EMERGE

WP8 Communication and Dissemination

D8.2 Communication and dissemination plan

Version: 1.0

Date: 31/03/2023

Document control

Project title	Emergent awareness from minimal collectives
Project acronym	EMERGE
Call identifier	HORIZON-EIC-2021-PATHFINDERCHALLENGES-01-01
Grant agreement	101070918
Starting date	01/10/2022
Duration	48 months
Project URL	http://eic-emerge.eu
Work Package	WP8 Communication and Dissemination
Deliverable	D8.2 Communication and dissemination plan
Contractual Delivery Date	M6
Actual Delivery Date	M6
Nature[1]	R
Dissemination level[2]	PU
Lead Beneficiary	University of Bristol
Editor(s)	Renan Picoreti Nakahara (DVL), Sabine Hauert (UOB)
Contributor(s)	Adela Staszowska (DVL)
Reviewer(s)	Bahador Bahrami (LMU)
Document description	This deliverable presents the strategy for communication and dissemination of the EMERGE project's objectives and results. It identifies key audiences and stakeholders, their characteristics, and relevant messages. The plan presents the communication and dissemination activities, channels and materials which will be used by project partners throughout the project. It also establishes a timeline for activities and discusses key performance indicators (KPIs).

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[1]R: Document, report (excluding the periodic and final reports); DEM: Demonstrator, pilot, prototype, plan designs; DEC: Websites, patents filing, press & media actions, videos, etc.; DATA: Data sets, microdata, etc.; DMP: Data management plan; ETHICS: Deliverables related to ethics issues.; SECURITY: Deliverables related to security issues; OTHER: Software, technical diagram, algorithms, models, etc.

[2]PU – Public, fully open, e.g. web (Deliverables flagged as public will be automatically published in CORDIS project's page); SEN – Sensitive, limited under the conditions of the Grant Agreement; Classified R-UE/EU-R – EU RESTRICTED under the Commission Decision No2015/444; Classified C-UE/EU-C – EU CONFIDENTIAL under the Commission Decision No2015/444; Classified S-UE/EU-S – EU SECRET under the Commission Decision No2015/444

Version control

Version[3]	Editor(s) Contributor(s) Reviewer(s)	Date	Description
0.4	Renan Picoreti	24.02.2023	Intermediate document proposed by editor
0.4	Sabine Hauert	27.02.2023	Reviewed the content and added suggestions.
0.5	Bahador Bahrami	30.03.2023	Intermediate document approved by reviewer
0.8	Renan Picoreti	30.03.2023	Document finished by editor
0.98	Bahador Bahrami	30.03.2023	Document approved by reviewer
1.0	Davide Bacciu	31.03.2023	Document released by Project Coordinator.

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[3] 0.1 – TOC proposed by editor; 0.2 – TOC approved by reviewer; 0.4 – Intermediate document proposed by editor; 0.5 – Intermediate document approved by reviewer; 0.8 – Document finished by editor; 0.85 – Document reviewed by reviewer; 0.9 – Document revised by editor; 0.98 – Document approved by reviewer; 1.0 – Document released by Project Coordinator.

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Abstract

Awareness in biological agents has converging definitions when considering local states describing content-related consciousness from an agent-specific perspective. However, it becomes highly debated when it comes to global states. The issue magnifies when considering collectives of artificial agents. Several frameworks exist, all unsatisfactory in the limitations posed to agents' heterogeneity and disappearance of the local self into an integrated state.

Ultimately, existing frameworks are ineffective in explaining, facilitating, and supporting cooperative behaviours in artificial agents. The lack of a compelling theory of global awareness in AI is currently a significant barrier to the effective deployment of artificial agents in the real world.

EMERGE tackles this grand challenge by introducing the novel concept of collaborative awareness for collectives of minimal artificial beings. We will investigate how simple agents can develop a representation of their mutual existence, environment, and cooperative behaviour towards the realisation of tasks and goals.

EMERGE builds on a scenario of artificial beings with no shared language and constrained individual capabilities, which nevertheless leads to high-complexity behaviours at the collective level. Collaborative awareness becomes an emergent process supporting complex, distributed, and loosely coupled systems capable of high degrees of collaboration, self-regulation, and interoperability without pre-defined protocols.

EMERGE delivers a philosophical, mathematical, and technological framework that enables us to know how and where to allocate awareness to achieve a goal through the collective optimally. We will demonstrate EMERGE concepts on robotic use cases, with hints of broader applicability of the framework to Internet of Things, pervasive computing, and nanotechnologies. We will also investigate the ethical implications of collaborative awareness, focusing on moral responsibility, vulnerabilities, and trust.

Consortium

The EMERGE consortium members are listed below.

Organization	Short name	Country
Università di Pisa	UNIPI	IT
Technical University Delft	TUD	NL
University of Bristol	UOB	UK
Ludwig Maximilian University of Munich	LMU	DE
Da Vinci Labs	DVL	FR

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Acknowledgement

Funded by the European Union

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1.   Executive Summary

This document is a deliverable of the EMERGE project under grant agreement number 101070918.

This deliverable, "D8.2 Communication and dissemination plan", is part of work package 8 (WP8) "Communication and Dissemination" which "ensures communication and dissemination of EMERGE activities to different publics towards improving impact, public acceptance, and translation."

