embrace

pan-European Management of Biological toxin incidents through standaRdisAtion initiatives for Crisis response Enhancement

D8.1
Visibility Strategy & Plan

Funded by the European Union

EMBRACE is funded by the European Union's Horizon Europe Research and Innovation funding programme, Grant Agreement N° 101168322.

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Lead beneficiary	LC
Status	Submitted
Version	1.0
Due Date	31/03/2025
Delivery Date	24/03/2025
Dissemination Level	Dissemination Level
Work Package	WP8. Valorisation, Sustainability and Foresight
Task	T8.2 Visibility (Communication, Dissemination)
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Language	English
Format	.pdf
Keywords	stakeholder engagement; communication strategy; dissemination plan; sustainability; biotoxin resilience; EU policy alignment.
Abstract	The EMBRACE Visibility Strategy & Plan defines a structured approach for stakeholder engagement, communication, dissemination, and sustainability. It identifies key audiences, outlines tailored strategies, and details communication tools such as newsletters, events, and publications. The plan ensures long-term impact, aligning with EU policies and evolving based on feedback.
Referencing this document	EMBRACE_D8.1 Visibility Strategy & Plan_LC_Version_1.0

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Revision history

Version	Date	Partner	Description / Modification
0.1	06/01/2025	LC, RAN	Table of Contents
0.5	03/03/2025	LC, RAN	First draft
0.6	10/03/2025	ARC	Review of first draft
0.7	17/03/2025	LC, TEL, IANUS	Second draft
0.8	19/03/2025	ARC, TEL	Review of second draft
0.9	20/03/2025	LC	Final draft
1.0	24/03/2025	LC	Complete deliverable

Glossary of Terms

EMBRACE maintains a central glossary of terms on its website here: https://embracebiotoxhub.eu/glossary/.

This Deliverable relies on the terminology and definitions referenced in version 01 of the Glossary of terms unless stated otherwise within the text.

EXECUTIVE SUMMARY

This deliverable outlines the Visibility Strategy & Plan for the EMBRACE project, establishing a structured approach for stakeholder engagement, communication, dissemination, and sustainability. The strategy aims to ensure EMBRACE effectively reaches and engages key audiences, while laying the groundwork for long-term impact beyond the project's duration. Key objectives include defining the roles and responsibilities of consortium partners, identifying target groups, and tailoring engagement strategies for stakeholders such as policymakers, responder organisations, CBRN professionals, the scientific community, and the general public.

The document details the tools and channels that will be used for communication and dissemination, including newsletters, the EMBRACE website and blog, scientific publications, and participation in third-party events. Special efforts will be made to target specific audiences, including policymakers, industry, academia, and the wider public, as well as leveraging synergies with related initiatives such as the Crisis Management Innovation Network Europe (CMINE). Engagement with critical platforms like the Biotoxin Reference and Stakeholder Hub (BRSH) will be integral for knowledge exchange and responder engagement.

To ensure the project's long-term sustainability, the strategy incorporates proactive exploitation planning, addressing both challenges and opportunities to ensure EMBRACE's findings reach the right stakeholders. The project's alignment with EU policy frameworks strengthens its relevance within the broader landscape of biotoxin resilience and crisis management. Additionally, the branding strategy will ensure consistency in EMBRACE's external communications, bolstering its professional image and fostering trust among stakeholders.

At the time of delivery, EMBRACE is in the awareness phase, with communication efforts focused on social media and scientific outreach. The strategy is a living document, set to evolve based on feedback and engagement outcomes. Future iterations will refine the approach, ensuring EMBRACE's continued relevance and impact beyond the project's lifespan.

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1 INTRODUCTION

This deliverable sets out the Visibility Strategy & Plan for the EMBRACE project, providing a structured approach to stakeholder engagement, communication, dissemination, and sustainability. As outlined in the Grant Agreement (GA), this strategy ensures that EMBRACE effectively reaches and engages its key audiences while laying the foundation for long-term impact beyond the project's duration.

The document begins by defining the objectives and key implementation steps, outlining the overarching goals of the visibility strategy and the essential steps required for its successful execution. To measure progress, a framework for monitoring and key performance indicators is established, incorporating a dissemination and communication timeline, risk assessment, and immediate next steps.

A critical component of the strategy is identifying key target groups and stakeholders, ensuring that engagement efforts are tailored to the needs of policymakers, responder organisations, CBRN professionals, the scientific community, and the general public. This section also introduces personas to refine communication approaches. The roles and responsibilities of the consortium partners are then clarified, ensuring a coordinated and effective outreach strategy.

The deliverable further details the communication and dissemination tools and channels that will be employed, including digital templates, newsletters, the EMBRACE website and blog, scientific publications, project announcements, project videos, including from the realisation of the Field Trails if possible, and participation in third-party events. Specific efforts will be directed at targeted dissemination, including engagement with policymakers, industry, academia, and the general public, as well as leveraging synergies with CMINE and related initiatives. The strategy also highlights the Biotoxin Knowledge Network (BKN) and the Biotoxin Task Force (BTF) as critical mechanisms for responder engagement and knowledge exchange.

To ensure the long-term impact of the project, a proactive exploitation planning approach is outlined, addressing challenges, opportunities, and early-stage actions to support sustainability. EMBRACE is also positioned within the broader EU policy agenda, aligning its work with existing frameworks and strategic priorities.

Finally, the deliverable defines the EMBRACE branding strategy, covering key elements such as the logo, website, and visual identity to ensure consistency and professionalism in external communications. The document concludes by summarising key takeaways and outlining the next steps. Additional annexes provide further details, including a stakeholder list, a list of events, and publication outlets.

This deliverable serves as the initial foundation for the visibility and dissemination efforts of EMBRACE. While it establishes key objectives, implementation steps, and tools, it is designed as a living document, subject to regular updates as the project evolves. Future iterations will refine the strategy based on engagement outcomes, stakeholder feedback, and external developments, ensuring that EMBRACE remains at the forefront of biotoxin resilience research and policy.

2 OBJECTIVES AND KEY IMPLEMENTATION STEPS

The objectives of this deliverable are grounded in the Grant Agreement (GA) and align with EMBRACE's overarching mission to enhance crisis management capabilities, particularly in the context of biotoxin events.

This document will encompass the following:

- Strategy for stakeholder community building
- Strategy for publicising EMBRACE
- Dissemination and Communication plans, including:
    - the "Guide to Surviving a Biotoxin Event" – a product of Task 8.2 of the project,
    - and Media briefing pack. [1]

At its core, this deliverable provides a comprehensive Visibility Strategy, Dissemination, and Communication Plan that ensures effective engagement with key stakeholders, maximises the project's reach, and supports the long-term sustainability of its outputs. To achieve these objectives, EMBRACE will adopt a multifaceted approach, leveraging a range of communication channels and targeted dissemination activities to connect with diverse audiences. The strategy differentiates its outreach efforts based on the specific needs of researchers, responder organisations, forensic laboratories, policymakers, and the general public, ensuring that each group receives information that is both relevant and accessible.

A key aspect of this tailored engagement is the production of public-facing resources, including the "Guide to Surviving a Biotoxin Event", which aims to enhance public literacy on biotoxin risks, and a Media Briefing Pack designed to provide journalists with accurate and comprehensive information on biotoxin-related crises. These materials will be made available via the Biotoxin Reference and Stakeholder Hub (BRSH) and the EMBRACE website.

The BRSH serves as a central knowledge exchange platform, providing an interactive space for stakeholder engagement, resource sharing, and expert collaboration. A dedicated section will be allocated for responder organisations to discuss findings, provide feedback, and exchange ideas, ensuring that end users are actively involved in shaping project outcomes. To further support engagement, a budget allocation will be reserved for activities that directly address the needs and expectations of end users. Opportunities will be sought to exploit the broader Stakeholder environment being created by partner projects including PARATUS [2], PEERS [3], EUROBIOTOX [4], and HOLOZCAN [5]. The emerging Disaster Risk Stakeholder Hub [6] will be investigated for this.

In line with EMBRACE's commitment to Open Science, the dissemination strategy will prioritise transparency and accessibility. Project findings will be shared widely through open-access publications, scientific articles, and news updates, ensuring that the latest developments are readily available to the broader research and policy community. Regular updates will be provided via the EMBRACE website and the BRSH, keeping stakeholders informed of new publications, results, and upcoming events.

The communication plan will be structured around a set of highly targeted activities, designed to optimise impact and engagement. This includes:

- Collaboration with other EU-funded projects and initiatives, fostering synergies and knowledge exchange.
- Strategic use of social media and digital platforms, ensuring a consistent and professional online presence.
- Participation in thematic workshops, conferences, and training sessions, engaging both internal project partners and external stakeholders.
- Proactive media outreach, ensuring that key project insights are disseminated through trusted journalistic sources.

3 MONITORING AND KEY PERFORMANCE INDICATORS

The GA assigns clear and ambitions key performance indicators (KPIs) to the objectives of EMBRACE's Visibility Strategy, Dissemination, and Communication Plan [7], which are summarised in the table below.

Communication Tool	KPIs	End Project Target
Website	No. of visitors	5000 unique visitors
Website	Visitor location	All EU member states
Social Media	No. of followers	2000+ followers
Social Media	No. of interactions	5000 interactions
Newsletters	Number of sign-ups	200 registrations
Newsletters	Average click rate for actions	60% opening rate
Events	No. of events participated	50+ events
Events	No. of new contacts	2500+ participants
Publications	No. of papers	10 publications
Organisation of workshops & events	No. of events organised	6+ informative session; 3+ workshops, 3+ webinars, 1 final event; 3 policy events
Organisation of workshops & events	No. of participants	500+ participants
Multimedia videos/podcasts	No. of views	150+ views

Table 1. KPIs

To ensure regular updates on the progress of those targets, all project partners will update a shared repository with their relevant action. Overview of the progress will be discussed during the online monthly progress meetings and the biannual consortium meetings.

3.1 Dissemination and communication timeline

Dissemination activities within EMBRACE are structured into three key phases to ensure a strategic and impactful approach to stakeholder engagement, visibility, and sustainability. The Awareness Phase, covering the first year of the project (M1–M12), focuses on establishing EMBRACE's identity and laying the groundwork for effective dissemination. This includes the development of core branding elements such as the project logo, information leaflet, website, templates, and other communication materials. Additionally, each Key Exploitable Result (KER) is being assessed to inform the development of a targeted dissemination strategy, which will be reviewed and updated annually to align with evolving audience needs. A key priority of this phase is community-building through workshops and high-profile online and in-person events, designed to introduce EMBRACE's vision,

goals, and positioning. These activities also support the formation of the Biotoxin Task Force (BTF), a specialised expert group within the EMBRACE network. At this stage, liaison efforts with relevant standards committees are underway to establish structured communication channels and ensure alignment with existing policies and frameworks. As the project is currently in M6, it is at the midpoint of the Awareness Phase, with key dissemination activities, which will be further elaborated in Chapter 6, actively in progress.

Moving into the Delivery Phase (M12–M24), the focus will shift towards the execution of targeted scientific and commercial dissemination efforts. Scientific dissemination will centre on presenting EMBRACE's innovative approach, key findings, and technological advancements at conferences and workshops, ensuring visibility within the research and professional communities. Alongside this, commercial and policy-oriented dissemination activities will engage industry stakeholders, research clusters, and other EU-funded initiatives to identify synergies and collaboration opportunities. A crucial aspect of this phase will be direct engagement with end users, gathering valuable feedback to refine and optimise the solutions developed within EMBRACE.

The final stage, the Finalisation Phase, will commence in the last year of the project (M24) and extend beyond its completion, with a strong emphasis on ensuring the exploitation and sustainability of EMBRACE's outputs. During this phase, partners will actively contribute to the dissemination and commercialisation strategy by participating in industry events, conferences, and business meetings to promote the project's results. These efforts will reinforce connections with policymakers, industry professionals, and the broader research community, ensuring that EMBRACE's findings continue to inform crisis management and biotoxin resilience efforts well beyond the project's duration.

