



All-in-one middleware for industrial human-robot interaction

arise-middleware.eu

Coordinator



Consortium partners



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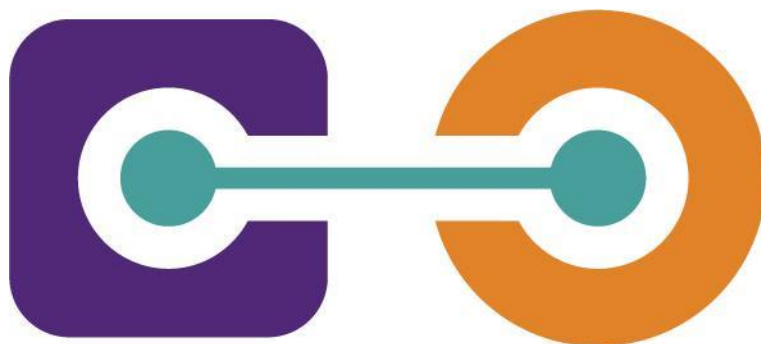
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D7.1 Communication & Dissemination Plan

Describing the communication strategy, the dissemination and exploitation plan of ARISE

Lead: FIWARE
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Executive Summary

This document consists of the initial communication and dissemination plan for ARISE, a project funded by the European commission, running for 42 months, which started in January 2024. The primary goal of this project is to develop an open and human centric middleware for human robot interaction as well as setting up a collaborative active ecosystem of stakeholders to continue working on the topic beyond the project's timeline.

A main aspect to reach these objectives is the development and implementation of an effective communication strategy, which includes establishing a dedicated brand and clear messages to be distributed to target audiences.

The underlying plan describes as a comprehensive roadmap, guiding partners towards effectively communicating about ARISE and disseminating results and includes a detailed stakeholder analysis and tailor-made messages for each group, supporting material to execute smoothly and an overview of and an introduction to monitoring and evaluation mechanisms in place.

This document is shaped as a funnel, starting with general strategic aims for this work package, to the identification of key stakeholders and practical information and guidelines for communication and dissemination as well as an outlook on upcoming exploitation plan developments.

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Acronyms & Abbreviations

ACR.	Description	ACR	Description
ADRA	AI, Data & Robotics association	euRobotics	European Robotics Forum
ADRAe	AI, Data & Robotics ecosystem	HRI	Human Robot Interaction
BDVA	Big Data Value Association	FSTP	Financial Support for Third Parties
CLAIRE	Confederation of Laboratories for AI Research in Europe	SME	Small & medium enterprises
DoA	Description of Action	SotA	State of the Art
EC	European Commission	tbd	To be defined
EDIH	European Digital Innovation Hub	TEF	Testing and Experimentation Facilities
ELLIS	European Laboratory for Learning & Intelligent Systems	WG	Working Group
EurAI	European association for artificial intelligence	WP	Work Package

1 Introduction

1.1 Purpose and Scope

This deliverable provides a comprehensive overview of key messages, updates, and insights to all stakeholders, including employees, partners, customers, and the general public. The activities defined aim to ensure clarity, consistency, and engagement across all communication channels, leveraging various types of formats.

The alignment with the project's objectives will enhance the organisation's visibility, foster strong relationships, and support the overall mission and goals through a targeted and impactful communication strategy.

Based on a stakeholder analysis executed as a central part of the process to develop marketing activities for ARISE the overall aim has been to gain a clear understanding of the needs and expectations of each identified target group. Deriving concrete actions is key to make sure that the results are conveyed to the right audience at the right time and in a tailored manner.

The communication strategy and dissemination plan developed in this document is due at the end of month six of the project and serves as the first report of WP7, followed by annual updates and advancements based on an ongoing evaluation along the project's timeline. The work package includes the following tasks, of which particularly the first and the last are focused on in this report:

Task	Task Description
T7.1	Communication Strategy and Dissemination Plan & Branding Kit (M1-6)
T7.2	Awareness raising, knowledge sharing, engagement and pre-marketing (M1-42)
T7.3	Standardisation and Policy Making (M12-42)
T7.4	Adaptation, Exploitation and Sustainability Roadmap (M7-42)

Table 1.1 Tasks of WP 7

As part of work package 7 this deliverable pursues the following overall work package objectives:

- **Maximising the impact of ARISE** by carrying out proper communication and dissemination activities, raising awareness about the project's progress and results, addressing a variety of stakeholders, reaching from a general public and policy makers to the scientific community and industrial stakeholders.

- **Ensuring a broad adoption of results** derived from the project, by complying with standards and contributing new elements to ensure interoperability within the ecosystem
- **Defining an initial exploitation strategy** suitable to foster a sustainable, long-term ARISE innovation ecosystem.

This deliverable is a living document, undergoing adaptations if needed as the project progresses. These updates will be documented together with updates from project segments completed and enriched with additional plans and documentation, key to ensure the sustainability of project activities (regular updates via D7.2, D7.3 and D7.4). The overall communication and dissemination plans are implemented in an agile and iterative way to offer flexibility along the project, considering the needs of different stakeholders.

Therefore, this document aims towards

- The definition of an effective, non-rigid strategy at the beginning of the project for internal and external partners to work with successfully promoting ARISE
- A clear plan to execute with measurable and realistic goals.
- A contribution to the consolidation and coherence of the partners' work.

1.2 Structure of this document

The structure of this document is organised into several focus sections, leading from an overview of overall objectives and ideas behind the ARISE strategy, towards detailed planning, breaking down goals into concrete activities fit to execute successfully. The first section introduces the objectives and scope of the plan, outlining the strategic goals and the target audiences. The second section details the communication strategy, including messaging frameworks, key channels, and tools to be used for effective outreach. Following this, the dissemination plan is presented, focusing on methods and activities for sharing project results with relevant stakeholders and the broader community. The next section covers the exploitation strategy, identifying potential opportunities (starting from M7) to be further defined in the upcoming months, to leverage project outcomes and achieve maximum long-term impact. Subsequent sections provide a timeline of activities, roles, and responsibilities of team members, and metrics for evaluating the success of the plan.

1.3 Intended Audience

This document is primarily directed towards two audiences. On the one side the partners of the project, a total of 10 partners from five different European countries, involved in ARISE within different roles and efforts and potential varying employees engaged with the project. On the other side this document is directed towards a general public, in particular stakeholders interested and engaged with innovation in the area of HRI, offering a general understanding of the aim of ARISE to support ecosystem building and impact creation through interested target groups. To make sure everybody is aware of the overall direction this plan serves as a guideline and overview for all partners to ensure aligned communication and clarity.

As partners are employing their own communications activities beyond the immediate channels of the project this document as well as accompanying documents offer assistance in doing so in line with the project's brand identity and objectives.

1.4 Contribution from partners

The following table provides the main contribution from participant partners in the development of this deliverable:

PARTNER	CONTRIBUTION
FIWARE	FIWARE is responsible for this D7.1 Communication and Dissemination plan and the overall execution of Communication activities along the project's time span.
ENGINEERING	ENGINEERING is responsible for identifying and implementing the Exploitation Strategy and Plans.
CARTIF	CARTIF, as project coordinator is responsible for the overall coordination of the activities described in this document.

Table 1.2 Partner contributions

2 Overall Objectives and strategy

The strategy behind communication and dissemination of the ARISE project is a central element to successfully deploy the activities defined for this project and to ensure its long-term sustainability. A crucial part to it is the successful involvement and engagement of identified stakeholders.

All activities in this work package are to support the overall continuous loop of industrial agile HRI design, developed within its three phases in the project, aiming to support a constant, fluid and bi-directional interaction with the ecosystem:

- **Phase 1:** Validation of agile HRI in self-hosted consortium Testing and Experimentation Facilities¹ (TEF from now on)
In this phase this WP is working in parallel with other technical work packages, focusing on awareness generation in general, setting up adequate channels (website, social media, Discord) and starts identifying and addressing the relevant communities identified.
- **Phase 2:** 1st round of Financial Support for Third Parties (FSTP) projects, process evaluation and adaptation
In this phase, activities are stronger connected with activities and results from other work packages. It offers increasing possibilities for content creation from first results from self-hosted TEFs and supporting the communication activities around the first round of FSTP targeting industrial communities and initiatives. Besides the project's

¹ <https://arise-middleware.eu/tefs/>

- established channels more weight is added towards cross-initiative collaboration, publications in relevant journals and events.
- Phase 3:** 2nd round of FSTP projects and evaluation.
 After the first round of FSTP projects, results offer the opportunity to re-calibrate and adapt processes further towards the needs of European industrial SME. This phase is also dedicated to lay the ground towards a sustainable ecosystem around the TEFs to ensure sustainability for when the project has ended.
 - Phase 4:** Reflection and exploitation
 Foster interaction within the community and the exchange between pilots and TEF. Showcase results from open calls and stabilise TEF reputation as hubs for HRI

All activities are always emanating from the ARISE community, a concept which is meant to adapt over time. While involving only the project partners at the beginning, the objective is to grow through multiplying agents such as partners, collaborations with stakeholders and outcomes along the project. ARISE aims to support its community with the necessary tools to transport our shared message to different stakeholders and addresses:



Figure 2.1 Visualisation of ARISE communication activities

2.1 Communication Objectives

Communication efforts are directed towards a general, HRI-curious public aiming to inform about the project as such via channels such as the website or social media, generally creating awareness about:

- ARISE's goal is to create an all-in-one middleware for HRI in the sectors of intra-logistics, healthcare and manufacturing.

- Initiate EU wide collaboration with related projects and initiatives on different scales to maximise impact through synergies and combining efforts.
- Establish the created TEF as trusted hubs for information and experimentation for HRI in the respective sectors and beyond.

These overall project goals are being supported by the following communications objectives:

Communication Objectives	
Awareness	Brand Positioning and stakeholder activation
Engagement	TEF and FSTP promotion
Community Building	Engaging relevant actors in a vibrant discussion, fostering a widely self-sustaining environment of innovative users and developers
Conversion	Direct interaction with engaged audiences, offering support and creating feedback loops

Table 2.1 Communication objectives

To archive this, tailored communication materials, highlighting the overall purpose of the project will be produced to transmit outcomes and results of the project, offering support for future exploitation. In the chapter dedicated to the communication plan, the chosen channels and tools to effectively reach our target audiences to maximise impact are being further defined.

2.2 Dissemination Objectives

In contrast to the described communication objectives in the previous chapter, dissemination activities are more specific. The main objective is reaching those stakeholders particularly interested in the results to learn and adapt. In ARISE this can be narrowed down in particular to end-users as well as technology and solution providers. The project’s dissemination activities also play an important role for the long-term sustainability of the project, aiming to continue to engage target audiences beyond the lifespan of the ongoing project.