This deliverable presents the strategy for communication and dissemination of the EMERGE project's objectives and results. It identifies key audiences and stakeholders, their characteristics, and relevant messages. The plan presents the communication and dissemination activities, channels and materials which will be used by project partners throughout the project. These are the project's visual identity and brand guidelines, deliverable and presentation templates, website and social media presence, scientific publications, press releases, promotional materials and newsletters, organisation of and participation in events, and networking activities with other projects and initiatives. It also establishes a timeline for activities and discusses key performance indicators (KPIs).

This plan will be continuously improved according to the performance of the aforementioned activities. An intermediary report and evaluation will be made available at M30 with deliverable "D8.3 Intermediate report on communication and dissemination activities" and a final report on WP8 will be made available at M48 with deliverable "D8.4 Final report on communication and dissemination activities".

2.   Communication and Dissemination Plan

According to the European Commission in the Horizon Europe Programme Guide[4], good communication (i) starts at the outset of the action and continues throughout its entire lifetime; (ii) is strategically planned and not just ad-hoc efforts; (iii) identifies and sets clear communication objectives; (iv) is targeted and adapted to audiences that go beyond the project's own community, including the media and the public; (v) chooses relevant messages; (vi) uses the right medium and means; (vii) is proportionate to the scale of the action.

Following these guidelines, EMERGE's communication and dissemination plan is developed to ensure that the project, its objectives and results are properly and widely disseminated to target audiences and stakeholders, increasing its impact and outreach. It starts with the identification of these target groups and the key messages being conveyed to each of them. Next, to reach those groups with an adequate message, the EMERGE consortium identified a well-defined number of communication activities to be carried out throughout the duration of the project. It includes a choice of the most appropriate and efficient dissemination channels and the development of adequate materials. Finally, a timeline for their implementation is set, and key performance indicators (KPIs) are established to evaluate their deployment and guide course corrections when necessary.

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[4] Horizon Europe Programme Guide, https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf

2.1.   Audiences and Key Messages

EMERGE's dissemination and communication activities are aimed at a number of target audiences – individuals or groups likely to be interested in learning about the project or whom the project wishes to engage – and stakeholders – individuals or groups who are involved in, impacted by or have a vested interest in the project. Since these groups often overlap, and audiences may become stakeholders through their engagement with the project, the two words will be used interchangeably here.

Target audiences were identified by the EMERGE consortium based on the target's potential interest in learning about the project, its objectives and outcomes, their potential influence in or contribution to achieving such outcomes, or their potential to be affected by it. These may be individuals, groups of people, public and private entities, such as decision-makers, scientific communities, universities, industrial players, from local, national and European or even international levels. These groups are listed in Table XXX. This is, however, a continuous exercise, and target audiences may evolve as EMERGE is developed and achieves its results.

With the identification of the target audiences, a strategy for communication can be put in place. It starts with the establishment of key messages that need to be shared with each target audience. Table 1 shows the initial key messages tailored to each target audience. These messages are context-dependent, and may change according to time and communication channels. Additional key messages may also be created according to the needs of the project.

Table 1: EMERGE's target audiences and key messages.

Target group	Key message
Researchers	"EMERGE's goal is to establish, analyse, implement and test a new artificial intelligence framework that allows a collaborative awareness – a representation of shared existence, environment and goals – to emerge from the interplay of multiple individual units of local awareness."
	"EMERGE contributes to redesign the future of artificial neural computing, by building on the idea of dynamical systems as next-generation computing engines for neural networks, allowing it to surpass the limitations of the classical Turing-based framework."
	"EMERGE will explore awareness at different scales of space (individual, local collective, medium-large scale collective) as well as at different scales of time, such as the effects induced by learning mechanisms of different time scales (lifelong and evolutionary)."
Industry and Innovators	"EMERGE will implement a clear research-to-technology pathway to produce breakthroughs and open new markets in the next generation of robotic systems."
	"EMERGE's collaborative awareness will transform robotic systems, as well as all kinds of applications which involve providing a service over a loosely coupled collective of entities, both physical or virtual, such as Internet-of-Things (IoT) devices, smart services, biomedical nanodevices, and many others."
	"EMERGE will facilitate AI uptake in critical industries by fast-tracking the deployment of swarm, soft and collaborative robotics capable of going beyond the usual structured human-robot collaboration scenarios and adjusting their performance according to local conditions."
Policy Makers	"EMERGE will facilitate AI uptake in critical industries by fast-tracking the deployment of swarm, soft and collaborative robotics capable of going beyond the usual structured human-robot collaboration scenarios and adjusting their performance according to local conditions."
	"EMERGE will investigate issues connected to ethics of robotics and human-robotics interactions, and develop and deliver an open-access ethical guidelines toolkit to help EU regulators with advanced insights to the current and future AI legal frameworks."

Target group	Key message
General Public	"Emergent awareness will make it easier for human operators to monitor and control collaborative robots and robotic swarms in industrial and logistics environments."
	"Robotic swarms with emergent awareness will be useful in real-world application such as logistics or environmental monitoring."
	"Collaborative robots with emergent awareness will allow out-of-the-box ready-use robotic solutions for industrial and logistics environments."
	"Soft robots with emergent awareness will improve the development of medical exoskeletons, grippers for fragile objects, and entirely new areas and application domains not available to rigid robots."