3.2 Risks and mitigating actions

An updated (with respect to the proposal) list of risks and mitigation actions related to the Visibility Plan is provided in the table below.

Risk	Rating	Mitigation
Not meeting task deadlines, KPIs or quality requirements	Medium	Agile project management principles, peer review of results and periodic progress review calls to mitigate risk / LC, RAN TEL
The dissemination of the project results is not sufficient to create an impact. The project will not achieve the planned impact and subsequent exploitation	Low	The dissemination plan will catch users as project sentinels in order to contribute to the dissemination of the results, emphasising the planned impact.

Table 2. Risks and mitigating actions

3.3 Immediate next steps

A list of immediate next steps for the communication and dissemination of the project during the rest of the Awareness Phase (M6-M12) is provided in the table below.

Activity	Responsible Partner	Timeline
Validation of the editorial plan	All partners (LC to lead)	M6
Organisation of the first external workshop	DCNA	M7
Presence in external events	All partners	M6-onwards
Deployment of the first newsletter	LC	M9
Preparation for the launch of the BTF	All partners (RAN to lead)	M6-M13
Preparation for the EMBRACE scientific symposium	VER	M6-M13

Table 3. Immediate steps (M6-M12)

4 KEY TARGET GROUPS AND STAKEHOLDERS

The EMBRACE project targets a diverse set of key audiences, each with distinct needs and expectations regarding crisis management, biotoxin resilience, and security. The first group consists of first responders and emergency services, law enforcement, and security agencies. This includes professionals such as firefighters, paramedics, healthcare and hazardous materials teams, law enforcement officers, and military personnel, all of whom play a crucial role in biotoxin incident response. EMBRACE aims to equip these stakeholders with improved detection methods, decontamination strategies, and risk assessment tools. Their engagement is essential for testing and validating the project's solutions in real-world scenarios, ensuring operational effectiveness, and integrating findings into existing emergency response protocols.

The research community and forensic laboratories represent another critical target group, as EMBRACE is built upon scientific collaboration and technological advancement. Researchers in the fields of toxicology, public health, forensic science, and security studies will benefit from access to new analytical tools, datasets, and methodologies. Forensic laboratories, in particular, will play a key role in evaluating EMBRACE's approaches to biotoxin identification and forensic analysis. The project's emphasis on Open Science aligns with this group's interests, promoting the transparent sharing of findings and fostering interdisciplinary research efforts.

Beyond technical and scientific experts, EMBRACE is also committed to engaging civil society and communities. Community groups, non-governmental organisations (NGOs), and advocacy networks focused on public health, environmental safety, and disaster preparedness will be integral to the project's outreach efforts. These organisations act as intermediaries between policymakers, responders, and citizens, ensuring that EMBRACE's solutions are both accessible and socially responsible. Their involvement will support awareness-raising activities, contribute to ethical considerations in crisis response, and help address public concerns regarding biotoxin threats.

Engaging with citizens is equally crucial, as biotoxin incidents can have significant societal and health-related consequences. The project will produce public-facing resources such as the "Guide to Surviving a Biotoxin Event" to improve public literacy on biotoxin risks and response measures. Effective communication with the general public requires messaging that is clear, accessible, and designed to alleviate fear while promoting preparedness. While citizen engagement may not be as technically detailed as other target groups, it remains essential for ensuring community resilience and public trust in crisis management efforts. To maximise outreach, the project will actively engage with citizens interested in understanding the consequences of biotoxin events through online channels, including social media and the project website. Strategic use of key terms and search engine optimisation will enhance the visibility of project content, making it easier for the public to access reliable information on biotoxin risks and response strategies.

Decision-makers, government organisations, health authorities, and standardisation bodies form another important target group, as their policies and regulatory frameworks shape crisis preparedness and response at the national and European levels. EMBRACE findings will be highly relevant to policymakers in public health, security, and civil protection, as well as standardisation organisations working to develop harmonised response protocols. By engaging with these stakeholders, the project

aims to ensure that its outputs are not only scientifically sound but also aligned with legal, regulatory, and policy frameworks that govern emergency response and public safety.

Finally, industry and business stakeholders, including biotechnology companies, protective equipment manufacturers, and CBRN technology providers, play a key role in the practical application and commercialisation of EMBRACE's innovations. This group is particularly relevant for the development and scaling of new detection technologies, decontamination solutions, and protective equipment. Establishing connections with industry partners will facilitate the integration of EMBRACE's findings into market-ready solutions, ensuring that its impact extends beyond the duration of the project.

Overall, each of these six key audiences contributes to different aspects of EMBRACE's mission. Table 4 below presents the tailored dissemination and engagement strategies to meet their specific needs that are planned to be used throughout the duration of the project to maximise its impact. [8]

Audience	Main Benefits	Dissemination and Communication Channels
First responders and emergency services, Law Enforcement and Security agencies	Improved equipment and protocols contribute to a more effective and coordinated biotoxin incident response. Training programs enhance the skills of emergency response teams, healthcare providers and hospital teams. Improved investigative capabilities, enhanced collaboration and interoperability, technological integration, and contributions to public safety.	Liaison with relevant responder organisations Technical reports, case studies, webinars. Specialised blogs, forums, websites, and online communities. Targeted workshops and demo events. Participation in conferences/workshops.
Research Community, Forensic Laboratories	Research institutions and Forensic laboratories benefit from sharing of knowledge and expertise to advance scientific understanding of biotoxin incidents. Networking opportunities lead to collaborations with other institutions and stakeholders. Access to advanced analytical techniques and tools ensure accurate identification of biotoxins. Improved capabilities for analysing biotoxin samples enhance technical expertise.	Liaison and collaboration with relevant research projects. Specialised blogs, forums, websites, and online communities. Target scientific, technical and disaster resilience conferences and workshops Target journals for academic papers and research articles
Civil society and communities	Improved crisis management provides safety assurance to local communities during biotoxin incidents.	Liaison with relevant communities and NGOs.

	EMBRACE's communication efforts engage local communities in more effective preparedness plans and awareness campaigns. Increased public trust in forensic laboratories, crucial for acceptance of their findings in legal contexts.	Specialised blogs, forums, websites, and online communities. Media, e.g., online journals, press releases. Conferences/workshops with large audiences. Targeted workshops and demo events. Presentations to key organisations. Grassroots campaigns, community events, social media, newsletters.
Citizens	Increased preparedness and public awareness about biotoxin incidents and the importance of crisis management. Transparent communications improve citizens' confidence in the ability of authorities and organizations to manage crises effectively.	EMBRACE website with accessible information about biotoxins and the project. Organisation of events open to the general public, social media, newsletters, local media. Informative "Guide to Surviving a Biotoxin Event" video and leaflet, available from the website.
Decision Makers and Government Organizations, Health Authorities and Organizations, Standardization Bodies	Access to advanced tools and methodologies enhances the ability of government agencies to prepare and respond to biotoxin incidents promptly. Findings from EMBRACE inform the development or modification of policies and standards related to biotoxin incidents. Improved crisis management tools and methodologies contribute to improving public health protection during biotoxin incidents. Valuable information on health protection measures is communicated to Health Authorities.	Policy briefs, webinars, newsletters. Relevant conferences/workshops. Organisation of policy events for presenting results and recommendations.
Industry, Business	Technology providers find new market opportunities for EMBRACE tools and methodologies.	Business-to-business events, trade fairs, industry conferences.

	Outcomes stimulate innovation and new, more effective, and sustainable products and tools.	Specialised blogs, forums, websites, and online communities. Targeted workshops and demo events.

Table 4. Audiences and Communication Channels

4.1 Personas

In the fields of communication and stakeholder engagement, personas are valuable tools for representing key audience groups in a way that reflects their motivations, needs, and behaviours. While personas are fictitious, they are carefully constructed based on real-world insights, allowing project teams to design targeted strategies that align with the expectations of different stakeholders. By introducing personas for EMBRACE's key audiences, the project ensures that its communication, dissemination, and engagement efforts are both relevant and impactful.

Personas allow the EMBRACE consortium to refine its messaging and outreach by offering a humanised representation of the diverse groups interested in the project, as presented in Table 4 above. For example, when developing communication materials aimed at first responders, a persona could help define what information is most valuable to emergency professionals, such as practical guidance on biotoxin response procedures or the latest advancements in detection and decontamination technology. Similarly, a persona representing policymakers may help guide the creation of briefings and recommendations that emphasise regulatory implications and policy alignment.

Beyond communication, personas play an important role in shaping the development and dissemination of EMBRACE's outputs. Understanding how different audiences are likely to interact with project findings ensures that materials such as the "Guide to Surviving a Biotoxin Event", training resources, and policy recommendations are tailored to their respective users. This approach not only enhances engagement but also increases the likelihood that EMBRACE's findings will be adopted and implemented in practice.

Moreover, personas support the project's broader exploitation strategy by helping to identify potential partners, investors, or stakeholders who could play a role in sustaining EMBRACE's impact beyond its funding period. Throughout the communication and dissemination phases, feedback from stakeholder interactions can be used to refine and adjust personas, ensuring that they continue to reflect the evolving needs of the target audiences.

Ultimately, by incorporating personas into its engagement strategy, EMBRACE enhances its ability to communicate effectively with different stakeholder groups, ensuring that its findings reach the right people in the most meaningful way. This approach strengthens the project's visibility, fosters collaboration, and maximises the long-term impact of its work.

The following table presents a list of five personas capturing the essence of this idea and applying it to the EMBRACE target audiences. It is needless to say that these personas are devised to orient action, not to constrain, and that the EMBRACE project will try to get its message across to everybody who belongs to the target groups, irrespective of the individuals' exact characteristics. Furthermore, no

dedicated persona represents the key audience of citizens, as it is an audience which by default consists of disparate characteristics.

Personas		
Persona 1: First responders and emergency services		
	Name	Alex Moreau
	Age	35–50
	Job title	Senior Hazmat Officer, Fire and Rescue Service
	Level of education	Bachelor's degree (Emergency Management or similar)
	Social networks	LinkedIn, YouTube
	Keywords	Rapid response, CBRN safety, biotoxin decontamination, emergency preparedness, risk assessment, responder training
Persona 2: Research Community & Forensic Laboratories		
	Name	Dr. Elena Petrov
	Age	30-55
	Job title	Lead Researcher in Toxicology and Forensic Science
	Level of education	PhD (Biochemistry, Forensic Science or similar)
	Social networks	LinkedIn, Bluesky
	Keywords	Biotoxin detection, forensic analysis, laboratory standardisation, Open Science, certified reference materials, toxicology research
Persona 3: Civil Society and Communities		
	Name	Daniela Weber
	Age	28-45
	Job title	Programme Manager, Public Health NGO
	Level of education	Master's degree (Public Health, Disaster Risk Reduction or similar)
	Social networks	LinkedIn, Bluesky, YouTube
	Keywords	Community resilience, disaster preparedness, health security, risk

		communication, public engagement, crisis response networks
Persona 4: Decision Makers & Government Organisations		
	Name	Sophie Dupont
	Age	35-60
	Job title	Policy Advisor, European Health and Safety Agency
	Level of education	Master's or PhD in Public Policy, Security Studies, or Health Administration
	Social networks	LinkedIn
	Keywords	Policy alignment, EU security strategy, crisis management frameworks, regulatory compliance, biotoxin threat mitigation, international cooperation
Persona 5: Industry & Business		
	Name	Alessandro Rossi
	Age	35-55
	Job title	CEO, CBRN Technology Startup
	Level of education	Master's in Engineering, Biotechnology, or Business Administration
	Social networks	LinkedIn, YouTube
	Keywords	Market innovation, biodefence technology, biotoxin detection solutions, public-private partnerships, commercialisation strategies, security technology

Table 5. Personas

5 CONSORTIUM ROLES

The EMBRACE consortium includes a great number of partners from different backgrounds, whose knowledge of their specific fields can be of great assistance in communicating the project to the targeted audiences. Leading the Visibility Strategy is LC and RAN, whose expertise in project and policy communication and stakeholder networking in emergency and disaster management respectively renders them key players in the development and implementation of communication and dissemination activities. There are several further partners whose contacts are likely to be very valuable from a communicational standpoint, from first responders, such as ARC, PUI and SMU, that can play a key role in getting the project's message across to their peers, to technology providers and industry players, such as TEL, BIOX, AIRS, MION PRO and IANUS, who have huge experience in working on such technical products and are very well-connected in their respective fields. Other partners, such as MUG, VER and BIOT, bring highly important and distinguished scientific and analytical inputs to the table, which basically is in line with the target group 'scientific community.' Finally, TPEB, CSA and UNMS' broad knowledge of the policy landscape and especially standardisation makes them important partners in approaching key international players in the field.

