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D5.2 – First Updated Communications, Dissemination and Engagement Plan

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Glossary of terms

Item	Description
CEI	Cloud-Edge-IoT
CMS	Content Management System
CSA	Coordination and Support Action
EC	European Commission
EUCloudEdgeIoT or EUCEI	Short Name to refer to The European Cloud, Edge and IoT Continuum, an inter-project umbrella initiative of which UNLOCK-CEI is a member and coordinator with the sister CSA Open Continuum
KER(s)	Key Exploitable Result(s)
KPI	Key Performance Indicator
RIA	Research and Innovation Action
SEO	Search Engine Optimisation
SG	Stakeholder Group
TF	Task Force
VCAs	Value Chain Adopters
WP	Work Package

Abstract

This deliverable offers a comprehensive overview of communication and dissemination activities within the UNLOCK-CEI project, part of the European Cloud, Edge, and IoT Continuum initiative. It covers stakeholder analysis, campaign results, and impact assessment through qualitative and quantitative KPIs until M18 of the project. The report also highlights horizontal activities like online presence, events, and community building. Valuable insights and lessons learned are summarised, making this a significant reference for advancing the Cloud-Edge-IoT domain through its comprehensive insights into effective communication and dissemination strategies.

Keywords

Cloud-Edge-IoT; Computing; Continuum; Communication; Dissemination; Engagement, Demand- Supply Dialogue

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Executive Summary

This deliverable provides a comprehensive overview of the communication and dissemination activities of the project UNLOCK-CEI and is a first direct update of the communication, dissemination and engagement plan outlined in D5.1. The document covers the main results and impacts stemming from the performed activities in the first 18 months of the project within the framework of the European Cloud, Edge, and IoT Continuum umbrella initiative. The document outlines the purpose, structure, and linkages to other deliverables. It also details the main activities and assets, developed both by UNLOCK-CEI solely and as part of a joint effort within the Communications Task Force (TF) coordinating the activities of a multitude of projects in the computing continuum space.

With respect to the initial plan set up in D5.1, this report presents an updated stakeholder analysis, better detailing targeted initiatives towards primary stakeholders such as Business Users, Industrial and Technology Associations, Tech Providers, and Research Organisations, along with secondary stakeholders like Citizens and Policy Makers. Since the methodology, objectives, and KPIs largely remain the same, only the updates and changes are noted in this deliverable whereas action items that appear in D5.1 but are not mentioned in this succeeding deliverable remain unchanged from the original plan.

One of the key novelties with respect to the original plan is a significant effort and support to the communication activities involving a wider range of Research and Innovation Actions (RIAs) which expand beyond the core cluster of the six MetaOS (Meta-Operating System) projects mentioned in D5.1 and embrace H2020 and HE projects across all domains of cloud, edge and IoT including the more recent cognitive cloud and swarm computing areas, as example. While the focus on industrial stakeholders has been the priority in the communication strategy of UNLOCK-CEI, being this a demand-side project, a significant amount of support has been given to the interaction with the supply side and the related research projects, mainly via the ad-hoc inter-project communication TF previously mentioned.

Further to this, the document presents the results of various communication campaigns, ranging from general awareness to industry insights and midterm achievements. It also highlights horizontal activities, covering the project's online presence, events, videos, news digest, materials, Zenodo community, and the community database.

Through these efforts, the project has successfully created an online and offline identity, increased awareness and engagement, and disseminated preliminary results. The report elaborates on the impact of these activities on the project's goals, measuring progress through qualitative and quantitative KPIs.

Finally, the document includes information on the project's IPR Policy and outlines the lessons learned and the next steps to be undertaken.

Overall, this deliverable serves as a reference for stakeholders, providing valuable insights into the communication strategy and efforts to advance the Cloud-Edge-IoT domain.

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1. Introduction

UNLOCK-CEI aims at unlocking the potential for accelerating the deployment of the Cloud-Edge-IoT (CEI) computing continuum. The project is specifically focused on the demand side drivers and challenges as well as the technology-driven innovations and business opportunities driving demand value chains. Effective communication, dissemination, and engagement play a pivotal role in shaping the success of projects like UNLOCK-CEI, given their complex nature and far-reaching implications. In the fast-evolving landscape of the CEI computing continuum, keeping stakeholders informed and engaged is essential. As the demand-side drivers and challenges in CEI continue to evolve, our project remains at the forefront of understanding and addressing these dynamics. Our strategy goes beyond simply sharing findings; it is about building a robust and collaborative CEI ecosystem. We recognise that this entails a multi-faceted approach, including comprehensive communication efforts, targeted dissemination channels, and active engagement with a diverse audience. By fostering collaboration, exchanging insights, and facilitating knowledge transfer, we aim to drive meaningful advancements within the CEI domain. Our communication plan and the activities implemented so far to follow the plan ensure that UNLOCK-CEI leaves a lasting impact on the CEI landscape. Such an impact is also maximised via the belonging of UNLOCK-CEI to a broader initiative, EUCloudEdgeIoT.

