



D3.1 – 1st Annual report on EMERGE dissemination activities

WP3 NA2 – Dissemination /
Communication activities, and
Exploitation Strategy



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List of abbreviations

ALMA - AlmaScience

HMU – Hellenic Mediterranean University

ICN2 – Institut Català de Nanociència I Nanotecnologia

MCL – Materials Center Leoben Forschung GmbH

RISE – Research Institutes of Sweden AB

SMEs – Small-medium enterprises

TLO – Technical Liaison Office

UNOVA – Instituto de Desenvolvimento de Novas Tecnologias - UNINOVA

WP – Work package

WUT – Warsaw University of Technology

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1. Executive Summary

This document is **D3.1 - 1st Annual report on EMERGE dissemination activities** and was prepared in the frame of work package WP3 – NA2 – Dissemination/ Communication activities and Exploitation Strategy. The EMERGE consortium is formed by 11 partners, which includes European research facilities, university laboratories and research and technology transfer organizations. The different backgrounds of the partners will have an impact on the target audience and relevant stakeholders of the project, such as public authorities, associations, academies, small-medium enterprises (SMEs) and industry, mostly connected to flexible and printed electronics.

This document has two main blocks: the preliminary draft of the dissemination and communication strategy, and the dissemination activities conducted during the 1st year of the project.

2. Dissemination and Communication Strategy

The full value of a project targeting distributed research infrastructure is achieved with interaction outside of the consortium. The opportunities and results created by the project, which can be beneficial to the stakeholders, need to be properly communicated and informed closely to the users that can benefit from it. For this, it is necessary to define the target audience for EMERGE, guidelines for stakeholders' engagement, as well as the services available, and actions developed. Moreover, a proper definition of key dissemination and communication actions and dissemination channels will allow a successful implementation of the project.

The definition of an initial dissemination and communication strategy comprises:

Communication and Dissemination Board

The Communication and Dissemination Board (in line with task 1.6) aims to promote the network among the different stakeholders to reach and seek new users of the EMERGE infrastructure. During the consortium meeting (M12) the board was established with representatives from *Instituto de Desenvolvimento de Novas Tecnologias - UNINOVA* (UNOVA, Pedro Barquinha), Hellenic Mediterranean University (HMU, Konstantinos Rogdakis), Warsaw University of Technology (WUT, Jakub Krzeminski), AlmaScience

(ALMA, Luís Pereira and Diana Gaspar) and Research Institutes of Sweden AB (RISE, Duncan Platt and Astrid Armgarth).

Internal communication

Despite the relevance of the communication towards external entities, internal communication has high relevance for the successful implementation and timely manner of the project. The main objectives of internal communication within EMERGE are:

- Continuous monitoring of the project activities and progress;
- Sharing of documents and information;
- Collection of deliverables, reports and other relevant documents;
- Risk identification and prompt mitigation action;
- Decision making both at the WP level and project-related decisions.

Besides a general mailing list for dissemination and sharing information that might be of interest to the entire consortium, different internal mailing lists were also created for each specific type of activities and boards, with the contacts from all partners and persons involved (name, role, WPs involved) for a clear understanding of the responsibilities. This approach facilitates communication and ensures that the information is directed to the leader and responsible persons at each institution for a specific task/WP or board.

In addition to the email, the communication between the consortium will be conducted with general project meetings¹ to be organized every 12 months, and online/hybrid meetings organized on a regular basis for each WP and boards such as Technical Liaison Office (TLO), Communication and Dissemination Board and Innovation and Exploitation Board. Other extraordinary issues will be dealt with promptly using the available tools.

All partners have identified the users that have access to EMERGE Google Drive. This shared drive will serve as a collaborative workspace and be used for internal data exchange and documents. Important information related to the project, including grant agreement, list of important contacts, list of deliverables, and dissemination materials, among others, will

¹ Whenever possible the project meetings will be organized in a face-to-face format. Due to the COVID-19 outbreak the 1st face to face meeting (general assembly) took place at M12.

be available on that platform. Additionally, relevant documents generated during the project will be also made available to the partners for download/editing on the Intranet of EMERGE project website (Figure 1).