Besides this broader categorisation, each partner assumes a sufficiently more specific role in the communication and dissemination of EMBRACE. This is tailored to its expertise and field of action. Table 6 offers a synthetic overview of this division of roles.

Partner's acronyms	Partner's Role	Main Objective
LC	The Lisbon Council for Economic Competitiveness and Social Renewal asbl is a Brussels-based think tank and policy network. Established in 2003 in Belgium as a non-profit and non-partisan association, the group is dedicated to making a positive contribution through cutting-edge research and by engaging political leaders and the public at large in a constructive exchange about the economic and social challenges of the 21st century.	In EMBRACE, the Lisbon Council will lead Task 8.2, with actions including a comprehensive Visibility Strategy, Dissemination and Communication Plan and a " Guide to Surviving a Biotoxin Event" aiming to enhance public literacy and to be used as a valuable resource for citizens seeking information on biotoxin events.
RAN	The Resilience Advisors Network is a grouping of more than 200 practitioners with backgrounds in emergency and disaster management providing extensive hands-on experience of disaster risk reduction in all its phases. From its membership, RAN forms specialist, subject-specific teams to support a large and diverse portfolio of projects with a focus on strengthening national, community,	RAN is funded by the UK Government (UKRI) to lead on creation of the Biotox Task Force, providing expertise into the project's trial and exercise activities as well as to lead the project's Valorisation, Sustainability and Foresight initiatives (WP8).

	locality and/or infrastructure resilience. Increasingly, RAN is also recognised for its stakeholder networking where it deploys the Crisis Management Innovation Network Europe (CMINE) to connect all those involved in this vital subject area.	
TEL	TELESTO Technologies, based in Athens, Greece, provides state-of-the art solutions in the field of Internet-of-Things (IoT), sensor networks and ways for retrieval, composition dynamic and use of sensor generated data. Telesto is recognized as a leader in Smart City innovations, including sustainable urban environment and city resource management, digital city services, and emergency response facilitation.	TELESTO Technologies is responsible for coordinating the EMBRACE project and will be the principal route for communications with the European Commission. TELESTO is also lead partner for Valorisation activities and will assist in software infrastructure developments.
DCNA	The Disaster Competence Network Austria (DCNA) acts as a link between scientific research and practitioners in crisis and disaster management. Through knowledge and technology transfer, findings from basic research are implemented and directed to those interested in security and disaster research in Austria and beyond. As an academic contact and cooperation partner for aid and relief organizations as well as organizations and decision-makers from the public and private sectors, the association has extensive experience in the continuous and lasting networking and cooperation of research and practice to facilitate access to expertise, models, tools and research approaches in security and disaster research.	The Disaster Competence Network Austria (DCNA) will work on the identification of gaps and needs in European biotoxin management and develop CONOPs for an improved procedure in the future.
ARC	The Austrian Red Cross is mandated by authorities at all levels (district, regional, national) to be in charge of c&c of emergency medical and psychosocial situations. In the field of civil protection ARC is providing the	The Austrian Red Cross will bring its expertise in the management of emergency medical response services and the management of persons with infectious diseases. It will

	following services to the public – mandated by law – all over Austria: Emergency Medical Services, Ambulance Services, First-Responder Services, Humanitarian disaster relief, Psychosocial Support, First Aid-Training for the population, Paramedic-Training. Relevant research activities ARC is the biggest provider of emergency medical service (EMS) dispatch in Austria. It is a very active actor in civil protection in Europe (trainings, exercises, missions, committees, exchange of experts, etc.).	also lead WP6 which is going to deal with trials for validating the solutions developed by the project.
PUI	Pompiers de l'Urgence Internationale (PUI), International Emergency Firefighter, is a French NGO founded in 2004, based in Limoges, with 265 volunteers. Its mission is to provide aid to populations affected by crises, strengthen civil security in emerging countries, and promote disaster prevention. PUI is recognised as a French Civil Protection Association by the Haute Vienne's Prefecture and is the first French organisation classified by the UN as an INSARAG medium Urban Search and Rescue (USAR) team. Additionally, PUI is recognised by the French government as a public service association and is part of the European Volunteers Search and Rescue (EVOLSAR) association and under classification by the WHO as an Emergency Medical Team. Its expertise lies in urban search and rescue (USAR), drones, emergency medical response, humanitarian logistics, and disaster preparedness. PUI operates advanced water purification units and collaborates with the French Association for the prevention of natural and technological disasters (AFPCNT) to enhance the society's resilience. PUI also specialises in civil protection	PUI plays a pivotal role in EMBRACE by sharing expertise in managing CBRN-E threats, particularly biotoxins, and victim management. It will organise a field trial in France to test innovative solutions and contribute to the evaluation of both trials. The goal is to validate new technologies and protocols in real-world scenarios, ensuring their effectiveness for CBRN-E preparedness and response.

	diagnostics, augmented reality fire training, earthquake simulations, and disaster preparedness programs, demonstrating a holistic approach to emergency response.	
MUG	The Medical University Graz is associated with the university hospital with 1500 beds and operates 3 BSL-3 laboratories. One BSL-3 laboratory has enhanced biosafety and biosecurity measures to perform pathological and forensic autopsies as well as laboratory investigation in case of highly pathogenic agents. The Medical University Graz participates in several EU-funded programs on pandemic preparedness and biodefence, and is member of the European Research Infrastructure for Highly Pathogenic Agents ERINHA.	The Medical University Graz contributes with three institutions, namely Pathology, Forensic Medicine and Psychiatry. Main roles are improving PPE and decontamination reagents, discovery of biomarkers for early identification of persons exposed to biotoxins, developing standardized procedures for forensic investigation, performing field tests, contribution to standards, and addressing ethical and regulatory issues.
VER	The Finnish Institute for Verification of the Chemical Weapons Convention (VERIFIN) is one of the Organisation for the Prohibition of Chemical Weapons (OPCW)'s designated laboratories for analysis of environmental and biomedical samples. VERIFIN has expertise in biotoxin analytics and chemical forensics and has a state-of-the-art analysis laboratory and Schedule 1 synthesis laboratory.	VERIFIN contributes to the analysis of biotoxins, development of training material for first responders, decontamination studies, and integrating the VERIFIN toolbox, leading WP3 and Task 2.4 and contributing to T4.1, T4.3, T4.4, T4.5 and T4.6.
SMU	Saitama Medical University (SMU) is a private university in Japan. SMU operates 3 large hospitals, Saitama Medical University Hospital (SMUH 700 beds), Saitama Medical Centre Hospital (SMCH 1000 beds) and Saitama International Medical Centre Hospital (SIMCH 700 beds). For treatment of poisoned patients (including those by biotoxin) and for conducting basic and clinical research on toxicology, SMUH is equipped with Clinical Toxicology Centre and	Provision of knowledge and techniques for research on the identification of biotoxins, as well as experience in the management of patients with biotoxin poisoning (including management of mass poisoning incidents such as the Tokyo Sarin gas attacks).

	SMCH with Toxicology Analysis Center integrated with Advanced Centre for Advanced Center for Emergency Medicine and Critical Care.	
BIOT	BioTalentum Ltd. is a biotechnology SME established in Hungary in 2005. Our mission is developing and providing human stem cell-based solutions for disease modelling, in vitro toxicology, and regenerative medicine. Our expertise, products, and technologies support the work of academic and industrial partners to advance stem cell-based research and drug development. In toxicology we help to develop NAMs which can replace animal experimentation. BioTalentum Consulting is the project and management support branch of the company which offers a wide range of services in project writing, management, and training to support customers with the execution of their project.	BioTalentum's task is the identification of possible biomarkers of biotoxin exposures. They apply human induced pluripotent stem cell-derived in vitro 3D brain models exposed to biotoxins which enables the identification of molecular alterations and affected pathways. Ultimately this allows identifying novel biomarkers and potential treatments.
BIOX	Bioxhale are healthcare revolutionaries, intent on everyone having affordable health checks when they need them, health checks that are fast, non-invasive and convenient. It is combining world class clinical and analytical science research leadership with experiences in respiratory disease, biomarker discover, early disease detection, precision medicine, large scale clinical and project study design and leadership, environmental volatile organic compound monitoring, high-cost therapeutics, breath samplers, in-vitro diagnostics, in-line and offline breath analysis, and data science pipelines. Bioxhale's approaches and knowledge capital have been refined and tested across the world with multiple independent multidisciplinary teams within a wide	Bioxhale is extending breath testing into the biotoxin domain. Integrating non-volatile, microbial and volatile analytes into a slick and quick breath sampling procedure is no easy task, and we are thrilled at the opportunity to work on this. It will also be providing wider support to the EMBRACE consortium informed by its experience in the CBRN area.

	range of operational environments, including CBRN.	
AIRS	AIRSENSE develops and manufactures high-quality safety instruments for various sectors, including first response (emergency services such as fire departments), public safety and aviation, as well as logistics and environmental monitoring. The company's mission is to create mobile, reliable, and stable detection devices that provide results in seconds.	In the EMBRACE, AIRSENSE contributes the pBDi (portable Bio Detector integrated), an ELISA-based device capable of detecting toxins, bacteria, and viruses. Its role involves developing a new biotoxin test kit for the EMBRACE target list and creating an advanced biotoxin chip to improve existing methods.
MION	MION is a Spanish SME aiming at the development and commercialization of analytical instruments for detection reaching ultra-low limits of detection in the range of sub-ppq (parts per quadrillion) in the case of low-volatility explosives and narcotics in the gas phase, which is commonly known as vapour detection. MION's technology is very versatile and it can be applicable to many sectors beyond explosives and narcotics, such as biotoxins, chemicals, or biological threats in any of the forms, liquid, gas, or solid.	MION will develop analytical solutions for bio-toxins detection based on its DMA technology.
PRO	Prometech is a European homeland security software company based in Utrecht, Netherlands and was founded in 2009. It was formed by a team experienced in software development and security. We have a broad focus on all security needs, with a specific specialisation in CBRNe and mass-casualty incidents. Prometech can bring over 20 years of dispersion modelling expertise and a wealth of software development talent to find a solution to any CBRN training needs. Our services have been utilised in countless national and international projects and are valued as a dependable partner by the CBRN community in Europe.	Prometech handles the technical management of EMBRACE as well as providing forensics and casualty management systems and a First Responder safety modelling suite.