The dissemination objectives of the project can therefore be defined as follows:

- Involving stakeholders during the project to contribute to tailoring long-term services in the TEFs ensuring quality and user-centricity of solutions
- Create awareness towards and exchange on the potential of HRI within the targeted sectors.
- Foster collaboration within a European community of users and providers as well as research and support organisations active in the field.

Targeted results to be supported by dissemination activities include:

Project Results	Support Actions	Audience	Channels	Evaluation
ARISE middleware	Trainings, demos, TEFs	Technology providers, policy makers	Partners, multipliers	Publications, use cases
ARISE SSH framework	Guidelines, documentation	Technology providers, policy makers	Partner communities, sister projects, standardisation organisations, multipliers	Feedback loops, adoption, performance
Reusable ARISE modules	Trainings, materials, promotion	Technology providers, researchers	Partners, Multipliers, sister projects	Number of variations
TEFs	Promotion, events	End users, technology providers, researchers	Partners	Number of cases
Agile HRI starter kit	Publication of reports and demonstrators,	End users, technology providers, researchers	TEF Partners	Number of users
Demonstrators / datasets	Promotion, trainings, events	End users, technology providers, researchers	TEF Partners	Publications, Demos

Table 2.2 Targeted dissemination results

2.3 Target Group Engagement Objectives

The overall objective is to establish a collaborative and transparent framework that allows input from and support for stakeholders. It is crucial to engage in such activities across the enter project life span, pivoting towards different very specific focal points along the way and shifting efforts accordingly the main objectives, which can be identified as the following:

- Awareness creation amongst the target audiences**
 Awareness creation is an initial activity with an adapting approach along the project, fostering steady increase of website traffic and social media as well as activity in the designated discord community.
- Interaction with audience**
 Interaction with audiences gains importance in phase two and three of the project, aiming for topic focused exchange within discord channels, attendance at events online and offline as well as contributions to FSTP calls supported by content on the website, social media, events, EC channels.
- Create/support a community around HRI**
 Establish an environment for community exchange on Discord ARISE forum, nudging discussion with project experts but also through the diversity of

community members, growing in numbers via designated forum in Discord, in workshops and events and creating a critical mass through stakeholders and liaisons within the ADRAe environment.

- **Establish feedback loops and support activities**

Feedback is particularly focused on in phase two and three of the project, as it is a crucial aspect towards tailoring services and activities for long-term perspectives, through evaluation as well as the production of self-service resources such as video tutorials or infographics, useful to stakeholder needs.

2.4 Role of the ARISE consortium

The consortium partners are all contributing to the successful execution of the communication and dissemination strategies, by providing the content base for communication. Furthermore, they support the communication and dissemination goals through their own networks to relevant stakeholders from industry and academia tailoring and sharing key messages within their specific domains, engaging local and international stakeholders through targeted events, publications, and digital platforms. Additionally, they offer links to other projects and initiatives they are connected to, relevant for the scope of the project, thereby enhancing visibility, fostering community engagement, and driving the successful uptake and application of the project's results.

Communication and dissemination activities will be coordinated by FIWARE providing and maintaining the required communication channels and materials, supported by the rest of the partners. A more detailed description of partner activities is provided in the dedicated chapter on Partner Activities in Communication and Dissemination below.

2.5 Main Message

Awareness creation is an objective over the entire lifetime of the project but a particular target at the beginning, laying the ground for the attention the project would like to generate when entering a phase of reaching out to potential pilots. The key message ARISE wants to convey can be summarised as the following:

- ARISE envisions a near future which aligns with the principles of Industry 5.0, prioritising resilient, sustainable, and human-centric work environments, in which companies recognize the benefits of investing into HRI technology to foster their short- and long-term goals.
- Therefore, the project's mission is to address industrial application challenges, develop human-centric solutions, tools and software modules and deploy industrial HRI in four TEF and more than 25 FSTP projects across Europe.
- In addition, ARISE will foster an ecosystem around HRI engaging stakeholders of different fields to ensure most dynamic and holistic development processes. Creating exchange and ownership towards finding solutions and implementation the project supports an agile and resilient engagement with its stakeholders.

These objectives can be summarized into one key message:

"ARISE envisions a future aligned with Industry 5.0 principles, aiming to create resilient, sustainable, and human-centric work environments through HRI technology. The project addresses industrial challenges, develops human-centric solutions and tools, and deploys HRI across four Testing and Experimentation Facilities (TEF) and over 25 funded projects (up to € 200.000 per project) in Europe, fostering a dynamic and holistic ecosystem of engaged stakeholders."

3 Stakeholder Analysis

To best approach the objectives described in chapter 2 an accurate identification is needed to understand the diverse key individuals, groups, and organisations that have an interest or influence in the success of the project, ranging from direct beneficiaries to indirect influencers and decision-makers. Mapping out their roles, interests, and levels of influence, enables us to tailor our communication strategies effectively. Understanding these dynamics is essential for developing targeted messages, fostering meaningful engagement, and ensuring that our communication efforts resonate with the right audiences. Ultimately, this analysis will guide us in building strong, collaborative relationships that support the project's objectives and facilitate its successful implementation. This chapter serves as an initial framework for cultivating meaningful relationships, managing expectations, and maximising the collective impact of our efforts across all stakeholder groups, supporting the aim to reach relevant target groups also across these stakeholders.

An initial map of stakeholders in connection with their interest in HRI and their influence on the development of technologies and their standardisation in industry we roughly mapped below (Figure 3.1), also taking into account their value for ARISE during the execution of the project:

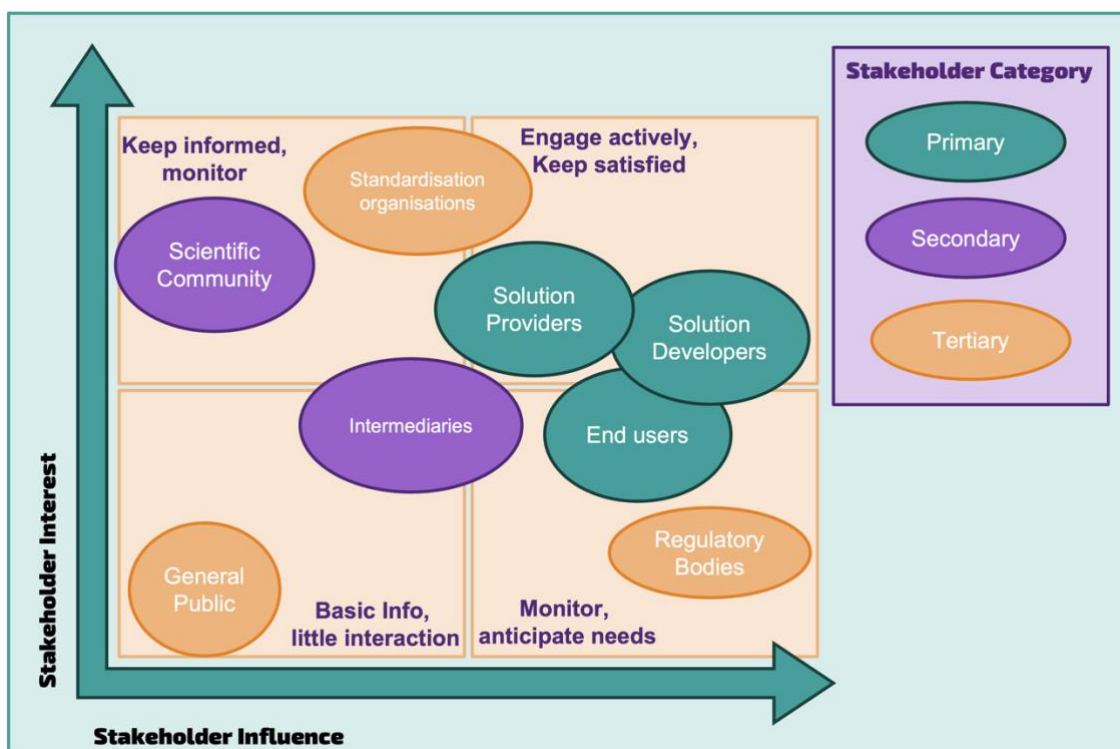


Figure 3.1 Visualization of Stakeholders based on their interest and influence on HRI related topics

3.1 Target audience Identification

A main part of the communication strategy is the identification of stakeholders and the common elaboration of strategies based on targeted groups to foster a successful development of ARISE objectives:

- Increasing efficiency and cost-effectiveness of developing, deploying and maintaining HRI solutions
- Developing open source based reusable modules able to push industrial HRI beyond State of the Art (SotA)
- Demonstrating openness and agility as crucial enablers of truly valuable and sustainable HRI solutions
- Ensuring impact and sustainability through a critical mass of stakeholders and strong liaisons with the ADRA ecosystem.

The ARISE communication and dissemination activities are targeting a broad range of recipients, from research to practice to the wider public, who further play crucial roles in different types of organisations such as academia, industry, solution providers, networks etc.

The ADRA ecosystem, due to its very specific focus on ARISE related ecosystems, plays a very important role within the ARISE communication strategy, as it is a network, supported by the

EC, dedicated to support artificial intelligence (AI), data and robotics association and partnership fostering a sustainable ecosystem, aiming towards ²:

- Supporting the AI, data and robotics strategic research, innovation and deployment agenda
- Mapping the AI, data and robotics landscape to deliver services and build connections
- Increase innovation and application within the field
- Raise awareness about ADRA
- Support the development of standards to foster European technological sovereignty

ADRA³ is an association founded by BDVA, CLAIRE, ELLIS, EurAI and euRobotics joining forces and bringing together a diverse group of stakeholders into the activities of the partnership. Based on the scope of ARISE the network behind ADRAe offers access to a wide variety of stakeholders, targeted by the project. Combining efforts and working closely with this network offers valuable opportunities to engage with the project's audience faster and directly. Initial contact with the network has already been established, next steps are outlining the opportunities we can focus on in a joint effort.

3.2 Approach based on stakeholder groups and their needs

To allow effective management of different stakeholders we clustered them into different groups, within which they could be addressed with similar messages and means of communication.

The following list further developed and based on the original list in the DoA is being updated along the project, if additional groups come into play and these adaptations will be reported in the upcoming deliverables of this work package.