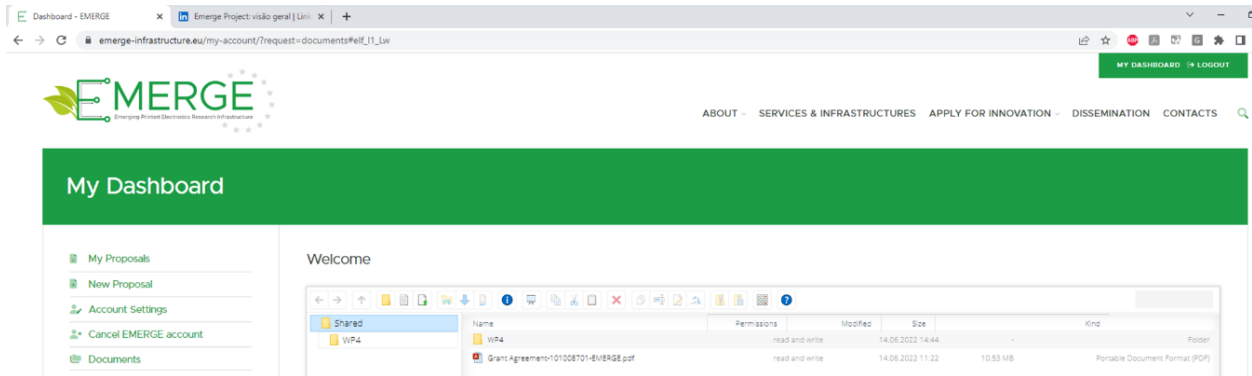


Figure 1. Screenshot of the intranet page on the EMERGE website.

External communication

At the beginning of EMERGE implementation each partner had already identified stakeholder groups from their networks (some provided supporting letters), consisting of research institutions, other researcher infrastructures, European networks, private companies in the field of printed electronics, technology transfer organizations, and others. Starting from this initial assessment, the TLO defined the following:

- Stakeholder;
- Their interests;
- How to address the stakeholder;
- Partners that could reach that audience.

Building from that initial assessment, the stakeholders' list is continuously updated. The identification of audiences and feedback received from them (including the feedback received from the EMERGE dissemination activities) is allowing to understand their needs and expectations, enabling a more targeted dissemination process for organizations and people who are interested in using the infrastructures provided by the EMERGE consortium. All the partners should be engaged and continue to promote EMERGE close to their respective networks, enabling the dissemination close to different target groups, focusing (but not restricted) on their geographic coverage (Table 1).

Table 1. List of partner countries and their respective geographic coverage.

Partner country	Geographical coverage
Austria	Central and Eastern European Countries
Germany	
Poland	
Greece	Mediterranean Sea, South-East European Countries
Portugal	Iberian Peninsula
Spain	Islands in the Mediterranean and Atlantic Sea
Sweden	Northern European and Baltic Countries

Besides the stakeholder community, it should be noted that internal stakeholders in the partner institutions, which may or may not be in direct contact with the project, should be also considered. Therefore, the dissemination of the project opportunities, news, events, and best practices, among others, must be promoted close to the group leaders and researchers within the partner’s organization.

Creation of tools to raise awareness about the project

As mentioned, the identification of the target community will help in the definition of the best promotion channel, which can include mailing lists, conferences, and other digital means such as website and LinkedIn.

This point is particularly important given the character of the project and the existence of open calls for the submission of short-term projects. The success of the project will be directly linked to the effectiveness of the tools to reach the target audience and stakeholders (Table 2).

Table 2. Primary means of communication.