3.   Activities, Channels, and Tools

EMERGE's communication will be implemented through a number of activities, channels and tools. This section describes the following:

- Visual identity and brand guidelines to create a consistent brand identity and improve awareness around the project;
- Deliverable and presentation templates for internal and external communication of the project;
- Website containing public domain information about the project aimed at different stakeholders and target audiences;
- Social media channels to engage and build relationships with different stakeholders and target audiences;
- Scientific publications for dissemination of key results produced during the project;
- Press releases to maximise the dissemination of project's results and important milestones on the media;
- Promotional materials composing a communication kit with clear and simple language aiming to reach a variety of target audiences;
- Events organisation and participation to raise awareness around the project, its activities and expected results, and disseminate the relevant developments;
- Networking activities with other projects and initiatives to ensure the impact of the project's results and to ensure the adoption of the project's outputs.

These activities are detailed in the following sections alongside a timeline for execution and key performance indicators (KPIs).

In addition to the collective activities listed above, each partner of the EMERGE consortium intends to conduct individual dissemination activities, ensuring maximum visibility of the project in their respective countries. Currently foreseen activities are presented below in Table 2. This list will be expanded as the project is developed.

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Table 2: EMERGE consortium partners individual dissemination activities.

Partner	Individual dissemination activities
UNIPI	Use the knowledge generated for courses in Intelligent Systems for Pattern Recognition, Continual Learning, Computational Neuroscience; and a 2-year MSc program devoted to Artificial Intelligence with over 200 students, and for seminars for the European AI Doctoral Academy (AIDA).
	Presentation of EMERGE results at keynotes and invited talks at robotics conferences.
	Participation in the European Researchers' Night, a Europe-wide public event, which displays the diversity of science and its impact on citizens' daily lives in fun, inspiring ways.
	Participation in the "Internet Festival", the largest event in Italy dedicated to the exploration of the Internet and digital innovation.
TUD	Supplement the Intelligent Control Systems, and MSc program in Robotics and the TU Delft PhD school on Soft Robotics (SIDRA, DISC).
	Presentation of EMERGE results at keynotes and invited talks at robotics conferences.
UOB	Use the results to inform the curriculum of an MSc in Biorobotics at University of Bristol.
	Presentation of EMERGE results at keynotes and invited talks at robotics conferences.
	Organisation of an outreach event during euRobotics week and UK Robotics week.
	Organisation of exhibits at the Summer Science festival, the "We The Curious" museum, and the V&A Museum in London.
	Organisation of a masterclass for industry on how to use the DOTS robots.
	Organisation of a workshop on swarm intelligence at ICRA, IROS, or RSS.
LMU	Update the curriculum of AI Ethics & Minds and Machines courses.
	Production of multimedia material (e.g., short animations, infographics etc) for introducing EMERGE to the general public.
	Organisation of a workshop on Ethics of Awareness in AI in Brussels in 2023.
	Presentation of EMERGE results at keynotes and invited talks.
DVL	Publication of articles directed at a broad audience to disseminate the project findings.
	Organisation of workshops and meetings (online or during relevant industry meetups) to reach out to the key stakeholders.
	Liaison with partners for effective communication and dissemination of knowledge developed in the project.
	Organisation of workshops and meetings (online or during relevant industry meetups) to reach out to the key stakeholders.

As required by Article 17 of the Grant Agreement, all material used for communication and dissemination activities related to the EMERGE project acknowledge the EU support and display the EU emblem and funding statement (in the local language where appropriate). Moreover, they include the disclaimer:

> "Funded by the European Union under Grant Agreement 101070918. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Innovation Council and SMEs Executive Agency (EISMEA). Neither the European Union nor the granting authority can be held responsible for them. In addition, UK partners will acknowledge being supported by UKRI grant number 10038942."

EMERGE's dissemination and communication activities and materials will use the English language. Partners are, however, encouraged to adapt any of those to their local language for the local dissemination of the project.

3.1.   Visual Identity

EMERGE's logo creates a consistent brand identity and improves awareness of the project and its objectives to all stakeholders. The logo is presented in Figure 1. It was made available to all partners in different versions and file formats using the project's internal document repository.

All materials produced will follow the established brand guidelines, including instructions on logo usage, and standard fonts and colours of the project are shown in Figure 2. The brand guidelines were made available to all partners using the project's internal document repository.

Figure 1: Different versions of the EMERGE project logo.

Primary Font

EMERGE's primary font is Quicksand.

As a general rule, Quicksand Bold or Medium is used for headings or sub-headings and Quicksand Light or Regular is used for body text.

Quicksand should be used on all publications.

Other typefaces can be used if a valid reason is given. This might be to do with a design that requires a more decorative face. It may also be for a separate marketing campaign where another font can be used to give standout. In these cases Quicksand should be used in conjunction with the other specific fonts to complement them.

Quicksand

AaBbCcDdEe123

abcdefghijklmnopqrstuwxyz
ABCDEFGHIJKLMNOPQRSTUWXYZ
£!@#$%^&*()_+-=[]{};"\,./"|<>?

Font Weights

Light	AaBbCcDdEe123
Regular	AaBbCcDdEe123
Medium	AaBbCcDdEe123
Bold	**AaBbCcDdEe123**

Colours

EMERGE's main colour is Purple.
Turquoise is used for accents.
Black is used mainly for typography.

