorated, DNA origami compatible antibody based bioRE. CICB and TEC have a specific co-patent where the methodology of the introduction of cluster on antibody is protected, and knowledge and practical expertise in the design, synthesis and characterization of cluster decorated antibody based bioRE.

At the current stage, trade secret and patenting are the two potential protections that are under consideration for the development of DNA origami compatible cluster decorated antibody. The scope of IP protection will be further defined in later stage of the project, depending on the changes required of the methodology already patented.

EXPLOITATION PLAN MONTH 12: DNA origami sensor platform based on SERS detection

Exploitable innovations and ambitions

DNA origami sensor platform based on SERS detection is based on the precise localization of bioRE functionalized with ACs in a precisely aligned nano array consisting of minimum three NPs on a DNA origami. This innovative sensor concept is the basis for fast, highly sensitive, selective, individually adaptable and low-device biosensors, which will set new paradigms in point-of-need (PoN) diagnostics, such as food analysis (aflatoxin) or medical in-vitro diagnostics (interleukin-6).

Innovation properties and benefits: the presented sensor principle can open up solutions with the fast and highly sensitive measurement method due to the combination of the high selective biological recognition elements and the fast optical measurement method of the SERS (10-30 s) with very low-limit of detection (10 pM). The sensor system does not require a sample preparation but analyses the analyte directly from the complex sample with little equipment.

The limitation will be defined in larger stage of the project.

Objective of exploitation

Scientifically, the exploitation aims to show a new sensing platform for SERS detection based on DNA origami with bioRe elements decorated with clusters. During the project two specific uses cases will be targeted in order to show the performance of this platform, detection of IL-6 and detection of aflatoxin B1 (AF-B1). For the society, this sensing platform creates the possibility to provide a new point of care (PoC) device with advanced features, which can be further used to detect different analytes. Lastly, for the commercial viewpoint, the partners are expected to monetize the result.

The objectives of the exploitation are to further strengthen partners' organization competitiveness in the research community and in the market via the increased know-how in DNA origami sensor platform based on SERS detection, synthesis of related components, process conditions, issues and market insights as well as to gain financial reward from the new product commercialization through licensing or cooperation agreements.

Exploitation strategy

Exploitation routes will be further evaluated at a later stage of the project. Diagnostic industry and manufacturing of intermediates are considered as the target customers who may be interested in the results.

Numerous potential exploitation routes are under consideration to exploit the DNA origami sensor platform based on SERS detection, including use for further research, develop and sell the new product/service, spin-off activity, cooperation agreement/joint-venture, sell IP rights or IP based business, license IP rights, or transfer ownership of IP rights to another partner from the consortium. The TRL is projected to reach level 4 by the end of the project, thus further developments for optimization of the process condition has to be conducted in order to bring this result to commercial market in 6 to 8 years after the project. At a later stage of the project, the suitable routes will be chosen and further elaborated.

IPR management

Several background IP have been brought by multiple partners into DeDNAed project and have been listed in the attachment 1 in the consortium agreement (CA), including background description and access right within the project for implementation. In brief, partners are granted on a royalty-free basis or with fair and reasonable conditions for the background needed to carry out the implementation within the project scope.

At the current stage, trade secret and patenting are the two potential protections that are considered for DNA origami sensor platform based on SERS detection. Ideally the scope of the IP protection shall be global.

4. Conclusions

This PDER provides DeDNAed with a solid framework for communicating, disseminating and exploiting project results and activities. The DeDNAed 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.

The PDER 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 PDER will explain how the project plans to guide the consortium partners through the exploitation process of DeDNAed results to achieve the expected impacts. In conclusion, the DeDNAed PDER 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 year of the project was sufficient. As soon as new findings and results are available, the measures described in the PDER apply. As leader of WP8, BNN will continuously monitor and coordinate future communication and dissemination activities. All project partners will be encouraged to perform further outreach activities and spread the word about the DeDNAed progress in their communities. The PDER will be updated regularly, with the next formal update in M24.

5. References & Bibliography

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"The Social media guide for EU funded R&I projects", online retrieved on 30th August 2021, https://ec.europa.eu/research/participants/data/ref/h2020/other/grants_manual/amga/soc-med-guide_en.pdf

Annexes

Annex 1. Brand guidelines

DeDNAed_Brand Guidelines.pdf

Annex2. Communication Toolkit

Template presentation slides

DeDNAed_PRESENTATION_template.pdf

DeDNAed_PRESENTATION_template.pptx

Template WP monthly update

DeDNAed_MonthlyWPupdate_template.pdf

DeDNAed_MonthlyWPupdate_template.ppt

Template deliverable/Meetings/agenda report

DeDNAed_Deliverable_x.x_final.pdf

DeDNAed_Deliverable_x.x_final.docx

Roll-up

DeDNAed_Roll_Up.pdf

Flyer template

DeDNAed_Trifold_Flyer.pdf

Press release template

DeDNAed_press release template_Parti

Annex 3. DeDNAed Communication and Dissemination LOG - EXAMPLE

EIC_DeDNAed_Comm Diss_Log_February 20