IANUS	IANUS is a Cypriot SME with offices in Larnaca and Athens, specialising in research and development of innovative technology solutions in the security, cybersecurity, and defense sectors. IANUS actively engages in the preparation and management of EU and national projects, software development, and professional cybersecurity services. IANUS has developed a series of solutions to enhance response times and efficiency for entities such as police, security companies, firefighters, emergency medical teams, and first responders during potential crises.	IANUS is the WP7 leader and a technical partner responsible in developing the BioRA tool, a digitalised risk assessment for biotoxin exposure incidents and the Biotoxin Reference and Stakeholder Hub (BRSH) aiming to work as a knowledge base as well as maintaining a Stakeholder directory of end users.
TPEB	TPEB CR was established in October 2011 as a unique non-profit public-private-partnership body in the Czech Republic focusing on the area of critical infrastructure protection. TPEB unites national energy companies, public bodies like the Fire Rescue Service and the Czech Standardization Agency, and leading universities and research institutions. Together, they drive research, innovation, and the introduction of new technologies for infrastructure protection. TPEB promotes public-private R&D collaborations, contributes expertise to national and international security bodies and brings invaluable expertise to enhance energy security and critical infrastructure protection.	Technological Platform Energy Security Czech Republic (TPEB CR) as a member of the consortium raises awareness and fosters cooperation between sectors as a part of the EMBRACE project.
CAS	The Czech Standardization Agency represents a National Standardization Body of the Czech Republic. As such the CSA is responsible for performing all national and international duties related to standardization and is a member of CEN/CENELEC. CSA focuses primarily on standardization activities and is an active member of various CEN/CENELEC technical	The CSA focuses on standardization activities in the project, especially on identifying gaps in standardization effort connected to biotoxin incident response and liaising with standardization groups to ensure EMBRACE priorities align with current standardisation initiatives.

	committees and standardization groups.	
UNMS	The Office of Standards, Metrology and Testing (UNMS SR) is a central state administrative body, located in Bratislava, Slovakia since 1993. UNMS SR is responsible for the area of Standardization, Metrology, Testing, Accreditation, Free movement of goods and Quality. It performs the function of national standards body and national committee and is a member of the CEN, CENELEC, ISO and IEC.	The Office of Standards, Metrology and Testing participates within WP8, focusing on Standardization activities. The main result of the research will be mapping of existing standards within the biotoxin incidents, developing Standardization Road Map and identifying gaps and needs for biotoxin incidents.

Table 6. Consortium roles

6 COMMUNICATION AND DISSEMINATION TOOLS AND CHANNELS

This chapter provides an overview of the communication and dissemination tools and channels selected for EMBRACE. Overall tools and channels encompass both traditional and newer forms of communication and dissemination.

6.1 Templates

The use of templates is necessary to standardise certain communication material to ensure a consistent appearance and, ultimately, the visual identity of the project. Due to this reason, both physical and digital document templates are made available to the EMBRACE consortium.

6.1.1 EMBRACE digital documents templates

A template for project deliverables was developed, as seen in the figure below.

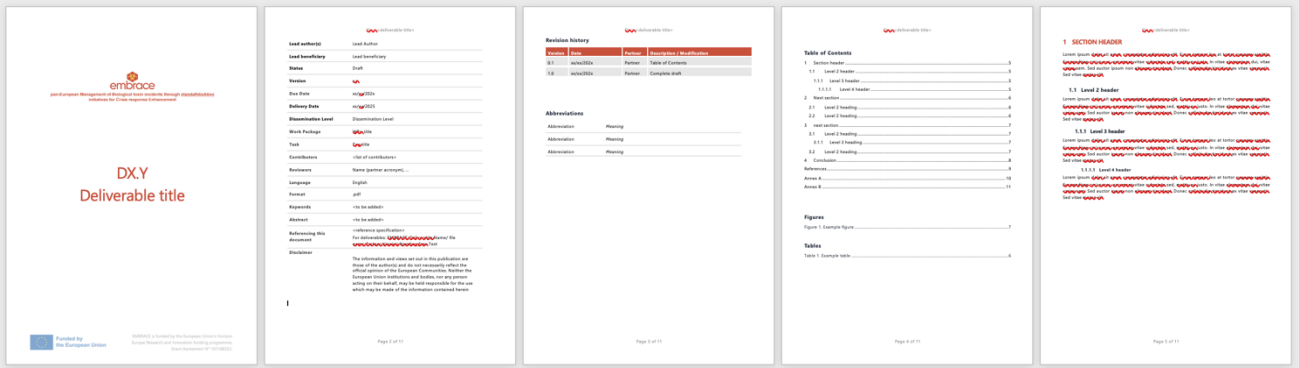

Figure 1. Deliverable template

The first page consists of the EMBRACE logo and the full project title, the title of the document, and the display of the EU funding statement. This version of the deliverable template may be used for dissemination and external communications.

A PowerPoint presentation template is provided for the consortium members to develop a presentation as they prefer and in the most suitable way for their event while complying with the brand developed for EMBRACE.

Figure 2. Presentation template

6.2 Newsletters

The EMBRACE newsletter serves as a key communication tool, ensuring regular engagement with external stakeholders and keeping them informed about the project's progress, key achievements, and upcoming activities. Issued on a biannual basis, the newsletter will highlight significant project developments, including technological advancements, policy insights, and contributions from various consortium partners. It will also showcase relevant success stories, upcoming events, and opportunities for collaboration, fostering a sense of community among stakeholders. To enhance its impact, the newsletter will be structured to provide concise, targeted content that resonates with different stakeholder groups, ensuring that each edition remains relevant and valuable.

The newsletter will be coordinated by LC under T8.2 and authored with contributions from different consortium members on a biannual basis, with ad hoc issues coming out in case of groundbreaking development in the project. The website homepage includes a tailored "Call-to-action" box attracting new subscribers. The first edition of the newsletter is planned for M9, while the second will come out in M13, following the presentation of the BTF.

6.3 EMBRACE website and blog

The EMBRACE blog serves as a dynamic platform for sharing project updates, insights, and expert perspectives on biotoxin resilience and crisis management. It plays a crucial role in increasing the project's online presence by disseminating news about relevant events, highlighting key project milestones, and showcasing the successes of the consortium. The blog also facilitates interaction with potential stakeholders by providing in-depth explanations of EMBRACE's objectives and results. Through well-structured and informative content, the blog helps build trust, reinforce the project's credibility, and attract new visitors who may be interested in engaging with EMBRACE or contributing to its activities.

The blog will be hosted on the EMBRACE website (https://embracebiotoxhub.eu/articles), which serves as the primary online platform for communication and dissemination. A dedicated space for the latest project announcements (https://embracebiotoxhub.eu/news), like consortium meetings and the organisation and participation in community events, is also available on the website. The website acts as a central hub for all project-related information, functioning as a one-stop-shop for stakeholders seeking access to key resources, project results, and relevant materials.

A detailed presentation of the website and its structure is presented at sections 8.2 and 8.3.

6.4 Articles and scientific publications

As outlined earlier, the findings of EMBRACE will be disseminated through academic channels, including peer-reviewed journals and international conferences. This approach ensures that the project's results are rigorously validated and accessible to the wider research community, allowing experts to assess and build upon EMBRACE's contributions. Given the interdisciplinary nature of biotoxin resilience, crisis management, forensic science, and public health security, publishing in reputable scientific outlets is essential to establishing the project's credibility and fostering further research in these critical areas.

In alignment with the project's Open Science policy, EMBRACE is committed to promoting transparency and accessibility in research dissemination. Wherever possible, publications will be made available through open-access journals, ensuring that findings are freely accessible to policymakers, responder organisations, industry professionals, and the broader public. This commitment supports the European Union's wider efforts to encourage open and collaborative research, maximising the impact of EMBRACE's work beyond the immediate consortium.

A curated list of suitable academic journals and conferences for the publication of EMBRACE's scientific outputs has been compiled with input from consortium members and is available in Annex C.

6.5 Project Announcements

Project announcements serve as an essential tool for keeping stakeholders informed about key developments, milestones, and achievements within EMBRACE. Project announcements provide updates that are primarily intended for the EMBRACE community, including consortium partners, policymakers, responder organisations and research institutions. These announcements will highlight significant progress, such as the launch of new initiatives, major findings, upcoming events, or

collaborations with other projects and networks. By sharing these updates through the dedicated space in the EMBRACE website mentioned in section 6.3, newsletter and other communication channels, including social media and CMINE, the project ensures that relevant audiences remain engaged and well-informed.

6.6 Third-party events

EMBRACE consortium members possess extensive expertise in scientific, industry, and policy events at both European and national levels, covering key areas such as crisis management, biotoxin resilience, public health security, forensic science, and CBRN threat mitigation. The consortium will actively participate in relevant external events, including conferences, international forums, trade fairs, digital exhibitions, and specialised workshops, to present project findings, engage with stakeholders, and distribute dissemination materials. Leveraging connections with related initiatives and existing partner networks, EMBRACE will strategically identify and prioritise events that maximise visibility, foster collaboration, and ensure the effective communication of project outcomes to the wider disaster resilience and security community. RAN will lead the EMBRACE presence in third-party events under T8.1, with the contribution of all members of the consortium.

6.7 Project brochure and presentation

The EMBRACE brochure is a vital tool for promoting the project, strengthening its visual identity, and supporting dissemination and stakeholder engagement efforts. As a versatile communication asset, the brochure allows for the quick and effective presentation of EMBRACE's objectives, key activities, and expected impacts to a broad audience, both online and offline. It serves as an accessible introduction to the project, highlighting its most relevant aspects in a concise and visually appealing format. By drawing attention to EMBRACE's mission and encouraging interaction, the brochure facilitates engagement with policymakers, responder organisations, forensic laboratories, and other key stakeholders. A well-designed brochure ensures that information is presented in a clear and structured manner, making it easy to understand while reinforcing the project's professional image. As a key component of the dissemination strategy, it will be distributed at conferences, workshops, and networking events, while it is already available digitally via the website to expand its reach and maximise its impact.

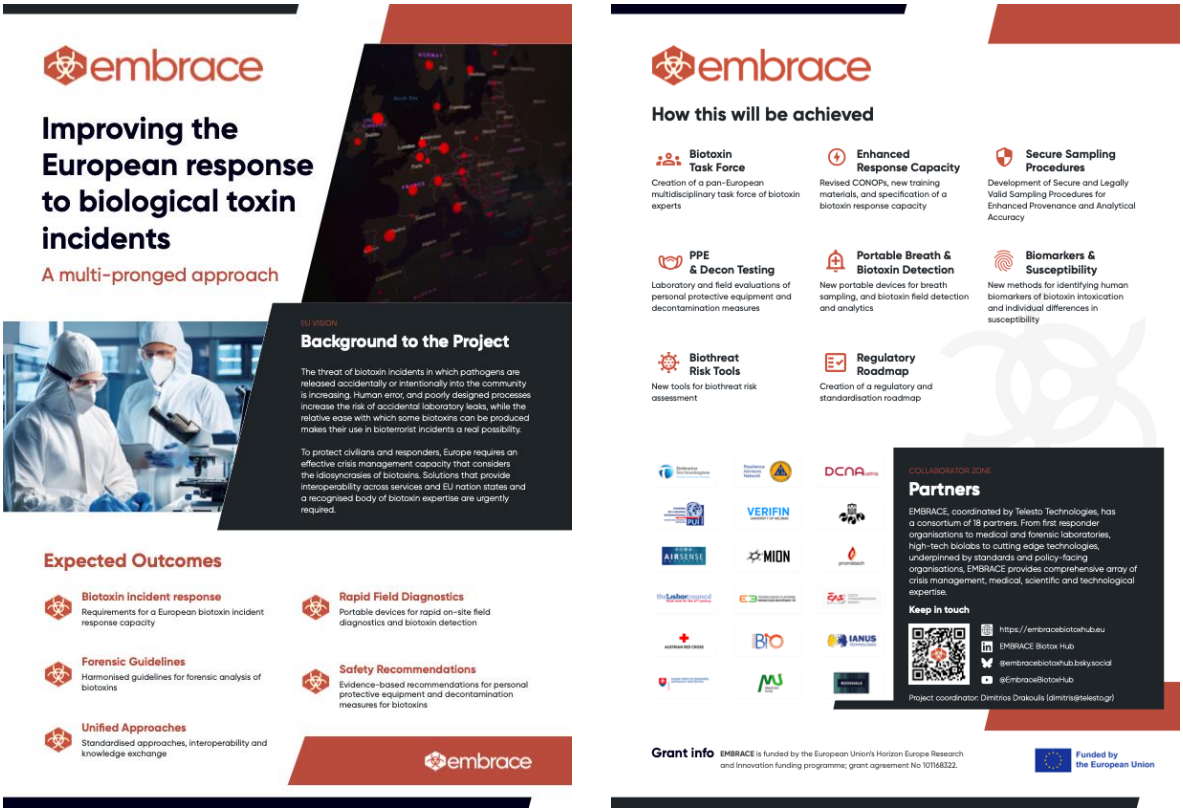

Figure 3**. **EMBRACE Brochure

Raising awareness of the project by developing a fairly comprehensive and generic overview is the logic underlying the introductory presentation of EMBRACE. The information presented in this brochure has been used in producing a project overview, which uses the presentation template presented in section 6.1.1. The presentation consists of a thorough overview of the context where EMBRACE was born, the vision that underpins its goals, its objectives and the approach envisioned to achieve them, and the expected outcomes and impact. Naturally, it also acknowledges the EMBRACE consortium members albeit it does not offer a detailed description of them.

