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HORIZON EUROPE PROGRAMME
HORIZON-CL4-2023-DIGITAL-EMERGING-01-33

GA No. 101135196

Developing New 2D Materials and Heterostructures for Printed Digital Devices

2D-PRINTABLE - Deliverable report

D7.1– Project's corporate identity

Funded by
the European Union

Deliverable No.	D7.1	
Related WP	WP7	
Deliverable Title	Project's corporate identity	
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Approved by	Jonathan Coleman (TCD) - Project Coordinator	yyyy-mm-dd
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V1.0	16/01/2024	Alessandra Lucini Paioni	
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Project Scientific Abstract

The 2D-PRINTABLE project aims to integrate sustainable large-scale liquid exfoliation techniques with theoretical modelling to efficiently produce a wide range of new 2D materials (2DMs), including conducting, semiconducting, and insulating nanosheets. The focus includes developing the printing and liquid phase deposition methods required to fabricate networks and multicomponent heterostructures, featuring layer-by-layer assembly of nanometer-thick 2DMs into ordered multilayers. The goal is to optimize these printed networks and heterostructures for digital systems, unlocking new properties and functionalities. The project also seeks to demonstrate various printed digital devices, including proof-of-principle, first-time demonstration of all-printed, all-nanosheet, heterostack light-emitting diodes (LEDs). In conclusion, 2D-PRINTABLE will prove 2D materials to be an indispensable material class in the field of printed electronics, capable of producing far-beyond-state-of-the-art devices that can act as a platform for the next generation of printed digital applications.

Summary

The Horizon Europe 2D-PRINTABLE project aims to unlock the full potential of 2D materials as an indispensable asset in the field of printed electronics. By employing sustainable and affordable techniques known as liquid exfoliation, the goal is to create more than 40 new 2D materials, guided by machine learning and AI methods. Moreover, the project will develop innovative printing and liquid deposition techniques to fabricate nanosheet networks and heterostructures with unique properties, facilitating the production of advanced printed digital devices. In particular, these novel materials will be integrated into printable 2D-based heterostructures specifically designed for digital technologies, which will serve as the foundation for a range of printed electronic devices, including transistors, solar cells, and LEDs, all of which will deliver exceptional performance.

This deliverable D7.1, describes 2D-PRINTABLE corporate identity, which consists of the following items:

- A project logo and colour scheme.
- Templates for documents, reports, and PowerPoint to be used by the consortium.
- Electronic newsletters, which will be released on a 6-monthly basis.
- The project website.
- Other communication products to generate the 2D-PRINTABLE identity linked to the Graphene Flagship Identity

The templates are created to support project presentations, deliverables, meeting documents, and reporting requirements. For 2D-PRINTABLE, a website is set up to act as a main channel to showcase 2D-PRINTABLE results, attract a broad audience, share important information *via* news items, and act as a contact point for third parties who are interested in the progress and outcomes of the project.

This deliverable elucidates the significance of establishing a distinctive corporate identity for the project, delineating the intended purposes of the identity components, and highlighting their correlation with the Graphene Flagship Initiative. The content of this deliverable will be complemented by visual representations showcasing each of the developed identity items.

Contents

List of Figures

1 Introduction

This report is the first deliverable for Work Package 7 – Communication, Dissemination, and Exploitation. The overall aim of WP7 is to make certain that the achieved results and the impact of the research done during the 2D-PRINTABLE project will be promoted to the widest possible group of potential users. To make sure it will be maximized to the fullest, the following objectives have been identified for WP7:

- To maximize impact by ensuring engagement and promoting synergies with relevant stakeholders and audiences via communication and dissemination of key results and innovations.
- To actively contribute to the Graphene Flagship initiative by participating in joint dissemination and road mapping activities.
- To manage and coordinate the interactions with the Advisory Board.
- To ensure the best exploitation of the project results, identifying specific target groups.

This deliverable focusses on the necessary tools and materials to inform a broad stakeholder base. The establishment of a corporate identity, such as a project website and dissemination materials, and the planning of dissemination activities created for the identified target groups are vital. The dissemination activities include:

- Promotion tools, to be generated throughout the project.
- Online communications (project website and social media).
- Project animation/video.
- Networking with professionals and presentations at conferences/events.
- Press releases and articles in specialised magazines and scientific journals.
- Outcome of multiple dissemination tools (as described in this deliverable).

Project dissemination plays a crucial role in fostering awareness and promoting the project throughout its entire lifecycle. By engaging in this process, the project not only attracts the attention of potential stakeholders but also appeals to other projects with a shared interest in the subject matter. This includes professional organizations, industries, research peers, and policymakers, who can easily discover and connect with the project through its dissemination efforts.

This deliverable document for task 7.1 describes the creation of the 2D-PRINTABLE logo (with colour scheme), various presentation/document templates, and the website, which have been created for the 2D-PRINTABLE corporate identity. The corporate identity is important for consistent and recognisable communication and dissemination by the consortium of the project. It will also generate a unique image for the project. The project identity and dissemination tools were developed by Uniresearch (UNR), with contributions from all partners.

