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Technical references

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PP = Restricted to other program participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)





Abstract of Deliverable

The communication and dissemination plan of the STEAMBrace project aims to bridge the gender gap in STEM fields by unlocking the potential of STEAM education for future European innovators, with a particular focus on women. This plan outlines strategies to engage diverse stakeholders, including educators, academia, CCIs, policymakers, industry professionals, students, parents, and advocacy groups, in order to promote inclusivity, collaboration, and knowledge exchange within the STEM and STEAM education ecosystem.

Through targeted communication efforts, such as newsletters, social media campaigns, and multimedia content, the project seeks to raise awareness, share best practices, and highlight the impact of STEAM education on individuals and communities. Additionally, the plan includes dissemination activities, such as workshops, webinars, and publications, to facilitate the sharing of project outcomes, resources, and tools with a broader audience.

Above all of these, and as a fundamental axe of both the STEAMBRace project and this C&D plan, the consortium will celebrate two STEAM Congresses and a STEAM Week, along with multiple activities related to them aimed to engage the members of the STEAM Alliance for Europe.

By prioritizing accessibility, diversity, and engagement, the communication and dissemination plan aims to foster a culture of innovation, empowerment, and equity in STEM and STEAM education across Europe.

Disclaimer

Funded by the European Union under Grant Agreement N. 101132652. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.





1. Introduction

More than half of the European population are women (approximately, 52 %). European women face, among other challenges, a significant gender gap within the STEM professions (Science, Technology, Engineering, and Mathematics): **only 4 out of 10 of the STEM workers are women**. This gap is even more pronounced in research and innovation (R&I), where only 10,7 % of the patents are submitted by women.

Projections suggest that achieving gender parity in leadership roles within a century is a daunting task. Recognizing this disparity, the **European Commission (EC)** has instituted equality policies to promote gender balance across all sectors of knowledge, particularly within the R&I sector, aiming for a gender-balanced European research workforce by 2030. It has become increasingly clear that achieving gender parity among graduates, from secondary school to doctorate level, is pivotal in mitigating future gender biases in the workforce.

In response to these challenges, innovative educational approaches have emerged to enhance the appeal of STEM studies and careers among female students. **The interdisciplinary STEAM approach** (Science, Technology, Engineering, Arts, Mathematics) approach has gained prominence, integrating transversal competencies such as arts, creativity, and innovation with the foundational scientific and technological skills of the STEM curriculum.

Numerous benefits of the STEAM approach have been observed, including providing students with real-world multi-skill know-how, enhancing problem-solving skills and emotional intelligence, fostering collaborative abilities and communication skills through **project-based learning**, instilling **confidence** and **leadership skills**, and effectively engaging previously disinterested students, especially females, through its interdisciplinarity and inclusion of social and cultural fields within STEM.

The STEAMBrace project aims to address the existing gender gap within fields by leveraging the potential of STEAM education. The project seeks to empower future European innovators, with a particular focus on encouraging participation among women. STEAMBrace wants to break boundaries and build bridges – literally – by establishing a European-wide alliance: the STEAM Alliance for Europe.

This project is not just about some run-of-the-mill educational activities, but about bringing together creative thinkers and evidence-based **strategies to create a STEAM education methodology inclusive, sustainable, and socially impactful**. To achieve this thrilling challenge, a diverse consortium of experts (including Cultural and Creative Industries, or CCIs) have teamed up to drive forces in innovation. The **STEAMBrace** project will collaborate with educational institutions and students between 11 and 18 years old to uncover the gaps and limitations in traditional STEM education. From country-specific training activities to empowering young women and rural students, the **STEAMBrace** aim is clear: **to revolutionize STEAM education across Europe**.

Additionally, **STEAMBrace** will establish a **Digital HUB** to facilitate networking among participants, encompassing both students and stakeholders. This platform will serve as a **centralized resource for information** regarding the implementation of STEAM across Europe, **fostering collaboration and knowledge exchange**. In line with this, **two congresses** will be





held on STEAM methodology. And, last but not least, **STEAMBrace** will conduct a **pilot STEAM week at the EU level** to showcase innovative approaches to STEAM education and stimulate further engagement and participation.

Furthermore, the STEAMBrace project is committed to long-term impact and sustainability. We will develop a comprehensive roadmap for annual reproducibility, ensuring that the initiatives and achievements of STEAMBrace endure beyond the project's lifespan. Additionally, there will be provided ongoing training courses and guidelines tailored for teachers and educational managers, equipping them with the necessary tools and knowledge to promote STEAM education effectively across Europe.

A communication challenge

Taking into account all of this, the real challenge with the communication of **STEAMBrace** lies in effectively conveying its innovative and multifaceted approach to a diverse range of stakeholders. This challenge could be subdivided into the following:

- Complexity of concepts: STEAM education involves integrating various disciplines, including science, technology, engineering, arts, and mathematics. Communicating the benefits and intricacies of this approach clearly and concisely to audiences with varying levels of familiarity with these concepts can be challenging.
- Overcoming misconceptions: There may be existing misconceptions or resistance to adopting new educational methodologies like STEAM. Effective communication will involve dispelling myths, providing evidence of the effectiveness of STEAM education, and highlighting its relevance in addressing contemporary challenges.
- Targeting diverse audiences: The project aims to engage multiple stakeholders, including educators, policymakers, students, parents, and industry professionals. Tailoring communication strategies to address the specific interests and needs of each audience group while maintaining a consistent message can be demanding.
- Sustaining engagement: Maintaining stakeholder engagement throughout the project duration and beyond requires ongoing communication efforts. Keeping stakeholders informed, involved, and motivated to contribute to project objectives can be challenging over an extended period.
- Language and cultural barriers: As a European project, communication must navigate language and cultural differences across participating countries. Ensuring that messages are culturally sensitive, linguistically accessible, and resonate with diverse audiences is crucial for effective communication.

Addressing these challenges will require a comprehensive communication strategy that emphasizes clarity, relevance, inclusivity, and sustained engagement across diverse stakeholder groups. All of this information must be transmitted properly through all dedicated





channels, supported by other materials to ease the general public's comprehension. Therefore, the communication plan and strategy will be developed according to Figure 1.

The tools and details in this figure will be **combined** and used properly throughout the project aiming to achieve the maximum visibility for each specific target group.

Along this communication and dissemination plan, strategies, messages, materials, channels, and campaigns will be explained to understand how to address specific audiences and reach the project goals. All projects need strong communication, but



Figure 1. Communication strategy. Main tools

those aiming to reach the general public need to double efforts for their message to impact the maximum number of people.