The “European Cloud, Edge and IoT Continuum” initiative, also known as “EUCloudEdgeIoT,” or “EUCEI” is a collaborative effort aimed at advancing the development and deployment of Cloud, Edge, and IoT technologies in Europe. This initiative is driven by [two Coordination and Support Actions \(CSAs\), Open Continuum and UNLOCK-CEI](#) both consisting of a consortium of key partners from various sectors, including industry and research domains, who recognise the transformative potential of these technologies for the European digital landscape. These two CSAs collaborate to address both the supply and demand sides of the CEI continuum, ensuring a comprehensive approach to advancing CEI technologies and ecosystems in Europe. Their synergistic efforts, along with contributions from other EU projects, are pivotal in driving innovation and collaboration in the CEI domain. The overall initiative is then supported by a wide range of [Research and Innovation Actions \(RIAs\)](#) focused on the following topics:

- **Cloud:** This cluster includes projects that are focused on cloud computing technologies. These projects may involve the development of new cloud services, improvements in cloud infrastructure, cloud security, and the integration of cloud computing with other technologies.
- **NGIoT (Next Generation Internet of Things):** NGIoT projects are aimed at advancing the Internet of Things (IoT) technology. They focus on the next generation of IoT for a more human-centric, sustainable, and resilient Internet of Things. This includes innovation in connectivity, integration, scalability, and social adoption.
- **MetaOS:** This cluster refers to a set of six core RIAs working on overarching operating systems that manage various computing environments in a unified way. Projects under this call are mainly working on creating platforms that can integrate different systems and provide a single interface for managing diverse computing resources.
- **Cognitive Cloud:** Cognitive cloud projects are involve the combination of cognitive computing with cloud computing. This means applying AI and machine learning to cloud-based services to make them more intelligent, self-managing, and able to make decisions or provide insights.
- **Swarm Computing:** Swarm computing projects are related to the concept of swarm intelligence, where many simple agents or devices work together to perform tasks or solve problems, mimicking the behaviour of swarms in nature. In computing, this could involve decentralised systems that work collaboratively without central control.
- **Open Source:** Projects in this category focus on developing technologies or solutions that are open source, meaning that their source code is made freely available and may be redistributed and modified. This promotes collaboration and sharing within the tech community.

- **Software Technologies:** This is a broad category that encompasses a wide range of projects focused on the development of new software technologies, tools, frameworks, and methodologies for various applications.
- **Other:** This includes a limited set of projects that do not belong to the previously specified categories.

The EUCEI initiative also incorporates a community of industrial partners, including research projects and other industry players, which are actively scouted, for instance, through value chain adopter workshops and dedicated events aimed at SMEs and startups, with this being one of the specific focusses and valued added of UNLOCK-CEI as a demand side project. These partners represent the business aspect of the initiative and contribute to the development and deployment of Cloud, Edge, and IoT technologies in Europe.

1.1 Purpose of this document

The activities reported in this deliverable are based on the objectives, value propositions and methodology outlined in D5.1 “Communications, dissemination and engagement plan”, offering an overview of the project’s outreach and impact right at the end of the M18 of the project, with over half of the timeline already passed (the project is finishing in November 2024, at M30).

An overview of the main UNLOCK-CEI results and insights can be also found in the White paper published at the aftermath of the First Online Stakeholder Forum event, an online gathering to discuss the intermediate insights and impact generated. While the event outcomes are duly described in section 3.2.3, the corresponding White Paper can also be accessed [here](#) on the project Zenodo channel as well as in a dedicated section of D5.6.

1.2 Link to other deliverables

As WP5 Communication, Dissemination and Engagement has a horizontal role in the UNLOCK-CEI project in terms of communicating project objectives and disseminating results to target stakeholders, all deliverables are relevant to WP5 activities and represent the source of content for most of the website, social media and event-related activities. Out of all, however, the following deliverables are found to be most closely related to D5.2:

WP	Deliverable No.	Deliverable Name	Connection with this deliverable
1	D1.1 (M6), D1.2 (M12), D1.3 (M24)	Cloud-Edge-IoT Demand Landscape	D.1, D1.2 and D1.3 report on essential trends, definitions and market insights which are used as primary material to feed the communication content which is the backbone of the implementation of the communications plan updated in D5.2
3	D3.1 (M6) D3.2 (M12)	CEI ecosystems overview with the value chain adopter groups	D5.2 describes activities that support the recruitment of targeted VCA via personalised messaging and value propositions
5	D5.1 (M03), D5.3 (M30)	Updated Communications, dissemination and engagement plan (initial plan and second updated release)	D5.1 and D5.3 represent respectively the previous and the future updated versions of D5.2
5	D5.4 (M12), D5.5 (M28)	Demand Side Radar	The Demand Side Radar is one of the main visualisation tools that will be used to attract and engage with stakeholders defined in D5.2
5	D5.6 (M18), D5.7 (M28)	User stories and policy briefs booklet	User stories and policy briefs are also key elements of the communication strategy to raise awareness and inspire stakeholders described in D5.2

5	D5.8 (M18), D5.9 (M30)	Sustainability Plan	D5.2 is connected to D5.8, released simultaneously, and the future updated plan D5.9, because effective communication and engagement strategies outlined in D5.2 are crucial for building awareness, generating interest, and garnering support for the sustainability initiatives and long-term objectives presented in D5.8 and D5.9.
6	D6.3 (M6), D6.4 (M30)	Data Management Plan	Collection and treatment of all data necessary to execute the plan here described will be compliant to what defined in the DMP

Table 1 - List of related deliverables

1.3 Structure of the document

D5.2 offers a comprehensive overview of UNLOCK-CEI's strategies for effective communication, dissemination, and engagement. The document is organised into several key sections:

- **Section 2 “Overview of main actions and assets”** introduces readers to the European Cloud-Edge-IoT Continuum and the key role played by the Communications Task Force (TF6). It offers insights into UNLOCK-CEI's communication assets, including its stakeholder analysis, targeted messaging, and engagement actions. This section lays the foundation for understanding the project's context and communication strategies.
- **Section 3 “Communication, Dissemination, and Engagement Results and Impact”** delves into the tangible outcomes of UNLOCK-CEI's communication efforts. It discusses various campaigns undertaken by the project, such as General awareness, Value Chain Adopter (VCA) support, EC Events, Industry Insights, and Midterm Achievements and Impact. The chapter also explores horizontal activities, including the project's website, social media channels, events, videos, news digest, materials, Zenodo community, and contact database. Through these details, readers gain a deep understanding of the project's reach and impact. The chapter outlines how the project has crafted its online and offline identity, maintained a strong online presence, increased awareness and engagement, fostered relationships with VCAs, disseminated preliminary results, and built a thriving community. Additionally, it discusses the measurement of Key Performance Indicators (KPIs) and their contributions to the project's overall success.
- **Section 4 “IPR policy”** addresses the project's Intellectual Property Rights (IPR) policy. It underscores the importance of protecting and responsibly managing project-related intellectual property, ensuring its integrity and value.
- **Section 5 “Next steps”** outlines the project's future communication, dissemination, and engagement plans beyond the scope of this deliverable. It provides insights into how UNLOCK-CEI intends to build upon its current strategies to further its goals.
- **Section 6 “Conclusions”** summarises the key takeaways from the document, emphasising the importance of effective communication, dissemination, and engagement in UNLOCK-CEI's mission. and setting the stage for future activities that will be documented in the final version of this plan, D5.3.

2. Overview of main actions and assets

This chapter presents a detailed overview of the EUCloudEdgeIoT (EUCEI) initiative, starting with an in-depth look at the collaborative efforts within the Communications Task Force (TF6) and later focussing on the specific activities of UNLOCK-CEI.

2.1 Communications Task Force TF6

To facilitate interaction and collaboration among these diverse stakeholders, the initiative has established [six task forces](#). These Task Forces (TFs) serve as cooperation mechanisms within the Cloud, Edge, IoT, and related domains, assisting in coordination and dissemination among stakeholders such as research projects, coordination projects, the European Commission, and other organisations. The TFs aim to avoid overlapping work between projects, amplify the impact of individual projects, identify potential areas for collaboration and conflict, create common strategies, approaches, and methodologies relevant to the CEI Ecosystem, increase the visibility of the Cloud, Edge, and IoT continuum and foster community development. Each TF targets specific types of projects and stakeholders, ensuring a comprehensive approach to advancing CEI technologies and ecosystems.