2 Project Identity

For the project 2D-PRINTABLE, a graphical project identity has been developed with visual elements to represent the project. The graphical identity includes a project logo, an icon designed for the project, fonts, colours, and templates for text documents as well as presentations (the templates are described in Chapter 3). A project flyer will be created and included in the Plan for DEC activities (D7.2, M6).

2.1 Project Logo

A distinctive logo (Figure 2.1) and icon (Figure 2.1) have been crafted exclusively for the 2D-PRINTABLE project, available in various formats and resolutions. This ensures their versatile usage across dissemination tools such as the website, templates, flyers, and more. As the logo has been designed with specific colours, a colour scheme has been established for UNR to create templates and other dissemination tools coherent with the logo as seen in Figure 2.3.

Figure 2.2 - 2D-PRINTABLE Logo

Figure 2.1 – 2D-PRINTABLE Icon

2.1.1 Alignment with Graphene Flagship Initiative

To align with the identity of the **Graphene Flagship**, we have incorporated the **identical 2D symbol**, in dark blue, as employed in the 2D Experimental Pilot Line (2D-EPL) project logo. This deliberate choice serves the purpose of establishing a unified and interconnected brand identity, visually reinforcing the shared affiliation and synergy between the 2D-PRINTABLE project and the broader Graphene Flagship initiative. By adopting the same symbol, we aim to enhance the recognition and coherence of the brand across both projects, fostering a cohesive visual representation aligned with the overarching initiative's identity.