6.8 Briefing for communication, dissemination and exploitation

The communication and dissemination plan presented in the remainder of chapter 6 outlines the main rationale of the first phase as to raise awareness on EMBRACE to spark interest and elicit interactions with the target audiences. The EMBRACE project employs a comprehensive dissemination and communication strategy to maximise its impact, ensuring that project findings reach relevant stakeholders effectively while fostering engagement and knowledge exchange. Through a combination of scientific dissemination, targeted communication efforts, and strategic exploitation planning, EMBRACE aims to establish itself as a key initiative in biotoxin resilience, strengthening crisis management capabilities and advancing European policy and security frameworks. The approach is designed not only to inform but also to actively involve different audiences, from first responders and policymakers to the research community, industry, and the general public.

As mentioned in section 3.1, the communication, dissemination, exploitation and sustainability efforts of EMBRACE will be divided into three phases:

1. Awareness Phase (M1–M12): The first year will focus on establishing EMBRACE's identity through branding, a project website, dissemination materials, and templates. Each key exploitable result (KER) will be assessed, and a targeted dissemination strategy will be developed and updated annually. Workshops and online or in-person events will introduce EMBRACE's goals, build the stakeholder network, and establish the Biotoxin Task Force (BTF). Engagement with relevant standards committees will ensure continuous collaboration.
2. Delivery Phase (M12–M24): This phase will prioritise scientific and commercial dissemination, sharing EMBRACE's findings through publications, conferences, and workshops. Collaboration with related initiatives and research clusters will be sought to maximise synergies. End users will be actively engaged to test and provide feedback on the project's solutions, ensuring their practical relevance and refinement.
3. Finalisation Phase (M24 and beyond): The final stage will focus on sustaining and exploiting EMBRACE's outcomes. Partners will support long-term adoption by participating in industry events, conferences, and business meetings, ensuring the project's innovations remain relevant and impactful beyond its duration.

The following sections will provide a more detailed breakdown of EMBRACE's dissemination and communication and exploitation plans, outlining specific measures and tools that will be employed to ensure that project outcomes are effectively shared, discussed and utilised within both scientific and policy communities

6.9 Dissemination

Dissemination within EMBRACE focuses on the scientific and technical community, ensuring that key findings, methodologies, and innovations are widely shared through peer-reviewed publications, conference presentations, and engagement with professional networks. This includes the publication of research outputs in open-access journals, participation in international forums, and knowledge-sharing with forensic laboratories and security practitioners. These efforts contribute to the broader scientific dialogue on crisis preparedness and biotoxin response, ensuring that EMBRACE's findings are rigorously assessed and integrated into ongoing research and innovation.

6.9.1 Plans for dissemination

This table reports the activities foreseen per each persona in each phase of the project's duration.

Persona	Awareness Phase	Delivery Phase	Finalisation Phase
First responders and emergency services	LinkedIn posts, on-page search engine optimization (SEO), blog articles, landing pages, events, newsletters, CMINE	Call to Action (CTA) on social media, website and CMINE, tailored newsletter, marketing automation	International exhibitions and events, demos
Research Community & Forensic Laboratories	Research articles, blog articles, social media posts, events, newsletters	CTA on research articles, website and social media, tailored newsletter, marketing automation	Publications, open lectures, international conferences

Civil Society and Communities	Blog articles, on-page SEO, social media posts, events, newsletters	CTA on website and social media, tailored newsletter, marketing automation	Social media campaigns, policy briefs
Decision Makers & Government Organisations	Blog articles, on-page SEO, social media posts, events, newsletters	CTA on website and social media, tailored newsletter, marketing automation	Policy briefs and key notes in high profile events
Industry & Business	Blog articles, on-page SEO, social media posts, events, newsletters	CTA on website and social media, tailored newsletter, marketing automation	International exhibitions and events, demos

Table 7. Dissemination Plan

6.9.2 Dissemination to responders and CBRN professionals

Ensuring that responders and CBRN professionals have access to the latest knowledge, tools, and best practices is a key objective of the project's dissemination strategy. Given their frontline role in managing biotoxin-related incidents, targeted outreach will prioritise practical, actionable insights that enhance operational preparedness and response capabilities. The engagement will be facilitated through the creation of the Biotoxin Reference and Stakeholder Hub (BRSH) and the Biotoxin Task Force (BTF), which are presented in detail in the sections below.

6.9.2.1 The Biotoxin Reference and Stakeholder Hub (BRSH)

The Biotoxin Reference and Stakeholder Hub (BRSH) aims to be a centralised system designed to serve stakeholders through the integration of essential information and resources related to biotoxins, as well as a comprehensive action plan for emergency response situations. BRSH also aims to serve as an interactive platform where information can be shared and exchanged between the platform community.

The BRSH will provide access to biotoxin knowledge libraries offering thorough information about biotoxins, including their types and mechanisms of action. This will help stakeholders understand how toxins affect the human body and identify potential risks. The hub will also include access to scientific papers, reports and research articles on symptoms, diagnosis, and detection methods, enabling better understanding and decision making.

The platform will feature a stakeholder directory and contact list, facilitating networking and the exchange of data and information between the different end-users and experts including toxicologists, researchers and first responders. It will also provide detailed guidelines with step-by-step instructions on how to respond to biotoxin emergencies, covering protective measures, appropriate personal protective equipment, and decontamination procedures for various end users. Legal, regulatory and policy content will be featured to ensure compliance with national and international frameworks. Regular updates will maintain the database current with the latest information on biotoxins.

6.9.2.2 The Biotoxin Task Force (BTF)

The European Biotoxin Task Force (BTF) is being created to address high-priority issues and challenges for securing societies from the threat of potential biotoxin accidents where Pathogens could be released accidentally from bio-laboratories or intentionally by malicious agents.

Innovations in biotechnology and the subsequent expansion of related laboratory infrastructure have increased the potential for accidental and intentional harm to society, e.g., through experimental errors, insufficient biosafety precautions, or inadequate biosecurity. Furthermore, designer engineered threat agents are potentially more dangerous than biotoxins with a natural origin and could be released with dramatic effect.

Concerns over the security of communities has driven a need for binding international standards for safe and responsible work on these highly dangerous pathogens.

The intention of EMBRACE is to create a standing body of experts whose objectives may vary depending on the nature of the problem they are addressing, but with a combined and shared expertise in all aspects of the threat.

6.9.3 Use of CMINE & synergies with other initiatives and projects

The Crisis Management Innovation Network Europe (CMINE) is an open, cooperative, and inclusive information network for sharing information, experiences, best practice, and lessons learned among individuals, crisis management organizations, researcher entities, industry, and policy makers throughout Europe and beyond.

CMINE provides an environment in which members and others can participate in and observe discussions on project-related issues and thereby establish an unprecedented sharing of knowledge across all fields of the project.

CMINE also links stakeholders from existing projects, networks and initiatives to reduce repetition and fragmentation whilst encouraging new ideas and identifying innovative solutions to improve European resilience.

CMINE maintains a professional networking website attracting a diverse group of stakeholders that would not normally interact with each other on a regular basis. This includes policymakers, practitioners, members of the private sector, NGOs, science & research, training & exercising, media and standardization representatives. With well over 2,000 members, it supports the interests of those involved in Crisis Management and Civil Protection by encouraging innovation in all aspects of crisis and emergency prevention and resolution. It provides an environment where stakeholders can connect and discuss ideas relating to process and product innovation in all its forms, in an informal and neutral environment.

CMINE is funded by the European Commission through its Horizon programmes. It was established as part of the sustainability strategy for Driver+ ID: 607798. It is now supported by grants to projects including TeamAware ID: 101019808, PEERS ID: 101074040, PARATUS ID: 101073954, DIREKTION ID: 101121249, SYNERGIES ID: 101121172, and EMBRACE ID: 101168322. The community is facilitated and maintained by the Resilience Advisors Network under a formal agreement created with the European Research Executive Agency.

A number of Clusters have been constituted as informal, voluntary and free subsets of the Community for European Research and Innovation for Security (CERIS). Made-up of projects working on thematic and related research areas under the Disaster Resilient Societies (DRS) framework and, increasingly of other programmes such as the Union Civil Protection Knowledge Network (UCPKN) and the European Defence Fund (EDF).

Clusters are facilitated through the offices of CMINE with the purpose of promoting good practice in research through collaboration whilst recognising opportunities for efficiency wherever appropriate through combined activity such as dissemination events.

Membership is available for current projects funded by any European Grant Agreement with a Cluster typically involving between 15 and 20 projects. The Clusters also seek to maintain the impact and legacy of recently concluded projects and encourage coordinators to stay engaged after the end of their projects conclude to ensure that their legacy is understood, disseminated and used wherever possible.

The CBRNe and Standardisation Cluster (CSTAC) has been born of some of the best-known projects in the field such as eNOTICE and ENCIRCLE. CSTAC recognises that the CBRN world with all of its complexities and sensitivities, is extremely broad. The current structure includes relevant projects from Horizon2020, Horizon Europe, the Union Civil Protection Knowledge Network and the European Defence Fund attracting players from all aspects of Chemical, Biological and Radiation disciplines.

Annex A identifies a detailed list of projects relevant to EMBRACE, with which contact and collaboration are already under way.

Figure 4 Current members of CSTAC

6.9.4 Dissemination to policymakers

Engaging policymakers is a crucial aspect of EMBRACE's dissemination strategy, ensuring that the project's findings contribute to evidence-based decision-making in crisis management, biotoxin resilience, and public health security. To achieve this, EMBRACE will actively participate in policy-focused conferences, networking events, and high-level discussions where European and national decision-makers convene. These engagements provide opportunities to present research outcomes, share best practices, and influence the development of policies and regulations that enhance preparedness and response to biotoxin threats.

A key element of this strategy is fostering direct dialogue between researchers, policymakers, and industry stakeholders, enabling the translation of scientific advancements into practical policy recommendations. EMBRACE will support these efforts by presenting its results at national and international policy events, facilitating discussions on crisis management frameworks, and

highlighting innovations that improve emergency response capabilities. Decision-makers will also be encouraged to subscribe to the project's newsletter, keeping them informed about key developments and emerging findings relevant to their policy domains.

Given the complexity of biotoxin-related risks, ensuring alignment with existing security, health, and environmental policies is essential. The project's relevance to the existing policy ecosystem is further elaborated in chapter 7. EMBRACE will provide policymakers with concise and accessible briefing materials, including policy papers, summaries of project findings, and recommendations for standardisation and regulatory improvements. These materials will not only inform policy discussions but also demonstrate how EMBRACE's solutions align with European security strategies and international crisis response frameworks.

As the project progresses and more concrete results become available, dissemination to policymakers will intensify. While early engagement will focus on raising awareness and fostering dialogue, later stages will prioritise the presentation of validated solutions, demonstrator outcomes, and best practices that can be integrated into policy and regulatory frameworks. By ensuring that EMBRACE's findings are both accessible and actionable, the project will contribute to strengthening Europe's resilience against biotoxin threats and improving decision-making processes in crisis response and public health security.

