AI for real-world network operation

WP5 – Dissemination, communication, and exploitation of results

D5.1 – Communication and dissemination plan

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DISCLAIMER

SUMMARY

The present document represents the first deliverable that will be submitted within the scope of the AI4REALNET project work package 5 (WP5): "Dissemination, communication, and exploitation of results", and it presents the initial communication and dissemination plan.

The project's WP5 is structured in four tasks, which will be developed and implemented during the whole project:

Task 5.1 - Dissemination and communication plan

Task 5.2 - Dissemination boosters

Task 5.3 - Cooperation and synergies with regional and European initiatives/stakeholders

Task 5.4 - Exploitation strategy and Plan

Within this work package, nine deliverables will be written and submitted.

This deliverable, "Communication and dissemination plan", is divided into two main parts: the communication and the dissemination plans.

The dissemination plan will be first presented, since it is focused on a macro strategy, that comprises the objectives, targets, communication tools and key performance indicators. Besides, results achieved in the first three months will also be presented, in a subsection called dissemination impact assessment.

The communication plan introduces the communication strategy, that follows an integrated marketing approach based on several communication initiatives that will be implemented throughout the full length of the project.

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ABBREVIATIONS AND ACRONYMS

AI	Artificial Intelligence
AAV	Automatic Advertising Value
KPI	Key Performance Indicators
WP	Work Package
M	Month
SMEs	Small and Medium-sized Enterprises
IMC	Integrated Marketing Communication

TABLE 1 – ABBREVIATIONS AND ACRONYMS

1. INTRODUCTION

The scope of the AI4REALNET project covers the perspective of artificial intelligence (AI)-based solutions addressing critical infrastructures (electricity, railway, and air traffic management), modelled by networks that can be simulated, and are traditionally operated by humans, and where AI systems complement and augment human abilities.

This project will be implemented based on a 42-month work plan, structured in six work-packages (WP).

The WP5 "Dissemination, communication, and exploitation of results" objectives are:

- Deliver communication, dissemination, engagement, and cooperation strategies;
- Deliver relevant input to scientific communities;
- Promote open science activities;
- Ensure collaboration with AI4Europe and Adra-e projects;
- Benchmark and engage AI community along the project and get contributions (e.g., participation in open innovation with the AI4REALNET digital environments);
- Promote the exploitation of the AI4REALNET results and of the technologies.

This document sets up a dissemination and communication plan, following an Integrated Marketing Strategy approach (IMS), to reach the expected outcomes, from the beginning until the end of the project. The following communication tools will be implemented during that period: advertising (e.g., visual identity, flyers, booklets, videos), direct marketing (e.g., newsletters), digital marketing (e.g., website, social media channels), and public relations (e.g., press releases, events, webinars).

The groups targeted in this plan are network operators (e.g., mobility, energy, water, ICT), AI service providers, AI community, ICT and control system providers, regulators and policy markets, academic institutions, citizens, international associations, European Commission, the media, and the External Experts Advisory Board.

2. DISSEMINATION PLAN

The AI4REALNET project dissemination plan presents strategic and targeted actions for promoting the project and its results to a series of different audiences, at the same time demonstrating how EU funding contributes to tackle socio-economic challenges and contribute to a larger societal understanding about AI benefits, risks and vulnerabilities, but also provide novel mechanisms to monitor and ensure safety, as well as the ethical dimension associated to AI in critical infrastructures.

Firstly, the dissemination objectives are defined regarding the projects purpose. Furthermore, stakeholders' groups are identified to tailor the communication and dissemination efforts. Therefore, to reach these target groups and achieve the dissemination goals, various communication tools will be implemented during the 42 months of the project. Finally, measuring the impact of the project dissemination actions will allow to understand if the dissemination objectives are being achieved, and/or if some adjustment actions should be carried out.

2.1 OBJECTIVES

As already mentioned in the introductory section of this document, the project's dissemination strategy is focused on achieving the following objectives:

1. Ensure broad visibility and raise awareness about AI4REALNET in Europe, spreading knowledge of the project's results (e.g., via scientific publications) establishing a distinctive and recognizable identity that will support promotional and marketing efforts.

2. Reach, stimulate, and engage a critical mass of relevant stakeholders to ensure effective showcasing of project results, leading to validation, improvement, and possibly further adoption.

3. Facilitate exploitation of the project's assets and promote the replicability of AI4REALNET technologies and framework for trustworthy AI-based decision systems, including their open-source software.

4. Fully support the key player's engagement strategy in the project activities and concepts around the human-AI cooperation while providing great visibility of the AI social-technical robustness and performance and recommendations to policy makers.

5. Establish strong liaisons and close collaboration with relevant European initiatives (e.g., AI-on-demand, Adra-e, AI4EUROPE) and beyond.

The following sections – target groups and communication tools – have been defined considering these objectives.

2.2 TARGET GROUPS

The AI4REALNET project will target the following groups (and expected benefits/interest):

1. **Network operators:** Learn about the AI added value for improving mid- and short-term operational planning, and enhanced resilience of real-time network operation. Non-functional requirements for AI (e.g., security, technical, human cooperation, scalability).

2. **AI service providers:** Discover the evolving applications of AI technology within critical infrastructures, exploring emerging use cases. Gain insight into the versatile capabilities of AI4REALNET digital environments, specifically designed for rapid prototyping and testing purposes.

3. **ICT/Control system providers:** Follow latest breakthroughs in AI algorithms and methodologies, examining how these advancements can be leveraged to augment and refine products with cutting-edge AI capabilities.

4. **Customers/citizens:** Increased awareness of socio-economic benefits from trustworthy AI.

5. **Other critical infrastructures:** Gain proficiency in replicating and/or adopting the AI4REALNET conceptual framework and open-source AI solutions. Learn how to integrate these tools into your decision-making processes, drawing inspiration from the project's diverse use cases to enhance and innovate your own strategies.

6. **Regulators and policymakers:** Learn about new use cases for operational planning of network infrastructures and AI (human) users' acceptance as a valuable input. Use this understanding to inform the development of regulations and policies that align with emerging trends and technological advancements.

7. **International associations:** Leverage from project outcomes to help association members to understand each AI technology, their advantages and readiness level.