² <https://adra-e.eu/> [accessed 04.06.2024]

³ <https://adr-association.eu/> [accessed 04.06.2024]

Type of Stakeholder	Role	Project related interests	How to address (key message & channel)
Scientific Community: Research, Academia, RTO	Researcher, Developer	<ul style="list-style-type: none"> - Learning, Skills - Further R&D - Knowledge Sharing/Feedback - Scientific Evidence 	Engage via pilots, events, posters and journals, communicate about standards, interoperability efforts
Industry (SME and startups)	End Users	<ul style="list-style-type: none"> - Solutions - Knowledge - Guidance and Support to use - Feedback - Best Practices 	Via trainings, website, demos, events & impact stories emphasising economic benefits and offering direct support via TEF tutorials.
	Solution Providers	<ul style="list-style-type: none"> - Learnings, Skills - R&D - Knowledge - Feedback 	Via trainings, website, demos, events & impact stories emphasising growth opportunities and market potential, technical guidelines
	Technology Providers	<ul style="list-style-type: none"> - Learnings, Skills - Testing & Experimentation - Guidance 	Via trainings, website, demos, events & impact stories emphasising growth opportunities and market potential, technical guidelines
Standardization Organisation	AIOTI, ETSI, ISO, IEC, ROS2, HS_Booster, Smart Data Models	<ul style="list-style-type: none"> - Keep updated - Feedback loops 	Website, events and publications: focus on standardisation efforts, emphasising interoperability opportunities
Intermediaries	Associations, unions	<ul style="list-style-type: none"> - Learning, Skills - Guidance - Access to TEF - Potential benefits 	Website, impact stories, publications events enabling industry engagement, marketing messages

	Innovation Hubs	<ul style="list-style-type: none"> - Access to TEF - Community 	Info webinars, website publications advocating benefits for companies
	National/EU sector federations	<ul style="list-style-type: none"> - Knowledge - Economic gains - Potential Benefits - Replicability - Best Practices 	Website, impact stories, publications events enabling industry engagement, story telling
Related Initiatives	CEO/ Coordinator/ Members	<ul style="list-style-type: none"> - Knowledge Sharing - Synergies, Collaboration - Applicability - TEF work 	Mix of scientific and marketing messages via website, events and publications
General Public	citizens, employees	<ul style="list-style-type: none"> - General understanding of data use and safety topics - Overall benefits for economy 	Bite-sized, easy information towards HRI through impact stories, videos and website
Regulatory Bodies	EC / EP / Council	<ul style="list-style-type: none"> - Open standards - Compliance with regulation 	Ensure compliance and info on standards via publications, website

Table 3.1 Types of Stakeholders and how to address them

In the context of industry, a primary focus not stated in detail in the table above, lies on particular sectors within industrial HRI use. These industries have been defined already in the DoA as manufacturing, health care and intra-logistics as core areas for HRI potential and focus areas of TEF involved.

4 Communication Plan

This chapter outlines our strategic approach to raising awareness, fostering engagement, and driving the adoption of HRI technologies across our primary target sectors. By clearly defining our communication goals, we aim to create an all-encompassing narrative that highlights the project's significance, showcases its benefits, and encourages active participation from industry professionals, academic researchers, policy makers, and the general public.

Due to the diversity of stakeholders, it is important to communicate clearly, using appropriate terminology without overusing technical jargon to support an open and accessible mode of communication for all target groups. We aim to keep the balance between technical and non-technical audiences to broaden our reach while also maintaining recognition of the project's objective within a more specific scientific or developer focused community.

ARISE stands for **Agile, human-centric, and Real-time enabled open Source technologies** advancing industrial HRI in Europe. Our brand is carefully crafted around its aim to foster this objective of bringing together humans and robots by standard tools, supplying the technology to connect different assets easily. The following segment will showcase how.

4.1 Visual Identity

The visual identity of ARISE is a fundamental aspect of our brand, visually transmitting our mission through a cohesive and distinctive design language.

A brand book, available to all partners has been developed based on the initially designed logo, to ensure a consistent and impactful communication about the project across all materials by all the partners.

The brand book developed for the partners contains information and references on the following elements defining the visual identity of ARISE:

- Main logo and variations for optimal representation, including information on its correct usage and application across media.
- Defined set of colours, including codes and hierarchy
- Typography to be used in ARISE materials
- Graphical Elements derived from the logo to be used in support of the overall design
- Image suggestions, to support the selection of fitting imagery underlining the message to be transmitted with the produced material
- Templates for Deliverables, Documents, Slides, ensuring a common corporate identity across partner activities – see below.
- Resources with download links to easily access the building blocks, described in the bullet points above.

4.1.1 Logo

The geometrical shapes used reflect the diversity of resources to be connected by ARISE technology. While the round shape allegorizes a soft, round human shape, the edgy symbol stands for the hard, robust, metallic features of the robot the human is interacting with. A simple straight line (easily replicated) characterises the ARISE's open all-in-one middleware, able to connect all kinds of shapes.

The colour choices further emphasise the meaning of the symbols used in the logo icon. While orange reflects human creativity, warmth and vitality, violet stands for the artificial aspect of HRI, the machine. Turquoise fosters the idea of the ARISE all-in-one middleware, emanating stability and open communication. It is often connected to the electronic era, the world of computers and communication in this context.



Figure 4.1 Primary project logo



Figure 4.2 Primary project logo alt



Figure 4.3 Primary project logo black



Figure 4.4 Primary project logo white



Figure 4.5 Secondary project logo

4.1.2 Templates

Templates have been designed as an integral part of our brand guide to ensure consistency, professionalism, and efficiency in all our communications. By providing standardised formats for documents, presentations and postings, these templates help maintain a cohesive visual identity across all platforms and touching points. They enable team members to quickly and easily produce materials that align with our brand's aesthetic and messaging, ensuring that every piece of content reflects the project's values and enhances the brand recognition. Furthermore, a rather simple idea of having templates is to save time and reduce errors, allowing the team to focus more on delivering impactful and engaging content to our audience.



Figure 4.6 Examples of documents

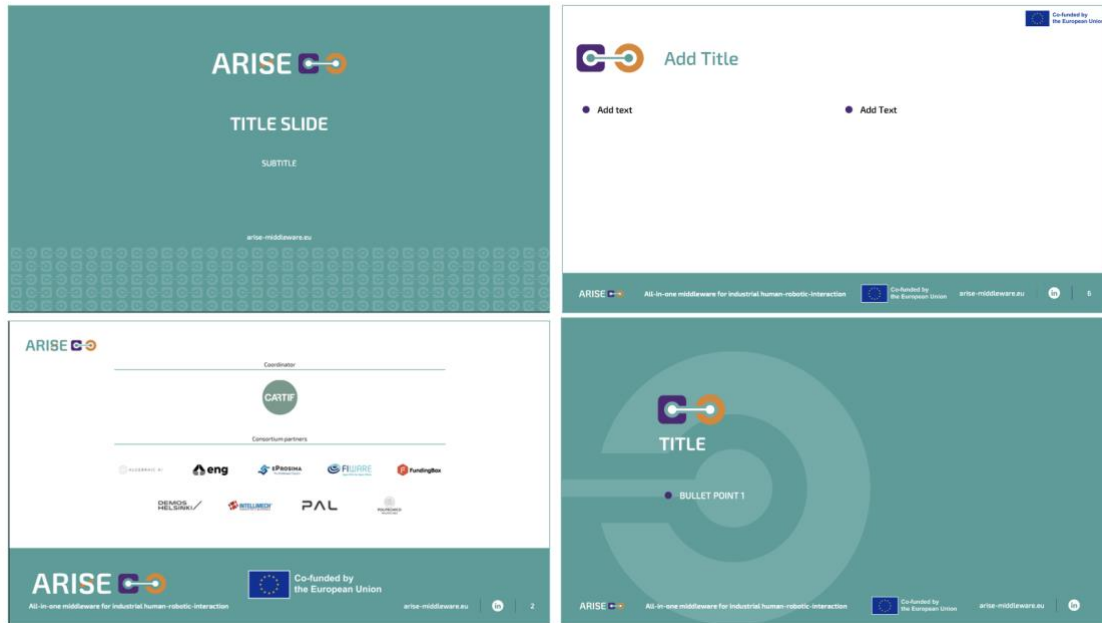


Figure 4.7 Examples of slides

4.1.3 Disclaimer

As agreed in the DoA, all materials such as brochures, leaflets, presentations, dissemination activities as well as infrastructure, equipment etc funded by the grant acknowledge the support of the EU, displaying the European flag and funding statement. Therefore all activities contain information of the funding support, using the emblem and statement available via the download portal of the EC:



Figure 4.8 EU emblem and funding statement

4.2 Communication Channels

To effectively reach and engage the ARISE audience, our project utilises a variety of communication channels tailored to different needs and preferences. These channels include

our official website as well as a social media platform and a video streaming platform. Each of them plays a crucial role in sharing information, updates, and insights. By leveraging these platforms, we aim to foster an inclusive and interactive community, ensuring that our stakeholders are well-informed and actively involved in the project's progress and outcomes.

4.2.1 The Website and its structure

The ARISE website⁴ serves as the central platform for all communication and dissemination activities. Designed with user experience in mind, the website offers a comprehensive overview of the project's objectives, activities and opportunities. It features sections dedicated to news updates, resources, events, and stakeholder engagement opportunities. The setup of the website includes an intuitive navigation structure, ensuring visitors can easily access relevant information and stay informed about the latest developments.

The ARISE website is being developed as needed, based on the project's requirements, starting off with basic information about the project and activities (green blocks in the site-map) in the very beginning, constantly refined with additional building blocks (orange blocks – regular updates, purple blocks, stagnant additions to the basic website) along the way.



Figure 4.9 Site Map ARISE website

Through regular updates and information about interaction opportunities, the website not only provides valuable content but also fosters a dynamic and engaging platform bringing the audiences closer to the project, nudging direct interaction with the team, e.g. by promoting the discord forum installed, e.g. via specific pop-up banners.