Among all the TFs, the one on Communications plays a significant role in the context of the present deliverable. The Communications Task Force (TF6) is a pivotal element of the EUCloudEdgeIoT initiative, dedicated to enhancing the visibility and coherence of the initiative's activities. The common objectives and responsibilities of the TF include:

- **Brand identity creation and joint branding management:** A key objective for TF6 is to craft and promote a distinct brand identity for the EUCloudEdgeIoT initiative. The TF endeavours to harmonise branding efforts among CSAs to create a cohesive and powerful voice that effectively communicates the initiative's mission and maximises its impact. This encompasses the establishment and maintenance of a consistent brand identity across all Coordination and Support Actions (CSAs), ensuring a unified presence and message in all external communications.
- **Community engagement and development:** TF6 aims to cultivate an active and engaged community. This includes all the cluster projects in chapter 1. Ensuring an ongoing, substantive discussion on the CEI continuum is another significant objective of TF6 as part of community engagement. The TF is responsible for initiating and maintaining a rich dialogue on CEI-related topics, encouraging the exchange of ideas and perspectives within the ecosystem.
- **Common Events Coordination:** The TF plays a central role in the orchestration of events that bring together various stakeholders of the EUCEI initiative. This includes the planning and execution of collaborative events such as workshops, consultation and concertation events, infodays and conferences, aimed at fostering synergy and knowledge exchange among the initiative's members and other interested stakeholders.
- **Amplification of the activities of Research and Innovation Actions (RIAs):** TF6 is committed to the promotion and amplification of the activities undertaken by RIAs. The TF actively works to disseminate achievements and progress made by these actions to a broader audience, thereby enhancing their impact and reach.

The TF is co-led by Maria Giuffrida, Trust-IT, in representation of UNLOCK-CEI and Catarina Pereira, Martel Innovate, in representation of Open Continuum. Members of the leading team are also Claudio de Majo and Diego Domenici (Trust-IT, UNLOCK-CEI) and Christos Tselebis (Martel Innovate, Open Continuum) as of November 2023. The coordination team constantly interacts to manage the joint assets described in 2.4 and convenes with bi-weekly longer meetings to plan and discuss short and medium term activities. The TF is also participated by at least one representative, typically the Communication Leader, of each of the 48 projects and initiatives involved in the EUCEI ecosystem, as reported [here](#). The TF organises monthly calls with all of its members that have been held on the second Wednesday of each month since the [public launch of the initiative to the wider community](#) in February 2023. Since November 2023, the TF6 monthly meetings are organised jointly with TF1 on strategic liaisons to enhance the project's overall impact by aligning communication efforts with strategic goals and ensuring a coordinated approach to stakeholder engagement.

2.3. UNLOCK-CEI Communications and Engagement

In the first 18 months of its initiative, UNLOCK-CEI has made significant contributions to communications and engagement TF6 overall activities via the effort of WP5, primarily focusing on demand-side actions, within the larger TF6 context. This summary outlines the key areas of activity, with subsequent chapters delving into more detailed analyses.

UNLOCK-CEI's efforts have been geared towards engaging and supporting end-users, stakeholders, and VCAs. This approach is evident in a set of targeted campaigns that have been organised and executed since M1. More precisely, UNLOCK-CEI led the organisation of the general awareness and branding campaign (**campaign #1**) from M01 (June 2022) with the creation of the first landing page in June 2022 and the first functional version of the website in early November 2022 as well as the setup of all social media channels until M07 (December 2022) with the launch of a general press release to widely present the initiative. As part of this campaign UNLOCK-CEI also organised the first introductory webinar to present the EUCEI initiative on 19th September 2022 and produce an initial set of branded materials such as the project's rollout banner and bookmarks.

Later on, UNLOCK-CEI organised more targeted campaigns, e.g. to support the recruitment of VCAs across the five industrial sectors targeted by the project. This is the case of **campaign #2** (M08-10) designed to foster awareness, engagement, and practical support for industry players interested in contributing to our project and network with possible partners interfacing with their technology and services.

Similarly it organised an industry focused campaign "Industry Insights" (**campaign #4**) started in M12 (May 2023) and still ongoing to highlight specific industry results, with dedicated brochures, spotlight use cases and a series of industry focused impact events.

In parallel, the project activated specific campaigns to support EC-led events (**campaign #3**). This is the case of the consultation and concertation event organised by Open Continuum in May 2023, where UNLOCK-CEI supported the promotion of the event with a focus on the creation of a first catalogue of Meta-OS use cases, the conduction of interviews with projects attending the event and the online and social media promotion. Later in the year, UNLOCK-CEI co-organised instead an infoDay focused on the promotion of five specific calls and was mainly responsible for the hybrid setting and offline event management and organisation of this event on 4th December 2023.

Finally, UNLOCK-CEI started the "Midterm Achievements and Impact" campaign (**campaign #5**) to showcase the preliminary insights and reflections of the project with a summary event that was held on 25th September 2023 and the release of a first white paper.

A part from the vertical campaigns, UNLOCK-CEI has been responsible for continuous "horizontal activities" that include the management of the website, social media channels and community activities in cooperation with Open Continuum.