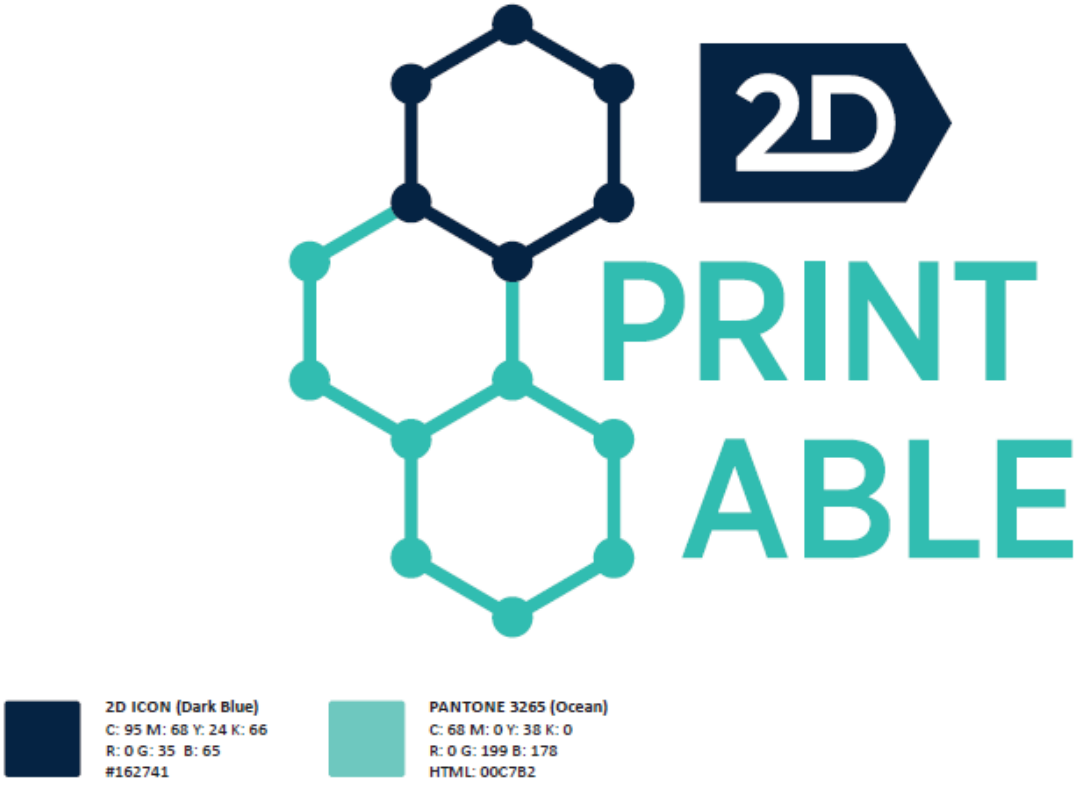


Figure 2.3 - 2D-PRINTABLE Colour Scheme

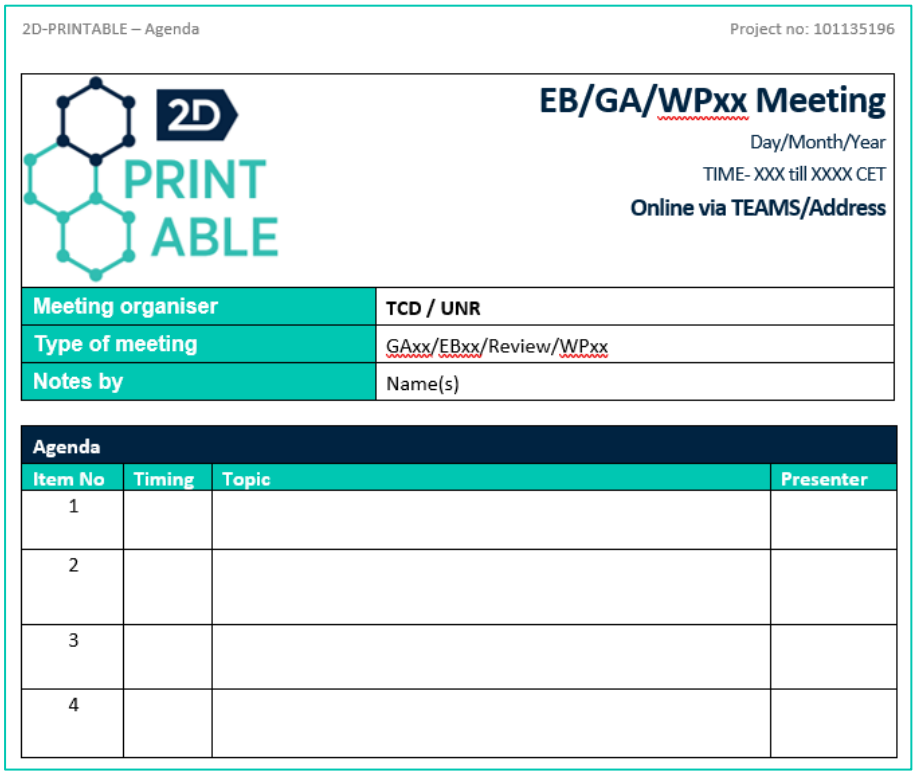
3 Project Templates

In maintaining adherence to the established 2D-PRINTABLE project identity, a suite of templates has been developed to ensure consistency in document layout. These templates serve as essential tools for project management and project partners in executing the requisite project activities. Their standardized format not only enhances the professional appearance of project-related documentation but also contributes significantly to operational efficiency.

3.1 Document Templates

Templates have been created to facilitate a range of project-related activities:

- **Template Agenda** for meetings: Figure 3.1 displays the created template for the agenda.
- **Template Minutes** for meetings: Figure 3.2 displays the created template for the minutes.



2D-PRINTABLE – Agenda — Project no: 101135196

EB/GA/WPxx Meeting

Day/Month/Year

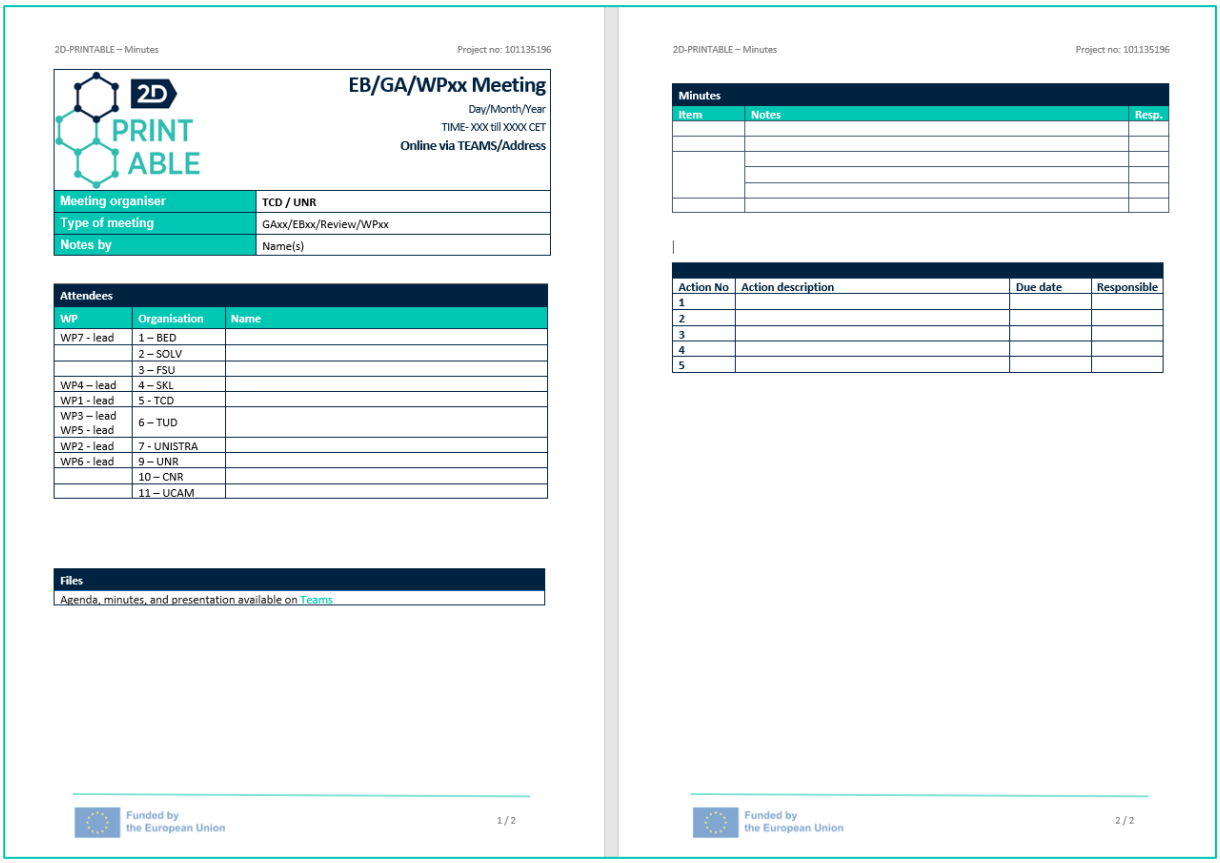
TIME- XXX till XXXX CET

Online via TEAMS/Address

Meeting organiser	**TCD / UNR**
Type of meeting	GAxx/EBxx/Review/WPxx
Notes by	Name(s)