8. **AI community:** Engage in the AI4REALNET community for testing novel AI algorithms in the digital environments with industry-driven use cases.

2.3 COMMUNICATION TOOLS

In an Integrated Marketing Communication (IMC) approach, communication tools are known as elements that complete themselves in a process, even though each component plays a specific role.

All these tools are expected to contribute to reaching the project's target audiences and achieve the project's objectives.

This section is divided into five sub-sections: advertising, digital marketing, direct marketing, public relations, and scientific publications.

2.3.1 ADVERTISING

2.3.1.1   PROJECT'S IDENTITY

A visual identity has been created to communicate the AI4REALNET project. An identity manual presenting the project logo, official colours and the typography, has been conceived to establish the project's brand. The concept intends to demonstrate how the project aims to help "congested" networks (represented in red) smoothly turn into more efficient and congested-out networks (blue).

FIGURE 1 – AI4REALNET LOGO

The colours should be represented as faithfully as possible. The two following colours constitute the logo:

- Red: Pantone 185 C or #ED1C24
- Blue: Pantone Pantone 287 C or #2E3192

Regarding the typography, the fonts defined are Roboto and Arial, which should be applied to all the communication materials. Some of the identity's applications can be visualised in **Annex 1** of this report.

2.3.1.2   X-BANNER

An x-banner with the AI4REALNET brand was produced to help the project stand out in events and meetings. This was first used in October 2023 in the project's kick-off meeting organised by INESC TEC. The digital version of the x-banner is available in **Annex 2** of this report.

2.3.1.3 BROCHURE

Several brochures regarding the project will be designed and produced. The first one intends to present an overview of the project, including information about the expected outcomes, partners, and financing. The primary purpose is providing partners with communication material to present at strategic events or meetings. The first brochure will be available in month M5 (February 2024).

2.3.1.4 VIDEO

The planned videos will be produced throughout the whole project, aiming to present the project while giving it visibility and consistency. The plan includes the production of three videos, one of them at the beginning of 2024, targeting all project audiences. The fundamental goal of these videos is to raise awareness of the project, focusing on the social media and website audiences since these are the main channels in which the videos are to be disseminated.

2.3.1.5 BOOKLET

A project booklet is to be designed by the end of the project (M42). This communication resource should include technical information for a specific audience with more profound knowledge in the subject, in addition to the outcomes and results of the project. It will also inform about the project management, partners, financing, and stakeholder ecosystem.

2.3.2 DIGITAL MARKETING

Digital Marketing is a communication feature that boosts the project's online presence, considering that nowadays, the digital environment is so powerful that it should not be undervalued. These digital tools help to deliver the project message to an audience, supporting the development of relationships with the public and increasing interaction between the project and its stakeholders. AI4REALNET project will explore two types of digital tools: website and social media channels.

2.3.2.1 WEBSITE

A brand's online presence through a website is an indispensable mechanism to reach different audiences, providing them with information worldwide. For this reason, the AI4REALNET project website will be an essential communication tool to disseminate the project from the beginning. The main goals of this website are to inform about the project itself, evolution, outcomes and activities, scientific publications, or deliverables, as well as means through which people can be part of the project.

The website is already online on https://ai4realnet.eu/ The structure includes eight main menus:

- Project – overall presentation of the project, its vision, use cases, expected outcomes, and global structure.

- Community – introduction to the project's consortium.

- Use Cases – explanation of all the project use cases in each of the three critical infrastructures.

- Results – results obtained throughout the project's development: open software, scientific publications, public deliverables, and open datasets.

- Media Corner – release of information necessary to media coverage, namely the identity of the project and the press releases submitted.

- News – publication of the news pieces associated with the project that can include activity led by partners or other content relevant for acknowledgment.

- Events – the same as the point before, but regarding events organised by the project consortium or in which the project is knowledgeable.

- Contacts – exposure of all the project coordination contacts.

A printscreen of the homepage can be found in **Annex 3**.

2.3.2.2 SOCIAL MEDIA

The whole communication strategy is intended to function sidelong a social media strategy, designed to integrate Owned Media channels (LinkedIn and X (former Twitter)), which will cover the general goals of:

- Raise awareness.

- Build reputation.

- Influence the market and attract decision-makers.

- Define relationships with partners.

With these general goals in mind, according to the recognized mainstream audience, each channel will act differently and be expected to have a different impact. The purpose is to reach audiences mainly composed of the AI Community (academia, industry), policymakers, start-ups and SMEs, network operators and service providers, citizens, and the general public. Therefore:

- LinkedIn: attract decision makers.

- X: increase online visibility.

- YouTube: operates mainly as a repository of videos.

The social media channels of the project have been available since M1 in the following links:

- LinkedIn: https://www.linkedin.com/company/ai4realnet-project

- X: https://twitter.com/AI4REALNET

- Youtube: https://www.youtube.com/channel/UCSCvS33-h7YoYaNjctBi1Ww

Each social media network should have its agenda and purpose, depending on the target audiences and the project's objectives. So, below there's an overview of the strategy developed for the different channels considered:

| Social Media	Main objective	Main audiences	Content Strategy	Frequency
LinkedIn	Attract decision-makers	Policymakers AI Community and Ecosystem AI service providers	Project and partner info Media coverage Videos	4 times/month
X	Increase visibility	European citizens SMEs Academia	Project and partner info Media coverage Videos	4 times/month
YouTube	Enable video content sharing	All target groups	Videos	~1 time/month