Addressing the general public is a challenge that **STEAMBrace** can overcome through **strong messages** and **different channels and approaches**. For the most specialized audience, dissemination tools and approaches can be used.

Communication, dissemination, and exploitation: what's the difference?

Before diving into the details of this Communication and Dissemination plan, it's crucial to understand the differences among these three concepts.

	Communication	Dissemination	Exploitation
What is it?	Inform, promote, and communicate activities and results	Make knowledge and results publicly available free-of-charge	Make concrete use of results for commercial, societal, and political purposes
Who's the target?	Citizens, stakeholders, and the media	Audiences who can learn or benefit from the results: scientists, industry, authorities, policymakers, civil society	Audiences who can take the results forward: researchers, stakeholders, industry, authorities, policymakers, civil society
How	A designed strategyClear messagesRight channels	Scientific magazinesConferencesDatabases	Roadmaps, prototypes, softwareSharing knowledge, skills, data
When	From start to end	As soon as results are available Up to 4 years after the end	Towards the end and as long as results are exploitable, at least for 4 years after the end
Why	Engage stakeholdersAttract expertsRaise awareness	Maximize impactContribute to world knowledge	Lead to new legislation or recommendationsHelp to tackle a problemBenefit the society

Table 1. Differences among communication, dissemination, and exploitation. Source EU REA (2023) 1

¹ European Commission, European Research Executive Agency, (2023). Communication, dissemination & exploitation what is the difference and why they all matter, Publications Office of the European Union. https://data.europa.eu/doi/10.2848/289075





2. Objectives:

The general objectives (GOs) of this communication and dissemination plan are as follows:

- G01: Provide a main framework for all communications and dissemination activities, ensuring coherence and giving a strong project image to external stakeholders and target audiences, maximizing the availability, accessibility, and awareness of the project results and the continuation of the STEAM Alliance.
- G02: Engage key stakeholders with a proper transfer of knowledge and results through an appropriate dissemination strategy.
- G03: Ensure that the objectives, activities, and methodologies developed are widely promoted to the target groups defined on a European level and beyond.

To address these GOs, several **Specific Objectives (SOs)** have been defined:

- S01: Increase awareness among stakeholders, including educators, policymakers, students, parents, and industry professionals, about the project's objectives, activities, and potential impact on promoting gender equality and innovation in STEM education.
- S02: Stimulate engagement and participation of stakeholders through clear and accessible communication channels, opportunities for feedback, and involvement in project activities and events.
- S03: Ensure a proper understanding of the STEAM approach and its benefits in fostering interdisciplinary learning, creativity, and innovation among students and educators across Europe.
- S04: Engage stakeholders and increase the number of participants in the STEAM
 Alliance, as well as promote the use of the STEAM digital platform.
- S05: Foster partnerships, collaborations, and knowledge exchange among relevant organizations, institutions, and networks through the STEAM Alliance for Europe.
- S06: Monitor and evaluate the effectiveness of the communication and dissemination activities through metrics control and regular communication among the Communication Board (CB).

Alignment with Horizon Europe objectives

The proposed communication objectives not only address the specific communication needs of STEAMBrace but also strategically align with the broader objectives of Horizon Europe Partnering, emphasizing knowledge dissemination, collaboration, knowledge exchange, and policy impact.

By actively promoting **STEAMBrace**, the communication strategy contributes to creating a broader understanding of the project's significance and its potential implications for sustainable development.





3. Branding:

Every company, institution, and project needs a **recognizable brand** for people to find them. And, also, in order to achieve all the communication objectives and **maximize the project visibility**. To get good branding, there are various elements to take into account.

Name

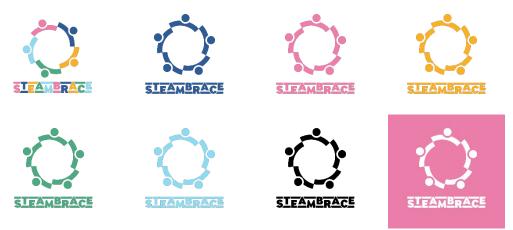
The project's actual name is "European coordination network and activities to embrace a sustainable and inclusive STEAM educational system: the blend of artistic and creative approaches in STEM education, research & innovation". We'll use the **acronym**: STEAMBrace.

Visual identity

The visual identity of the project, like the logo and the name, is the way **STEAMBrace** is presented visually. This is the way to create a first impression on anyone outside the project and, once in contact with it, them to remember it through different tools.

Logo

A logo that "embraces" the union of the different categories represented by each colour. The five colours as a sign of **STEAMBrace**'s identity. Our logo and identity sign are the conjunction of two elements (logotype + isotype). These elements can work in different ways depending on the needs of the elements.



The main version of the logo is vertical (as shown above), but there's also a horizontal version, with the same colour variants:



We can use the logo for decoration and in an iconic way. But officially, the logotype and isotype will always go together and a subtitle can be added.









Colours

These colours have been picked to align with the project logo. All of them must be used in documents, PowerPoint presentations, communication materials, and any communication piece regarding the project. The name and code facilitate the printing process of any communication material.

HEX	RGB	СМҮК	Graphic Colour
#336699	51 102 153	84 56 18 4	
#EB7EAA	235 126 170	2 64 6 0	
#F7B02A	247 176 42	1 35 88 0	
#4CA982	76 169 130	70 8 59 0	
#8FDAEF	143 218 239	46 0 8 0	

Table 2. Colour summary

Typography

These are the **typographies** that will be used in all communication and dissemination materials of the **STEAMBrace** project: Geometos and Roboto.

Logo, products, merchandising, titles	Body text	
GEOMETOS BOLD RG ABCDEFGHIJKLMNOPQRSTUVWXYZ	Aa Roboto Regular ABCDEFGHIJKLMNÑOPQRSTUVWXYZ abcdefqhijklmnñopgrstuvwxyz	
Logo, products, merchandising, titles	Subtitles, emphasis, alt. messages	
GEOMETOS BLACK RG ABCDEFGHIJKLMNOPQRSTUVWXYZ	Roboto Bold ABCDEFGHIJKLMNÑOPQRSTUVWXYZ abcdefghijklmnñopqrstuvwxyz	

Table 3 Typografies summary

For the **deliverables and document templates** in general, we'll use **Arial Nova Condensed**. The main reason is that this typo is preinstalled in most of the computers, so it will be much easier for all the partners to use the templates, rather than installing Geometos and Roboto.