Agenda			
Item No	**Timing**	**Topic**	**Presenter**
1			
2			
3			
4			

Figure 3.1 – 2D-PRINTABLE Agenda Template



2D-PRINTABLE – Minutes Project no: 101135196

EB/GA/WPxx Meeting
Day/Month/Year
TIME- XXX till XXXX CET
Online via TEAMS/Address

Meeting organiser	**TCD / UNR**
Type of meeting	GAxx/EBxx/Review/WPxx
Notes by	Name(s)

Attendees		
WP	**Organisation**	**Name**
WP7 - lead	1 – BED	
	2 – SOLV	
	3 – FSU	
WP4 – lead	4 – SKL	
WP1 - lead	5 - TCD	
WP3 – lead WP5 - lead	6 – TUD	
WP2 - lead	7 - UNISTRA	
WP6 - lead	9 – UNR	
	10 – CNR	
	11 – UCAM	

Files
Agenda, minutes, and presentation available on Teams

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2D-PRINTABLE – Minutes Project no: 101135196

Minutes		
Item	**Notes**	**Resp.**

Action No	**Action description**	**Due date**	**Responsible**
1			
2			
3			
4			
5			

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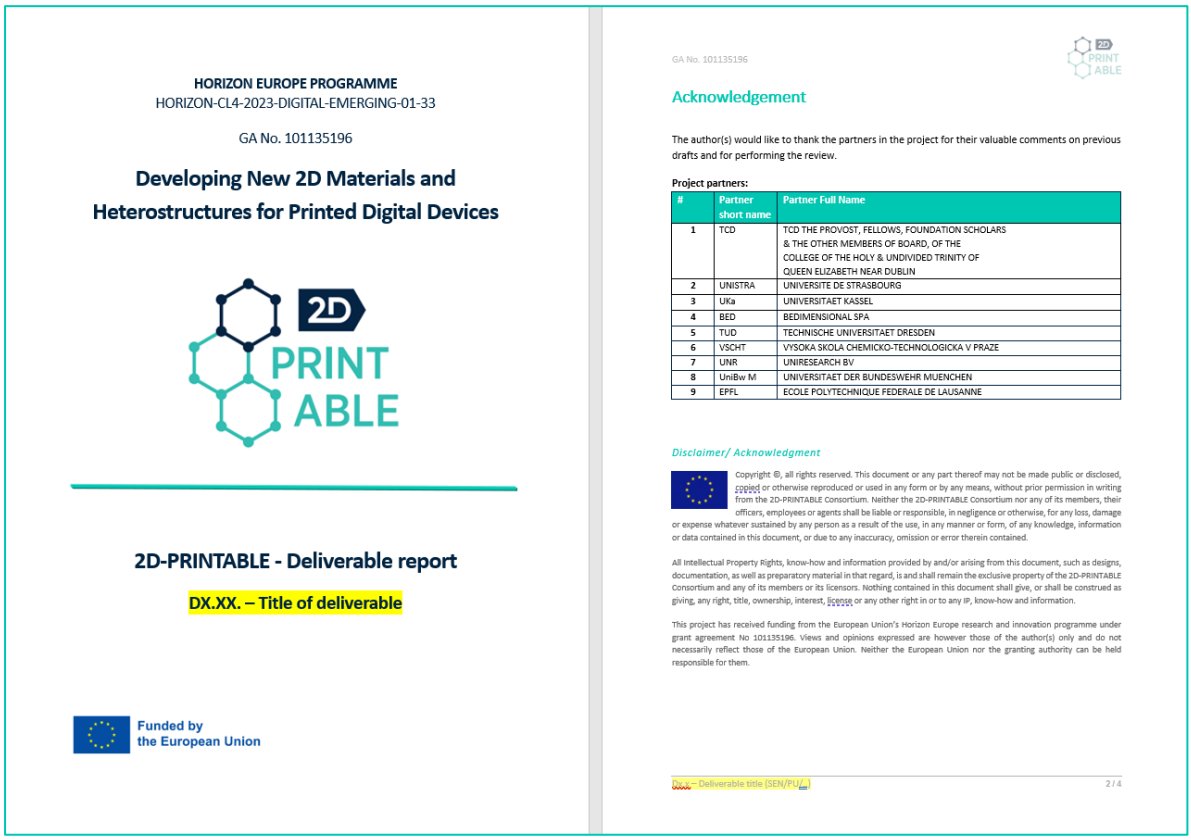
Figure 3.2 - 2D-PRINTABLE Minutes Template

- **Deliverable and Milestone templates:** These templates, accessible to all partners, have been meticulously crafted for the purpose of documenting project deliverables (refer to Figure 3.4). Encompassing essential sections such as the front/title page, executive publishable summary (in cases of document confidentiality), general work overview, conclusions, risk registry, and EU acknowledgment and disclaimer; these templates offer a comprehensive framework for partners to articulate specifics about each deliverable. Moreover, a distinct template has been developed for reporting achieved milestones. This user-friendly document provides a straightforward format for detailing what has been accomplished, the methodologies employed, timelines, responsible parties, and includes a dedicated section for public information, fostering effective project communication and dissemination activities.