TABLE 2 – SOCIAL MEDIA CHANNELS STRATEGY
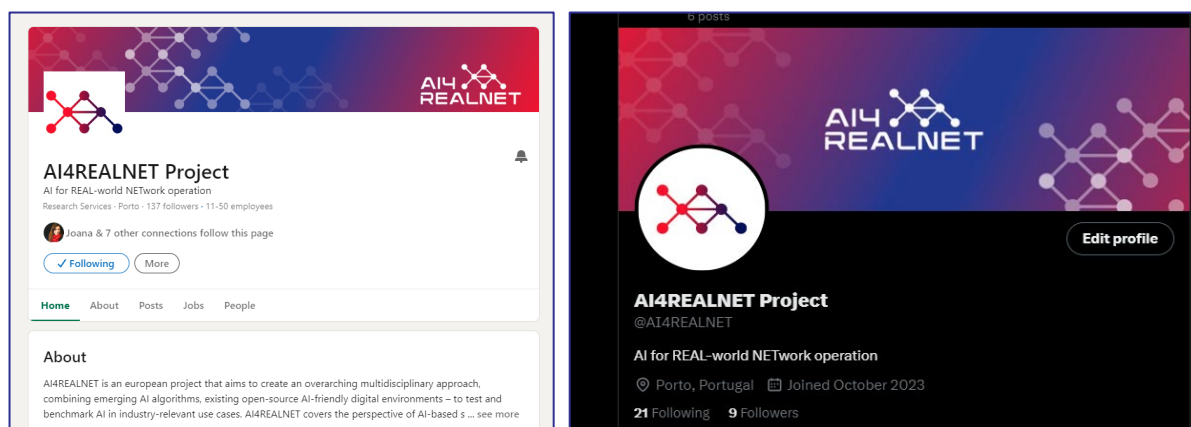
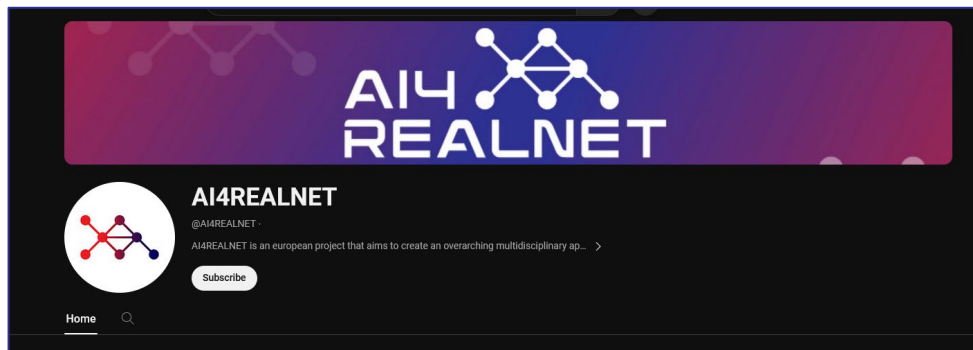**FIGURE 2 – AI4REALNET LINKEDIN'S AND TWITTER'S PAGES OVERVIEWS**

FIGURE 3 – AI4REALNET YOUTUBE'S PAGE OVERVIEW

2.3.3 DIRECT MARKETING

2.3.3.1 NEWSLETTER

Emailing newsletters can be quite an impactful engagement tool, mainly because it can be individually directed, thus contributing to establishing relationships with stakeholders and keeping them informed about the project's developments. The AI4REALNET intends to send a digital newsletter to all subscribers every three months until the end of the project.

The first newsletter is to be launched in January 2024. Audiences will be challenged to subscribe to the newsletter once the website is launched. All partners should be important in sharing the newsletter among their contacts. Information about the launch of each newsletter will also be available on the project website and the project's social media channels.

2.3.4 PUBLIC RELATIONS

2.3.4.1 PRESS RELEASE

One of the target audiences to reach within the AI4REALNET project is the media and public relations offices. By addressing such a credible channel, it is possible to disseminate the project's purposes, impacts, and results in a more effective way, not only to the specific target groups but also to the public.

The partners' already existing contacts within their respective countries need to support this relationship. Therefore, the project's coordination has established that the partners responsible in each country for this activity will be the following:

- Portugal – INESC TEC
- France – RTE
- Germany – UKASSEL

- Netherlands – TenneT
- Switzerland – ZHAW

The first general Press Release (English version) was released in November 2023. The document is available in **Annex 4** of this report. Considering the project's coordinator country, the Portuguese version of the press release is already presented in **Annex 5**. All press releases will also be included on the project website, regardless of the language in which they are written.

The national adaptation of this document was released to Portuguese media, which has resulted in the publication of 3 news pieces, with an Automatic Advertising Value (AAV)[1] obtained of about 300€. These results are available in **Annex 6**. So far, no press release has been launched in other countries; therefore, no more results are included in this document.

2.3.4.2   NEWS PIECES PUBLISHED ON OTHER ONLINE PLATFORMS

Besides the news pieces published in the media, it is expected that the AI4REALNET partners also contribute to the dissemination of the project by publishing news pieces on different online platforms, such as their institutional websites, newsletters, or other channels.

Until the submission date of this deliverable, two news pieces have been published online. A table with the news pieces published is available in **Annex 7**

2.3.4.3   EVENTS

Two types of events can occur within the AI4REALNET project: organised by other entities or institutions (conferences, EU events, workshops, etc.) in which the project's partners participate; or events organised by the consortium.

Considering the first type, until the date of this deliverable, there has been no record of any participation by the project's partners, which is expected considering that the project started three months ago. By cooperating with other European initiatives, such as similar projects or networks, the project will have the opportunity to participate in several events. In this context, the collaboration with Adra-e will be explored to disseminate the AI4REALNET results and support the update and implementation of the AI, Data and Robotics Strategic Research, Innovation and Deployment Agenda.

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[1] AAV corresponds to the advertising value equivalent to the space occupied by the news calculated automatically from the cost of an even colourless page in the press, 1 second on television or radio and CPM (cost per thousand contacts) in online media.

Regarding the events organised by the consortium, in the first three months of the project, only the kick-off meeting event was organised, which took place in Porto (Portugal) in October 11 and 12, 2023. All partners (presential and online) attended the kick-off meeting.

In addition, WP5 includes the organization of a communication workshop, delivering useful information on how to communicate the project and use the tools available correctly and effectively to all partners. This initiative will be held in January 2024, one month after the proposed deadline, considering that this workshop will also allow the project's management team to pass along important information to the consortium.

FIGURE 4 – AI4REALNET KICK-OFF MEETING

At this point, we also consider the dissemination boosters, a group of actions that intend to engage the target groups with specific actions, aiming to raise awareness, enhance their engagement, and disseminate the final project results. These actions include awareness boosters, with the preparation of webinars, as well as engagement boosters, with the organisation of workshops and open competitions, both occurring during the project's duration.