Pantone® 273 C
RGB   44 39 77
HEX   2C274D
CMYK   90 90 40 38

Pantone® 3385 C
RGB   81 191 157
HEX   51BF9D
CMYK   65 0 50 0

Pantone® Black C
RGB   35 31 32
HEX   231F20
CMYK   0 0 0 100

Logo Do's & Dont's

Do's and dont's for the EMERGE logo.

EMERGE ✓ Always use logo files from the logo guideline's respective folders. Never try to recreate them from the guidelines.

EMERGE ✗ Never stray from the color palette.

EMERGE ✗ Never rearrange elements of the design.

EMERGE ✗ Never stretch or distort the logo.

EMERGE ✗ Never change or alter any fonts.

EMERGE ✗ Never change the orientation of the logo with angles different than 0 or 90.

Figure 2: Extract from the brand guidelines for the EMERGE project.

3.2. Project Templates

Templates for internal and external communication of the project were produced and made available to all partners using the project's internal document repository. Templates are subject to updates over time to better represent the evolution of the project.

The deliverables template will be used for all of EMERGE's deliverables. The template defines a series of quality controls for project deliverables and provides a series of features that enhance the quality of the documents, such as:

- front page with project/document identification and partner logos;
- headers and footers providing useful document information and funding information,
- a concise overview of all document information, including version history control and table of contents, lists of figures and tables, etc.; and
- a uniform formatting template for the main content.

A simplified version of this template will be used for other documents produced by the partners.

EMERGE will be presented in several internal and external meetings, conferences, and other events. These are opportunities to disseminate the project, its developments and results, increasing awareness around it. The presentation template was created containing:

- a front slide including the project logo, presentation title and presenter information;
- a consortium slide including all partners' logos;
- a content slide
- a final slide including an invitation to visit the project website and social media channels.

The presentation template will be complemented by a slide deck to be developed so all partners can present the project in a standardised way.

3.3. Website

The EMERGE project website – https://eic-emerge.eu/ – contains public domain information about the project aimed at different stakeholders and target audiences.

Consortium partner DVL is responsible for keeping the website always up-to-date and functioning properly, solving any issues in a timely manner. The schedule for these updates will depend on the specific needs of the website. Relevant website updates will be communicated to consortium partners through internal channels and to target audiences through EMERGE's social media channels.

Figure 3 show a screen capture of the EMERGE website homepage. More information on EMERGE's website is provided on deliverable "D8.1 Project website, logo, and online presence".

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Figure 3: EMERGE website homepage.

3.4. Social Media

Social media are important communication tools to engage and build relationships with different stakeholders, and to increase brand awareness for the project. EMERGE social media profiles will be used for communicating about:

- The project's goals, milestones, findings, and public deliverables;
- Facts and figures on subjects related to the project's field;
- Featured consortium partners, members, and other key stakeholders;
- News, press releases and website updates;
- Scientific publications accompanied by summaries aimed at a general audience;
- Organization of meetings, webinars, conferences and other events;

- Participation of consortium partners in third-party events;
- Relevant content published by third parties, such as the latest trends and developments in the field.

Social media profiles on the platforms Twitter and LinkedIn were set up by M1:

- Twitter: https://twitter.com/eic_emerge
- LinkedIn: https://www.linkedin.com/company/eic-emerge/
- Instagram: https://www.instagram.com/eic_emerge/

Profiles and publication timelines are shown in Figures 4 and 5. Initial content was published concerning the kick-off meeting and the EMERGE's objectives. Content is being regularly posted, and a calendar was set up where partners can suggest and approve content for the updates to be published on each channel, ensuring continuous activity. Starting at M4, a weekly minimum publication frequency is planned.

The Instagram profile was created but not yet updated due to the more visual nature of this social media channel, we will start regularly updating the channel when the project starts generating results.

In regular email reminders sent by DVL to the internal mailing list, consortium partners are encouraged to share EMERGE social media publications and to tag the EMERGE profiles when publishing content related to the project in their own profiles. Collectively, partner's co-investigators have over 8.600 followers on twitter and over 10.000 on Linkedin, amplifying the reach of EMERGE's publications.

To increase the visibility of these channels, the EMERGE website includes links to the project's social media profiles. Additionally, as they become sufficiently populated with content, the social media timelines will be integrated into the website's homepage.

To assess their effectiveness, the project's social media accounts will be monitored using the analytics provided by each platform. Throughout the project's duration, the consortium will assess the suitability to create additional profiles on other social media channels, such as Instagram, TikTok, or new platforms.

As of the final version of this document, on M6, EMERGE's Linkedin and Twitter profiles have gathered 99 and 55 followers respectively. During M6, 15 posts were published on LinkedIn and achieved more than 8.000 impressions, while 22 were published on Twitter and had over 10.000 impressions. We expect this to grow throughout the project.

Table 3: Social media timeline and KPIs.