Arial Nova Condensed

Aa Bb Cc Dd Ee Ff Gg Hh Ii Jj Kk Ll Mm Nn Ññ Oo Pp Qq Rr Ss Tt Uu Vv Ww Xx Yy Zz 1234567890 / * - + = $\frac{1}{2}$? $\frac{1}{2}$ " # % & () ; : . , - _ " [] { } \mathbb{C} \mathbb{C} < > ' \mathbb{C} | \mathbb{C} a \ \mathbb{C} \ $\mathbb{$





The **Identity Visual Brandbook** is attached as an annex to this document, with further details about the uses and applications of the logo, resources, etc.

4. Communication and dissemination plan:

Developing a **communication and dissemination strategy** is vital to the success of a Horizon Europe project, especially when it's about a Coordination and Support Action (CSA). Such a strategy serves as a **roadmap** for effectively conveying the project's objectives, outcomes, and innovations to a diverse range of stakeholders. By **maximizing impact** through targeted communication efforts, CSA projects can engage policymakers, educators, researchers, industry professionals, and the general public in their activities. This engagement not only facilitates **knowledge exchange and collaboration** but also enhances the **visibility of the project and its consortium members** within the scientific community and beyond.

Moreover, a robust communication strategy promotes **reproducibility and sustainability** by disseminating best practices, guidelines, and recommendations. This will enable stakeholders to replicate and build upon project results, extending their impact beyond the project's duration.

Additionally, developing a comprehensive communication and dissemination plan is a requirement for Horizon Europe funding programs, demonstrating the project's commitment to transparency, accountability, and knowledge sharing.

Target Audience

The first thing to consider is the **audience** to whom the **STEAMBrace** project will be addressing its materials and messages. Considering and classifying target audiences is essential for ensuring that communication efforts are **tailored**, **prioritized**, **and optimized for maximum impact**.

By identifying primary and secondary audience groups and understanding their interests, needs, and levels of understanding, communication strategies can be customized to address specific concerns and preferences. This increases the likelihood of engagement and participation, fosters a sense of ownership among stakeholders, and ensures that messages resonate with their unique contexts.

Ultimately, targeting audiences strategically enhances the relevance, effectiveness, and reach of communication activities, leading to greater support for the project's goals and initiatives.

The **criteria** used to identify and classify the audience for the **STEAMBrace** project include:

- Relevance: Assessing the relevance of each audience group to the project's objectives, activities, and outcomes. Primary audiences are those directly involved or impacted by the project, while secondary audiences may have indirect but still significant relevance.
- Influence: Considering the level of influence that each audience group holds concerning the project. Primary audiences, such as educators and policymakers, have a direct influence on project implementation and outcomes, while secondary audiences, such as parents and industry professionals, may influence perceptions or provide support.





- Engagement potential: Evaluating the potential for engagement and participation among each audience group. Primary audiences are typically more directly engaged in project activities, while secondary audiences may require targeted efforts to foster engagement and involvement.
- Impact: Assessing the potential impact that effective communication with each audience group could have on project outcomes. Primary audiences, if effectively engaged, can significantly contribute to project success, while secondary audiences may amplify the project's reach and influence.

With these criteria available, we have identified, classified, and described the target audiences of the **STEAMBrace** project as follows:

- Primary Audiences (A1):
 - educators (A1.1): Teachers, instructors, and educational staff involved in STEM education at various levels, including primary, secondary, and vocational schools. Educators play a crucial role in implementing STEAM approaches in classrooms and fostering a supportive learning environment. Engaging educators with communication activities ensures buy-in, adoption, and effective implementation of STEAM education methodologies.
 - Academia (A1.2): Researchers, scholars, and academics involved in STEM and STEAM education research and development. Here we include the STEM academic community, as well as science and technology institutions, such as museums, research centers, or universities. Targeting academia is essential for knowledge exchange, sharing best practices, and advancing the evidence base for STEAM education. Collaboration with academia can enhance the quality and rigor of STEAMBrace's research and contribute to the broader scholarly discourse on STEM and STEAM education.
 - Policymakers (A1.3): Government officials, policymakers, and education administrators responsible for shaping education policies at regional, national, and European levels. This includes the European Commission and other EU Education Platforms, but also education regulatory authorities at national and European levels. Policymakers influence the allocation of resources, curriculum development, and the integration of innovative educational approaches like STEAM into formal education systems. By targeting policymakers, the project can advocate for supportive policies and funding to promote STEAM education initiatives.
 - o End users/Students (A1.4): School-aged children and adolescents, particularly those between the ages of 11 and 18, who are the primary beneficiaries of STEAM education. We must focus particularly on girls and rural students. They are the ultimate recipients of STEAM education, and their engagement and enthusiasm are crucial for its success. By targeting students with communication activities, the





- project can inspire interest in STEM fields, promote creativity and innovation, and empower them to pursue STEAM-related careers.
- Cultural and Creative Industries CCI (A1.5): Professionals and organizations in the
 cultural and creative sectors driving innovation. Targeting CCIs is important as they
 can provide valuable insights into the intersection of arts and sciences, contribute to
 interdisciplinary learning, and offer opportunities for collaboration and real-world
 application of STEAM concepts

Secondary Audiences (A2):

- Parents/Guardians (A2.1): Parents, guardians, and caregivers of school-aged children, who influence their children's educational choices and provide support at home. Parents play a significant role in shaping their children's attitudes toward education and career choices. Engaging parents with communication activities helps to garner their support for STEAM education, address any concerns or misconceptions, and encourage their involvement in supporting their children's learning.
- Industry professionals (A2.2): Professionals working in STEM-related industries, including scientists, engineers, technologists, and innovators. These professionals can provide valuable insights into the relevance of STEAM education to real-world applications and workforce needs. Engaging with industry professionals through communication activities can help bridge the gap between education and industry, facilitate partnerships for experiential learning opportunities, and inspire students by showcasing career pathways in STEM fields.
- O Non-Governmental Organizations (NGOs) and advocacy groups (A2.3): Organizations and groups focused on promoting education, gender equality, and innovation, both at local and international levels. These organizations can serve as allies and advocates for STEAM education initiatives, providing additional resources, expertise, and networks. Engaging with these organizations through communication activities can help amplify the project's message, leverage additional support and resources, and build alliances to advance common goals related to education and gender equality.
- Sister projects (A2.4): Other projects and initiatives in the field of STEM and STEAM education, which may share similar goals or collaborate with STEAMBrace on common objectives. Engaging sister projects allows for knowledge sharing, collaboration, and coordination of efforts to maximize impact and avoid duplication of resources. Collaboration with sister projects can enhance synergies, foster innovation, and contribute to a more cohesive and effective approach to STEAM education.