⁴ <https://arise-middleware.eu/>

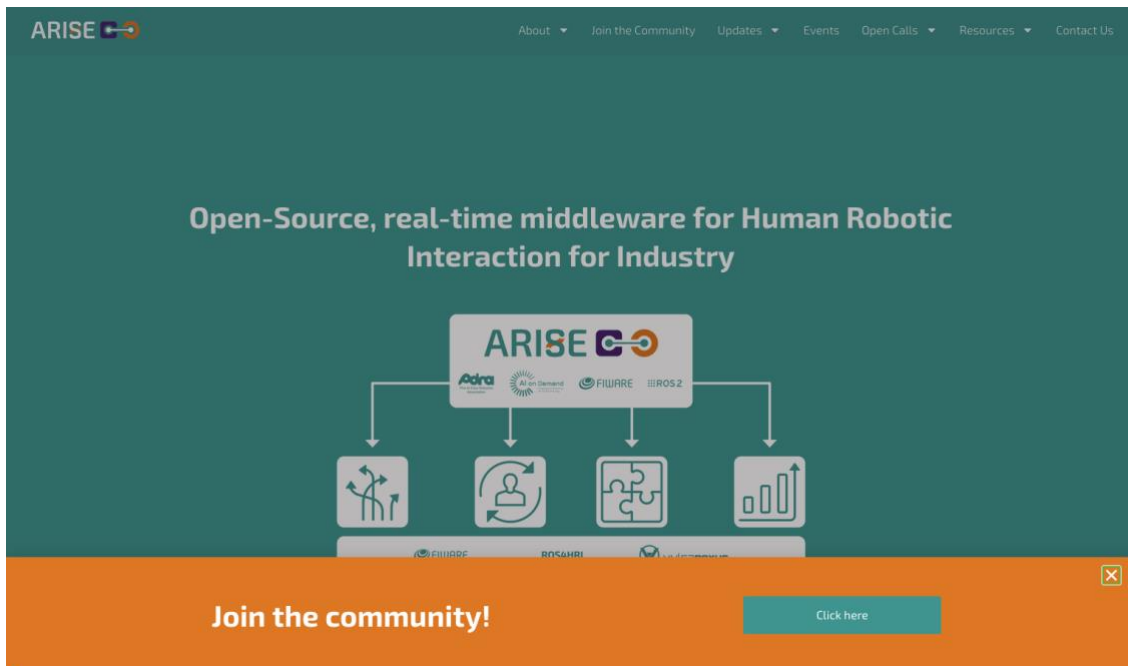


Figure 4.10 Screenshot of the arise-hri.eu landing page

The content for the ARISE website is being collected via one common document, structured with templates based on different categories (news, events etc) to ensure an efficient and easy-to-use process for the project team:

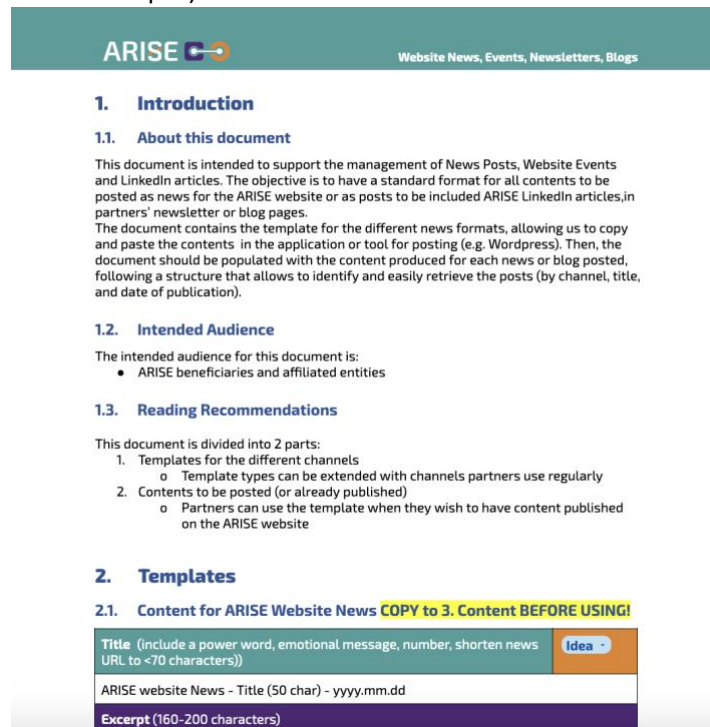


Figure 4.11 Screenshot of the first page of the drafting document for website content

4.2.2 Social Media

An active social media engagement is an integral to our project's communication strategy. By leveraging our LinkedIn appearance, we aim to amplify our reach, engage with diverse audiences, and foster a vibrant online community. Through targeted content, regular updates, and interactive campaigns, our social media presence will highlight project milestones, share valuable insights, and encourage stakeholder participation.

Additionally, the LinkedIn page should facilitate the interconnectedness of various platforms of engagement, regularly linking and leading people towards the website or YouTube for in depth resources or discord as our platform for active community exchange.

A social media calendar serves as a mutual planning tool for the consortium allowing all partners to contribute with content. To ease the process and cater to all needs, content may be provided as a final version, only to be proof-read or as basic information to be transformed into LinkedIn suitable text by the WP 7 team:

This tab collects all postings planned/published through ARISE channels, content (longtext and images to be stored in here and linked in the applicable line below: <https://drive.google.com/drive/folders/1rbCkDXcKXWALCs7NHwDY9JIG3zP>)

NUMBER	24 Interactions	294					
Date (yyyy-mm-dd)	Canal	Posting (SM Text or Link to long text)	Hashtags	Partners tagged	Image (Link Gdrive) or Link for reposts	All Text	Status
2024-06-12	LinkedIn Post	Be one step ahead of other Open Call applicants and participate in the informative webinar during which we explain the whole procedure and your part in it! https://events.zoom.us/jv/AtKDAesd3-X9VnVhZ03Hbg1_Rb7q15VBZNeqBqvsHreKxn2-AitKAcLdKC9FCZ8H0s-a8VlnO6kg6QEhKJK-EAKUYKM_D155N2980Gp0RNGh_07CV0dZra6hHy0rV4zkmYagGriaMq *Referenced from: MarketsandMarkets Research report on Industrial Robotics Market Tomorrow is the day! If you have not signed up for our info webinar yet, make sure to do so now! This info session on June 18th will offer you the opportunity to learn more about ARISE and how you can make use of the opportunities it holds for European SME, active in robotics as users or developers. <ul style="list-style-type: none"> up to € 200 000 mentoring and support from experts Access to testing and experimentation facilities (TEF) Network 	#humanrobotinteract on #manufacturing #manufacturingindustry #manucentricity #industrialinnovation #AccessibleTech	all partners	https://drive.google.com/file/d/1GmUvNtECs-z7Z0m-1c3Hh0Dz3mVYvowVw/w2vps-sharing		Published
2024-06-17	LinkedIn Post	Make use of this opportunity and use this chance to prepare perfectly for our open call for pilots, opening in the fall. Sign up via https://link.in/dASxI-9H Exciting News from the ARISE Project! The ARISE General Assembly M5 was successfully held at the CARTIF facilities. On June 10th, we conducted a technical workshop with the middleware developers and TEF's owners and on June 11th and 12th, we hosted the consortium's General Assembly. During these sessions, we analyzed the current status of the activities and defined the action plan for the next six months. This event was a great success and a highly productive meeting with our partners. Together, we are paving the way for innovative advancements in the project!					Published
2024-06-20	LinkedIn Post	Consortio: CARTIF , F2WARE , PAL Robotics , FundingBox , Consorzio Intellimech , Engineering Group , eProxima , Politecnico di Milano, Demos Helsinki, Algebraic AI Inc[10:27]#ARISE-HRI #GeneralAssembly #Innovation #MiddlewareDevelopment #FuturePlans	#collaboration #ARISE_HRI #GeneralAssembly	all partners	https://drive.google.com/drive/folders/1QePSc_NdWUJ0R_2zHM-uVwvE10A9tG		Draft

Figure 4.12 Screenshot of Social Media calendar in the ARISE communication dashboard

The aim is to publish postings at least once a week, preferably Tuesday or Wednesday morning (9am) or around lunch time (1pm). During important events or key periods for open call dissemination postings may go up in numbers per week, but ideally not for consecutive days and topics varying between

- Project objectives, partner introductions
- ARISE news
- ARISE events
- External events related to the scope of the project
- Publications
- News from partners related to the scope of the project

Using specific hashtags and tags in social media postings can be beneficial for maximising the visibility and reach of our content, when used sensibly. Person and organisation tags will be varied based on the transmitted content of a post to engage relevant users and organisations, by alerting them and their networks to our content.

The main hashtag for ARISE is #ARISE_HRI, and always part of our postings while additional hashtags such as #robotics, #healthcare, #manufacturing, #HRI, #HumanRobotInteraction, #EC, #OpenCall etc are used based on posting content. This supports our aim to easily identify ARISE activities in social media, making them discoverable to a broader audience interested in specific topics. This dual approach not only enhances our ability to connect with target audiences and foster community engagement but also boosts our posts' chances of being shared and discussed, thereby amplifying our project's impact and extending our message to a wider, more diverse audience.

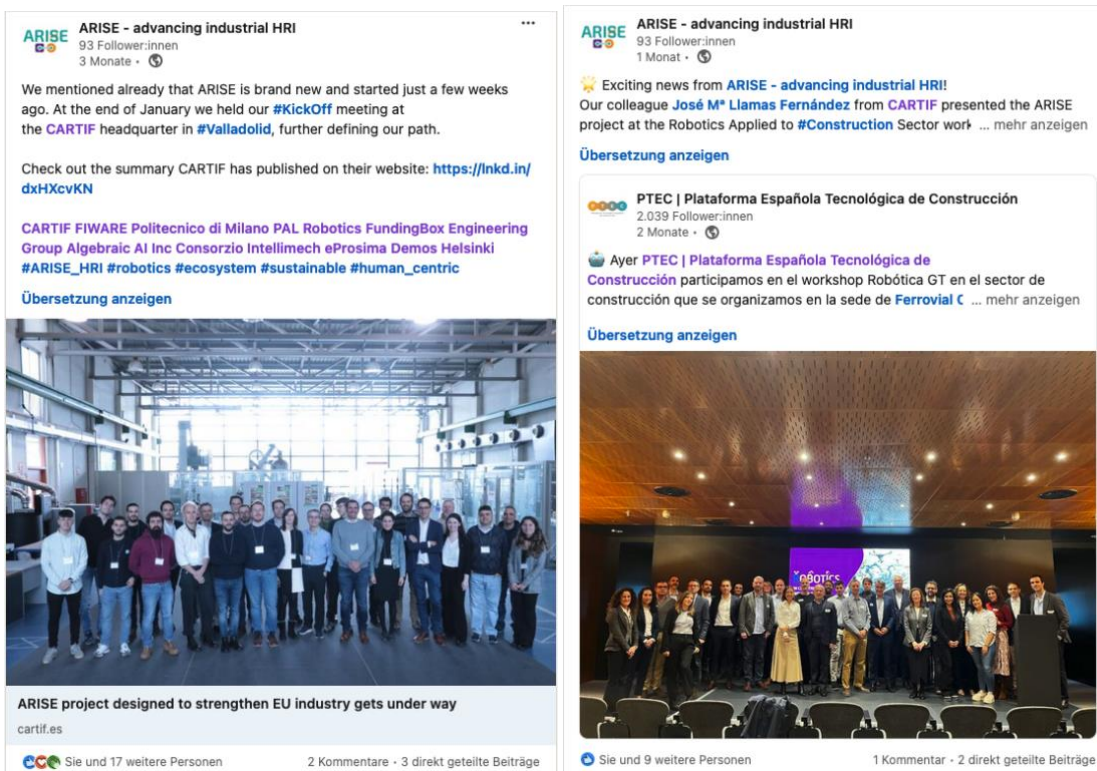


Figure 4.13 Screenshots of LinkedIn Posts

4.2.3 YouTube

A central service ARISE will offer to the HRI community is the production of tutorials and videos demonstrating new features.