- **News item templates for results and events**: Templates have been developed specifically for dissemination purposes. Partners are encouraged to utilize these templates for documenting (intermediate) results attained within the project. Additionally, partners are urged to employ templates when reporting on events attended by project representatives, effectively representing the project (refer to Figure 3.3).



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Developing New 2D Materials and Heterostructures for Printed Digital Devices

2D-PRINTABLE - Deliverable report

DX.XX. – Title of deliverable

Funded by the European Union

GA No. 101135196

Acknowledgement

The author(s) would like to thank the partners in the project for their valuable comments on previous drafts and for performing the review.

Project partners:

#	Partner short name	Partner Full Name
1	TCD	TCD THE PROVOST, FELLOWS, FOUNDATION SCHOLARS & THE OTHER MEMBERS OF BOARD, OF THE COLLEGE OF THE HOLY & UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN
2	UNISTRA	UNIVERSITE DE STRASBOURG
3	UKa	UNIVERSITAET KASSEL
4	BED	BEDIMENSIONAL SPA
5	TUD	TECHNISCHE UNIVERSITAET DRESDEN
6	VSCHT	VYSOKA SKOLA CHEMICKO-TECHNOLOGICKA V PRAZE
7	UNR	UNIRESEARCH BV
8	UniBw M	UNIVERSITAET DER BUNDESWEHR MUENCHEN
9	EPFL	ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE

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Figure 3.4 - 2D-PRINTABLE Deliverable Template (front and acknowledgment pages shown)

Website: https://2d-printable.eu/

The text provided in this document will be used on the 2D-PRINTABLE website (and newsletter) so please make sure that no confidential information is enclosed, and that the information is easily readable and understandable.

Title of Event

Involved partners:
Please list the short names of the involved partner(s).

General event info
- Start + end date
- Location
- Host
- Event website

Short outline of event purpose/profile
Summary of 1-5 lines.

Dissemination activity/partner's role at the event
Please describe:
- How you (partner XX) will disseminate the GREENCAP project (oral presentation, presenting a poster, demonstration, etc...).
- Who will attend/ have attended the event from your organisation? Please include a short explanation of why you are attending/have attended the event.
- Other HE projects / projects with a similar topic that will attend/have attended the event (or other parties you are collaborating with).
- An estimation of number of attendees.

Please include visual aspects e.g. presentation screenshots/poster layout/pictures taken during the event (if possible)!

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Website: https://2d-printable.eu/

The text provided in this document will be used on the 2D-PRINTABLE website (and newsletter) so please make sure that no confidential information is enclosed, and that the information is easily readable and understandable.

Title of Result

Involved partners:
Please list the short names of the involved partner(s).

Date of achievement of result:
Month, day, year.
(Result has been achieved on day month year in month xx of the project.)

Short introduction
Summary of 1-5 lines.

Result item
- **Objective:** What is the objective?
- **Research:** What has been researched? And how has this been done?
- **Result:** What was the result?
- **What will it be used for:** What will the results be used for?
- **Impact:** What is the impact (in general / on the project / ...)?

Please use illustrations, graphs, and pictures to make it readable/understandable.

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Figure 3.3 - 2D-PRINTABLE News (left) and Result (right) item template

3.2 Newsletter Template

During 2D-PRINTABLE project a biannual electronic newsletter is published, catering to the public. This informative newsletter is distributed to both the consortium and dedicated subscribers. Each edition encompasses updates on the project's progress, highlights of achievements in the preceding 6 months, summaries of events attended by project partners, and pertinent information pertaining to 2D-PRINTABLE partners or related matters. Key standard features of the newsletter include:

1. The 2D-PRINTABLE logo.
2. 2D-PRINTABLE News section
3. 2D-PRINTABLE event section
4. Facts and Figures of the project.
5. 2D-PRINTABLE Partners' logos with links to the partners' specific page
6. Link to the Graphene Flagship
7. EU acknowledgment and disclaimer

3.3 Report Templates

To monitor the financial and technical activities of partners during the project, an internal interim report procedure has been defined. With intervals of 6 months, partners will be requested to provide an update on the performed activities, CDE update, and effort consumed (both in terms of PM and budget). To monitor the financial activities, the project makes use of the monitoring system EU-FIN. To monitor the technical activities, templates will be prepared by UNR to report partners' technical activities and other important achievements. The template for the internal interim follows the project identity. Additionally, a template for the Periodic Reporting (technical part) will be set-up by UNR and distributed among the consortium with instructions 2 weeks prior to the first periodic reporting (M18).

3.4 Presentations Templates

Presentation templates have been designed to cater to the specific needs of creating engaging presentations for meetings and conferences. Specifically, a dedicated template has been developed for the Work Package (WP) presentation updates, intended for use during both the 2D-PRINTABLE General Assemblies and the Executive Board meetings (EB) of the project.