It is important to address that, depending on the approach, type of information, and objectives, we can also classify these groups in communication and dissemination audiences.

- Communication: it involves everything related to the project, news about all sectors participating in STEAMBrace, and any piece of information that doesn't contain specific non-public data. Disclosure of some data or information about the project and its work packages is desirable to show transparency and expand knowledge, but for scientific and technical data, dissemination tools are available. The main objective of the project communication is for any piece of information to spread as much as possible and to make the project known to as many people as possible. All of the primary audiences that we have listed above belong also to this category. Encouraging children and teenagers to participate and be more actively involved in STEM, as well as pursuing this kind of career will be addressed through different communication (as well as dissemination) actions specifically designed for this purpose, specifically, stressing the need to encourage the vocation towards these careers of girls and young women. To achieve this goal, and since the audiences included here are guite different, all the actions taken, events, materials, etcetera, will adapt their language to be integrative and transversal. Social media, website, promotional material, the different events, press releases, guidelines and recommendations, networking and clustering actions... These are some of the possible tools that will be used in this case.
- Dissemination: the dissemination of the project involves the public disclosure of project-generated results. It is normally addressed to researchers, academia, professionals of different sectors, stakeholders, etc. But dissemination actions with other specific audiences can be performed too, like science weeks for students and the general public, who may be interested in STEAMBrace's results and progress. Open access to scientific publications will be actively pursued so that any audience can download these results from any specific audience. The secondary audiences defined earlier are our dissemination targets, including also de academia (A1.2). The main objectives for this group are to share foreground results, boost the transferability of knowledge, and show the opportunities reached in the project. The project website, de Digital HUB, work evaluation meetings, the STEAM Congresses, and other dissemination events (workshops, trade fairs) and materials (policy recommendations, open-access scientific articles, etc.) are the main tools that will be used for this purpose.

Core values of the project and key messages

Once the audience has been identified, we have to define the core values of the **STEAMBrace** project before developing the specific key messages for each group. We have identified **five core values** for the **STEAMBrace** project:

• Inclusivity: STEAMBrace is committed to fostering an inclusive learning environment that embraces diversity in all its forms. This value emphasizes the importance of providing equal opportunities for all individuals, regardless of gender, ethnicity, socioeconomic background, or geographic location, to engage and excel in STEM and STEAM education.





Inclusivity ensures that all learners feel valued, respected, and empowered to participate fully in educational experiences and opportunities.

- Innovation: STEAMBrace values innovation as a driving force for progress and advancement in STEM and STEAM education. This value emphasizes the importance of creativity, experimentation, and problem-solving in fostering a culture of innovation among learners. By encouraging innovative thinking and approaches, STEAMBrace aims to inspire the next generation of innovators, entrepreneurs, and leaders who will drive positive change and address complex societal challenges.
- Collaboration: Collaboration is a core value of STEAMBrace, highlighting the importance of teamwork, cooperation, and partnership in achieving shared goals and objectives. This value emphasizes the power of collective action and the synergy that arises from bringing together diverse perspectives, expertise, and resources. By fostering collaboration among stakeholders, including educators, policymakers, industry professionals, and community members, STEAMBrace seeks to create a supportive ecosystem that promotes excellence and mutual support in STEM and STEAM education.
- Excellence: STEAMBrace is committed to excellence in all aspects of its work, including research, teaching, outreach, and impact. This value emphasizes the pursuit of high standards, continuous improvement, and the achievement of meaningful outcomes that make a positive difference in the lives of learners and communities. Excellence drives STEAMBrace to strive for the highest levels of quality, rigor, and effectiveness in its programs, initiatives, and partnerships, ensuring that it delivers on its mission to advance STEM and STEAM education for all.
- Empowerment: Empowerment is a core value of STEAMBrace, emphasizing the importance of equipping individuals with the knowledge, skills, and confidence to pursue their passions, overcome challenges, and achieve their full potential. This value underscores the belief that education is a transformative force that empowers learners to become active agents of change in their lives and communities. By fostering a sense of agency, autonomy, and self-efficacy, STEAMBrace aims to empower learners to navigate complex and dynamic environments, make informed decisions, and contribute positively to society. Empowerment lies at the heart of STEAMBrace's commitment to creating a more inclusive, innovative, and equitable future for all.

With so many different audiences to reach, it is important to **distribute the project's core** values among different messages and communicate them **through different channels** with specific communicative goals. These messages reflect:

- Main values of the project defined above.
- The project's evolution.
- The goals that the project aims to achieve.
- The project's gender balance among the consortium.
- The importance of women in STEM.





It is key to follow these items when communicating about the project in all dedicated channels. Considering the target audience groups listed above, we've also identified the key messages of the STEAMBrace communication strategy. That is to say, the idea that we want to communicate to each group:

Audience group	Key message
Educators	Join a collaborative effort to integrate innovative STEAM education approaches, fostering a culture of inclusivity and excellence in teaching and learning.
Academia	Contribute to the advancement of scholarship and practice in STEM and STEAM education, fostering collaboration and innovation to empower the next generation of learners and leaders.
Policymakers	Support evidence-based policies and initiatives that prioritize equitable access to STEAM education, driving societal innovation and empowering future generations.
Students	Explore the exciting world of STEAM education, where creativity meets discovery, and unlock your potential to shape a brighter future for yourself and your community.
CCIs	Embrace interdisciplinary collaboration and innovation at the intersection of arts and sciences, leveraging creativity as a catalyst for societal progress and cultural enrichment.
Parents & guardians	Partner with educators to nurture your child's curiosity and passion for learning, providing support and encouragement for their journey in STEAM education.
Industry professionals	Engage with educational stakeholders to cultivate a skilled and diverse workforce, driving innovation and competitiveness in our industries through partnerships in STEAM education.
NGOs & advocacy groups	Advocate for inclusive and impactful STEAM education initiatives, collaborating with stakeholders to empower learners and advance social equity and innovation.
Sister projects	Collaborate with like-minded initiatives to amplify the impact of STEAM education efforts, fostering knowledge exchange and synergies to drive positive change in education and society.

Table 4. Key messages summary

Channels

To address the targeted audiences with the proper messages, **dedicated channels** are needed, as well as **specific actions** throughout the project.

Social media

Social media are a key part of the communication plan. On the one hand, they are the brand and image of the project towards people who don't participate in the project. On the other hand, they are the main communication window to reach the general public as well as other stakeholders and targeted audiences. They are also useful to:





- Redirect traffic to the STEAMBrace website and raise visitors and page views.
- Create a coherent brand for the project.
- Spread all contents, events, and project activities.
- Serve as the visual channel for the project.