Due to its set-up YouTube serves as an adequate platform to publish ARISE video materials since:

- It is public (with options to adapt access) and offers a wide reach, as one of the largest globally operating online platforms which ensures material shared in our YouTube channel is accessible for a broad audience

- Videos offer a different kind of engagement and are therefore a useful complementary tool to publications etc to reach our target audience and ensure the understanding of complex information conveyed.
- Tools such as subtitles, automated translations or captions broadens the project's reach and includes audiences otherwise not accessible e.g. due to language barriers.
- Containing a shareable link YouTube videos can be easily embedded into the website, without affecting its performance, shared via social media or sent to potentially interested stakeholders.
- Videos uploaded to the ARISE channel⁵ on YouTube are permanently available to a general public and therefore also plays an important role for ensuring the sustainability of ARISE outcomes beyond the project's duration. Unlike a website, there is no need for one of the partner organisations to maintain the channel, to keep it public.

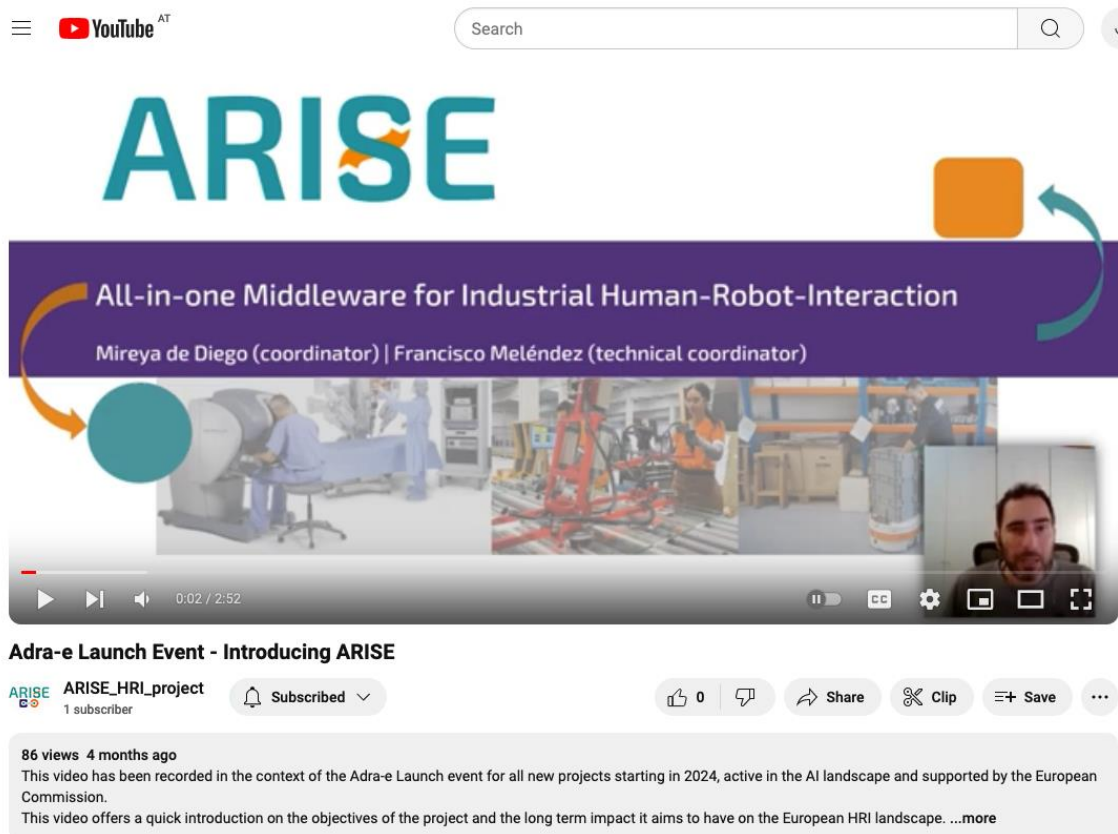


Figure 4.14 Example of an initial project presentation of ARISE available on the project's YouTube channel

⁵ https://www.youtube.com/@ARISE_HRI_project

4.2.4 Press Release

There are two press releases planned across the duration of the project. This is a way of sharing the project's goals and opportunities with the general public. These compact while complete descriptions of ARISE can serve the partners to produce translations in additional EU languages, aside from English, to further disseminate about ARISE. An initial press release is planned within the first year and another one, after 50% of the project has been completed to pick up the achievements reached so far while also informing about upcoming actions ahead.



Figure 4.15 Draft (therefore blurred) of the ARISE press release

4.2.5 Discord

Building and engaging with an HRI focused community is a crucial objective for the development of an open all-in-one middleware for HRI, as constant interaction, trial and error mechanisms and feedback loops contribute to a constant evaluation and advancement of the project.

To facilitate this exchange, Discord has been selected as a most suitable tool for engaging with the community due to its diverse communication features and customization options. It offers real-time chat, voice, and video capabilities, allowing for immediate and dynamic interactions among community members.

The choice of Discord is not by chance. Initially created as a platform for gamers, the developer’s community has accepted it as the *de facto* standard to connect with people interested in software, hardware, etc. For example, the ROS developer community has a Discord server to provide support for robotics projects based in the ROS open source framework⁶.

Discord's server structure enables the creation of organised channels dedicated to different topics, ensuring focused discussions and easy navigation. Additionally, its roles and permissions system allow for effective moderation and management, fostering a safe and welcoming environment. With integrations for various tools and the ability to host events, polls, and announcements, Discord provides a comprehensive platform for building and sustaining a vibrant, engaged community.

Main objectives we want to achieve with our ARISE community on discord:

- Platform for exchange with the ARISE team as well as within peer from the community
- Information and discussion on specific focus topics such as TEF, open calls or a separate channel for end-users.
- A place to make available information and forwarding links

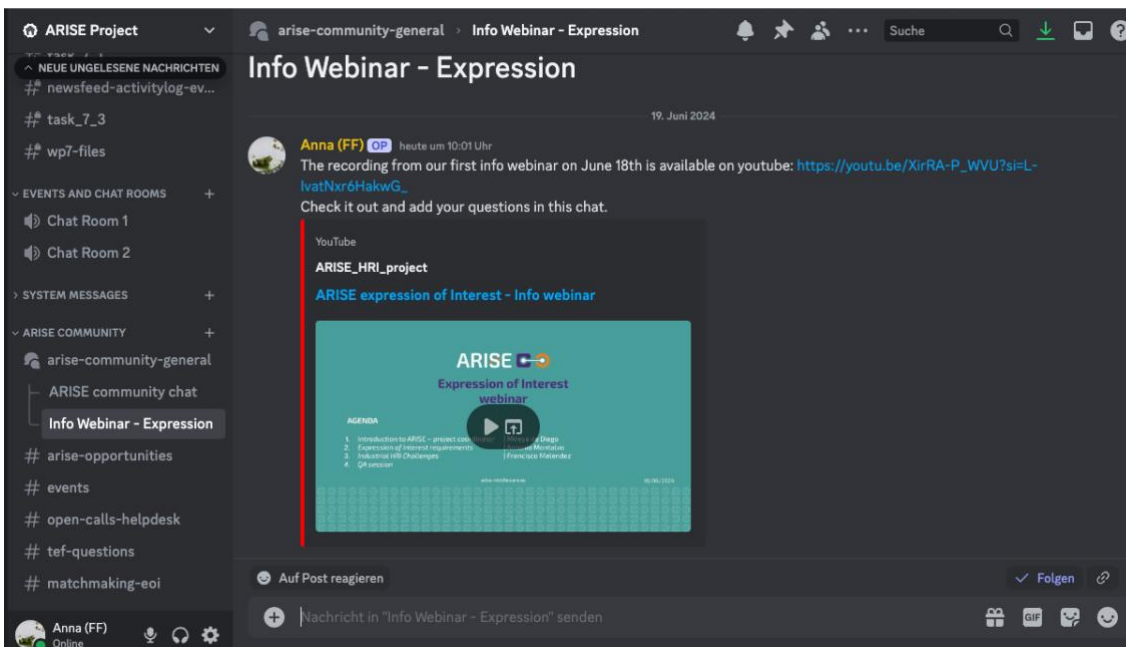


Figure 4.16 Screenshot of ARISE community channels on discord

The ARISE discord server is separated into two areas, a private area which contains channels for the project channels to discuss actions within a work package, challenges etc as well as a

⁶ <https://discord.com/servers/open-robotics-1077825543698927656>

public area, the ARISE COMMUNITY, open to any registered user, containing specific focus channels to structure discussions topics. This public area of the ARISE Discord channel is also an important way of communicating with an interested audience about the project's open calls, for which a designated "Open Call Help Desk" channel, moderated by the responsible partner, of has been provided.

4.3 Use of the EU emblem

The EU flag and funding statement (see Figure 4.8) is being displayed on communication and dissemination material such as the website, presentations, brochures in its original formats, displayed below.

5 Dissemination Plan

This chapter details our strategy to ensure that the project's findings and advancements reach the appropriate audiences in an impactful and meaningful way. By outlining clear goals for sharing our research and developments, we aim to enhance visibility, foster collaboration, and facilitate the practical application of our solutions in real-world settings. Our dissemination efforts will leverage various channels and platforms to effectively communicate our achievements, promote best practices, and stimulate further research and development. This is essential for overall awareness creation towards the project's advancements but also to foster collaboration and high-quality proposals to maximise impact and reach.

5.1 Different stages of dissemination activities

Based on the four phases defined in chapter 2 and the various stakeholder groups in mind, dissemination activities can be clustered based on their importance at different points in time of the project.

While in an initial phase, the main focus lies on creating awareness, phase 2 is dedicated to showcase what has been developed in TEFs to serve as hands-on examples for pilot submissions in the open call of the project. The following third phase is also targeting the engagement of potential pilots, based on learnings from the previous phase but already takes into account the time after the project which is to be further stabilised in phase 4.