6.9.5 Scientific and technical dissemination

Scientific and technical dissemination is fundamental to the success of research and innovation projects, ensuring that findings are shared with experts, fostering collaboration, and encouraging further advancements in the field. By engaging with the scientific community, EMBRACE contributes to a growing body of knowledge on biotoxin resilience, crisis management, forensic science, and CBRN threat mitigation. Dissemination to researchers and technical professionals enables interdisciplinary exchange, promotes innovative problem-solving, and ensures that the latest developments are accessible to those who can apply them in practice.

A key priority of EMBRACE's scientific dissemination strategy is ensuring that results are made openly available in accordance with the Open Science policy, promoting transparency, accessibility, and wider societal impact. Research findings will be published in peer-reviewed open-access journals to maximise their reach and enable researchers, policymakers, and industry professionals to engage with EMBRACE's outputs. Additionally, scientific dissemination will take place through participation in conferences, workshops, and specialised forums, allowing project partners to present key insights, technical methodologies, and findings to relevant audiences. These events will provide opportunities for in-depth discussions, knowledge exchange, and potential collaboration with external experts.

To further support engagement, EMBRACE will produce technical reports and white papers summarising key findings. These publications will cover aspects such as biotoxin detection technologies, forensic analysis, and standardisation efforts. The project's website will feature dedicated sections for scientific publications, technical infographics, and explainer content, ensuring accessibility to a wider audience, including researchers from related fields who may not yet be familiar with EMBRACE. These materials will also be promoted via social media channels, increasing visibility and encouraging further interaction with the scientific and technical community.

Academic and research partners within the consortium will take an active role in external European and international scientific conferences and events, presenting EMBRACE's progress and achievements. Leveraging international networks of academic institutions will enhance outreach efforts, ensuring that EMBRACE findings are disseminated beyond the immediate consortium. Furthermore, scientific publications and technical updates will be featured in the EMBRACE newsletter, with experts invited to subscribe and tailor their preferences to receive relevant content.

A non-exhaustive list of international journals and upcoming conferences suitable for publishing EMBRACE-related research has been compiled in Annex C. Through these efforts, EMBRACE aims to contribute lasting value to the scientific and technical community while ensuring that its research findings support evidence-based policy, innovation, and crisis preparedness.

6.9.6 Private sector and general public dissemination

Engagement with businesses and industry stakeholders is a crucial part of EMBRACE's dissemination strategy, ensuring that technological advancements, risk assessment methodologies, and crisis response innovations reach the private sector. The project will engage SMEs, start-ups, biotechnology firms, protective equipment manufacturers, and security technology providers, raising awareness of EMBRACE's research and its potential for commercial application. Dissemination to businesses will take place through trade fairs, industry conferences, and dedicated workshops, where innovative project results will be showcased to potential investors and technology adopters. Additionally, EMBRACE will collaborate with EU-level networks and related initiatives to extend its outreach within the private sector. A curated list of targeted industry events taking place during M1-M12 of EMBRACE project is included in Annex B.

Since businesses, particularly SMEs, often rely on scientific research to guide innovation, EMBRACE's dissemination efforts to the industry will partly overlap with its engagement with the scientific and technical community. Scholarly publications on biotoxin detection technologies, forensic methodologies, and crisis response innovations will also be of interest to private sector stakeholders developing security and resilience solutions. The project's website will feature infographics and explainer materials designed to illustrate the technological progress of EMBRACE in an accessible way, making it easier for industry professionals to understand potential applications.

Beyond industry, the general public and the media represent key target audiences for EMBRACE's dissemination efforts. Given the diverse nature of the general public, outreach will be designed to be high-level, clear, and accessible, ensuring that complex scientific concepts are communicated in an understandable manner. The EMBRACE website and social media channels will play a central role in this effort, providing an overview of the project's goals, activities, and findings in a format suitable for non-expert audiences. Social media engagement will ensure that project updates reach a broad audience, while online content will highlight the relevance of biotoxin threats, public safety measures, and crisis preparedness strategies in an engaging way.

A key initiative to enhance public literacy on biotoxin risks will be the development of the "Guide to Surviving a Biotoxin Event". This resource, designed specifically "to enhance public literacy and as a valuable resource for citizens seeking information on biotoxin events." [9], will provide practical information on biotoxin threats, protective measures, and response strategies, ensuring that the public

is better prepared to understand and react to potential incidents. The guide will be made available via the Biotoxin Reference and Stakeholder Hub (BRSH) and the EMBRACE website.

In parallel, the media plays a crucial role in disseminating information to the wider public. To ensure accurate and responsible coverage of biotoxin-related threats and crisis management strategies, EMBRACE will develop a comprehensive media briefing pack, which will serve as a key reference for journalists and media professionals. This pack will provide fact-based, accessible information on the project's findings, key risks, and crisis response recommendations, helping to bridge the gap between scientific research and public communication. Like the public guide, the media briefing pack will be made available via the BRSH and the project website.

6.10 Communication

Communication activities are designed to raise awareness, foster engagement, and improve public understanding of biotoxin threats and response measures. EMBRACE will employ a mix of digital and in-person outreach efforts, including social media engagement, website updates, newsletters, and stakeholder workshops. Public-facing resources, such as the *Guide to Surviving a Biotoxin Event*, will provide accessible information to improve public literacy on biotoxin risks, while dedicated roundtables and expert panels will ensure ongoing dialogue with key stakeholders.

6.10.1 Plans for communication

This table presents an overview of the activities regarding each communication tool distributed over the different phases of the project's duration.

Communication Tool	Awareness Phase	Delivery Phase	Finalisation Phase
Project website	LinkedIn posts, on-page SEO, blog articles, landing pages, events, newsletters, CMINE	CTA on social media, website and CMINE, tailored newsletter, marketing automation	International exhibitions and events, demos
Project blog	Research articles, blog articles, social media posts, events, newsletters	CTA on research articles, website and social media, tailored newsletter, marketing automation	Publications, open lectures, international conferences
Social media	Blog articles, on-page SEO, social media posts, events, newsletters	CTA on website and social media, tailored newsletter, marketing automation	Social media campaigns, policy briefs
Communication material	Blog articles, on-page SEO, social media posts, events, newsletters	CTA on website and social media, tailored newsletter, marketing automation	Policy briefs and key notes in high profile events
Traditional communication tools	Blog articles, on-page SEO, social media posts, events, newsletters	CTA on website and social media, tailored	International exhibitions and events, demos

		newsletter, marketing automation	

Table 8. Communication Plan

6.10.2 EMBRACE Community

The main aim of the strategic communication plan is to foster the growth of the EMBRACE online presence and wider BTF community development. This will be achieved by providing open access to all content that is disseminated, which will be tailored to reach different target groups. Examples of this content include the website, social media profiles, press and media initiatives, newsletters as well as participation in conferences.

The EMBRACE project will strive to build a "community of interest" through various communication initiatives such as those listed above in table 8. To increase understanding and recognition of the project's findings and their implications, outreach efforts as those described above through the engagement channels will be directed towards the project's target groups.

A successful creation of the EMBRACE community will hinge on active and sustained engagement with its target groups, ensuring that communication efforts are both inclusive and impactful. The project's outreach initiatives will be designed to foster collaboration, share knowledge, and encourage participation from diverse stakeholders. By providing easily accessible, high-quality content across various platforms, including social media, the project website, CMINE platform [10], CSTAC [11], and newsletters, the EMBRACE community will not only grow in numbers but also in depth, forming a dynamic space for continuous learning and interaction. Key to success will be maintaining open channels of communication, ensuring transparency, and addressing the needs and interests of the community members. Participation in conferences and media initiatives will help establish the project's presence and authority in the field, while creating opportunities for networking and feedback. As the community expands, the collective exchange of ideas will fuel the project's objectives and generate meaningful dialogue on the relevance of its findings, ultimately driving the impact and legacy of the EMBRACE project.

6.10.3 EMBRACE social media strategy

The creation of social media accounts is part of establishing the online presence of the EMBRACE project. Social media dissemination of EMBRACE will also take place through the management of a planned editorial calendar on social media. The editorial calendar will be designed quarterly, following the timeline of project developments and will be updated on an *ad hoc* to better reflect unplanned project breakthroughs, as well as in the CBRN community and relevant policy fields. A method is designed for the planning of social media content development over the 3-year life of EMBRACE.

Three pages on different social media channels were set up to disseminate the project:

- LinkedIn: https://www.linkedin.com/company/embrace-biotox-hub/
- Bluesky: https://bsky.app/profile/embracebiotoxhub.bsky.social
- YouTube: https://www.youtube.com/@EmbraceBiotoxHub

A multi-channel strategy allows to reach different target clusters on the different platforms. In fact, social media is chosen for its strategic function, specific functionality and target audience. In this way, the choice of these channels relates to their nature as tools for public debate.

The use of LinkedIn focuses in fostering professional connections and enhancing project visibility. LinkedIn allows for networking with key stakeholders, including industry leaders, academics, and policymakers, which can lead to new collaborations and partnerships. Sharing updates, research outcomes, and relevant content also helps in building credibility within the academic and professional communities.

Bluesky, as a newer decentralised social media platform, offers the potential for more organic engagement with a tech-savvy audience. It facilitates more direct and authentic conversations around the project's progress, promoting a sense of community and enabling feedback from a broad range of users. Its growing user base could attract attention from early adopters and innovators who are likely to be interested in the project's impact and innovations.

YouTube offers a unique opportunity to visually showcase EMBRACE through detailed videos, such as research summaries, interviews with project leaders, demonstrations and event highlights. As one of the most widely used platforms globally, YouTube allows for a broad audience reach. Additionally, videos can enhance understanding and engagement by presenting complex ideas in an easily digestible format, encouraging further interaction and interest.

The use of specific hashtags will support the dissemination of information towards influential people in the sector. The dedicated hashtag for EMBRACE, used across all platforms, is #EmbraceBiotoxHub, which encompasses not only the project name, thus promoting recognisability, but also the main theme of the project, crystallising the project’s position in the CBRN ecosystem.

Therefore, it is crucial to activate synergies between social media accounts of all project partners and the project channels. Each official social channel of EMBRACE has been followed by all project partners, posts may contain specific mentions/hashtags consistent with the project objectives.

Actions such as following among other profiles involved in the project, sharing or retweeting specific and consistent content, tagging and mentioning the EMBRACE page are the basis of dissemination throughout the life of the project.

To create continuity and recognisability on the different dissemination platforms, the aesthetic identity of the social channels is in continuity with the brand identity of the website (see the corresponding remarks on this). All channels contain the official logo and make a clear reference to the home page of the site by means of a button.

The construction of navigation paths from the site to the social networks through the social bar (bar that summarises the entire social presence of the project in the footer of the website) and vice versa, i.e. from the posts to the site through the specific link will be central.

The main objective of EMBRACE’s social media presence is to disseminate, inform and engage people interested in the proposed topics. The social media pages will mainly be used to drive traffic to the website, where in-depth content will be provided in the blog pages. The idea is that social channels will help pushing people who are not familiar with the project, but work in the relevant sector, to become promoters of the initiative.

The initial phase consists in the strategic set-up and optimisation work to ensure that the right people are reached. Thanks also to the support of reposts and likes and the identification of the audience to follow, in collaboration also with partners, including key opinion leaders (KOLs), institutions, NGOs, companies.

After strategic dissemination, monitoring will take place through the analysis of insight data on proprietary platforms and aggregated in a document to make it easier to track the results of interaction and engagement on social media, according to the KPIs as mentioned chapter 3.

6.11 Proactive exploitation planning

Exploitation planning within EMBRACE ensures that project outcomes are not only disseminated but also effectively translated into actionable solutions with long-term impact. This process involves engaging with policymakers, industry representatives, and standardization bodies to integrate EMBRACE findings into policy frameworks, crisis management protocols, and commercial applications. By establishing a structured valorisation strategy, the project will create pathways for further innovation, industry adoption, and regulatory influence, ensuring sustainability beyond the funded period. A key component of this planning is the alignment of project results with regulatory and industry needs. EMBRACE will systematically map its innovations against existing standards, best practices, and relevant EU directives. To maximize impact, EMBRACE will also adopt a dynamic exploitation roadmap that includes continuous monitoring of project results, proactive engagement with industry partners, and strategic measures to ensure that research outputs transition into market-ready innovations.