The distinction between campaigns and horizontal activities in UNLOCK-CEI's approach lies in their focus and reach. While the campaigns are targeted, time-bound initiatives aimed at specific groups or objectives (such as raising general awareness or supporting value chain adopters if we take campaign #1 and #2 as examples), horizontal activities represent a broader, ongoing effort to engage, inform, and build a community around the project. This two-pronged approach ensures both depth and breadth in reaching and influencing UNLOCK-CEI's diverse stakeholders. All details about both types of actions are reported in chapter 3 of this document.

2.4. Communications, Dissemination and Engagement Assets

As a results of the communications, dissemination and engagement activities, all the main assets have been already created for the project and are described in the table below. The remaining final asset consisting of strategic policy recommendations for future initiatives will be produced in the upcoming months and

documented in the updated and final version of this deliverable, D5.3 as well as other related deliverables, e.g. D5.7 and D5.9.

Communications Asset	Description	Main Owner
Brand Identity and positioning	A cohesive set of branding guidelines and strategies that define and communicate the distinct identity of the EUCEI initiative. This includes logos, messaging, and overall aesthetic that aligns with the goals and values of the initiative.	Joint Ownership UNLOCK-CEI and Open Continuum
Website	The official online platform for the EUCEI initiative, serving as a central hub for information, updates, resources, and engagement with the broader community. It features project details, news, event listings, and resources.	Joint Ownership UNLOCK-CEI and Open Continuum
Social media channels	Official social media accounts used for promoting the initiative, sharing news, engaging with stakeholders, and amplifying the reach of EUCEI activities. Platforms include Twitter, LinkedIn, and Youtube.	Joint Ownership UNLOCK-CEI and Open Continuum
Community	A diverse network of stakeholders, including industry experts, researchers, and partners involved in the EUCEI initiative.	Ownership is mixed, with some contacts being joint (e.g., from joint events or TF6 activities) while others are project-specific. UNLOCK-CEI has specific contacts that are more focused on the industry side (see asset "contacts database")
UNLOCK-CEI contacts database	The UNLOCK-CEI stakeholder database is a comprehensive repository that houses key information about the project's stakeholders. It includes details like names, organisational affiliations, contact information, areas of interest or expertise, and records of engagement with the project, such as participation at events or subscription to the News Digest. This database is instrumental for reporting purposes as it enables the project team to track stakeholder engagement, assess the reach and impact of their initiatives, and tailor future communications and activities to meet stakeholder needs and interests. It serves as a vital tool for maintaining and nurturing relationships with key partners and collaborators. As of November 2023, the database counts 650+ unique community members (e.g. newsletter registrants, event participants, identifiable social media followers) that have directly interacted with UNLOCK-CEI	UNLOCK-CEI
Demand-side CEI radar	A tool designed to visualise the main use cases within the CEI landscape, providing valuable insights for the initiative's main key sectors of manufacturing, energy, healthcare, agriculture, mobility and transportation.	UNLOCK-CEI
CEI user stories and collection of spotlight use cases	A set of industry-focused examples and case studies demonstrating the practical applications and impact of CEI technologies.	UNLOCK-CEI

Table 2 - Summary of main communication, dissemination and engagement assets

2.5. Updated Stakeholder analysis, targeted messaging and engagement actions

This section provides an update on the stakeholders detected as potential target groups during the early stages of the UNLOCK-CEI project. For an in-depth analysis of the UNLOCK-CEI stakeholders, please refer instead to D5.1 Communications, Dissemination and Engagement Plan. The primary Stakeholder Groups (SGs) identified at the beginning of the project and confirmed over the course of the initial 18 months are

<https://www.eucloudedgeiot.eu>



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SG1 - Business Users, SG2 - Industrial and Technology Associations, SG3 - Tech Providers and Developers, and SG4 - Research and Innovation Organizations. Secondary stakeholders include **SG5 - Citizens and the General Public, and SG6 - Policy Makers and other facilitators.**

Primary stakeholders represent the main engagement targets for UNLOCK CEI, while secondary and other stakeholders represent target groups who can also benefit from UNLOCK CEI's outputs or influence and encourage the adoption and exploitation of its results in some way.