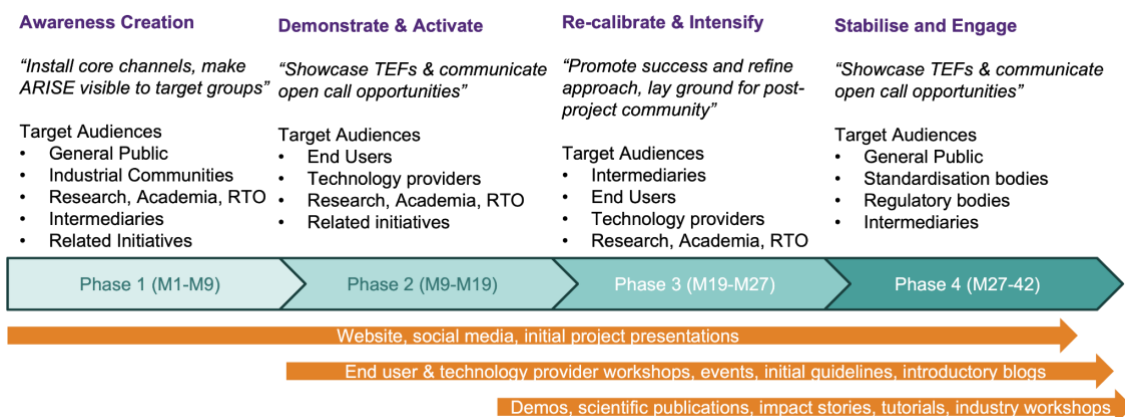


Figure 5.1 Visualisation of the four main phases of dissemination

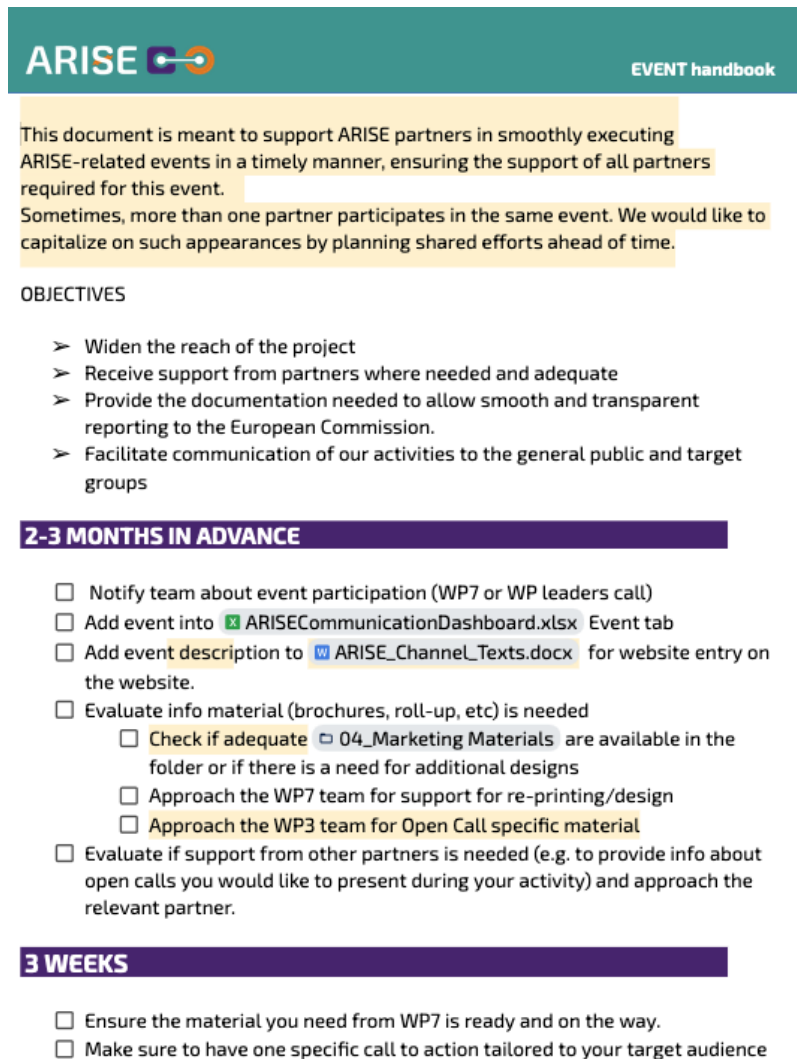
5.2 Dissemination channels

To ensure the best outcomes ARISE uses a variety of dissemination channels to ensure that our messages reach the intended audiences, fostering awareness, engagement, and collaboration. From traditional methods like academic publications and conferences to digital strategies, our dissemination efforts are designed to maximise reach and impact. By employing a diverse mix of channels, we aim to create a robust communication network that not only informs but also inspires action and involvement from all relevant parties.


5.2.1 Events

Events play a central role in our dissemination plan, serving as dynamic platforms for sharing knowledge, fostering collaboration, and engaging with stakeholders directly by attending and organising conferences, workshops, seminars, and webinars, designed to showcase our project's advancements and opportunities for stakeholders. By facilitating face-to-face and virtual interactions, these events provide invaluable opportunities for networking, exchanging ideas, and receiving real-time feedback from diverse audiences. Through well-planned and executed events, we aim to amplify our reach, strengthen partnerships, and drive widespread knowledge and ideally adoption of our project's innovations.

To ensure a smooth preparation and execution of ARISE participation during events as well as insightful evaluations an event handbook has been drafted for partners, containing a short checklist to go through to avoid missing essential actions:



The screenshot shows the 'ARISE EVENT handbook' document. It includes an introduction, objectives, and a checklist of tasks categorized by timeframes: '2-3 MONTHS IN ADVANCE' and '3 WEEKS'. The '2-3 MONTHS IN ADVANCE' section lists tasks such as notifying the team, adding event details to a dashboard and website, evaluating marketing materials, and checking for support from other partners. The '3 WEEKS' section lists tasks like ensuring materials are ready and making specific calls to action.

ARISE  **EVENT handbook**

This document is meant to support ARISE partners in smoothly executing ARISE-related events in a timely manner, ensuring the support of all partners required for this event.

Sometimes, more than one partner participates in the same event. We would like to capitalize on such appearances by planning shared efforts ahead of time.

OBJECTIVES

- > Widen the reach of the project
- > Receive support from partners where needed and adequate
- > Provide the documentation needed to allow smooth and transparent reporting to the European Commission.
- > Facilitate communication of our activities to the general public and target groups

2-3 MONTHS IN ADVANCE

- Notify team about event participation (WP7 or WP leaders call)
- Add event into [ARISECommunicationDashboard.xlsx](#) Event tab
- Add event description to [ARISE_Channel_Texts.docx](#) for website entry on the website.
- Evaluate info material (brochures, roll-up, etc) is needed
 - Check if adequate [04_Marketing Materials](#) are available in the folder or if there is a need for additional designs
 - Approach the WP7 team for support for re-printing/design
 - Approach the WP3 team for Open Call specific material
- Evaluate if support from other partners is needed (e.g. to provide info about open calls you would like to present during your activity) and approach the relevant partner.

3 WEEKS

- Ensure the material you need from WP7 is ready and on the way.
- Make sure to have one specific call to action tailored to your target audience

Figure 5.2 Event handbook

This handbook does not only include guidelines to execute event participation but also the relevant links go prepare (e.g. templates) and follow-up (e.g. feedback forms for partners and external event participants).

A detailed overview of the type and number of events ARISE will participate in or organise is visible below in chapter 8 on Monitoring and Reporting.

The image below gives an overview of the events participated in so far as well as upcoming opportunities in discussion within the consortium:

5.2.2 Journals and Scientific Publications

ARISE aims to develop open all-in-one middleware for HRI which contains the significant research effort amongst partners and participating stakeholders. We are committed to providing evidence of our progress through Open Access publications, ensuring broad accessibility while respecting intellectual property (IP) protection processes. Additionally, we identified high-impact journals to publish our findings, to further solidify our project's contributions to the scientific community and the industry at large.

An initial list, to be extended along the project's duration, is displayed below:

- Computers in Industry
- European Journal of Information System
- International Journal of advanced manufacturing technology
- International Journal of Production Research
- European Association for the Study of Science and Technology Conference
- Open Research Europe Portal.

5.2.3 Channels of the European Commission

Making use of the options available through media of the EC, ARISE intends to maximise visibility and exploitation distributing updates through some of the following channels:

- Horizon Magazine
- Research*eu results magazine
- Research*eu focus
- Futuris Magazine (euronews.next)
- Open Research Europe

The above shall be seen as an initial list, to be further developed based on needs and outcomes during the project.

5.2.4 Liaisons with relevant initiatives

Since most of the partners are also involved in other projects ARISE intends to capitalise on these connections, engaging with sister projects, for increasing reach as well as sharing and re-using project results.

A strong focus will be attributed to the collaboration with projects focusing on the same or a related area, providing inputs to each other's scope beneficial to the development of HRI solutions in the intra-logistics, healthcare and manufacturing sectors. Encounters with other projects will be approached as follows:

1. Generate an overview of suitable projects, mapping them and engaging the most relevant partners as a main point of contact
2. Initial contact with the project's coordinator

3. Exchange of basic information about the projects
4. Widening the group of people engaged in the interaction, pinpointing areas of shared interests (working groups, events, shared publications, meetings etc)
5. A shared event calendar to find overlaps
6. Events to engage and get to know each other
7. Reporting of activities.

Depending on the initiative, collaboration activities may vary to adapt to the needs and potentials of the relevant partner and optimise the impact and benefit for all involved parties. Below we establish an initial overview of different initiatives and the related way of collaboration. This list is not final and shall be adapted and expanded based on the needs of ARISE towards external partnerships.

- Aligning with other, sister projects from the same funding call, focusing on the same sector or technological challenges. This type of collaboration aims towards a mutual learning process from results as well as combining resources to reach mutual target audiences via collaboration in communication efforts such as social media and cross-posting as well as shared events or publications. Initially a focus will lie on the two following projects:
 - FORTIS is a project on multi-modal and multi-aspect holistic HRI working on a solution for enabling robots to interact with humans in a human-like way for long periods by building a digital twin to support in monitoring and optimising operations and safety.
 - JARVIS aims towards intersubjective AI-driven multimodal interaction for advanced user-centric human robot collaborative applications by developing AI enhanced means of interaction, developing socially interactive robots and trustworthy AI applied in large scale pilots.
- Engage with projects in cross-communication and shared activities such as events, which are linked to ARISE via one or more partner organisations. Examples for these collaborations:
 - SM4RTENANCE (involved partner FIWARE) is a project focusing on the potential of data-driven and AI powered algorithms for predictive maintenance and dynamic asset management in manufacturing.
 - MANOLO (involved partner PAL) works on trustworthy efficient AI for cloud-edge computing, by delivering a complete and trustworthy stack of algorithms and tools to support efficiency and optimisation.
 - COROB (involved partner FUNDINGBOX) focuses on cooperative robots powered by AI and data for flexible production to foster higher productivity in the production of a variety of highly customised products in small quantities.
 - CYCLOPS (involved partners FIWARE) aims to integrate data from multiple sources, using AI technologies for automated end-to-end data life cycle management for FAIR data integration, processing and re-use.
 - PiSTis (involved partners POLIMI) a project on promoting and incentivising federated trusted and fair sharing and trading of interoperable data assets aiming to build trust between data providers, data owners and consumers.