We've chosen **LinkedIn** and **Twitter** as the main social media channels for the project. Both can be valuable, depending on the target audience and communication objectives. LinkedIn is well-suited for engaging with professionals and decision-makers in a professional context, while Twitter offers broader reach, real-time engagement, and opportunities for hashtag campaigns and visual storytelling. Utilizing both platforms strategically can help maximize the project's visibility, engagement, and impact.

We'll also have a **YouTube** channel to upload all the video content that will be developed during the project.

LinkedIn

LinkedIn can serve as a valuable channel for both communication and dissemination of the project. It offers a professional platform tailored for networking and sharing industry-related content, making it suitable for engaging with professionals, educators, policymakers, and industry stakeholders. Through targeted messaging and content sharing, the project team can reach specific audience segments relevant to STEM and STEAM education initiatives, fostering discussions, sharing best practices, and promoting policy developments. LinkedIn also provides opportunities for establishing thought leadership, building credibility, and participating in communities focused on STEM and STEAM education, thus facilitating collaboration and knowledge exchange within the professional community.

Twitter

On the other hand, Twitter can effectively support communication and dissemination efforts, albeit with a different focus and audience compared to LinkedIn. With its real-time nature, Twitter is ideal for sharing timely updates, news, and events related to the project, reaching a diverse user base that includes educators, students, policymakers, NGOs, industry professionals, and the general public. Hashtag campaigns can amplify the project's visibility and engagement, while visual content such as images, videos, and GIFs can enhance storytelling and showcase project activities and achievements.

YouTube

YouTube offers a dynamic and engaging platform for sharing multimedia content, fostering community engagement, and promoting the values and objectives of the **STEAMBrace** project to a diverse audience of learners, educators, policymakers, and stakeholders.

This platform will be also really useful for organizing virtual or hybrid events. For example, to stream the conferences of both congresses.





Project website

The **STEAMBrace** website will be used to provide information to each target group, along with access to public documents, links of interest, social networks, content networks, project newsletters (including a subscription option), information about the Horizon Europe Programme, and other areas of cooperation.

During the project's lifecycle, the website will be regularly updated with public information about **STEAMBrace**'s status and achievements, as well as the public events being organized.

It will include the following sections:

- Landing page (home): General information about the project and the consortium (project overview, partners involved, contact information, etc).
- The project: Here the public can find more detailed information about the project, the work packages, and more information about the project's objectives.
- Knowledge center: This will include all of the public documents (deliverables, scientific publications, videos, presentations, brochures, leaflets, etc.) available for download.
- News: This will be a dynamic section providing information about project events and initiatives. It will be regularly updated when the consortium needs to communicate events and news to external audiences. Also, in this section we'll include blog articles, written by the consortium members, about related topics. Here we'll include a newsletter subscription section.
- Events: This section will remain hidden at the beginning of the project and it will be published once we start launching the first workshops and activities, with a calendar and information about these. Once the 1st STEAM congress is launched, a subcategory will be created with all the related information for this event. The same will be done for the 2nd congress and another one for STEAM Week, in which we will include information about the activities that are going to be developed in each country, social media and educational materials, a toolkit to participate, a calendar, and other type of interesting materials.
- STEAM digital HUB: To be developed by the project's partner AIJU, it will contain all the digital segments required for the project and the STEAM Alliance.

The STEAMBrace website will be accessible. This means that it must follow the international standards from the Web Accessibility Initiative (WAI)². Web accessibility standards are essential guidelines for enforcing inclusiveness in the web development process. These standards refer to the globally recognized **Web Content Accessibility Guidelines (WCAG)** of the World Wide Web Consortium (W3C). The WCAG comprises four principles known as POUR: Perceptible, Operable, Understandable, and Robust.

² Initiative, W. W. A. (n.d.). Accessibility principles. Web Accessibility Initiative (WAI). https://www.w3.org/WAI/fundamentals/accessibility-principles/





Project's newsletter

Aimed at a wide range of audiences, the newsletter will be a useful tool that will provide a regular and structured channel to engage with stakeholders, share updates, and highlight key achievements and activities. It's the perfect channel to establish more direct and personalized communication with your audiences.

The structure of the newsletter should be flexible, with some sections that might remain present every time it's sent and others that could appear or not depending on the communication needs. For example, the most complete version could include:

- Introduction: A brief introduction welcoming readers to the newsletter and providing an overview of its contents.
- Project updates: This section could feature updates on project activities, milestones, and achievements since the last newsletter. It could include highlights of recent events, progress on research initiatives, and any noteworthy collaborations or partnerships.
- Featured content: This section could showcase in-depth articles, interviews, or case studies related to STEAM education. It could include insights from project team members, guest contributors, or external experts, offering valuable perspectives and knowledge to the audience.
- Upcoming events: This section could provide information on upcoming events, such as webinars, workshops, or conferences, organized by the STEAMBrace project or its partners. It could include details on how to register or participate, ensuring stakeholders are informed and able to engage with relevant activities.
- Resources and tools: This section could highlight useful resources, tools, or publications related to STEM and STEAM education that the public could find on our webpage (public deliverables, brochures, posters, toolkits, educational materials...) or other resources that could be useful in general (research papers, online courses...).
- Community spotlight: This section could feature stories or testimonials from members of the STEAMBrace community, including educators, students, policymakers, and industry professionals. It could showcase their experiences, achievements, and contributions to STEM and STEAM education, fostering a sense of community and collaboration.
- Contact information: The project team's websites, e-mail addresses, social media profiles, and other relevant contact data, encouraging readers to reach out with inquiries or to get involved in project activities.

Communication materials

Communication materials will be designed during the project's lifetime to be used by partners when necessary and sometimes to be used as engagement tools for targeted audiences. CTA, as leader of WP7, is responsible for the creation of all communication material, but all partners are allowed to produce their own, always respecting the branding, visual identity, and core project values, and always asking CTA for supervision and/or approval.