Target group	Primary means of communication
Research institutions, other researcher infrastructures, European networks, private companies in the field of printed electronics, technology transfer organizations	Dedicated web pages (Website and LinkedIn), scientific conferences and events, distribution of dissemination material (project leaflet) in events
Internal stakeholders	Email, internal meetings, dissemination material (project leaflet, roll-up)

Templates for communication materials

For the overall communication of the project, the project identity/graphic profile was created to have it recognizable in all its communication forms and channels. A logo, page layout for presentations and reports, and colour scheme were prepared to be used in all means of dissemination (Figure 2). Further details about those materials are available in D2.4 (EMERGE corporate slide and poster presentation).

3.1. Dissemination objectives for the 1st year

The initial dissemination and communication foresee different stages of the dissemination & communication activities during the project (Table 3).

Table 3. List of dissemination objectives for the year1 (M1 – M12).

Objective	Observations	Description of use
Definition of the project identity (logo, image) and preparation of the communication materials	Materials developed	Applied to all communications materials and channels. Used to present EMERGE at internal and external communication and dissemination activities.
Creation of website and LinkedIn for dissemination of the project	https://emerge-infrastructure.eu/ https://www.linkedin.com/company/85115408 (Error! Reference source not found. and Error! Reference source not found.)	Website with project information, intranet for the partners, online form for proposal submission LinkedIn for dissemination activities, announcement of open calls, and other news related to the project
Development of materials, brochures and flyers	Open-call slide/poster/roll-up and pamphlets (Figure 6)	Roll-up designed by RISE, AlmaScience and UNOVA to be used in national/international events.
EMERGE presentation at events	Presentation of the project at events with national and international stakeholders	Presentation in “Ciência 2022” event promoted by the Portuguese Science and Technology Foundation, and “Workshop on EU projects” during ISFOE 2022.
Participation in relevant National and European communication and dissemination events	Despite the COVID-19 restrictions the project was presented and promoted at national and European events	Project presented in several events (please see section 3.2)

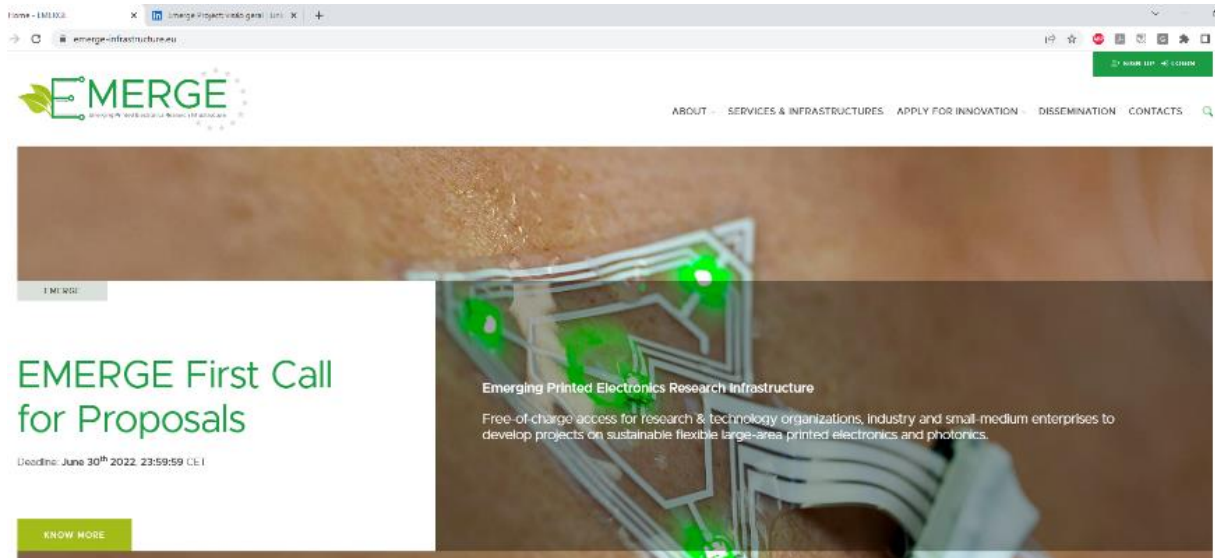


Figure 4. Screenshot from EMERGE website.