6.11.1 Challenges and opportunities

Aligning results with International Organization for Standardization (ISO), European Food Safety Authority (EFSA), Organisation for the Prohibition of Chemical Weapons (OPCW), and Codex Alimentarius requires early regulatory engagement and validation. Certification of biotoxin detection tools, forensic methods, and decision-support systems is resource-intensive but necessary for market entry. Intellectual property (IP) protection through patents, trademarks, and copyrights is essential to safeguard innovations while enabling controlled commercialization. Ensuring adoption across forensic science, food safety, public health, and emergency response sectors requires targeted exploitation strategies. Opportunities lie in the growing policy focus on food safety, biosecurity, and forensic intelligence, providing a pathway for standardization and regulatory integration.

6.11.2 Preliminary plan

To effectively valorize EMBRACE outcomes, the project will implement a structured strategy focused on standards integration, IP protection, commercialization, and sustainability planning. The first step is to gather and document the Key Exploitable Results (KERs) from all project partners, ensuring that all significant outputs are tracked and categorized based on their regulatory, technological, and market potential. This KER database will be updated throughout the project's lifespan to reflect new findings, validation progress, and protection needs. Once the KERs are identified, EMBRACE will

conduct a standards mapping exercise, engaging with ISO, EFSA, OPCW, and Codex Alimentarius to ensure that project results are aligned with existing and emerging regulatory frameworks. This will support integration into forensic protocols, food safety guidelines, and biotoxin crisis response strategies. For IP protection, partners will implement a comprehensive documentation system to track invention disclosures, development timelines, and knowledge assets. Legal safeguards will be established through consultations with qualified IP experts via the Horizon Results Booster Service, guiding patent applications, licensing agreements, and market-oriented protection strategies. To facilitate commercialization, EMBRACE will engage with biotech companies, forensic laboratories, and food safety agencies to explore licensing and market-entry strategies for its innovations. Pilot projects and validation trials will assess technology readiness levels (TRLs), supporting industry adoption. Training modules and dissemination activities will be developed to ensure that first responders, forensic scientists, and food safety authorities are equipped to apply EMBRACE solutions effectively.

6.11.3 Exploitation planning actions for the first year

In the first year, EMBRACE will identify and categorize KERs, distinguishing between joint and individual KERs, and align them with relevant standards, best practices, and intellectual property (IP) protection strategies. A KER database will be created and continuously updated, covering biotoxin detection tools, forensic sampling methodologies, decision-support systems, and protective measures for responders. Target groups for each KER will also be identified, ensuring tailored exploitation strategies for key stakeholders. A mapping exercise will align KERs with relevant standards and regulations. For IP protection, each KER will be assessed for patents, trademarks, or copyrights, supported by the Horizon Results Booster Service. Joint KERs will cover cross-partner innovations, such as forensic protocols and decision-support platforms, while individual KERs will be independently protected and commercialized. Target groups will be defined based on KER relevance, including regulatory bodies (ISO, EFSA, OPCW, Codex Alimentarius) for standardization, first responders and forensic agencies for operational use, food safety authorities for biotoxin monitoring, biotech firms for commercialization, and academia for training and capacity building.

7 THE EMBRACE PROJECT'S NEXUS TO THE EU'S POLICY AGENDA

The EMBRACE project aligns with several key European Union policy initiatives that focus on crisis management, public health security, and countering CBRN (Chemical, Biological, Radiological, and Nuclear) threats. The increasing risk posed by biological toxins, as demonstrated by recent incidents in Europe and globally, underscores the urgency of strengthening crisis response capabilities, enhancing standardisation efforts, and fostering cross-border cooperation. In this context, EMBRACE supports the EU's strategic efforts to build resilience against biological threats while ensuring interoperability across security practitioners, including first responders, public health experts, law enforcement agencies, and forensic laboratories.

One of the most relevant policy frameworks connected to EMBRACE is the Union Civil Protection Mechanism (UCPM) and rescEU, which aims to improve the EU's preparedness and response capacity for large-scale emergencies, including CBRN incidents. EMBRACE's work on biotoxin detection, risk assessment, and response protocols aligns closely with rescEU's mission to develop joint response mechanisms and stockpile critical resources, such as personal protective equipment and decontamination tools. The European Commission's efforts to stockpile protective equipment through a joint DG ECHO-HERA initiative further highlight the importance of aligning EMBRACE's work with existing EU policies on responder safety and crisis preparedness.

At the heart of European health security policy, the Health Emergency Preparedness and Response Authority (HERA) plays a crucial role in strengthening the EU's capacity to anticipate and respond to biological threats. EMBRACE's focus on improving biotoxin detection, forensic analysis, and decontamination methods complements HERA's objectives by contributing to a more coordinated, science-driven response to biological crises. The project's engagement with specialised and forensic laboratories across Europe also reflects broader EU efforts to enhance cross-border collaboration in health security and emergency response.

Standardisation is another critical component of EMBRACE, closely tied to the European Standardisation Strategy and initiatives led by CEN/TC 391 (Societal and Citizen Security) and ISO/TC 292 (Security and Resilience). Previous EU-funded projects have made progress in standardising lab-based detection and identification of biological toxins, yet gaps remain in on-site detection methods, forensic analysis, and decontamination procedures. EMBRACE aims to build on these efforts by developing certified reference materials, inter-laboratory training programmes, and forensic guidelines, ensuring that crisis response actions are based on validated, harmonised methodologies. Importantly, while standardisation efforts should support crisis operations and policymaking, they must remain flexible enough to adapt to emerging threats and evolving security needs.

The project's objectives also align with broader EU strategies, such as the Strategic Compass for Security and Defence, which calls for enhanced cooperation in tackling hybrid threats, including bioterrorism and the malicious use of biological agents. Similarly, EMBRACE supports the EU's implementation of the Sendai Framework for Disaster Risk Reduction, which emphasises the importance of scientific research, technological innovation, and multi-stakeholder engagement in strengthening societal resilience against biological hazards.

In addressing the challenge of biotoxin decontamination, EMBRACE contributes to the Zero Pollution Action Plan, part of the European Green Deal, which includes measures to minimise human and

environmental exposure to hazardous substances. Given that biological toxins exist at the interface of biological and chemical threats, their decontamination requires an interdisciplinary approach that builds on both biological and chemical safety protocols. EMBRACE's work in evaluating the effectiveness of existing decontamination procedures and recommending improved methodologies directly supports these EU policy goals.

Finally, EMBRACE is positioned within the Horizon Europe Civil Security for Society Cluster (Cluster 3), which focuses on strengthening the EU's capacity to prevent, detect, and respond to security threats, including those posed by CBRN materials. By fostering collaboration between security practitioners, researchers, and policymakers, EMBRACE contributes to evidence-based policymaking and operational improvements that will have lasting impacts beyond the project's duration.

EMBRACE sustainability strategy to ensure lasting impact is clearly defined under Objective 8 (O8) of the GA. [12] EMBRACE will establish the Biotoxin Knowledge Network (BKN) to provide specialised expertise to the Disaster Risk Management Knowledge Centre (DRMKC). A comprehensive sustainability plan will be developed, focusing on the creation of post-project organisational structures, securing funding streams, and fostering engagement with industry and other relevant stakeholders. From the outset, the project will actively build collaborative relationships with key initiatives in the disaster resilience field, including the Union Civil Protection Knowledge Network (UCPKN), the Community for European Research and Innovation for Security (CERIS), the Crisis Management Innovation Network Europe (CMINE), and the CBRN and Standardisation Cluster (CSTAC). These efforts will ensure that EMBRACE is well-integrated within the broader resilience community. Additionally, close collaboration with consortium members engaged with the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO), the Union Civil Protection Mechanism (UCPM), and rescEU will support the dissemination of insights related to biotoxin concepts of operations (CONOPs) and capacity requirements. To maximise the uptake of project outcomes, EMBRACE will implement a targeted communication strategy to keep key stakeholders, including standardisation technical committees, disaster resilience national focal points, policymakers, and public health organisations, informed of project developments and innovations. This strategy was further analysed per targeted audience in section 6.9 of this deliverable.

8 EMBRACE BRANDING

Branding plays a crucial role in ensuring the visibility, credibility, and long-term impact of the EMBRACE project. A strong and consistent brand identity not only enhances recognition among key stakeholders but also reinforces the project's authority in the field of crisis management and biotoxin resilience. Effective branding ensures that all communication materials, from the project website and social media presence to reports and dissemination tools, maintain a coherent visual and narrative identity, making EMBRACE easily distinguishable within the broader research and policy landscape.

Figure 5 presents a visual representation of the Colour Palette and corresponding RGB and Hex Codes.

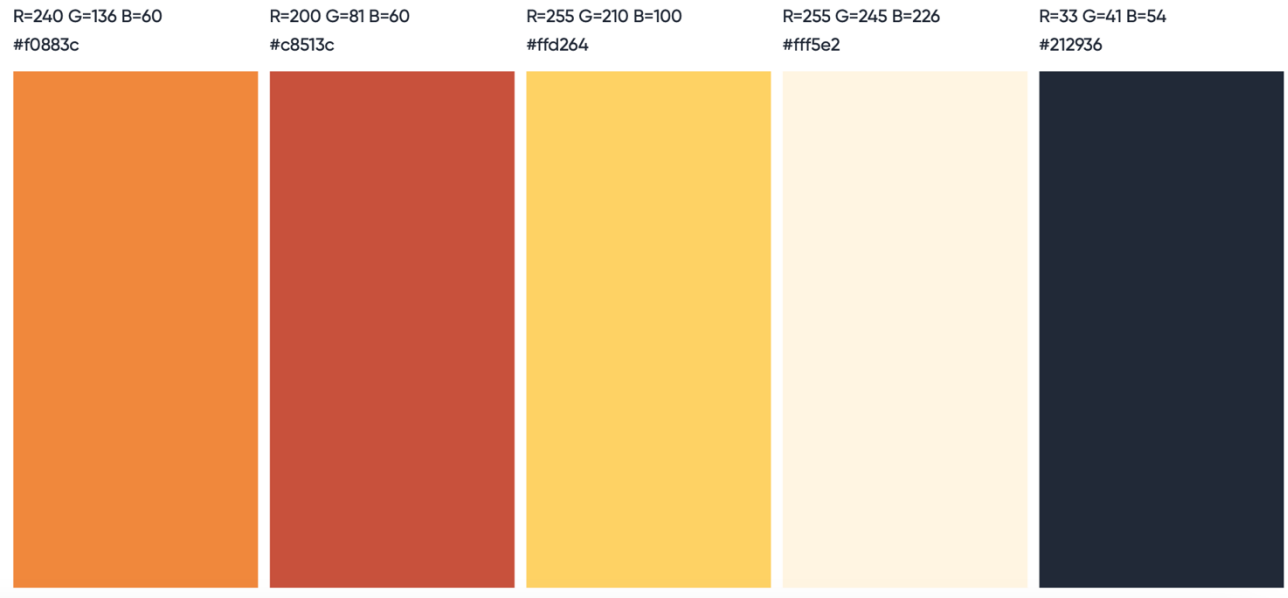

Figure 5. Visual representation of the Colour Palette and corresponding RGB and Hex Codes

8.1 EMBRACE logo design

The primary communicational element for project identification is the EMBRACE logo, which consist of a graphic item (logomark) and the project acronym. A more detailed version of the logo also includes the full project name. Figures 6 and 7 present the two version of the logo.

Figure 6. EMBRACE logo

Figure 7. EMBRACE logo with full project name

As a result of a cohesive and well-defined branding strategy, EMBRACE aims to achieve the following outcomes:

- Enhanced visibility and recognition among key stakeholders, ensuring a strong and identifiable presence within the crisis management and biotoxin resilience community.
- A consistent and professional image across all communication channels, including online platforms, printed materials, and event presentations.
- Improved engagement with the scientific community, fostering credibility and ensuring EMBRACE's research findings reach relevant academic and professional audiences.
- Strengthened trust and credibility among policymakers, responder organisations, and industry professionals, reinforcing EMBRACE's role as a key reference in biotoxin preparedness and response.
- A clear and unified message that effectively conveys EMBRACE's mission, objectives, and impact, ensuring long-term relevance and sustainability beyond the project's duration.