- **ADRA network**

The Adra Network is a collaborative initiative aimed at advancing artificial intelligence, data, and robotics across Europe and has identified a variety of ecosystems and cross-sector technology enablers in its strategic research, innovation and deployment agenda, valuable to the ARISE objectives. It brings together industry leaders, research institutions, and policymakers to foster innovation, share knowledge, and drive the development and deployment of cutting-edge technologies. By facilitating partnerships and promoting best practices, the Adra Network places a crucial role in the dissemination of ARISE results. Initial activities such as the Adra-e launch event have already been used to promote the project start of ARISE, further engagements at ADRA events are currently being discussed and utilisation of communication channels are being explored.
- **AI on Demand platform⁷**

The AI on Demand project is a European initiative designed to accelerate the adoption and integration of artificial intelligence across various sectors. It provides a centralised platform offering a wide array of AI resources, including tools, services, datasets, and expertise, to support research and innovation projects. An essential part of the platform is the elaborate catalogue of organisations focusing on AI, which can serve as an entry point for ARISE to engage with fitting stakeholders outside our immediate network, adding new angles to diversify the target audiences we aim to reach through different channels.
- **EDIH network**

The EDIH network is part of the European Union's strategy to accelerate digital transformation across its member states. The network comprises regional centres of excellence dedicated to providing SME, with access to advanced digital technologies, expertise, and services (such as training). EDIHs offer support in areas such as artificial intelligence, cybersecurity, high-performance computing, and digital skills training. By fostering innovation, facilitating knowledge transfer, and promoting collaborative projects, the EDIH network aims to enhance the competitiveness and resilience of European industries, driving economic growth, and ensuring that all regions benefit from the digital revolution. For ARISE the existing links of this network offer direct links to the ARISE target group. Based on the available overview on EDIH in Europe and their focus activities and target sectors, we will select the most relevant hubs to engage them as multipliers towards their audiences.

Based on the catalogue⁸ available on the EDIH website, initially a broad outreach to EDIH fulfilling the criteria of "robotics" in the area of technology (124 out of 431 entries) is used as an initial list to further specify priorities in outreach and further interaction to narrow down options for collaboration.
- **Horizon Standardisation Booster⁹**

The Horizon Standardisation booster supports expert services to increase and valorise project results through standardisation. A collaboration process with an assigned expert for ARISE has already started. This activity is not directly connected to the initial

⁷ <https://www.ai4europe.eu/>

⁸ <https://european-digital-innovation-hubs.ec.europa.eu/edih-catalogue>

⁹ <https://www.hsbooster.eu/>

phases of the project but rather focuses on the sustainability of results in the long term, taking into focus the time beyond the immediate project timelines.

6 Exploitation Plan

This section provides a comprehensive description of the activities planned within Task 7.4, **"Adoption, Exploitation, and Sustainability Roadmap"** aimed at ensuring the effective management, exploitation, and sustainability of the project's results and intellectual property (IP). The strategic objective of all exploitation activities in ARISE is to facilitate the widespread adoption and sustainability of its results beyond the project's completion, thereby maximising their impact. This represents a major priority and challenge for our consortium, given the project's high potential.

To define the most suitable and concrete exploitation strategy, the subsequent sections outline the actions to be taken also reported in Figure 6.1:

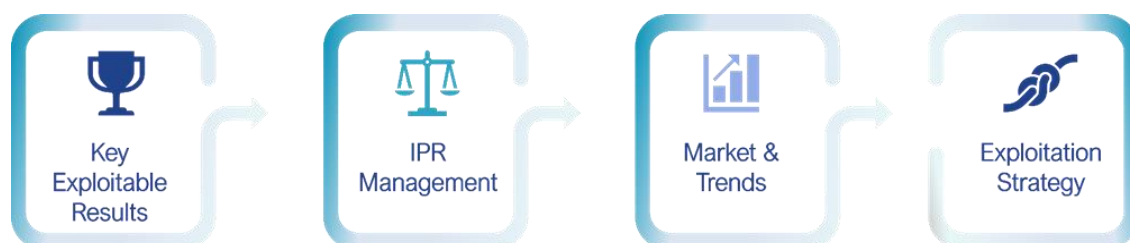


Figure 6.1 Exploitation activities

6.1 Key Exploitable Results Analysis

In the dynamic landscape of the ARISE project, the formulation of a robust exploitation strategy is paramount to maximise the value derived from the project activities.

In this regard, the first step towards the exploitation is to identify and clearly define the individual exploitable results provided by each partner.

According to the EC definition¹⁰, a result is defined as:

"Any tangible or intangible output of the action, such as data, knowledge and information whatever their form or nature, whether or not they can be protected, which are generated in the action as well as any attached rights, including intellectual property rights".

A Key Exploitable Result (KER), in the Horizon Europe Work programme¹¹ is an identified main interesting result (as defined above) which has been selected and prioritised due to its high potential to be "exploited" – meaning to make use and derive benefits – downstream the value

¹⁰ <https://ec.europa.eu/newsroom/informatics/items/689551> [assessed 18.06.2024]

¹¹ <https://ec.europa.eu/newsroom/informatics/items/689551> [assessed 18.06.2024]

chain of a product, process or solution, or act as an important input to policy, further research or education.

To gather information related to ARISE's Key Exploitable Results (KERs), an Excel sheet named "KERs Identification" will be shared among the consortium members. This sheet will contain a preliminary list of exploitable results and will serve as the foundation for the future characterization of project outcomes. It will also support preliminary activities related to Intellectual Property Rights (IPR) management. The structure of the "KERs' identification" is reported in the following table:

Partner Name	Other Partners involved	Name of the KER	Description	Type of the result	WP

Table 6.1 KERs identification

The compilation of this template by the Consortium members will start in the early stages of task and, as this is an evolving process that aligns with the progression of project activities, a consolidated version will be made available in the upcoming release of the document (M12) that will encompass the consolidated assets from month 12 onwards, reflecting the dynamic nature of the database development in tandem with the project's advancements.

When the census phase of the results will be completed, the identified KERs will be analysed to gather information that can characterise them from a business perspective using a series of tools provided by Horizon Results Booster services¹².

6.2 IPR Management

For each ARISE KER, the intellectual property rights (IPRs) will be carefully assessed to create a favourable environment for respecting intellectual property aspects and ensuring a sound approach by participants. To facilitate this, a specific "IPR Repository" will be established. This repository will serve as the primary tool, continuously updated throughout the project's implementation phase, to maintain a clear vision of ownership, co-ownership, possible licensing issues, conflicts, and more.

The objective is to collect all relevant and necessary information about the exploitable ARISE assets during both the implementation and post-project stages. This will provide a comprehensive overview of all generated assets, tracing their ownership, helping project partners recognize their IP assets, and ascertaining the existence of third-party rights. The database will be based on the following template:

- Type and description of the asset
- Ownership

¹² <https://www.horizonresultsbooster.eu/> [accessed 18.06.2024]

- Licence scheme
- Other proprietary components involved
- Possible licence issues

During the preliminary and final IPR analysis, the exploitation team will determine cases of sole or joint ownership for the foreground developed during the project. If the contributions of multiple beneficiaries cannot be clearly established, a joint ownership agreement must be concluded, stipulating the efforts invested by each partner. As the project progresses, this tool will be continually updated to monitor the status of the identified assets, filter those with market potential, and appropriately manage the intellectual property rights of all assets, thereby developing a clear IPR portfolio.

6.3 Market Analysis

The ARISE project is set to transform the industrial HRI landscape, and an in-depth market analysis will be crucial to its success. This preliminary market analysis will focus on identifying the current demand for HRI solutions across various industries, assessing market trends, and evaluating the competitive landscape. Key activities will include gathering data on the adoption of HRI technologies, understanding the specific needs and pain points of target industries, and identifying potential barriers to market entry. Furthermore, the analysis will involve benchmarking ARISE's innovative Agile HRI solutions against existing technologies to highlight their unique value propositions. Future activities will extend to engaging with industry stakeholders through surveys, interviews, and workshops to refine our understanding of market requirements and to foster partnerships that will aid in the widespread deployment of project's solutions. This comprehensive market analysis will ensure that ARISE advancements in HRI are aligned with market needs, paving the way for effective commercialization and sustainable growth.

6.4 Exploitation Strategy

As reported in the DoA, the ARISE project's exploitation strategy is driven by answers to key 'what, who, how' questions that underpin all communication, dissemination, and exploitation activities:

<p>What needs does ARISE address?</p>	<p>ARISE tackles the high costs associated with developing, deploying, and operating Human-Robot Interaction (HRI) systems, which hinder their sustainable and large-scale deployment in real-world applications. The lack of standardisation in robotics hardware, control platforms, and high-level interfaces further challenges developers and application providers. Maintenance poses another significant hurdle, as modifications or upgrades often require a complete overhaul of the application, making it unsustainable both technically and financially.</p>
<p>What problems will ARISE solve, and how will it be better than existing solutions?</p>	<p>ARISE will enhance the agility of suppliers to develop, deploy, and maintain HRI solutions, thereby increasing the sustainability and widespread adoption of real-world applications. By implementing, demonstrating, and promoting the novel concept of Agile HRI within the European innovation ecosystem, ARISE aims to position Europe at the forefront of industrial HRI.</p>
<p>What new knowledge and results will ARISE generate?</p>	<p>Increased agility through an all-in-one middleware for Open, Human-centric, and Real-time enabled HRI. Human-centric modules specifically designed for industrial HRI within a holistic agile paradigm, expanding the state-of-the-art. Comprehensive technical and non-technical support resources to help suppliers bring their HRI-enabled solutions closer to market.</p>
<p>Who will use the ARISE results?</p>	<p>HRI adopters: end-user companies needing HRI solutions to improve specific processes. HRI suppliers: technology creators, system integrators, and application providers of industrial HRI. The AI, Data, and Robotics ecosystem, especially through the AI on Demand platform.</p>

<p>What benefits will ARISE deliver?</p>	<p>Increased efficiency and cost-effectiveness in developing, deploying, and maintaining HRI solutions. Development of open-source products that advance industrial HRI beyond the current state-of-the-art. Leveraging openness and agility as crucial enablers for valuable and sustainable HRI solutions.</p> <p>Long-term sustainability through contributions from a critical mass of stakeholders and strong liaisons with the ADRA ecosystem.</p>
<p>How will stakeholders and interested parties be informed about the generated results?</p>	<p>Awareness will be raised through strategic communication and dissemination of project activities and results. Collaborations will extend to the ROS 2 and FIWARE ecosystems, European innovation actions on AI, data, and robotics, European networks of (E)DIHs, and key stakeholders including industry, academia, standardisation bodies, and policymakers</p>

Table 6.2 Driving answers the ARISE exploitation strategy is based on

To ensure the sustainability of ARISE's approach, a comprehensive exploitation strategy will be implemented, involving a wide range of stakeholders. This will include a detailed roadmap of activities to demonstrate the impact of ARISE on the development of industrial HRI. The mission is to provide proof of concept, easy-to-use systems, AI tools, and best practices to understand the drivers of large-scale HRI integration. The ARISE Consortium, comprising partners with strong backgrounds in AI, data, robotics, and HRI, will leverage established associations and networks with outreach and multiplying capacities. The competitive advantages identified by the ARISE Consortium include advanced features beyond the state-of-the-art, standardisation, and interoperability of solutions compatible with initiatives like NGSI-LD (ETSI), smartdatamodels.org, DDS, ROS 2 Interfaces, FIWARE Robotics WG, ROS4HRI, and ISO for Industrial HRC.