Figure 5. Screenshot from EMERGE LinkedIn page.

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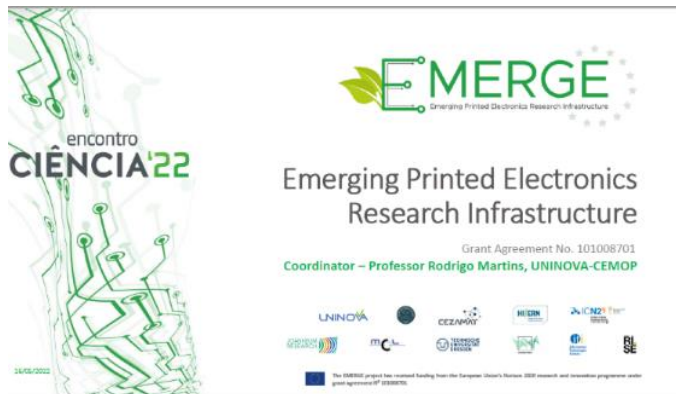
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Figure 6. Open call slides and posters prepared for dissemination in events.

3.2. Dissemination activities (M1-M12) and anticipated actions (M13-M24)

Partner 1	UNOVA
<p>Overview of the dissemination activities</p>	<p>EMERGE project was presented at Ciência 22 event promoted by the Portuguese national funding agency for science, research and technology. <u>Several scientific publications with work partially supported by EMERGE:</u></p> <p><i>“Materials as activator of future global science and technology challenges”</i> in Progress in Natural Science: Materials International, Elsevier, (https://doi.org/10.1016/j.pnsc.2021.11.002)</p> <p><i>“Tailoring the synaptic properties of a-IGZO memristors for artificial deep neural networks”</i> in APL Materials, AIP, (https://doi.org/10.1063/5.0073056)</p> <p><i>“Emergent solution based IGZO memristor towards neuromorphic applications”</i> in J. Mater. Chem. C, RSC, (https://doi.org/10.1039/D1TC05465A)</p> <p><i>“Stacking-Dependent Electrical Transport in a Colloidal CdSe Nanoplatelet Thin-Film Transistor”</i> in Nano Lett., ACS, (https://doi.org/10.1021/acs.nanolett.1c04822)</p> <p><i>“Flexible nanostructured TiO₂-based gas and UV sensors: a review”</i> in Discover Materials, Springer, (https://doi.org/10.1007/s43939-022-00023-5)</p> <p><i>“Composites Based on PDMS and Graphite Flakes for Thermoelectric Sensing Applications”</i> in Materials proceedings, MDPI, (https://doi.org/10.3390/materproc2022008042)</p> <p><i>“Solution Combustion Synthesis of Hafnium-Doped Indium Oxide Thin Films for Transparent Conductors”</i> in Nanomaterials, MDPI, (https://doi.org/10.3390/nano12132167)</p> <p><i>“Microwave-Assisted Synthesis of Zn₂SnO₄ Nanostructures for Photodegradation of Rhodamine B under UV and Sunlight”</i> in Nanomaterials, MDPI, (https://doi.org/10.3390/nano12122119)</p>
Foreseen dissemination activities	
International	<p>Participation in the 15th International Symposium on Flexible Organic Electronics 2022, integrated in the Nanotextology 2022 conference.</p> <p>Joint <u>workshop</u> (UNOVA and ALMA) at Junior Euromat 2022 (July 2022) conference, where EMERGE project will be presented and advertised</p> <p><u>Participation in international conferences</u> (TCM 2022) and organization of EMERGE workshop as a satellite event during the conference.</p> <p><u>Scientific publications</u> in peer-reviewed journals acknowledging EMERGE.</p>
National	