SG	Challenges	Value	Engagement Actions
SG1 - Business Users	Lack of or incomplete knowledge about the benefits brought by the CEI paradigm shift, inability to engage with CEI providers individually in an effective way, gaps between individual and industry needs or struggles in sustaining the long investment cycles needed to adopt CEI-based solutions, poor strategic alignment between different company functions, skills gaps, inertia, risk aversion for critical infrastructure.	Better understanding of CEI potentialities in terms of concrete use cases and application areas, possibility for their needs and voices to be heard and transferred to providers, the understanding of industry-specific dynamics and market trends.	<ul style="list-style-type: none"> A market-focused section on the EUCEI website was created to communicate the current market state, adoption barriers, and potential future opportunities for CEI adopters. CEI business users were engaged through a series of targeted value-chain adopters' events and later through the definition of success stories discussing positive examples of CEI adoption in different industrial contexts. Several CEI business users participated in UNLOCK-CEI webinars. Industry-focused success stories were published in the form of flyers and then leveraged for the publication of a whitepaper and future policy briefs.
SG2 - Industrial and Technology Associations	Lack of offering of actual services and infrastructures, understanding of dynamics limited to the sector of reference	Better understanding of possible CEI -based solutions, service offerings, user and provider business models, learning from different industrial sectors	<ul style="list-style-type: none"> Various associations and initiatives were engaged both online and at networking events contributing to increasing the momentum of CEI adoptions. Examples include the European Alliance for Industrial Data, Edge and Cloud, the Alliance for IoT and Edge Computing Innovation (AIOTI), GAIA-X Federated Secure Data Infrastructure, the Networked European Services and Software Initiative (NESSI), and the Big Data Value Association (BDVA).
SG3 - Tech Providers and Tech Developers	Capability and scaling complexities, interoperability problems, logistics complexities, bandwidth bottlenecks and high costs, security threats, and data access control, inadequate knowledge about end-users' needs, struggle in positioning clearly in the new CEI supply chain.	Direct link with CEI business users and a better understanding of their needs, collaboration opportunities with research and industrial players, and a better understanding of their role and proposition in the CEI tech delivery supply chain.	<ul style="list-style-type: none"> A series of tech impact events are being organised to understand how organisations can prepare to technically support the development of the future CEI infrastructure. UNLOCK-CEI webinar series also provided insights on technological gaps, bottlenecks and complexities of great interest for this stakeholder category. Tech providers and developers were also engaged through the larger EUCEI research projects community (see below).
SG4 - Research and Innovation Organisations	Limited contact with the business community and market players, problems in understanding or testing the suitability and readiness of their research for the go-to-	Access to research insights based on CEI landscape radar, market data or projections, and test results via commercial	<ul style="list-style-type: none"> A community of research projects exploring different aspects of the Computing Continuum was gathered, and different initiatives were channelled into six dedicated task forces. These aim to ensure strategic engagement, peer-to-peer relations, open call coordination,

	market, lack of specific skills or resources	feasibility assessment tool.	commercial relationships, commercialisation support and dissemination of research results. <ul style="list-style-type: none"> • UNLOCK-CEI's webinars also featured members of the research communities discussing their use cases, challenges and potential technological breakthroughs linked to CEI applications. These were also detailed in post-webinar reports. • Project brochures were created detailing the main accomplishments of research projects in the EUCEI community.
SG5 - Citizens and General Public	Low awareness about these technological trends and how a paradigm shift from cloud to edge to IoT affects their daily life	Understand the benefits and opportunities that can generate from the development of CEI demand.	<ul style="list-style-type: none"> • Several video pills for social media and other videos promoted the EUCEI initiative in simple language and explained the growing demand for these applications. • Webinar events also explained the role and potential of CEI applications in simple terms to appeal to a wide audience.
SG6 - Policy Makers and other facilitators	Understand investment priorities for the development of CEI, support the main actors of the CEI value chains, encourage CEI adoption, and reduce barriers to its development.	Landscape view of the technologies under development, their comparison and their market readiness also in terms of standardisation needs and maturity, insights for future funding programmes and the shaping of the next Large Scale Pilots	<ul style="list-style-type: none"> • Different CEI-related policies and initiatives were mapped on the EUCEI website in a dedicated section. • A whitepaper was drafted by the UNLOCK-CEI consortium gathering the project's main findings and insights and early reflections as a basis for the future production of policy briefs.

Table 3- Summary of Stakeholder Analysis and Achieved Engagement Actions

After detecting the different priorities and potential challenges/benefits associated with each stakeholder group, targeted messages were drafted for each category and promoted through different engagement channels (e.g., project website, social media channels, webinars, videos, flyers, workshops, success stories, newsletters, and specific events like the VCA workshops described in D3.2). Overall, the communication strategy aimed to provide insights, foster understanding, and promote the benefits and opportunities of the CEI paradigm shift. Targeted stakeholder engagement strategies also culminated in the first UNLOCK-CEI online forum Advancing towards the Cloud, Edge and IoT Continuum: Insights & Impacts held online on 25 September 2023 and featuring representatives from each stakeholder group.