Activity	KPI	Year 1	Year 2	Year 3	Year 4	Total
Social Media Channels	Twitter Followers	100	200	300	400	400
	LinkedIn Followers	100	200	300	400	400

Figure 4: EMERGE Social Media – Twitter profile and timeline.
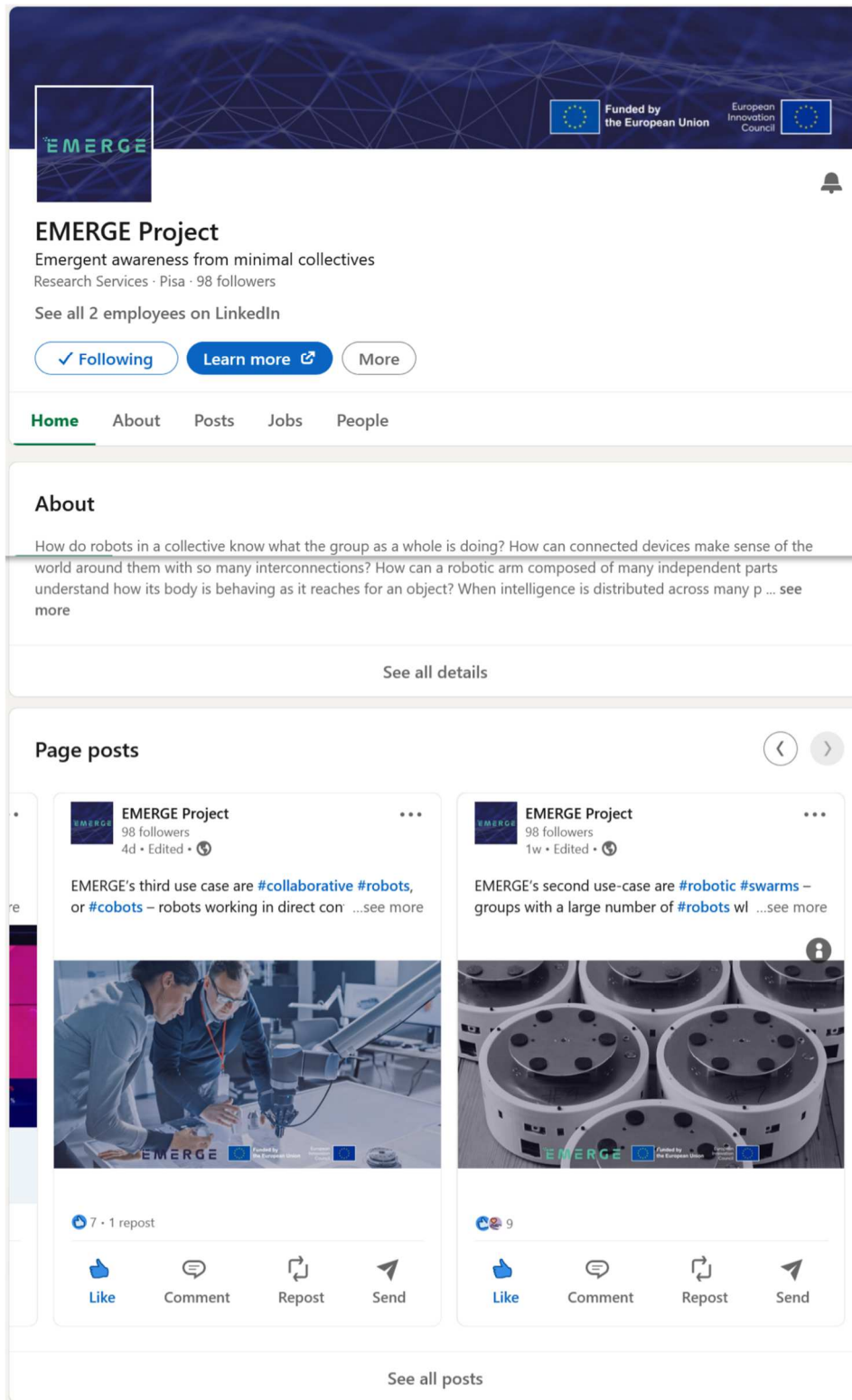
Figure 5: EMERGE Social Media – LinkedIn profile and timeline.

3.5. Press Releases

To maximise the project's dissemination to the media, the consortium will prepare press releases to promote EMERGE's results and important milestones. The initial plan is the preparation of three press releases throughout the project's duration. They will be disseminated by each consortium partner through their networks and will be available on the project website. Press releases will be produced in English and, as needed, translated into the national languages of partners in order to be sent to national media. Additionally, all press releases will be made available on the project website and social media channels.

Partners are expected to keep a record of the distribution and publication of the press releases. A press clipping register is available to all partners at the project's internal document repository.

The first press release was prepared by DVL regarding the project start, with information of the project's goals, partners, funding, etc. The press release was distributed to all partners, adapted by their respective communications offices as deemed necessary, and distributed to various media. In addition, project partners are expected to coordinate with their individual University press offices to highlight high-impact papers produced as part of the project.

Figure 6 shows the first press release. As of the submission of this deliverable, EMERGE has been mentioned in the media over 250 times, including paid (press release distribution service), earned (regular media coverage of the project and its partners), and owned (by partners themselves) media.

Table 4: Press releases timeline and KPIs.

Activity	KPI	Year 1	Year 2	Year 3	Year 4	Total
Press Releases	Number of Press Releases	1	3	1	2	7
	Total Media Coverage*	50	150	100	200	500
Mainstream Publications	Number of Submissions (Blogs/News Articles)	2	2	4	4	12

* Number of times EMERGE was mentioned in the media.

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UNIVERSITÀ DI PISA   **TU**Delft   University of BRISTOL

LMU LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN   DA VINCI LABS

EMERGE Consortium secures €2.8M grant awarded by European Innovation Council for the investigation of a new framework for AI collective awareness

Project scored first among those selected by the EIC's Pathfinder "Awareness inside" Challenge and will receive a combined €2.8M grant from the European Commission over the next 4 years.