Partner 2	HMU
Overview of the dissemination activities	HMU has promoted the EMERGE project on LinkedIn.
Foreseen dissemination activities	
International	<p><u>Two oral presentations at international conference:</u> HMU will deliver an oral presentation disseminating Emerging Printed Electronics Research Infrastructure - EMERGE during the “Workshop on EU projects” during the 15th International Symposium on Flexible Organic Electronics (ISFOE22) held in Thessaloniki, Greece on 4-7th July 2022, an event financially supported by EMERGE. During the same conference, HMU will deliver an oral presentation related to “Memristive perovskite solar cells towards self-powered IoT edge computing”.</p> <p><u>One scientific manuscript publication in an international journal acknowledging EMERGE:</u> HMU published a scientific manuscript entitled “<i>Memristive perovskite solar cells towards parallel solar energy harvesting and processing-in-memory computing</i>” in Materials Advances, RSC (https://doi.org/10.1039/D2MA00402J) a study financially supported by EMERGE.</p>
National	HMU to announce press releases on various websites and also interview with Prof. Kymakis on a TV channel presenting the mission of EMERGE

Partner 3	WUT
Overview of the dissemination activities	<p>WUT promoted EMERGE with a presentation shown at the registration desk 9th International Symposium on Sensor Science. https://i3s2022warsaw.sciforum.net/</p> 
Foreseen dissemination activities	
International	
National	

Partner 5	Institut Català de Nanociència i Nanotecnologia (ICN2)
Overview of the dissemination activities	<p>ICN2 has promoted the EMERGE project using different social networking platforms like LinkedIn and Instagram. Private and public accounts of the participants in the project have been used to expand the network and reach potential future collaborators. ICN2 will be on the organizing committee of a conference in Tirana, Albania (TNT2022) with possible opportunities to advertise EMERGE.</p> <p><u>Scientific article publication</u> with EMERGE project in the acknowledgements (https://doi.org/10.1016/j.bios.2021.113737)</p>
Foreseen dissemination activities	
International	<p><u>TNT2022 Conference</u> held in Tirana with opportunities to advertise EMERGE (October 2022)</p> <p><u>Social network advertisement</u> for the consortia and the calls for findings by the participants in the project (private accounts of Giulio Rosati, Massimo Urban, and Arben Merkoçi) and the public account of the Nanobioelectronics and Biosensors Group (via Instagram)</p> <p><u>Participation in international conferences</u> (TNT2022) acknowledging EMERGE project (poster)</p>
National	

Partner 6		Materials Center Leoben Forschung GmbH (MCL)	
Overview of the dissemination activities			
Foreseen dissemination activities			
International		MCL is involved in the organization of the conference IEEE-ISAF 2022 (Tours, France, June 27 – July 1, 2022). Staff from MCL will be the programme chair of ECAPD topics (ECAPD - European Conference on Applications of Polar Dielectrics) and will have a contribution talk at the same conference.	
National			

Partner 9		ALMA	
Overview of the dissemination activities		ALMA was responsible for the creation and management of the content published on the EMERGE LinkedIn page. ALMA account and some of the private accounts (private accounts of Luís Pereira and Diana Gaspar) have been used to promote and increase the extension of the project towards relevant stakeholders.	
Foreseen dissemination activities			
International		ALMA together with UNOVA is organizing a <u>workshop</u> at Junior Euromat 2022 (July 2022) conference, where EMERGE project will be presented and advertised. <u>Participation in international conferences</u> (TCM 2022) and organization of EMERGE workshop as a satellite event during the conference.	
National			

Partner 11		RISE	
Overview of the dissemination activities			RISE has participated in the conference PRINSE'22 (7 th PrintoCent Industry Seminar – June 2022 - Oulu, Finland) with an EMERGE booth and dissemination materials. During this event RISE, gave a pitch about the project.
Foreseen dissemination activities			
International		EMERGE booth at the conference TNT 2022.	
			
National			