7 Partner Activities in Communication and Dissemination

The activities in WP 7 are a joint effort of all the consortium partners, led by FIWARE (T7.1, T7.2 and T7.4) and ENGINEERING (T7.3), each of them contributing with their specific expertise and possibilities to contribute to a most effective outreach.

Main activities of the partners can be summarised as the following key activities:

- Share updates on the project's progress with the WP 7 lead, to support communication and dissemination activities via the project's communication channels.
- Communicate and disseminate ARISE related information in relevant channels and events.
- Regularly update the consortium on activities planned in the future to allow adequate support and preparation from the team.
- Continuous updates on communication and dissemination activities in the provided documents to support the reporting process of this work package. (Updates should be executed at least once a month, prior to a monthly WP call)

Based on the communication plan described in a previous chapter the following graphic gives an overview of the process underlying a successful execution of communication activities via ARISE channels:

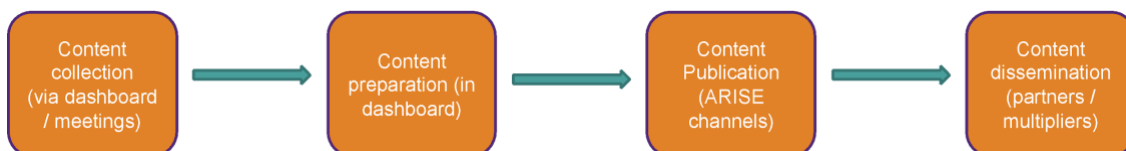


Figure 7.1 Communication Process

Content for communication activities can be provided by all partners via the communications dashboard, which contains a tab particularly dedicated to this type of activity. Partners may contribute final texts only to be proof-read by WP7 or raw information yet to be drafted into publishable text.

Updates to the dashboard should be provided at least once a month, for which a reminder is being sent to the WP7 mailing list by the WP7 lead one week before the WP7 monthly meeting call. This way questions or remarks can be discussed within the team directly and fast.

Prepared content (displayed in the communication dashboard) is to be posted at the required date via ARISE channels. Relevant partners and multipliers will be informed about the publication to facilitate rapid dissemination activities via additional channels.

ARISE partners are requested to mention @ARISE_HRI in their relevant postings and also include the main hashtag #ARISE_HRI in postings connected to the project.

The defined dissemination process follows a similar plan, displayed in the following graphic below:

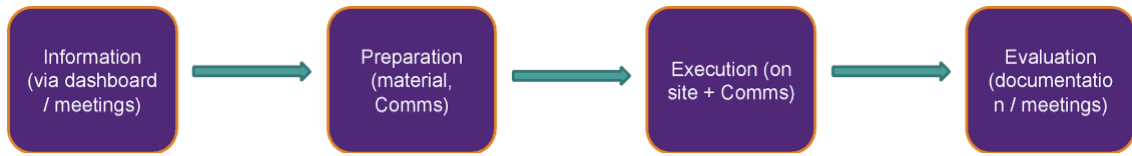


Figure 7.2 Dissemination process

Dissemination processes (e.g. at events and conferences) follow a similar but slightly more active structure as communication. A dedicated tab to fill in information about planned participations and actions is available in the communication dashboard to all partners all the time. Monthly reminders to update will be sent by the WP 7 lead one week prior to the WP 7 monthly virtual meeting. Main events should be discussed during this meeting, offering partners the possibility to evaluate collaborative activities at shared events or support e.g. to prepare material for this event. Events should be used as opportunities to collect feedback from the project's detailed checklist.

8 Monitoring, Analytics & Reporting

All activities in the work package of communication and dissemination will be closely monitored by FIWARE (T7.1 - T7.3) and Engineering (T7.4) as task leaders in this work package. A detailed repository of activities and their impact will be kept to continuously track actions and evaluate measures to enable a rapid adaptation of strategy based on measured outcomes.

Relevant KPI have been defined in the DoA and introduced to the developed dashboard accessible by all partners and regularly updated by WP 7 contributors.

TAB	TYPE	TARGET
EVENTS	D1 – Events Organisation	
	Workshops: Online & F2F	2
	Attendees to workshops (min. 15pax per WS)	30
	Demo Events: Online & F2F: Online demos are also valid	4
	D2 – Participation at Conferences & Workshops	
	Attended events: for knowledge exchange with relevant communities, projects and initiatives; Liaisons; Increased awareness.	20
	Presentation of project at world class events: e.g. ERF24	5

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	Attended events: for knowledge exchange with relevant communities, projects and initiatives; Liaisons; Increased awareness.	20
	Presentation of project at world class events: e.g. ERF24	5
PUBLICATIONS	D3 – Scientific Publications	15
	Conference papers	
	Journal papers	
	Articles in specialized magazines/journals	4
COMMUNITY	D4 – Community Building / Engagement with Stakeholders	20
	Industry (including tech providers, solutions, research centres, stakeholders) contact points: Stakeholders, to be found by TEFs. brainstorming with TEFs, collect info to create a separate excel with a list of people/units to contact (or already contacted). We should gather at least a name and email of a representative and the date/place in which the contact point was made.	
	Industry communities informed about the project. Associations, ask if interested in receiving information. > start compiling a list of associations. research events taking place and approach them to play an active role (offer a speaker input or panel expert)	
	Webinars: Dissemination events for Open Calls	4
	D5 – Collaboration and synergies with EU projects	20
	EU projects reached, contact with another project, exchange of emails, they attend our webinar...get in touch with (E)DiHs (DTA), align with projects close to the partners already (circuloos, sm4artenance...)	
	Joint activities (events), participation in the events of another project/initiative. Approach EDIH focused on manufacturing, robotics, health, services and offer them participation in their workshops etc,	

Table 8.1 Total dissemination KPI for the project's duration of 42 months

WEBSITE	C1 - Website (visitors, visits, views)	
	Unique visitors	2000
	Av. Duration of visits	2min

	Page Views	5000
	References in search engine (liaisons with other initiatives via links, increased awareness)	25
BLOG & SM POSTS	C2 - Blog & Social Media	
	All C2-Blog Posts (on LinkedIn or interactive blogs) more than a SM post	10
	Blog Posts on Partners' channels	
	Posts on 3rd Party Blogs	
	Blog Posts on ARISE website	
	Blog Posts / Articles in LinkedIn ARISE	
	LinkedIn Blog Interactions:	
	All C3- Social Media Posts	250
	Facebook	
	Twitter/X	
	LinkedIn	
	Other	
	SM Interactions: comments, likes, etc.	200
	Total social media followers	200
Linkedin		
X (or other)		
Partner Social Media Posts		
COMMS	C4 - Impact Stories	
	Communication of project results and achievements, dissemination through various channels	16
	C5 - Traditional media	
	Press releases	2
	News: articles in magazines, newspapers, etc	5
Blog posts in EU portals: use information from newsletters and blogs to compile blogs for EU channels.	3	
VIDEO	C6 - Short video clips created and posted; to be created based on demos and posted on the website...also includes interviews.	8

Table 8.2 Total communication KPI for the project's duration of 42 months

Linked to the displayed table, individual tabs correspond to each KPI displayed, offering detailed information e.g. on social media publications and reactions, events participated or

organised or activities via partner channels. An example for the collection of activities via partner channels can be seen below:

PARTNERS' SOCIAL MEDIA CONTRIBUTION										
NUMBER	19 INTERACTIONS					70				
Partner Name	Date (YYYY-MM-DD)	Type of Action	Views	Comments	Likes	Share / Retweet	Followers	Website Hits / LinkedIn Article Reactions	Title (if relevant)	Link to Post
FF	2024-01-26	LinkedIn Post			2	35		2	Info about Kick-off	https://www.linkedin.co
CAR	2024-02-08	Partner Websit							ARISE project description	https://www.cartif.es/en
CAR	2023-12-05	Partner Blog							The evolution of HRIs (Human-rob	https://blog.cartif.es/en
CAR	2024-01-24	Partner Websit							ARISE project kicks off at CARTIF, d	https://www.cartif.es/en
INT	2024-01-29	LinkedIn Post	835			31			ARISE project kicks off at CARTIF, d	https://www.linkedin.co
FBA/FBC	2024-03-19	LinkedIn Post							ERF2024 summary, ARISE attendin	https://www.linkedin.co
FBA/FBC	2024-03-15	LinkedIn Post							ERF2024, workshop	https://www.linkedin.co
FBA/FBC	2024-03-14	X Post							ERF2024, join booth	https://twitter.com/Fun

Figure 8.1 Screenshot of the partner's social media contributions in the ARISE communication dashboard

9 Conclusions

The exploitation, communication and dissemination plan presented in this document reflects the project's aim to amplify visibility and outcomes by engaging a variety of stakeholders from an early stage, based on a comprehensive strategy to effectively share our project's objectives, progress, and outcomes.

By leveraging a variety of communication channels and targeted activities, we aim to maximise the reach and impact of our messages, fostering awareness, engagement, and collaboration via our own channels (website, social media and discord) as well as the cross-communication via partner channels and engagement at fitting events and conferences.

This plan is designed to ensure that our innovations and insights are widely disseminated, driving meaningful change and achieving our project's goals. Through consistent and strategic dissemination efforts, we will build a strong community around our project, reaching from the general public, to academia and individual end users.

Sharing results in publications allows for broad discussion along the course of the project and opportunity for on-going adaptation triggered by an engaged community, inspiring action and contributing to the broader field of HRI. Offering room for constant adjustments the consortium aims to contribute to the establishing a sustainable network for human-centric open-source middleware, supporting the efforts of TEF beyond the project's end.

Providing adequate material for knowledge transfer and the dedication of engaged TEF ensures the availability of ARISE outcomes beyond the M42 defines one part of the briefly described actions to define the project's exploitation roadmap in detail by M12.

Activities described in this document and executed along the project's lifespan will be regularly evaluated and expanded in the upcoming deliverables D7.2, D7.3 and D7.4.