Pisa, January 19th - How do robots in a collective know what the group as a whole is doing? How can connected devices make sense of the world around them with so many interconnections? How can a robotic arm composed of many independent parts understand how its body behaves as it reaches for an object?

When intelligence is distributed across many parts, be they robots, devices, or objects, it can be tricky for the bigger picture to emerge. Yet answering these questions is key to making collective systems easy to design, monitor and control. This is the goal of the EMERGE consortium composed of the University of Pisa (IT), Ludwig Maximilian University of Munich (DE), Delft University of Technology (NL), University of Bristol (UK), and Da Vinci Labs (FR).

The EMERGE project will deliver a new philosophical, mathematical, and technological framework to demonstrate, both theoretically and experimentally, how collaborative awareness – a representation of shared existence, environment and goals – can arise from the perceptions and interactions of individual agents, without leveraging a pre-existing common language between them.

This collaborative awareness envisioned by EMERGE will transform robotic systems, as well all kinds of applications which involve providing a service over a loosely coupled collective of entities, both physical or virtual, such as Internet-of-Things (IoT) devices, smart services, biomedical nanodevices, and many others.

EMERGE has been awarded a highly competitive grant in the Horizon Europe funding programme. The project scored first among the 8 projects selected out of 34 projects submitted to the "Awareness inside" EIC Pathfinder Challenges 2021 call. The partners will receive a combined €2.8M grant from the European Commission over the next 4 years. UK participants in EMERGE are supported by UK Research and Innovation.

Emergent Awareness

Humans and other biological agents can effectively move in new environments, navigate previously unseen situations, and intuitively coordinate through complex social interactions.

From the moment they enter a room, two people charged with moving a table have at their disposal, through their senses, an abundance of information. They are aware of their own body, their surroundings, as well as of each other and the table. And, as soon as they are aware of their goal, with little to no explicit communication, they can integrate all this data – these individual, or local, awareness states – and cooperate to solve the problem and move the table to a new place.

Artificial intelligence nowadays enables the translation of isolated local awareness states from biological to artificial agents using information about the environment which can be collected from mechanical (contact, vibration, collision, etc), and electromagnetic (radio, infrared, visible light, etc) stimuli.

1

Figure 6: EMERGE first press release.

3.6.   Scientific Publications

Key results produced throughout the project duration will be disseminated in the form of article pre-prints, peer-reviewed articles in scholarly journals, articles in conference proceedings, monographs, patents, and research data (data underlying publications, curated data and/or raw data).

EMERGE will publish peer-reviewed scientific articles in gold open-access journals such as Science Robotics, AIJ, Ra-L, Advanced Intelligent Systems, Nature Machine Intelligence, Mind & Language, Minds and Machines, AI and Ethics, Nature Human Behaviour, Cognitive Science, Synthese.

Open science will be the main driving criteria of communication and dissemination activities under the EMERGE project. The project will strictly follow the open access policy, ensuring immediate online access to scientific information that is free of charge to the end-user. Preprint versions of all articles will be deposited into multidisciplinary open-access repositories, e.g., ArXiv or Zenodo (Figure 7 shows the Zenodo community page created for EMERGE).

Once published in a scholarly journal or in a conference proceeding, the article's final version will be immediately made available on the project's website, and posted into the institutional open repository. This open repository will automatically feed OpenAIRE with articles to ensure the largest possible impact among researchers, policymakers, and businesses.

Each partner will ensure open access to the deposited publication within six months of publication, assuming an electronic version is available without extra charge via the publisher. The partners will also ensure access to the bibliographic metadata that identify the deposited publication (including terms under the grant agreement, the name of the action, acronym and grant number, the publication date, and length of embargo period if applicable, and a persistent identifier). All scientific peer-reviewed articles will be published under Creative Commons CC BY 4.0 licence. Thus, the authors retain all the copyright of the article. However, the partners will retain their copyright and grant licences to publishers based on Creative Commons licences.

Along with the dissemination to the scientific community, publications will be disseminated with layperson summaries published on the project's website and social media channels to reach a wider audience. When appropriate, these summaries will also be cross-posted to third-party websites (e.g., Robohub.org or AIhub.org) for wider dissemination.

If necessary, additional press releases will be considered for the dissemination of major results of the project.

Table 5: Scientific publications timeline and KPIs.