This tailored approach ensures that presentations align with the project's visual identity while maintaining consistency across different platforms and gatherings. The created templates aim to enhance the effectiveness of communication during critical project updates, offering a standardized and visually cohesive framework for conveying information at project meetings.

Figure 3.5 – 2D-PRINTABLE WP presentation template (first and last slides shown)

4 Project Website and social media

In M4 of the project, the 2D-PRINTABLE public website is launched under the domain: https://2d-printable.eu/ . The website has been designed by partner UNR with input from the project partners. It will act as a platform to showcase 2D-PRINTABLE's results and as a contact point for third parties who are interested in the progress and outcomes of the project. All information displayed on the project website is and will be updated and maintained regularly.

4.1 Website structure and homepage

The structure of the public website is carefully organized to provide comprehensive insights into 2D-PRINTABLE and its overarching objectives. It encapsulates detailed information regarding planned activities and emphasizes the anticipated impact of the project. The design philosophy behind the website centres on user-friendliness, featuring an intuitively organized and easy-to-navigate layout. This deliberate approach ensures that visitors can effortlessly access and retrieve pertinent information about the project.

To facilitate seamless navigation, the website adopts a scrollable webpage format, offering a smooth and intuitive user experience. The navigation is further enhanced through the incorporation of six main tabs: Project, Results, News/Events, Graphene Flagship, Partners, and Contact. Each tab is strategically curated to encapsulate distinct aspects of the project, providing visitors with a structured pathway to explore specific areas of interest.

The homepage layout and topic sections will allow visitors to explore the main aspects of the project by scrolling through the page. The main sections on the homepage are:

8. The 2D-PRINTABLE short title and main project picture.
9. A short project introduction where the EU and 2D-PRINTABLE consortium are mentioned, with links to the project's objectives, stricture, concept, and Facts & Figures.
10. A link to a featured article.
11. 2D-PRINTABLE News.
12. Facts and Figures of the project.
13. 2D-PRINTABLE Partners with links to the partners' specific page
14. Media kit
15. Links to a contact form to get in touch with the project coordinator and management.
16. EU acknowledgment and disclaimer

The website has an attractive format supported by a considerable number of hyperlinks. On the left side of the page, direct links to the newsletter and Graphene Flagship are available allowing visitors to easily share the website content on these platforms. Figure 4.1 displays a screenshot of the first sections of the website homepage.

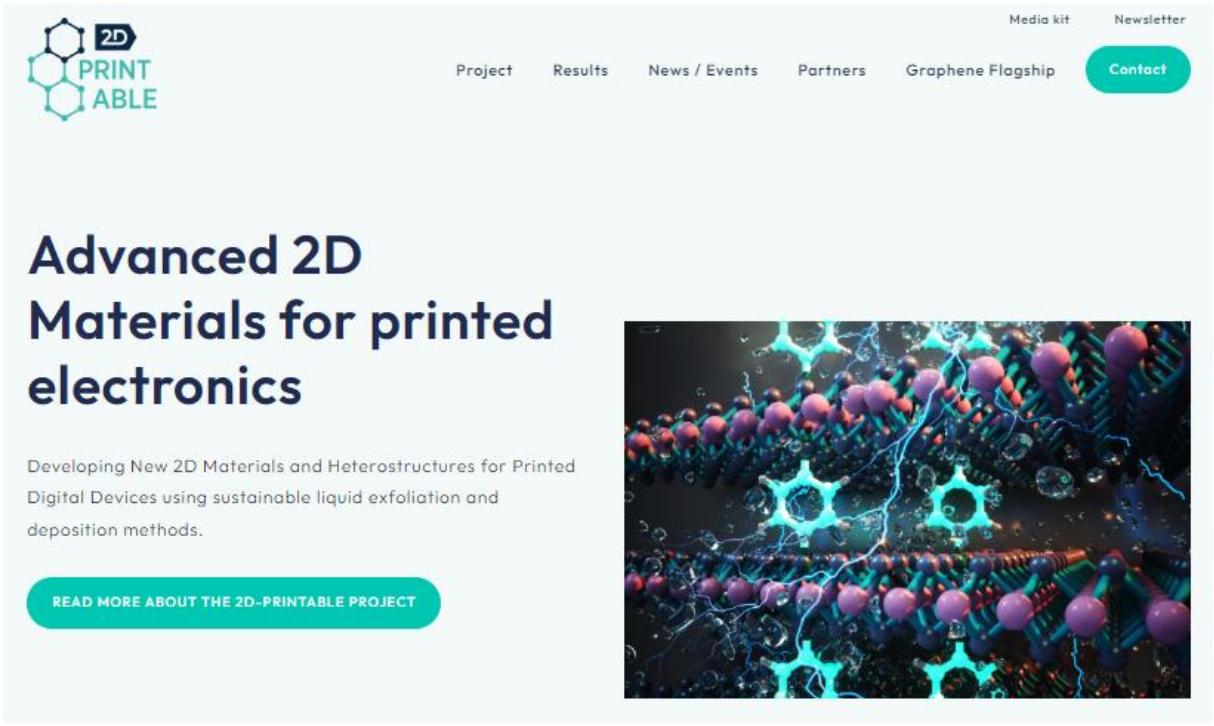

Figure 4.1 – 2D-PRINTABLE Website Homepage

4.2 Website sections

The main section “Project” gives an overview of the 2D-PRINTABLE concept, goal, results, and general information. Details are provided in each subsection:

- About 2D-PRINTABLE
- Objectives
- Concept
- Mission
- Approach
- Results
- Facts & Figures
- Publications
- Graphene Flagship

In the “**Results’ section**, an interactive timeline with project updates is shown. Results are ordered by month of achievement.