Here, the project will at least 3 AI open innovation competitions using the digital environments (Grid2Op, Bluesky, and Flatland), in the three domains to enrich and speed up new concepts and solutions developments, strengthen solution-seeking and AI developers multi collaborations and partnerships, involving developers from around the globe. Meetings with regional/national infrastructures, AI policy makers, and regulators will also be arranged to inform them about the benefits/impacts of different deployment and policy scenarios.

2.3.5 OPEN SCIENCE

The dissemination throughout scientific publications in conferences and peer-reviewed journals will also be used as a communication tool. In line with Horizon Europe rules, peer-reviewed publications and research data developed within the scope of the AI4REALNET project should be made available through open access, meaning they are free of charge to the end-user, selecting either self-archiving / "green" open access or open access publishing / "gold" open access) and making research results available via an open repository (e.g., ArXiv, Zenodo) and by publishing results on the project website for public, quick, and free access.

As indicated in the Description of Action, all project's key exploitable results will be published under an open-source licence (mainly MIT, GPL, and EUPL), which will be made available as a GitHub repository via the AI4Europe platform. This will enable the evolution and progress of the AI4REALNET concept even beyond the end of the project, thus reducing the risk of becoming outdated or useless and allowing multiplication of AI4REALNET benefits and impacts.

A GitHub repository was already created for the AI4REALNET project: https://github.com/AI4REALNET
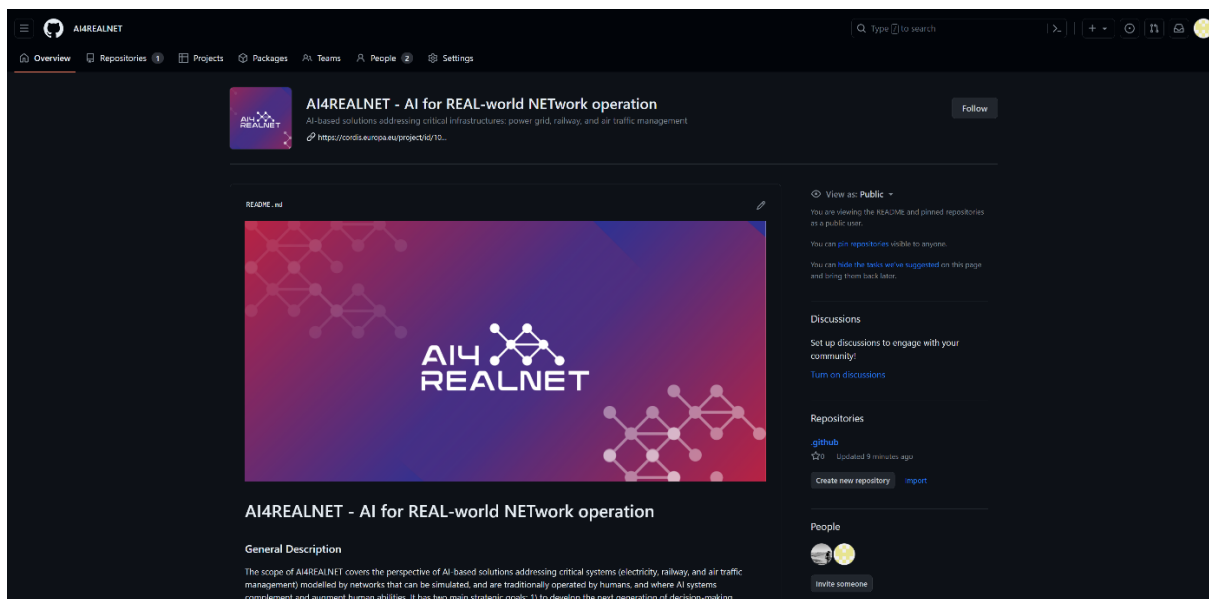

FIGURE 5 – AI4REALNET GITHUB PAGE

2.3.6 COOPERATION WITH OTHER INITIATIVES

The cooperation and synergies with other initiatives will be strengthened throughout the project timeline. Table 3 presents the three main actions its purposes and lists some initiatives that will be targeted.

Action	Purpose	Initiatives, Networks, and Associations
Providing use cases and AI assets (open-source software from WPs 1-4).	Enhancing the AI-on-demand platform catalogue Sustainability beyond project's lifetime	AI4Europe
Share challenges and use cases. Contribute to improving the synergies between HE funded projects in AI	Accelerating development: Stimulate innovation within the AI landscape. Facilitating investment: As a bridge for potential investors and stakeholders Driving market uptake: Guide and influence the direction of AI-based decision systems	Adra-e (CSA) AI, Data and Robotics Association (Adra) ELLIS - the European Laboratory for Learning and Intelligent Systems EurAI - European Association for Artificial Intelligence CLAIRE - Confederation of Laboratories for Artificial Intelligence Research in Europe
Establish meaningful interaction and knowledge exchange with AI start-ups, SMEs, and Digital Innovation Hubs.	Create a mutually beneficial environment and drive innovation within the AI landscape. Knowledge Exchange: Leveraging the expertise and experience within AI DIHs	EDIH - European Digital Innovation Hubs EEN - Enterprise Europe Network

TABLE 3 – COOPERATION WITH OTHER INITIATIVES

2.4 KEY PERFORMANCE INDICATORS

It is only possible to measure the success of each communication action by using Key Performance Indicators (KPIs). These indicators defined at the time of the proposal are crucial to evaluate the course of action. The following table presents the KPIs associated with the actions considered within the communication and dissemination plan:

Activity	Schedule	KPI
Website	M3-M42	> 1500/year unique visitors
Social Media	M1-M42	> 100 followers (LinkedIn) > 100 followers (X) > 100 views (YouTube)
Brochures	M5-42	≥ 5
Project Slide-deck	M5	1
Videos	M6-M42	≥ 3
Infographics	M5	≥ 8
Articles	M1-M42	≥ 5
Newsletters	M4-M42	≥ 9
Press Relations	M2-M42	≥ 3 PRs ≥ 10 news pieces
Invited talks	M1-M42	On invite
Booklet	M42	1
Final event	M42	≥ 100 attendees

TABLE 4 – AI4REALNET COMMUNICATION KPIS

Activity	KPI
AI open innovation competitions (including tutorials)	≥ 3
Publication in highly ranked international journals	≥ 8
Thematic workshops organisation	≥ 5 (2 in person + 3 online)
Contributions in international conferences	≥ 20
Cluster of European projects and other initiatives	≥ 8
Targeted meetings with policymakers	≥ 4

TABLE 5 – AI4REALNET DISSEMINATION KPIS

2.5 DISSEMINATION IMPACT ASSESSMENT

During the project's first three months, several actions have been implemented to determine the dissemination impact assessment. Considering that some of these activities have associated KPIs, the following table will present the communication actions developed until now and its current review.