Following the obligations for recipients of EU funding programmes 2021-2027, "All beneficiaries, managing authorities and implementing partners have to display prominently the EU emblem and funding statement on all the communication materials, dissemination activities and any equipment, infrastructure, vehicle, supply or result financed by the grant." [13]

Figure 8. EU emblem and funding statement display

In addition, a generic statement acknowledging funding should be included in publications and presentations:

"EMBRACE is funded by the European Union's Horizon Europe Research and Innovation funding programme, Grant Agreement N° 101168322."

Non-EU partners, should append acknowledgement of their funders to this statement, as required.

8.2 EMBRACE website

The EMBRACE website serves as a central hub for communication and dissemination, providing a single point of access for all project-related information. It plays a crucial role in ensuring transparency, facilitating engagement, and maximising the reach of EMBRACE's findings and results. As the primary digital platform, the website offers stakeholders a space to follow the project's progress, access key resources, and stay informed about upcoming events. Additionally, it will host essential materials, scientific publications, public deliverables, blog articles and news updates, ensuring that valuable insights are easily accessible. The website will also enable stakeholders to register their interest, subscribe to the project's newsletter, participate in discussions and contribute to the wider EMBRACE community, with direct links to information about the BTF and CSTAC.

Moving forward, updates will focus on enriching content across all sections, ensuring that the latest project developments are communicated effectively while maintaining full accessibility for all users.

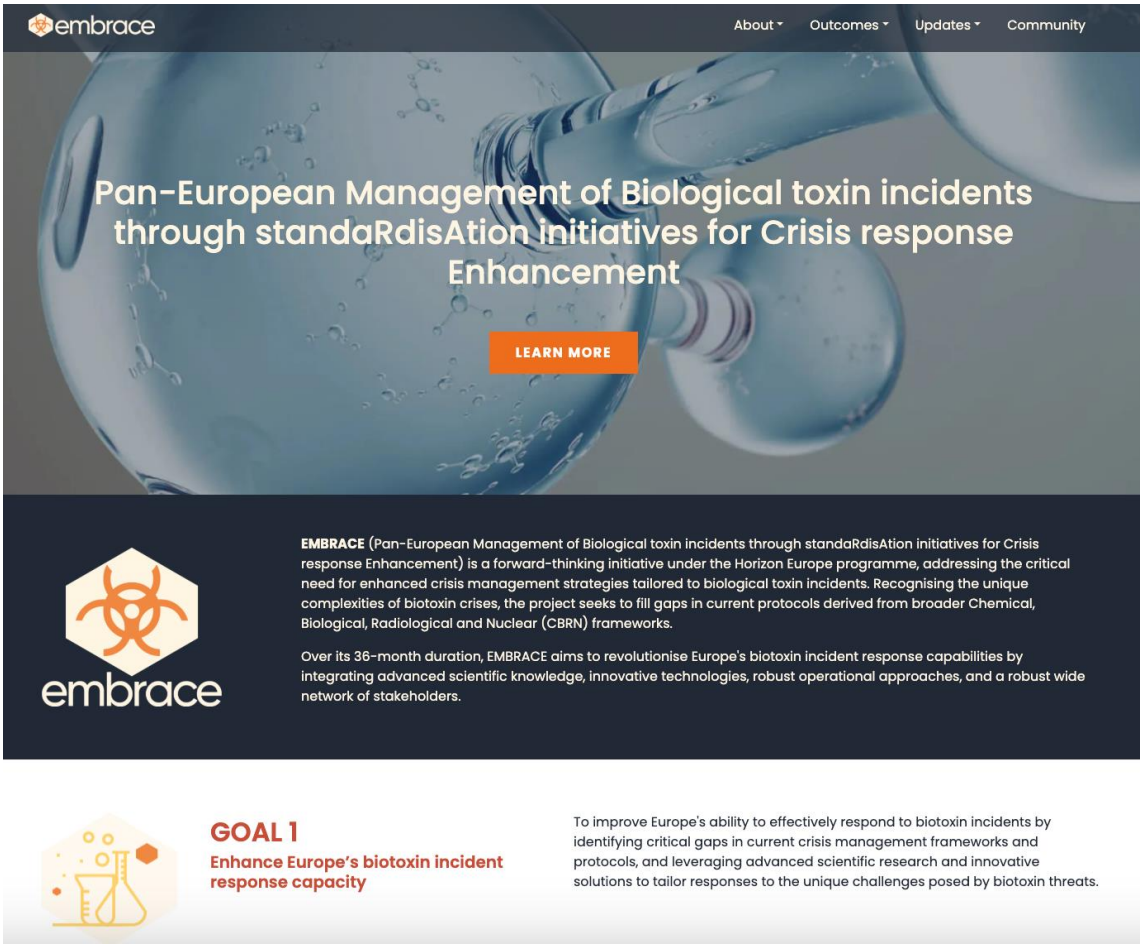

Figure 9. EMBRACE website homepage

8.3 EMBRACE website structure

The first version of the website includes:

- Homepage
- About
    - Description of the project

    - Governance
    - Partners
    - Dissemination materials
- Outcomes
    - Public deliverables
    - Publications
- Updates
    - News
    - Articles
    - Events
- Community

Whereas the Homepage provides an overview of the project and, naturally, functions as a link to the other sections of the website, the other sections dive deeper into the project.

The About section includes a page that describes the project's context, the issue addressed, the solution advanced and more specific objectives of EMBRACE. Additionally, it includes a page about the consortium partners, these are presented and briefly described. Finally, it includes a page on the governance of the project, hence a description of the work packages and the leadership team (i.e., project coordinator and project manager, the scientific, technical and ethics leads, the Security Advisory Board and the Ethics Board). Finally, a page dedicated to the dissemination materials of EMBRACE can be found under the About section.

In the Outcomes section, the user can browse the available public deliverables of the project, as well as any future publications, under the Open Science approach of EMBRACE.

The Updates section include the project news page, the project blog (Articles page) and the events page, which includes both events which EMBRACE is actively organising and participating, as well as events that are of interest to the broader EMBRACE community.

Finally, as previously mentioned, the Community page offers information about the BTF and CSTAC, including the projects with which EMBRACE is currently collaborating via CSTAC, providing direct links to the relevant pages.

9 CONCLUSION

Deliverable 8.1 has outlined the EMBRACE Visibility Strategy and Plan, providing a structured approach to engaging key stakeholders, increasing project visibility, and ensuring long-term impact. It has defined the overarching objectives of the project's dissemination and engagement efforts, aligning them with the strategic goals set out in the Grant Agreement. Additionally, it has established key performance indicators to monitor the effectiveness of dissemination activities and ensure continuous refinement based on measurable outcomes.

The deliverable has also identified target groups and developed personas to tailor communication strategies to diverse audiences, including policymakers, responder organisations, forensic laboratories, the scientific community, and the general public. The roles and responsibilities of consortium partners in supporting dissemination efforts have been clarified, ensuring a coordinated and effective outreach strategy. Furthermore, an extensive overview of communication and dissemination tools and channels has been provided, covering a range of materials such as digital templates, newsletters, scientific publications, social media strategies, and direct engagement activities. These efforts are complemented by a communications starter pack, made available to the consortium to support consistent and impactful messaging across all platforms.

Recognising that effective dissemination extends beyond visibility and engagement, this deliverable also incorporates a proactive exploitation strategy, ensuring that EMBRACE's findings and innovations reach the right stakeholders with the appropriate tools and channels. The project's alignment with EU policy priorities has been examined, reinforcing its relevance within the broader European crisis management and biotoxin resilience landscape. Finally, branding has been highlighted as a key element in establishing a strong and recognisable identity for EMBRACE, enhancing credibility, trust, and stakeholder engagement.

As the project is currently in M6, at the midpoint of the awareness phase, key dissemination activities are actively underway. Wide-reaching communication efforts across social networks are a priority at this stage, complemented by ongoing steps to expand EMBRACE's outreach to scientific audiences. Work is also progressing on refining dissemination strategies and identifying additional opportunities for engagement. Moving forward, the consortium will explore synergies with related projects and initiatives, strengthening collaborations to enhance EMBRACE's impact and ensure its contributions remain relevant and accessible beyond the project's duration.

REFERENCES

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[5] https://www.eurobiotox.eu/#

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[7] https://drs-hub.eu

[8] Grant agreement, PART B, p.26.

[9] Grant agreement, PART B, pp.26-27.

[10] Grant agreement, PART B, p.37.

[11] https://www.cmine.eu/

[12] https://www.cmine.eu/topics/37519/page/home

[13] Grant agreement, PART B, p.p.4-5.

[14] European Commission. (n.d.). Communicating about your EU-funded project. European Commission. Retrieved February 20, 2025, from https://rea.ec.europa.eu/communicating-about-your-eu-funded-project_en#ecl-inpage-100

ANNEX A – STAKEHOLDER LIST

The initial projects engaged with by EMBRACE through the CBRNe Cluster of projects (CSTAC) include:

• PEERS - Making CBRN Standards relevant to first responders using worked examples Standardisation

• EuroBioTox - The establishment of validated procedures for the detection and identification of biological toxins

• HolozCan - Deep Learning Powered Holographic Microscopy for Biothreat Detection on Field

• PROACTIVE - Testing common approaches between European safety and security practitioners, in particular Law Enforcement Agencies (LEAs) and CBRNe First Responders

• NEST - Detection of multiple threats amongst which CBRN threats or pandemic viruses are present

• INCLUDING - Developing a Federation to provide a common framework to standardize access to CBRN facilities

• eNOTICE - Development of a European Network Of CBRN Training Centers

• VERTIgO - Taking an integrated approach to conflicts and disaster relief by virtualization and simulation of CBRN defence training

• STRATEGY - Ensuring first responders' safety and empowering their operational capacity through standardisation

• VALKYRIES - Harmonization and Pre-Standardization of Equipment, Training and Tactical Coordinated procedures for First Aid Vehicles

ANNEX B – LIST OF TARGETED EVENTS FOR M1-M12

Name	Type	Date
Security & Policing 2025	Conference	11-14 March 2025
UN Humanitarian Network Partnerships Week	Conference	17-28 March 2025
CBRNe Summit Europe 2025	Summit	25-27 March 2025
Medical Biodefence Conference	Conference	7-10 April 2025
12th NBC Symposium on CBRNe Threats - "A Resilient Society"	Symposium	9-14 June 2025
CBRNe Convergence Europe: High Intensity CBRN	Conference	24-26 June 2025
IUPAC's World Chemistry Congress 2025	Congress	14-19 July 2025
15th CBRNe Protection Symposium	Symposium	30 September-2 October 2025

ANNEX C – TARGET PUBLICATION OUTLETS

Name	Type	Audience
Toxins	Journal	Scientific community
Archives of Toxicology	Journal	Scientific community
Emerging Contaminants	Journal	Scientific community
Cell Biology and Toxicology	Journal	Scientific community
Journal of Breath Research	Journal	Scientific community
Journal of Emergency Medicine	Journal	Scientific community
Analytical Chemistry	Journal	Scientific community
Journal of Chromatography A and B	Journal	Scientific community
Neuropsychobiology	Journal	Scientific community
Journal of Affective Disorders	Journal	Scientific community
Frontiers in Psychiatry	Journal	Scientific community
Frontiers in Psychology	Journal	Scientific community
Journal of Clinical Medicine	Journal	Scientific community
European Neuropsychopharmacology	Journal	Scientific community
Journal of Psychiatric Research	Journal	Scientific community
Fire Soldier Magazine (National Journal of French Firefighters)	Journal	First responders and emergency services
Live in Limoges magazine	Magazine	First responders and emergency services