The main communication materials are:

- **Brochure**: for general communication of the project targets and showing the main objectives, expected outcomes, partners, and regions involved. Useful for conferences and presential events, meetings with stakeholders, etc.
- Leaflet: a single sheet (one or two pages). Unlike the brochure, which will include much more general information, the leaflet will be focused on more defined audiences, objectives, or moments and will be designed to be printed as well as disseminated through digital media. It will act as a letter of introduction, for example, when building bridges with organizations that we want to join the STEAM Alliance for Europe.
- Posters: to increase the visibility of both the project and its partners.
- Social media toolkit: To facilitate the dissemination of information about STEAMBrace (type of activity, dates, encourage participation or attendance, dissemination of objectives, etc.) by speakers and participants of the conferences, STEAM Week, and other activities of the project, as well as by members of the STEAM Alliance for Europe, a user guide or manual will be created. It will include a set of guidelines with clear information about what they have to tell in their channels, how to tell it, dates and relevant information, etc. This document is designed to unify the messages that will be delivered and to ensure that our "preachers" are delivering our message correctly.
- A general PowerPoint presentation: updated regularly. It should be used in conferences
 and external events where partners are participating and should help them explain the
 project and how it is developing.
- **Roll-up:** for general communication of the project targets and showing the main objectives, expected outcomes, partners, and regions involved.
- Videos: explanatory videos will be made, showing the achievements of the project and lessons learned. Also, interviews with partners, experts, testimonials, and other kinds of materials, depending on the communication campaigns that will be developed during the project. The target audience will be end-users and policymakers. The videos will be promoted via social media and events (e.g., workshops).
 - To show the project's results, there will be developed at least 4 video-documentaries
 of 10 minutes, explaining the outcomes obtained.
 - Also, to quickly show the project's progress and promote events and video documentaries, there will be developed about 35 1-minute videos (shorts).
 - It's also expected to develop video-instructions and a handbook for educators for performing the STEAM week activities, and the training activities, in schools and ST institutions.





The communication materials and documents will be adapted in terms of accessibility to be readable by voice assistants. This will be pursued by heading levels, bullet points for lists, sections, and identifying documents' language. Charts and graphics should be identified, and they'll have alternative text when needed. Digital materials should include alternative texts for image description. When e-mailing some of these, we'll avoid using image files (PNG, JPG...) since they're not readable. Regarding videos, they should be subtitled, at least in English.

Accessibility is crucial for ensuring that the communication of the project reaches and engages with all stakeholders, including those with disabilities, fostering inclusivity and ensuring equal access to information and resources.

Press releases

It is foreseen that at least 4 press releases will be produced and disseminated during the development of the **STEAMBrace** project. It is recommended that the partners have a database of general media contacts at a national and regional level, but also specialized in STEAM education, the STEM industry, R+D+i, Horizon projects, education, etc.

These press releases will also be shared as news on the project website and will be uploaded in the communication resources section. The press releases will be created in English and will be translated into the consortium languages (Italian, Spanish, Swedish, Portuguese, Romanian, and Croatian).

At least it will be produced 1 press release (PR) for the kick-off meeting and another 3, one per each year of the project's duration. Nevertheless, it is highly recommended to produce and disseminate a newsletter for communicating milestones and events. For example, for the STEAM congresses, one should be sent to announce them and another one to communicate their outcomes and impact. The same for STEAM Week.

As far as the dissemination and dispatch of press releases is concerned, these will be uploaded in the languages of the consortium on the website, and will also be published as news on the website. Otherwise, **the Communication Board will coordinate to send the PRs to its databases or contact lists** of specialized, generalist, national, regional, local, and European press contacts where possible.

The following chart reflects these PRs. This list will be updated throughout the project to include the dates on which these will be sent out, as well as any others that may be added as **STEAMBrace** develops.

N° PR	Month	Date
PR1. STEAMBrace KoM	M2	Feb. ' 24
PR2. STEAMBrace presentation + STEAM Alliance	M5	May '24
PR3. Digital HUB launched	M6	June '24
PR4. STEAM Week announcement		
PR5. STEAM Week celebration + outcomes		
PR6. 1st STEAM Congress for stakeholders announcement		
PR7. 1st STEAM Congress for stakeholders celebration + outcomes		
PR8. 2 nd STEAM Congress for stakeholders announcement		





Nº PR	Month	Date
PR9. 2 nd STEAM Congress for stakeholders celebration + outcomes		
PR10. 2 nd year		
PR11.3 rd year		
PR12. 4 th year		

Table 5 Summary of press releases

5. Management of the communication and dissemination:

CTA is the leader of the WP7 and coordinates the actions and processes with the inputs of the rest of the members of the consortium. Additionally, some specific procedures will be designed to organize, in an effective way, the external communication, the generation of content on the website, the social media work, the review of communication and dissemination materials, and the information and reporting about the participation in events.

With the main aim of **attracting and establishing a STEAMBrace community** around our stakeholders and the general public, an online communication strategy has been established with three main pillars:

- The STEAMBrace website will be permanently updated through the section on news and events.
- Social media and newsletters will be used to share the advances about the project included in the website and attract visitors and users. Specific calls to action will be published to measure engagement and achieve all communication objectives.
- Search Engine Optimization (SEO) techniques will be used to obtain a good positioning
 of the website on Internet browsers.

Editorial calendar and content contributions

To ensure partners' participation in the communication activities, an **editorial calendar** (available <u>here</u>) will be provided by CTA. This document will be available online so the consortium can edit and follow the changes, scheduled posts/campaigns, etcetera.

The main objective of this action is to maintain a constant flow of content on the project's website. To achieve this, **one article must be published each month**. Partners must send their contributions within the agreed deadlines, which will be reflected in the calendar. This content will also be helpful for brochures, leaflets, posters, infographics, or even press releases.

This Excel file has multiple sheets:

- Yearly calendar. As its name says, it's the calendar for the current year. At the top of the sheet, partners can see the Month number (M1, M2, M3...) and some important highlights.
- Topics and suggestions. Here are some ideas for writing blog articles to ensure we don't repeat the same.
- Scheduled articles. Once it's decided who will write an article and when it should be published, it will be registered in this sheet to track them easily.





• **Blog articles created**. This one is just for tracking who is contributing to articles and content creation, to make sure that we do an equitable distribution of efforts.

Organizing or participating in events

The events are the heart of the **STEAMBrace** project. Two **STEAM congresses** will be organized (M14 and M26, WITEC and ATRV coordinate), as well as the **STEAM week for future women innovators** (M26, led by EDE). This type of events will have their own communication strategies, which will be developed along with the leaders of these tasks.

Those strategies will include the development of press releases, special social media campaigns, newsletters, and other communication materials *ad hoc* (roll-ups, posters, leaflets...). Both the congresses and the STEAM week, as mentioned previously, will have a dedicated section on the website of the STEAMBrace project, in which people will be able to find all the information regarding them.

Also, in every Horizon Europe project, events are **one of the most important parts of the dissemination and communication strategy** because they allow the project members and the project to connect with stakeholders and the general public, encourage networking, and show the most important advances and results of the project. **Events also feed content to the communication channels** and tools (website, social media, press releases) generating great impacts on different audiences. They can be in-person events, hybrid, webinars, or any kind of dissemination activity that the consortium considers.