Tool	Action	Results
Advertisement	Communication materials: Project logo and x-banner	Project Identity presented (**Annex 1**) 1 X-banner produced (**Annex 2**)
Digital Marketing	Social Media	Followers: X: 18 LinkedIn: 198
Public Relations	Press Release Events	2 (**Annex 4** and **Annex 5**) 1 (kick-off)

TABLE 5 – DISSEMINATION IMPACT ASSESSMENT (M1-3)

2.5.1 DIGITAL MARKETING

Presenting a summary of the activity that has been done regarding social media, there are a few notes to consider.

In what concerns LinkedIn, the AI4REALNET profile has gathered 198 followers completed 11 publications, with a total of 9181 organic impressions, meaning the number of times the content has naturally appeared on someone's page. This profile has had 176 reactions, one comment, and five reposts.

Regarding the X's profile of the project, the results have been more challenging to achieve since it has attracted only 18 followers. So far, eight posts and two reposts have had up to 707 views, with two comments and eight reposts. One of the reasons for this outcome can be related to the recent changes in the social media structure itself, which will demand more appropriate contents and actions to mitigate this performance.

Despite already being created, the YouTube page is not mentioned with any impact assessment. It does not have content published since the project videos are still being produced. Interviews were recorded during the first project meeting and are still being edited, and the first concluded videos of this kind are predictably to be published by the end of 2023.

2.5.2 PUBLIC RELATIONS

The first project event happened in month 1, with the kick-off meeting. It took place in Porto, Portugal, and gathered all the project partners. This was the first opportunity to jointly establish common goals and align the purposes of the project.

After this meeting, a press release was prepared to raise awareness of the project, to approach in firsthand the general media of each of the countries evolved in the consortium. A full version of the document was made available to all partners (**Annex 4**) so that a wider dissemination could be conducted in each country. Therefore, a Portuguese version of the press release was written and sent to the Portuguese media (**Annex 5**), resulting in 3 news pieces being published (**Annex 6**). Until the date of the delivery of this document, none of the partners has responded to the forwarding of any press release to the local media.

3. COMMUNICATION PLAN

After determining the dissemination strategy, including objectives, target groups, communication tools, and KPI, the next step is defining how and when the communication tools will be used to achieve the goals. In this sense, the purpose of this topic is to establish, according to a 42-month calendar, a communication plan that addresses the different objectives of the project.

To better accomplish the general WP objectives, the communication plan will be hereafter structured into four different campaigns, each aligned with specific goals, targets, and instruments, preserving the idea that some actions may need adjustments. Thus, they do not depend entirely on the communications efforts.

3.1 FIRST CAMPAIGN

The communication efforts started at the beginning of the project, with the need to fulfil the first objective, which is to deliver strategies to create awareness of the project's activities, not only to general audiences but also to the scientific communities. This phase starts in month 1 of the project and goes until April 2024.

For that, tools regarding approaches such as advertising, digital marketing, and public relations are to be put in place, intensified at an early stage, but somehow extended till the end of the project.

While many of the communications actions are prolonged until the last month of the project, some midterm evaluation is to be carried out after this first phase to understand the impact of such actions and/or if additional measures are to be taken into consideration.

Tool	Action	Date	Target group
Advertising	Development of graphic identity	Oct 2023	All
	Development of communication materials (x-banner)	Oct 2023	
	Release of small videos with partners' statements	Dec 2023 - Jan 2024	
	Publication of 1st brochure	Feb 2024	
	Release of presentation video	Mar 2024	
Digital Marketing	Creation of social media pages	Oct 2023	All

Tool	Action	Date	Target group
	Publications on social media pages	Every week	
	Launching of website	Dec 2023	
	Updates on the website	Jan – Apr 2024	
Public Relations	Organisation of the kick-off meeting	Oct 2023	Consortium
	Dissemination of 1st press release	Oct 2023	All
	Publication of news pieces	Oct 2023 – Apr 2024	
	Organisation of the communication workshop	Jan 2024	Consortium
	Organisation of the first webinar (WP2)	Apr 2024	All
Direct Marketing	Launching of 1st and 2nd newsletters	Jan 2024 Apr 2024	All

TABLE 6 – FIRST COMMUNICATION CAMPAIGN

3.2 SECOND CAMPAIGN

In a second phase, between May 2024 and March 2025, with the project's awareness set in due course, the work of the communication plan relies on promoting the activities developed by the project's partners, delivering relevant input to scientific communities, and engage with AI communities, preparing further collaboration with other projects in the same areas.

Tool	Action	Date	Audience
Advertising	Publication of 2nd and 3rd brochures	Nov 2024 May 2025	All
Digital Marketing	Updates on the website	Every week	All
	Publications on social media pages	Every week	All
Public Relations	Publication of news pieces	May 2024 – Mar 2025	All
	External Expert Advisory Board Meeting	May 2024	Network operators, AI-service providers, ICT/control system

Tool	Action	Date	Audience
			providers, regulators & policy makers, international associations, AI community
	Organisation of a second and a third webinars (WP2)	Oct 2024 March 2025	All
	Organisation of a first thematic workshop ("RL applied to complex networks")	Feb 2025	All
Direct Marketing	Launching of 3rd and 4th newsletters	Sep 2024 Jan 2025	All

TABLE 7 – SECOND COMMUNICATION CAMPAIGN

3.3 THIRD CAMPAIGN

A third phase, from April 2025 to April 2026, intends to reinforce the message of the technological solutions being developed within the project's scope, enhancing the project's results and best practices. The strategies to be developed and implemented now will also rely on the outcomes of the WPs 1-4. The main groups that need to be targeted in this phase are network operators, AI service providers, and regulators and policy makers. Nevertheless, some core communications actions continue to be part of the project's strategy to disseminate the work it is developing.