Under the **section “News/Events”**, items related to the project, or its partners will be added on a regular basis. Examples of News items include press releases, participations in workshops, conferences and other meetings, updates on intermediate results, and any other initiatives related to the project from the consortium partners. This section will be regularly updated with upcoming (online) conferences, seminars, symposia, workshops, 2D-PRINTABLE General Assemblies, and any other interesting events which are directly or indirectly related to the project and which project partners will attend. Events which have already taken place in which partners have participated will also be listed on the Event page.

The **“Partners” section** provides information on each of the partners of the 2D-PRINTABLE project. The section provides a list of the partners, the geographical location of the partners is shown on a map, and the partner logos are displayed. An overview of the content and style of the Partner page is given in Figure 4.2. By clicking on a logo, visitors can access a concise description of the organization, an elucidation of their role in the project, and a direct link to their company website.

The **EU funding acknowledgment** is found at the bottom of every page and section of the website as seen in Figure 4.3. The acknowledgment consists of the European Union Flag and the text “Funded by the European Union”.

Additionally, a **disclaimer/copyright** page has been included on the website.

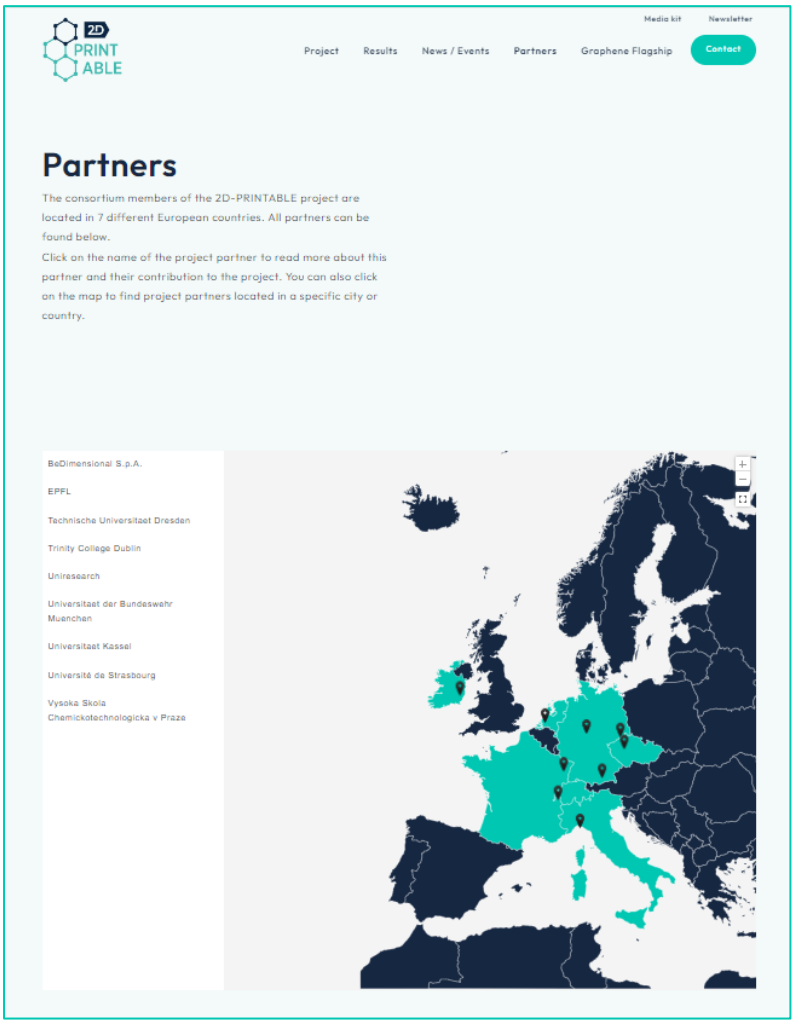

Figure 4.2 - Website partners section (left) and example of partner description (below)