The table below provides an update on the stakeholders' engagement actions carried out by the UNLOCK-CEI project as of M18 (November 2023). All the actions listed below resulted from events either promoted directly or supported by the UNLOCK-CEI project as part of the EUCEI initiative. Also, targeted social media campaigns promoted all physical and online events, publications, or any other dissemination material discussed below.

3. Communication, Dissemination and Engagement Results and Impact

This chapter presents the results of UNLOCK-CEI's Communication, Dissemination, and Engagement efforts. It is divided into two main sections. The first part details five key communication campaigns, outlining their goals, targets, and achieved outcomes. These campaigns are pivotal in promoting the adoption of cloud, edge, and IoT technologies across Europe. The second part focuses on the horizontal activities that support the initiative's outreach, such as the website, social media presence, event coordination, and community management. This chapter showcases the integration of targeted campaigns and continuous activities in

enhancing the UNLOCK-CEI activities and in turn boost EUCEI initiative's visibility and stakeholder engagement.

3.1. Campaigns

In order to better achieve its goals, WP5 has worked on the translation of the strategic plan detailed in D5.1 into a set of targeted communication and engagement campaigns. In the first 18 months of the project, five distinct campaigns have been identified and executed. They are described in the following sub-sections

3.1.1. Campaign 1 – General Awareness (Concluded)

During phase 1 of the project “Develop (M01-06)” – see D5.1 for details, a first “general awareness campaign was executed. This campaign focused on the promotion of UNLOCK-CEI and EUCEI’s launch and aimed to engage as many stakeholders as possible to support the achievement project’s overall goals.

Duration: M01 June 2022 – M07 December 2022

Main Goals and Target KPIs:

- Create a common branding and identity for the EUCEI initiative
- Build a cumulative audience community (social media channel audience) of 400 people by December 2022
- Build a cumulative database of at least 400 contacts across all stakeholder categories by December 2022
- Promote the project in at least six third-party events or meetings by December 2022

Main Activities performed:

- Creation of logo of the initiative and main templates
- Launch of the website (both temporary landing page and complete first version).
- Setup of the Newsdigest and EUCEI community mailing list.
- Press release by end of 2022 once Open Continuum and the MetaOS projects had officially started and promotion of the press release
- Introductory webinar
- Production of a roll-up banner and small gadgets.
- Production of introductory videos
- Production of dissemination material for general audience

Main Results

The Project Launch General Awareness Campaign was essential to establish both EUCEI and UNLOCK-CEI’s identity and presence among its key stakeholders. The first step was to plan and set up the project’s own communication channels. Then, an active event calendar in the seven-month campaign effectively put on an “roadshow” by directly reaching out to key stakeholders such as companies and researchers in third-party events as well as an UNLOCK-CEI led introductory webinar. Uptake by third-party media outlets and channels has also helped further spread word about EUCEI and UNLOCK-CEI.

- Gathered cumulative audience on social media as of December 2022: **587**
- Overall contacts in the UNLOCK-CEI database as of December 2022: **400**
- Launched News Digest issues as of December 2022: **3**
- Launched video pills: **4**
- Third-party events or meetings where UNLOCK-CEI had visibility as of December 2022 (more details about third-party events of campaign 1 and other events attended after December 2022 are available in the events section 3.2.3): **8**
 - IoT Week Conference (22 June 2022)

- H-Cloud Comms meeting (7 September 2022)
- IoT Exhibition (20-21 September 2022)
- EBDVF 2022 (22 November 2022)
- EFECTS (25 November 2022)
- AIOTI Webinar: IoT, Cloud, Edge Computing Continuum From Research to Deployment (30 November 2022)
- StandICT.eu Walk & Talk Webinar - Digital Transformation through Standardisation: IoT and Edge (13 December 2022)
- EU-IoT Communication Task Force Meeting (16 December 2022)
- Introductory webinars organised: **1** (19 September 2022 – more details in the events section)
- Communication channels set-up
 - Website [[EUCEI portal](https://eucloudedgeiot.eu)]
 - Twitter [[EU_CloudEdgeIoT](https://twitter.com/EU_CloudEdgeIoT)]
 - LinkedIn [[EUCloudEdgeIoT](https://www.linkedin.com/company/eucloudedgeiot/)]
 - YouTube [[eucloudedgeiot_eu](https://www.youtube.com/eucloudedgeiot_eu)]
 - Newsletter [[EUCEI News Digest](#)]



Figure 1 – Sample of branding material produced as part of campaign 1

3.1.2. Campaign 2 – Value Chain Adopter Support (First round concluded, second round planned)

As part of the phase 2 “Engagement”, a support campaign to recruit Value Chain Adopters for the first wave of WP3 workshops was setup and conducted. This campaign leveraged a blend of targeted promotional activities to achieve its main goals, including the creation of engaging promotional materials and the organisation of an opening webinar for the first wave of workshops.