Tool	Action	Date	Audience
Advertising	Publication of 4th brochure	Nov 2025	All
Digital Marketing	Updates on the website	Every week	All
	Publications on social media pages	Every week	
Public Relations	Dissemination of 2nd press release	Mar 2026	All
	Publication of news pieces	Apr 2025 – Apr 2026	
	Organisation of a second ("AI challenges for energy and mobility networks") and a third ("Co-learning and human-AI cooperation") thematic workshops	Sep 2025 Mar 2026	Service Providers

Tool	Action	Date	Audience
	External Expert Advisory Board Meeting	May 2025	Network operators, AI-service providers, ICT/control system providers, regulators & policy makers, international associations, AI community
	Organisation of a first AI competition (power grid) and a second (railway)	Jun 2025 Mar 2026	AI community, AI service providers
Direct Marketing	Launching of 5th, 6th, 7th, and 8th newsletters	Apr 2025 Sep 2025 Jan 2026 Apr 2026	All

<div align="center">TABLE 8 – THIRD COMMUNICATION CAMPAIGN</div>

3.4 FOURTH CAMPAIGN

Finally, from May 2026 until March 2027, the end of the project, when the project's results are estimated to be more consistent, the purpose is to promote and exploit these technologies and their open access feature. The primary audiences for this final phase are all target groups, with a special focus on specialized communities and operators, as well as customers and citizens.

Tool	Action	Date	Audience
Advertising	Publication of 5th and 6th brochures	Jun 2026 Mar 2027	All
	Release of the final booklet	Mar 2027	All
Digital Marketing	Updates on the website	Every two weeks	All
	Publications on social media pages	Every week	
Public Relations	External Expert Advisory Board Meeting	May 2026	Network operators, AI-service providers, ICT/control system

Tool	Action	Date	Audience
			providers, regulators & policy makers, international associations, AI community
	Organisation of a fourth ("Social-technical evaluation of AI-based decision systems") and a fifth ("Ethics and regulation (co-organized with CLAIRE)") thematic workshops	Oct 2026 Feb 2027	All
	Organisation of a third AI competition (air traffic management)	Jun 2026	AI community, AI service providers
	Dissemination of 3rd press release	Mar 2027	All
	Publication of news pieces	May 2026 – Mar 2027	
	Final event (in-person)	Mar 2027	
Direct Marketing	Launching of 9th and 10th newsletters	Sep 2026 Jan 2027	All

TABLE 9 – FOURTH COMMUNICATION CAMPAIGN

4. CONCLUSION

This deliverable aims to determine an initial dissemination and communication strategy for the AI4REALNET project. Therefore, the dissemination objectives have been defined, the target groups have been identified, and the communication tools that will be used, as well as some of the activities that will be developed, have been described. However, since other deliverables will be submitted under the scope of this WP during the 42 months of the project, and the fact that some strategies depend on the results of other WPs, tailored approaches have almost not been included in this phase (month 3).

So, four integrated communication campaigns have been defined according to a 42-month calendar, considering that the first campaign is already about 75% concluded, leaving some details about some tailored approaches and strategies to be designed and implemented further ahead.

In addition, this document also includes a brief communication impact assessment regarding the first three months of the project and, so far, the results achieved are somehow positive:

- A project graphic identity has been created and adapted to different communication materials, such as a presentation template and an x-banner.
- The website has been launched (even though the final version will only be available in January 2024) here: https://ai4realnet.eu
- Profiles have been created in three different social media channels and have been regularly updated ever since.
- A general press release has been developed and launched among the Portuguese media channels, resulting in 3 news pieces published. This press release was also disseminated through all the consortium partners.
- two news pieces have also been published on partners' online platforms.

Evidence of all the dissemination activities referred to in the deliverable are available in the annex section of this document.