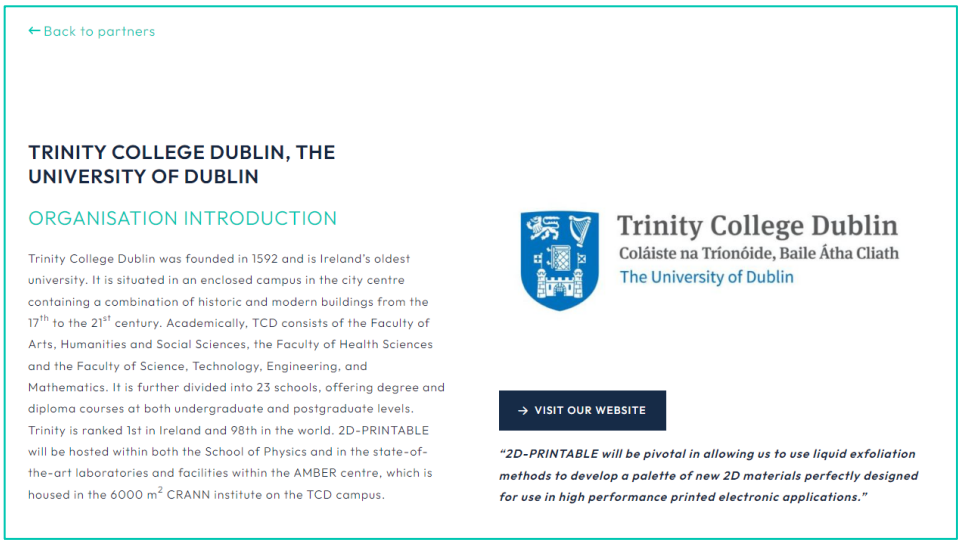

Figure 4.3 - EU funding acknowledgment

4.3 Social media and link to Graphene Flagship

4.3.1 Graphene Flagship Website

The Graphene Flagship website now features a comprehensive overview of the 2D-PRINTABLE Project (Figure 4.4), establishing seamless links between these two pivotal platforms. Utilizing this connection, the project aims to effectively disseminate news, highlight events, and showcase collaborative initiatives with other projects under the Initiative.

2D-PRINTABLE is set to play a crucial role in crafting shared content for the annual Graphene Flagship Report, collaborating on joint events like Graphene Week, and leveraging the collective tools and resources offered by the Flagship. This strategic integration enhances the project's visibility and ensures active participation in the collaborative efforts of the larger Graphene Flagship community (detailed planned activities will be included in D7.2, M6).

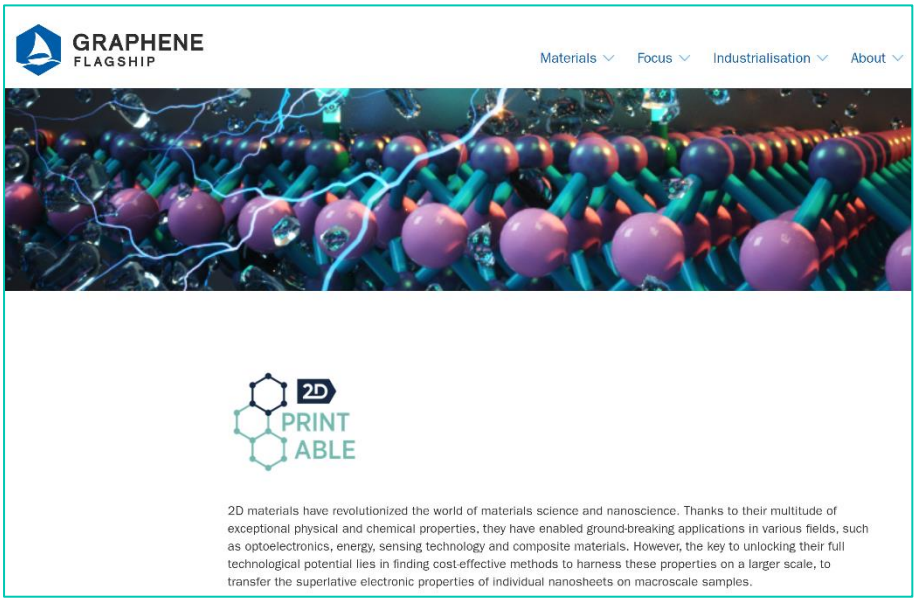

Figure 4.4 – 2D-PRINTABLE Project description on the Graphene Flagship website

4.3.2 GrapheneEU social media accounts

The 2D-PRINTABLE Project will be regularly sharing updates, posting news, and promoting events through the GrapheneEU social media accounts. This consistent engagement is designed to capitalize on the extensive network associated with GrapheneEU, contributing significantly to the cultivation of a common identity for the project within the broader community. By maintaining a schedule of regular updates and posts, 2D-PRINTABLE aims to establish a dynamic online presence that not only informs but also ensures continuous interaction with stakeholders. This approach fosters an ongoing sense of collaboration and shared identity across the expansive GrapheneEU network, enhancing the overall impact of the project within the community.

5 Deviations from Annex 1

There are no deviations from the description of this deliverable as given in Annex I of the Grant Agreement.

6 Acknowledgement

The author(s) would like to thank the partners in the project for their valuable comments on previous drafts and for performing the review.

Project partners:

#	Partner short name	Partner Full Name
1	TCD	TCD THE PROVOST, FELLOWS, FOUNDATION SCHOLARS & THE OTHER MEMBERS OF BOARD, OF THE COLLEGE OF THE HOLY & UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN
2	UNISTRA	UNIVERSITE DE STRASBOURG
3	UKa	UNIVERSITAET KASSEL
4	BED	BEDIMENSIONAL SPA
5	TUD	TECHNISCHE UNIVERSITAET DRESDEN
6	VSCHT	VYSOKA SKOLA CHEMICKO-TECHNOLOGICKA V PRAZE
7	UNR	UNIRESEARCH BV
8	UniBw M	UNIVERSITAET DER BUNDESWEHR MUENCHEN
9	EPFL	ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE

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