The participation of partners in events will be made visible through the **STEAMBrace** website and social media channels contributing to increasing the community of stakeholders and public interest in the project.

General and technical presentations of **STEAMBrace** will be showcased in face-to-face interactions with stakeholders when possible. **CTA and EDE**, as project coordinator, **will actively look for events**, **conferences**, **and opportunities** for all members to attend to network, enrich the project, and spread knowledge about it. If any member finds interesting events to attend, it would be useful to communicate it beforehand, so EDE can evaluate if it's worth the effort and CTA can promote it in all dedicated channels.

Scientific publications

It is expected that the project will develop several results from some of the work packages and they will be **addressed to different key communities**. The publications will be made freely and openly available via an online repository. Before publishing any scientific publication, the **STEAMBrace** partner involved will contact the whole consortium for revision and validation of the publication 45 days in advance (this can be changed if requested).

Workshops

These sessions will be organized with local stakeholders and different targeted audiences depending on the specific topic. As the project evolves, different workshops and actions will be organized with various groups of interesting audiences.





Communication board

To facilitate the management of the communication tasks and activities, as well as the communication between the different project partners, a **communication board** (CB, from now on) will be set up, composed of **one representative from each organization**.

This person will be responsible for attending the CB meetings, checking that the reporting document is being updated, and transmitting to his/her organization the decisions taken about the communication of the project. **One meeting per month will be held during the first 6 months** after the delivery of this communication plan. From the 6th month onwards, it will be decided, by mutual agreement between the members of the BC, whether to maintain the same frequency or to modify it.

Every 6 months, this communication plan will be subject to a periodic review by the members of this committee. The aim is to update the document and include all the campaigns and strategies that are developed, as well as to plan others in the future and to monitor the KPIs that are defined.

CB members are responsible for dispatching and disseminating the project's PR, materials, articles, newsletters... through their contacts and channels. They must also report all of the communication and dissemination activities that their organization carries out.

Website

CTA is responsible for the management of the website and will **update regularly** (at least once a month) the **STEAMBrace** website with news and events. **CTA will request information from the partners** to prepare the news. This kind of content will be registered and scheduled through the editorial calendar mentioned previously.

The **events** to which **STEAMBrace** partners are attending **have to be promoted** through the website and also from social media. To do so, partners need to inform CTA beforehand so news can be published. **Members of the consortium are requested to promote** press releases, offer information to create posts on the website, and other content and materials through their own communication tools and channels: website, social media profiles, newsletters, etc.

They are requested, too, to **provide CTA with photos to upload to every information piece** of the website. For the follow-up of the website, **analytic tools will be used**. These tools will give information regarding the number of visitors, countries, type of business, and so on. Reports will be prepared and analyzed yearly with the consortium.

Social media channels

CTA will mainly manage the social media accounts, but all partners can prepare and send information to CTA to share interesting information and posts. All contents will be published in English. However, retweets can come from tweets in other languages.

All partners should **follow STEAMBrace's** social media accounts with their personal and/or institutional accounts and they should **share** the project's social media accounts with their





contacts to **create an online network** through different platforms. **STEAMBrace** website links to the social media accounts as well as the social media accounts link to the website.

Communication campaigns

In some moments of the project, it is important to communicate **STEAMBrace** findings, evolution, or milestones with special emphasis. **That is when communication campaigns are necessary to spread the message further**. These campaigns may include:

- Press releases.
- Publications in online and printed media.
- Special social media campaigns.
- Promotion of events and workshops.

These campaigns will be carried out in specific moments of the project and **will require specific tools and strategies to succeed** and reach as many people as possible or achieve specific campaign goals.

Below we detail the steps necessary to properly communicate the different types of project milestones.

Deliverables' campaigns

Every time we finish a public (PU) deliverable that can be interesting for our audience, we will develop a series of communication activities that will help us to communicate and disseminate these results.

- 1. **Upload the document to the webpage**. Leading partners will provide the PDF final documents to the communication manager of the project (Contactica, CTA), and we will upload this file to the project's website ("Knowledge Center" section).
- 2. Provide information about this deliverable. The communication manager (CTA) will ask the WP/task leader (or the member of the CB to write a few lines, an abstract, or similar about the deliverable. We will prepare an article that will be published in our news section. The leader of the deliverable must provide:
 - a. A summary of its contents and significance
 - Insights into the development process and key findings
 - c. Visual materials, such as infographics or charts, so we can produce engaging and social media-friendly materials. Graphics and other type of materials can also be asked to create other types of contents for social media, presentations, brochures, or leaflets, i.e.
 - d. A brief explanation about the correlation with other deliverables, tasks, or work packages, when relevant.





From this information, the communication manager will generate news, blog articles, social media posts, and other materials that will be used both to launch the deliverable and to provide fluent content for **STEAMBrace**'s social media in the upcoming months.

3. Share the deliverable, news, and related content in your organization's profiles. Let us not forget to ask the communication managers of our companies or organizations to echo these deliverables whenever possible.

Some of these deliverables don't have to follow the whole campaign as described – they must be just uploaded to the webpage.

Work packages' campaigns

To keep track of the development of the project, we will share the most important developments as the **STEAMBrace** work packages (and their tasks) are initiated and completed. In this case, each leader of the WP must report to the communication manager (Contactica) the following information:

- 1. **Brief description of the work package**: when did it begin, when is expected to end, who leads and who participates in its development, what does it consist of, expected results.
- 2. **Outcome of the work package**: what discoveries were made, what problems were detected, what solutions were proposed...
- 3. **Relation with other work packages**: will the results of this WP be an essential input in another WP? Or will its outputs be necessary to develop another one? According to the results obtained, what are the expected findings?
- 4. **Public deliverables** that have been (or have to be) published.
- 5. **Pictures, infographics, charts...** Any graphic or audiovisual materials that are generated during the development of the WP.

For this type of campaign, we will use the following tools:

- Social media posts (in which we can also include the rest of the tools)
 - Infographics
 - Brochures/leaflets
 - Videos
- News article for the webpage
- Webinars with stakeholders
- Newsletter (it will include the news, latest blog articles, links to videos, links to deliverables...)





Meetings

When celebrating any kind of **project meeting** (General Assemblies and others, especially those that will be presential), we will share them. For this purpose, we'll generate the following materials:

- 1. Webpage news article: when, where, who hosted, what topics were treated, what are the outcomes of the meeting...
- 2. Social media post: a summary of the news item that acts as a hook for the reader to visit the website and read the full article, download related materials, and so on.
- 3. Compilation of photos or a summary video: to illustrate both the article and the social media posts.