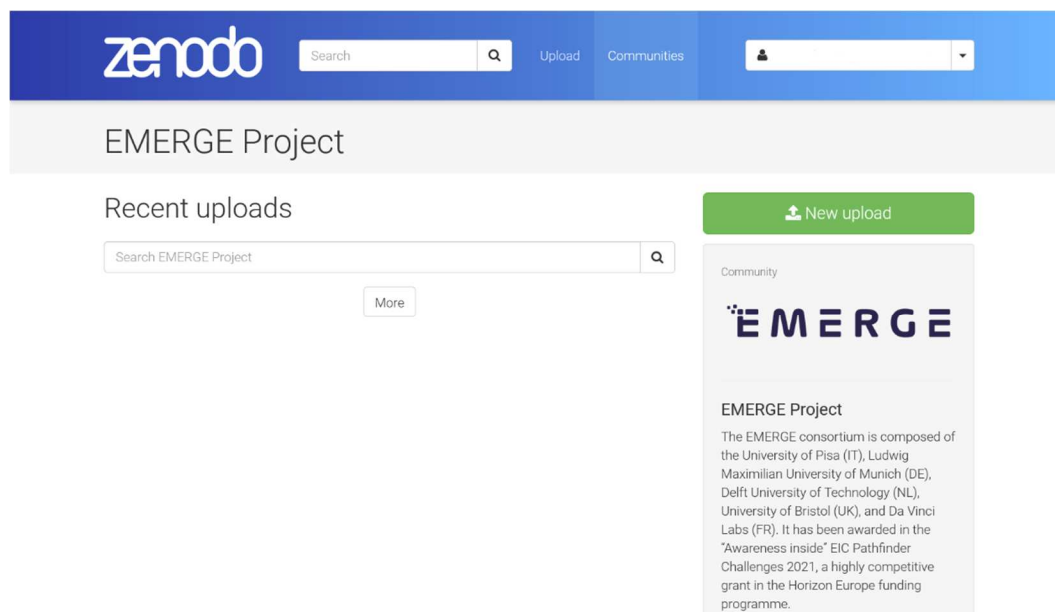| Activity	KPI	Year 1	Year 2	Year 3	Year 4	Total
Scientific Publications	Number of Publications	4	8	10	12	34

Figure 7: Zenodo community page created for EMERGE.

3.7.   Communication Kit

A communication kit containing a number of resources will be developed as promotional material for the project will be developed throughout Y1, aiming to reach a variety of target audiences with clear and simple language, avoiding technical content as much as possible. It will include the following materials:

- Factsheet, flyer or brochure communicating a general overview of the project, its challenges and expected impacts for distribution during events;
- Roll-up banner and/or poster which can be used by each partner at their own institutions and/or at events to capture the attention of passers-by;
- Slide deck: a series of standard presentation slides introducing the project to be used by itself, or included in more general presentations as needed by the partners.

Additionally, a series of videos will be produced explaining EMERGE's objectives and highlighting its results. The videos may be composed of interviews with project partners, partner institutional and research footage, stock footage, animations and infographics. The videos will be uploaded to a video hosting platform (such as YouTube) and made available on the project's website and promoted on social media channels, and distributed to all partners' platforms and information multipliers. Additional resources may be developed as necessary.

The first video, explaining key concepts of the EMERGE project, have been commissioned and should be ready for distribution in the following months. Screen captures of the storyboard are shown on Figure 8.

For distribution to stakeholders and the media, the communication kit will be complemented by any press release, publication, and other materials produced throughout the project duration.

The communication kit will be distributed to partners and stakeholders in digital form. The production of printed versions will be the responsibility of each partner according to their needs. Partners are, however, encouraged to reduce the environmental impact of the project

and limit the production of printed materials. These materials will also be delivered to partners in editable form for the purpose of localisation to the partner's language if necessary.

Table 6: Communication kit timeline and KPIs.

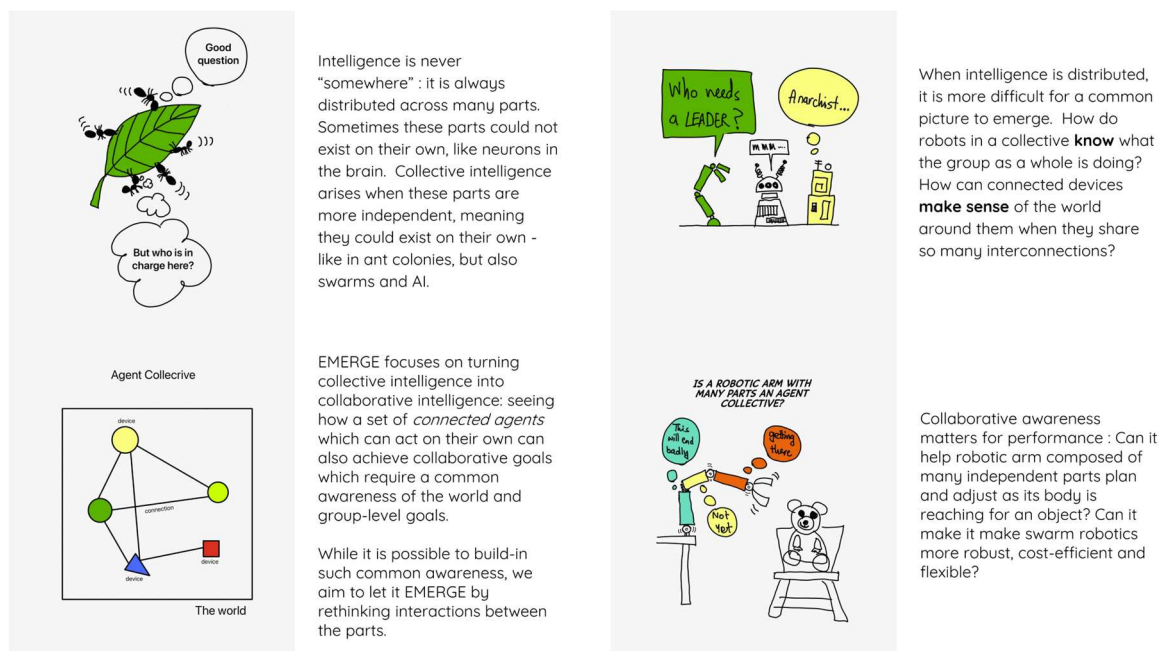| Activity	KPI	Year 1	Year 2	Year 3	Year 4	Total
Project Videos	Number of Videos	-	1	1	1	3
	Total Viewership	-	2.500	7.500	10.000	20.000

Figure 8: Screen capture of EMERGE's first video's storyboard, explaining key concepts of the project.