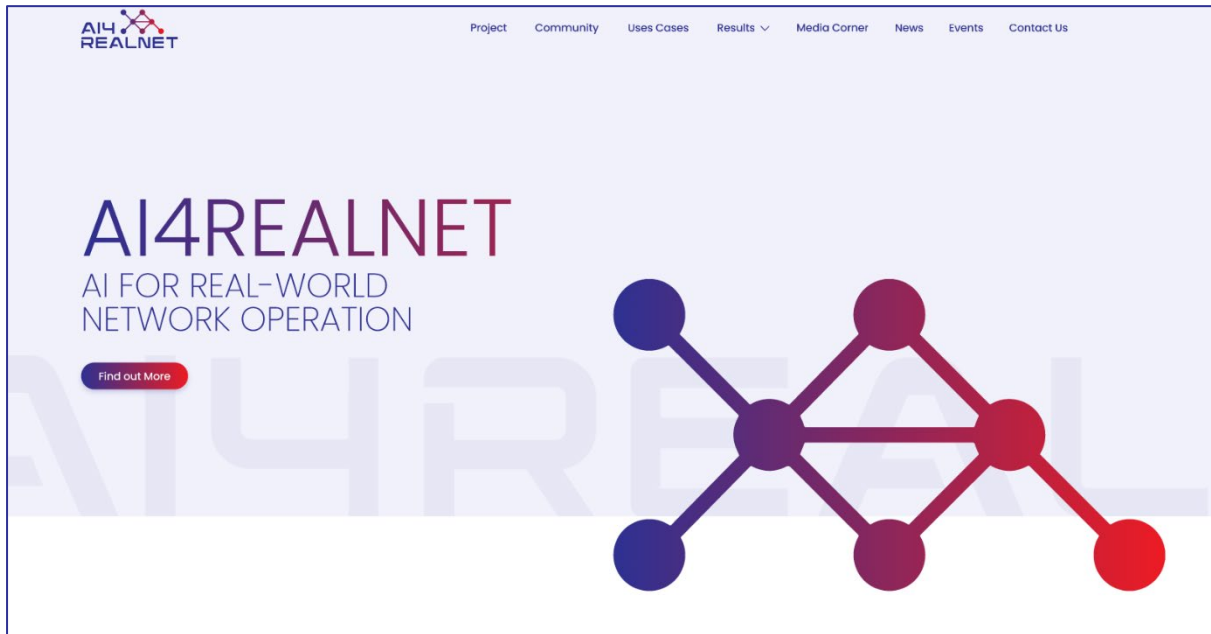# REFERENCES

[1] AI4REALNET Grant Agreement number 101119527

ANNEX 1 – Visual Identity and Applications
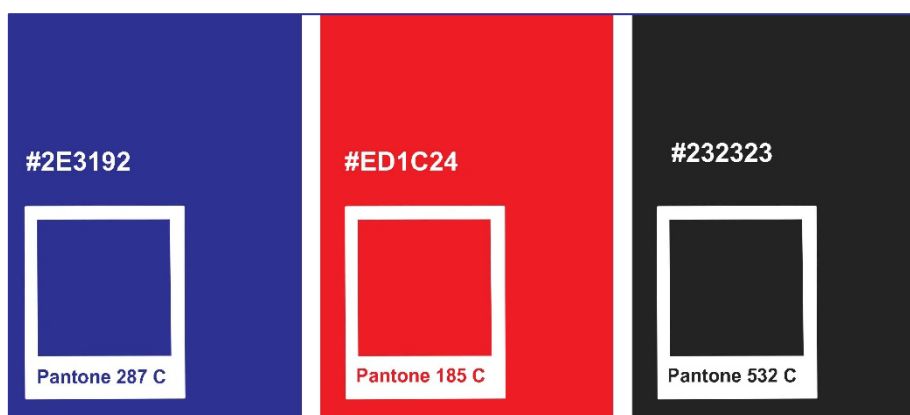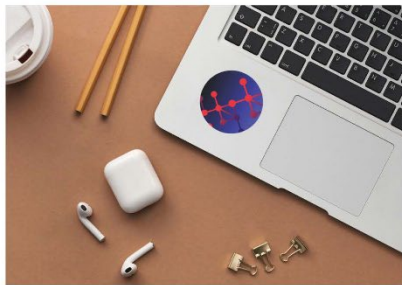
ANNEX 2 – X-Banner

ANNEX 3 – Preview of website's homepage

ANNEX 4 – General Press Release available for all partners (EN)

Artificial Intelligence and humans collaborate to increase safety of critical infrastructures

The European project AI4REALNET will support electricity, rail, and air traffic system operators to implement human-intelligence interactions and increase safety and efficiency in decision-making, considering the challenges of energy transition and digitalisation.

What if Artificial Intelligence (AI) were to be used to support decision-making, and increase efficiency and safety in the operation of critical infrastructures (typically run by humans) in the energy (power grid) and transport (railway and air traffic management) sectors? This is the goal of the Horizon Europe European project AI4REALNET – AI for REAL-World network operation.

It presents itself as a challenging and ambitious project that relies on a collaboration between humans and AI to support decisions made by human operators, creating conditions for the decarbonisation of these sectors, improving the quality of service and efficiency, while solving potential congestion issues in these infrastructures and contributing to increase the efficiency of investments in sectors critical to society.

The goal is not to replace humans by AI, but to ensure that AI emerges as a way to support faster decision-making, and even operationalising specific tasks autonomously. In sectors where human intervention is still predominant, the integration of new AI-centric technologies is an opportunity to reduce the workload of operators, addressing the challenges and needs of the sectors and designing solutions with adequate responses, in order to support people and societal challenges like resilience of critical infrastructures.

To apply and demonstrate AI-based decision systems in industry use cases, revealing tangible additional value, AI4REALNET developments will be validated in six use cases led by industry partners from the three domains.

The project aims at improving the safety and resilience of critical infrastructures, which are becoming more challenging, not only due to the increase in the volume of information, but also due to the changes imposed by decarbonisation. The AI4REALNET consortium hopes that AI can increase the capacity to operate more effectively and with less margin of error.

With the involvement of industry, the project will promote awareness of the benefits of reinforcement learning and explainable machine learning.

The project will also resort to current open-source AI-friendly digital environments, e.g., Grid2Op, Flatland, and BlueSky to foster and advance a global AI community.

The project is led by INESC TEC – a Portuguese research institute dedicated to scientific research and technological developments - and, in addition to Portugal, it brings together organisations

from France, Germany, Italy, the Netherlands, Switzerland, Sweden and Austria. The consortium is composed of 17 partners.

The project received close to €4M from the European Union, through the Horizon Europe programme, and €2M from the State Secretariat for Education, Research and Innovation (SERI) of Switzerland.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

About INESC TEC

INESC TEC is a private non-profit research association, with Public Interest status, dedicated to scientific research and technological development, technology transfer, advanced consulting and training, and pre-incubation of new technology-based companies.

Present in six sites in the cities of Porto (headquarters), Braga and Vila Real, and with more than 800 researchers, INESC TEC acts from knowledge generation to science-based innovation, and performs collaboratively in search for a more sustainable, responsible, and improved world.

The primary goal of INESC TEC is to exceed performance in research, while considering its social, environmental, and economic impact, with a commitment to the scientific and technological contribution to foster pervasive intelligence. As so, INESC TEC endeavours to be a relevant international player in Science and Technology in eight scientific domains, Artificial Intelligence, Bioengineering, Communications, Computer Science and Engineering, Photonics, Power and Energy Systems, Robotics and Systems Engineering and Management. Being an institution that operates at the interface between the academic and business worlds, bringing academia, companies, public administration, and society closer together, INESC TEC generates new knowledge as part of its research, and leverages that knowledge in technology transfer projects, seeking impact through both value creation and social relevance.

November XX, 2023

ANNEX 5 – Press release sent to media in Portugal (PT version)

Inteligência artificial e humanos colaboram para aumentar segurança de infraestruturas críticas

Projeto europeu AI4REALNET ajudará os operadores do sistema elétrico, da ferrovia e de tráfego aéreo, a implementar interações humanos-inteligência artificial para aumentar a segurança e eficiência na tomada de decisões, considerando os desafios da transição energética e digitalização.