All of these will be shared through **STEAMBrace's** channels, but partners must also disseminate this through their media.

Newsletters' campaigns

We should share **at least 10 newsletters** during the development of the project. Before launching the first one, is very important that we compile a database to whom we can send it. For this purpose, our webpage has a pop-up form so people can subscribe when they visit the webpage.

All partners should encourage their audiences to subscribe to the **STEAMBrace** newsletter. To ease this task, a landing page for subscribing to the newsletter will be created. This way, we can share a link in which people will always be able to join the list (since the pop-up won't show every time you visit the webpage).

Reporting communication and dissemination activities

CTA also must **collect all project communication impacts**, **readjust** the communication plan when needed, **and report** to the rest of the consortium. **This task, though, is also a collaborative one**, and all project members are requested to share information of interest to CTA.

For this purpose, CTA will provide an online Excel document, available in the project's Google Drive, in which partners can record their communication and dissemination activities (attendance to fairs and congresses, participation in seminars and workshops, publication of articles, publications in social networks, and others). CTA will send a reminder periodically, but it is the responsibility of each partner to register their C&D activities.

Support of the European Research Executive Agency (REA)

The support to the **STEAMBrace** project by the European Union must be recognized in all the dissemination and communication tools and materials. Any communication and dissemination of results (in any form, including electronic) must:

a) display the EU flag and the text Funded by the European Union. You can download them here.





b) include the following text: Funded by the European Union - European Innovation Council - STEAMBrace project - Grant Agreement nr. 101132652. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Innovation Council. Neither the European Union nor the granting authority can be held responsible for them

6. Evaluation process: Key Performance Indicators (KPIs)

CTA coordinates the Communication and Dissemination Plan of STEAMBrace and its activities with the involvement of all the members of the consortium. Each partner will make use of its communication tools and channels, networks, and collaboration to reach the stakeholders of the project and build the STEAMBrace community.

CTA compiles all the information about the events attended, upcoming events, other networking, and collaborative activities, as well as the impacts on media.

Activity	Indicators	Target	Schedule/Frequency
Website	Visits	<u>7.000</u>	M6-36
Social media	Followers on each channel	Twitter <u>200</u> LinkedIn <u>200</u>	M1-M36
Newsletter	Newsletters sent Newsletter subscribers	<u>10</u> ≥ 150	M6-M36. Every 6 months
Press releases	Press releases developed	<u>4</u>	Yearly
Videos	1 min. Videos (shorts) Visualizations of shorts Video-documentaries Video-doc. reproductions	≥ 35 ≥35000 ≥ 4 ≥ 2000	1 short per month; ≥1000 reproductions per short First video-doc by M6, next every 9 months.
Brochure	Brochures handed or downloaded	≥ 500 // ≥ 2000	M6 - First version M32
Scientific publications	Published in open-access	≥ 5	By M36
STEAM congresses	STEAM Congr. organized	<u>2</u>	Until M36
Pilot STEAM Week	STEAM Week organized	<u>1</u>	Until M36
Conferences	Conference presentations Conference attendance	<u>10</u> <u>4</u>	Ву М36

Table 6 Communication & Dissemination KPIs

7. Open-access dissemination:

Open access (OA) refers to the practice of providing online access to scientific information that is free of charge to the end-user and reusable. 'Scientific' refers to all academic disciplines. In the context of research and innovation, 'scientific information' can mean:

Peer-reviewed scientific research articles (published in scholarly journals).





Research data (data underlying publications, curated data, and/or raw data).

Peer-reviewed scientific research articles

Open access to scientific publications means free online access for any user. Although there are no legally binding definitions of 'access' or 'open access' in this context, authoritative definitions of open access appear in key political declarations including:

- The 2002 Budapest Declaration
- The 2003 Berlin Declaration

Under these definitions, 'access' includes not only basic elements - the right to read, download, and print – but also **the right to copy, distribute**, **search**, **link**, **crawl**, **and mine**.

The 2 main routes to open access are:

- Self-archiving / 'green' open access the author, or a representative, archives (deposits) the published article or the final peer-reviewed manuscript in an online repository before, at the same time as, or after publication. Some publishers request that open access be granted only after an embargo period has elapsed.
- Open access publishing / 'gold' open access an article is immediately published in open access mode. In this model, the payment of publication costs is shifted away from subscribing readers. The most common business model is based on one-off payments by authors. These costs, often referred to as Article Processing Charges (APCs) are usually borne by the researcher's university or research institute or the agency funding the research. In other cases, the costs of open-access publishing are covered by subsidies or other funding models.

In the context of research funding, open access requirements do not imply an obligation to publish results. The decision to publish is entirely up to the grant beneficiaries. Open access becomes an issue *only if* publication is chosen as a means of dissemination.

Moreover, open access does not affect the decision to exploit research results commercially, e.g. through patenting. The decision on whether to publish through open access must come after the more general decision on whether to publish directly or to first seek protection.

Open access to research data

Open access to **research data** refers to the right to access and reuse digital research data under the terms and conditions set out in the Grant Agreement.

Research data refers to **information**, in particular facts or numbers, collected to be examined and considered as a basis for reasoning, discussion, or calculation.

In a research context, examples of data include statistics, results of experiments, measurements, observations resulting from fieldwork, survey results, interview recordings, and images. **The focus is on research data that is available in digital form.**





Users can normally access, mine, exploit, reproduce, and disseminate openly accessible research data free of charge.

Mandate on open access to publications

Each beneficiary must ensure open access to all peer-reviewed scientific publications relating to its results.

To meet this requirement, beneficiaries must, at the very least, **ensure that any scientific peer-reviewed publications can be read online, downloaded, and printed**. Since any further rights - such as the right to copy, distribute, search, link, crawl, and mine - make publications more useful, beneficiaries should make every effort to provide as many of these options as possible.

Peer-reviewed publications are **those assessed by other scholars**. Peer review is typically, though not exclusively, organised by the journal or publisher to which an article or manuscript is submitted. However, new approaches are expected to become more prevalent in years to come. The dominant type of scientific publication is the journal article. Grant beneficiaries are also strongly encouraged to provide open access to other types of scientific publications including:

- monographs
- books
- conference proceedings
- grey literature (informally published written material not controlled by scientific publishers, e.g., reports)

The open-access mandate comprises 2 steps:

- 1. depositing publications in repositories
- 2. providing open access to them.