3.8. Events

Organisation of and participation in events, including scientific and industry conferences, trade shows, workshops, seminars, both virtual and physical, related to the partners' or the project's field of expertise, are prime opportunities to raise awareness around the project, its activities and expected results, and disseminate the relevant developments.

Additionally, they provide partners with networking opportunities with researchers and stakeholders and establish and deepen ties with other EU-funded projects and initiatives, and other groups in the scientific and industrial community.

EMERGE partners are encouraged to participate in such events at the local, national, EU and international levels. Relevant events include: DARS, ICRA, IROS, MRS, RSS, Robosoft, ALIFE, AAAI, IJCAI, NeurIPS, ICML. This list will be continuously updated and extended and communicated to all EMERGE partners. These events are also included in the Events section on the project's website.

Each partner will follow their own strategy to disseminate the project results, including submitting papers or presentations or proposing themselves as speakers. The participation of

partners in third-party events will be promoted on the project's social media channels. Partners are expected to keep records and to provide information on their participation in events alongside pictures. An event participation register is available to all partners at the project's internal document repository.

Furthermore, EMERGE will organise three online workshops throughout the project's duration to promote the main achievements of the project. The workshops will be recorded (following consent from participants) and uploaded to a video hosting platform (such as YouTube) and made available on the project's website and promoted on the social media channels alongside any relevant material.

In organising and participating in events, gender balance, and diversity more broadly, will be considered when selecting speakers, as we believe that this is an excellent means to reach out to both female and male participants.

Table 7: Events timeline and KPIs.

Activity	KPI	Year 1	Year 2	Year 3	Year 4	Total
Event Participation	Number of Conferences	2	2	4	6	14
Online Workshops	Number of Workshops	1	-	1	1	3
	Number of Attendees	80	-	160	240	480

The project's Y1 workshop will be a workshop on the ethics of awareness in AI. It will be organised in the Fall (September/October 2023) in Brussels to also connect with other portfolio members, policy-makers, and industry representatives. The workshop will enable participants involved in WP2 to share results and plans, and disseminate the work done in WP2.

3.9. Communication and Dissemination Crash Course

EMERGE will empower its researchers to communicate their work to a wider audience through social media (blogs, twitter, video, etc) through a 1-hour crash course, led by project partner Prof. Sabine Hauert, Associate Professor of Swarm Engineering at the University of Bristol in the UK. She is an expert in science communication with 15 years of experience contributing to BBC, CNN, The Guardian, The Economist, TEDx, WIRED, and New Scientist. She is also leader of charities Robohub.org and AIhub.org (which connect the robotics and AI communities to the public), and Scicomm.io.

The aim of this crash course is to scale-up the type of content produced about EMERGE, by having individual researchers drive their own communications, and also amplifying their content through the EMERGE channels. This will future train responsible innovators that are capable of communicating about their work and engaging in the public discourse. As a result of this training we expect each EMERGE researcher to produce a minimum of one piece of content that will be featured on the website and relevant channels.

3.10. Networking

EMERGE will take advantage of synergies and build networks with relevant stakeholders, local, national, European and international communities, associations, initiatives and projects to ensure the impact of the project's results and to ensure the adoption of the project's outputs.

During the first two years, we focus on building relationships with various stakeholders implicated in key interdisciplinary areas that are brought together by the project. The intermediate project network includes SME: Robotech Srl; RTOs: German Aerospace Center (DLR), Istituto Italiano di Tecnologia (IIT), CNR; universities: MIT, EPFL, LJMU, TUM, University of London; policymakers: European Parliament; societies: the Royal Society, EurAI, IEEE CIS, IEEE RAS, IEEE CSS, Italian Association for AI, European Network of Human-centered Artificial Intelligence, AI4EU; and clusters: Dutch Soft Robotics Initiative (4TU).

Additionally, the consortium will connect with third-party websites e.g., Robohub.org or AIhub.org, and to the ICT-48 Networks to make them aware of the project, and join relevant activities throughout the duration of the project.

3.11. Portfolio Communication and Dissemination Activities

Steered by the Programme Manager (PM) in charge of the portfolio of projects (Portfolio) generated by the 2021 EIC Pathfinder challenge call Awareness Inside, portfolio activities aim to develop synergies and collaborations among the projects and strengthen the prospects for a successful project completion and transition towards the market. These activities are executed in the context of WP10 "Portfolio activities" tasks T10.1-4 and reported on deliverables D10.1–3.

During those tasks, the EMERGE consortium will seek to (i) establish collaboration with the portfolio to cross-catalyse the research within the Portfolio to overcome shared challenges and increase its impact in the scientific community; (ii) proactively identify technological developments and non-confidential know-how acquired or generated by any of the Portfolio's beneficiaries, which could help the consortium to reach the project's objectives; and (iii) organise and take part in collaboration meetings to present the latest project's advancements, explore synergies within the Portfolio, interact with stakeholders, industry representatives, etc.

The EMERGE consortium will participate in regular meetings with representatives of other Portfolio projects to collaborate in joint communication and dissemination activities, such as workshops for different audiences, joint press releases, publications on social media, etc..