E se a Inteligência Artificial (IA) passasse a ser usada como forma de apoiar a tomada de decisão, o aumento da eficácia e segurança na operação de infraestruturas críticas (tipicamente operadas por humanos) nos setores energéticos (rede elétrica) e transportes (ferrovia e tráfego) aéreo? Este é o objetivo do projeto europeu AI4REALNET – AI for REAL-World NETwork operation - liderado pelo Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência (INESC TEC).

Apresenta-se como um projeto desafiante e ambicioso que assenta numa colaboração entre humanos e a IA com vista a apoiar decisões operacionais tomadas por operadores humanos que criem condições para a descarbonização destes sectores, melhoria na qualidade de serviço e eficiência, resolvendo, por exemplo, possíveis congestionamentos nestas infraestruturas e contribuindo para aumentar a eficiência dos investimentos em setores críticos para a sociedade. Centrado nas áreas da rede elétrica, ferrovia e controlo de tráfego aéreo, o AI4REALNET irá "ajudar os operadores de infraestruturas críticas a implementar interações humanos-IA, promover alterações organizacionais no contexto de integração de IA nos processos de negócio, e melhorar a inteligência operacional e de planeamento", explica Ricardo Bessa, investigador sénior do INESC TEC responsável pelo projeto e coordenador do Centro de Sistemas de Energia (CPES).

Apostando em diferentes formas de interação entre humanos e a IA, o projeto foca-se numa aprendizagem conjunta. "O que se pretende não é substituir um pelo outro, mas garantir que a IA surge como um apoio à tomada de decisão mais rápida, operacionalizando, até, de forma autónoma, determinadas tarefas", adianta.

Em setores onde a intervenção humana é ainda predominante, a integração de novas tecnologias centradas em IA surge como uma oportunidade para reduzir o volume de trabalho dos operadores, respondendo aos desafios e necessidades dos setores e desenhando soluções com respostas adequadas, de forma a apoiar as pessoas.

Para aplicar e demonstrar sistemas de decisão com base em IA em casos de uso na indústria, revelando um valor adicional tangível, os desenvolvimentos do AI4REALNET serão validados em seis casos de uso liderados pelos parceiros industriais dos três domínios.

"Queremos melhorar a segurança e a resiliência das infraestruturas críticas, que estão a tornar-se mais desafiantes, não só pelo aumento do volume de informação, mas também pelas mudanças impostas pela descarbonização e é nesse sentido que esperamos que a AI possa

aumentar a capacidade de operar de forma mais eficaz e com menor margem de erro", adianta Ricardo Bessa.

Contando com o envolvimento dos setores, o projeto irá, também, promover a consciencialização sobre os benefícios da aprendizagem reforçada (reinforcement learning - RL) e da aprendizagem automática (machine learning - ML) explicável. "É importante que os gestores estejam cientes do que esperar de um sistema de IA, e que os trabalhadores percebam que, em certas condições, um sistema pode falhar, ser tendencioso e tomar decisões erradas ou propor sugestões erradas. Isto representará uma mudança cultural na forma como os humanos veem e interagem com sistemas digitais", reforça.

Para atrair e construir uma comunidade global de IA, serão utilizados ambientes digitais já existentes e amigáveis à IA de código aberto, nomeadamente Grid2Op, Flatland e BlueSky.

"Esperamos ter novos algoritmos e novas abordagens para que possamos inspirar outros grupos de investigação, outros operadores de infraestruturas críticas (por exemplo distribuição de água, telecomunicações) e contribuir para colocar a Europa na liderança da Inteligência artificial", conclui o responsável. Todos os resultados serão disponibilizados em código aberto.

O projeto é liderado pelo INESC TEC e, para além de Portugal, conta com a participação de organizações de França, Alemanha, Itália, Países Baixos, Suíça, Suécia e Áustria. No total, o consórcio reúne 17 parceiros.

O Projeto é financiado em cerca de quatro milhões de euros pela União Europeia, através do programa Horizonte Europa, e dois milhões de euros pelo governo da Suíça.

Porto, XX de Novembro de 2023

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ANNEX 6 – List of news pieces published in Portugal media

Title	Media	Date	Link	Partner
Inteligência artificial e humanos colaboram para aumentar segurança de infraestruturas críticas	e-newvation	Nov 14, 2023	https://e-newvation.pt/2023/e-inovacao/inteligencia-artificial-e-humanos-colaboram-para-aumentar-seguranca-de-infraestruturas-criticas	INESC TEC
AI and humans collaborate to increase the safety of critical infrastructures	The Voice of Renewables	Nov 16, 2023	https://voiceofrenewables.com/post/YS4pWFAcM70uUCUg2tAm	INESC TEC
Inteligência artificial pode aumentar segurança de infraestruturas críticas	Mais Tecnologia	Nov 17, 2023	https://www.maistecnologia.com/inteligencia-artificial-pode-aumentar-seguranca-de-infraestruturas-criticas	INESC TEC

ANNEX 7 – Other news pieces published online in Portugal

Title	Site	Date	Link	Partner
Inteligência artificial e humanos colaboram para aumentar segurança de infraestruturas críticas	INESC TEC BIP Magazine (PT)	Nov 14, 2023	https://bip.inesctec.pt/noticias/inteligencia-artificial-e-humanos-colaboram-para-aumentar-seguranca-de-infraestruturas-criticas	INESC TEC
Artificial Intelligence and humans collaborate to increase the safety of critical infrastructures	INESC TEC BIP Magazine (EN)	Nov 14, 2023	https://bip.inesctec.pt/en/noticias/artificial-intelligence-and-humans-collaborate-to-increase-safety-of-critical-infrastructures/	INESC TEC
Inteligência artificial e humanos colaboram para aumentar segurança de infraestruturas críticas	INESC TEC Institucional website (PT)	Nov 16, 2023	https://www.inesctec.pt/pt/noticias/inteligencia-artificial-e-humanos-colaboram-para-aumentar-seguranca-de-infraestruturas-criticas	INESC TEC
Artificial Intelligence and humans collaborate to increase the safety of critical infrastructures	INESC TEC Institucional website (EN)	Nov 16, 2023	https://www.inesctec.pt/en/news/artificial-intelligence-and-humans-collaborate-to-increase-safety-of-critical-infrastructures	INESC TEC