Duration: M08 January 2023 - M10 March 2023, next round planned to start in M19

Main Goals and Target KPIs:

- Foster active engagement with VCAs.
- Develop and distribute effective promotional materials to attract and inform potential adopters.
- Organise a successful opening webinar to kick-start the first series of workshops

Main Activities Performed:

- Creation of a dedicated promotional video that succinctly showcases the benefits and opportunities offered by UNLOCK-CEI for value chain adopters.
- Organisation and execution of an opening promotional webinar, serving as an interactive occasion for introducing the initiative and engaging directly with potential adopters.
- Design and production of a flyer, providing concise and compelling information about the initiative, specifically tailored to attract and inform value chain adopters.

Main Results:

This campaign played a role in amplifying UNLOCK-CEI's reach and appeal to potential VCAs. The promotional video communicated the initiative's objectives and opportunities, to raise interest and engagement. The opening webinar successfully initiated the series of workshops, drawing a significant number of registrants and attendees. The flyer served as a tangible resource, further spreading awareness and information about the VCAs. Overall, this campaign contributed to building a foundation for the project's ongoing engagement with VCAs, setting a precedent for future recruitment and promotional efforts. A second round of this recruitment support campaign is set between M19 and M21. This continuation is strategically timed to bolster the second wave of workshops to be held from February 2023, building upon the initial campaign's results and lessons learned.

- Organised webinars: 1 opening webinar (6 February 2023 – more details in the events section)
- Promotional video: **1**, views: **299**
- Promotional flyer: **1**, views: **131**, downloads: **110**



Figure 2 - VCA promotional flyer produced as part of campaign 2

3.1.3. Campaign 3 – Support to EC events: Concertation and Consultation Event and InfoDay (ongoing)

This campaign was designed to align with and support key EC events, such as the Concertation and Consultation Event in May 2023, primarily organised by Open Continuum (concluded) and the upcoming Infoday scheduled for 4th December 2023.

Duration: M09 February 2023 - M12 May 2023 (concluded), second round ongoing

Main goals and target KPIs

The campaign entails:

- Focused Engagement: the campaign is currently part of the 'Engage' phase ending in M18, reflecting a shift towards more direct interaction with the community and stakeholders.
- Targeted Communication Materials: The use of specific materials like the [MetaOS booklet](#) launched during the consultation and concertation event and video interviews with RIAs indicates a tailored approach to content dissemination.

Main Activities Performed:

- Support Open Continuum in the communication activities of the May 2023 event, moderation of panels and rapporteuring
- Design and production of a Booklet on MetaOS use cases
- Support in the realisation of the [Research Community Booklet](#) and the [EUCEI initiative Brochure](#)
- For the second round, the main activities were focussed on leading the organisation of the offline and hybrid setting of the InfoDay to be held in December 2023

Main Results:

The campaign, aligning with key EC events, has achieved significant milestones:

- During its initial phase from February to May 2023, it successfully supported and enhanced the visibility of the Concertation and Consultation Event.
- The MetaOS booklet, launched at this event, received positive feedback for its insightful content on use cases, contributing to a deeper understanding of the project's scope.
- The video interviews with RIAs further amplified the project's reach, engaging a wider audience with compelling narratives about research impacts and future directions.
- The campaign's focused engagement approach, entering the 'Engage' phase, has led to more direct and meaningful interactions with the community and stakeholders, which is evident from the increased participation in discussions and panels.

As we move towards the second round, the focus has shifted to organising the offline and hybrid settings of the upcoming Infoday in December 2023. This next phase aims to build upon the established foundations, driving further engagement and participation. The campaign's adaptability and targeted communication strategies have been key in achieving important intermediate results as, at the submission of this deliverable, we have over 300 registered participants of which over 80 in person exceeding the targets set by the EC for the InfoDay.



Figure 3 - Sample materials produced for campaign 3

3.1.4. Campaign 4 – Industry Insights (ongoing)

The "Industry Insights" campaign, initiated in May 2023, is a market-oriented initiative designed to provide deep dives into various industrial sectors. It aligns closely with Task Force 5 "Markets and Sectors" and involves a series of sector-based industry impact events, complemented by the production of targeted brochures and digital content

Duration: M12 May 2023 - ongoing

Main goals and target KPIs

The campaign entails the following:

- Host 5 industry-focused tech impact events to provide sector-specific insights.
- Host events to support the launch and dissemination of Open Calls of MetaOS projects among relevant SGs across various sectors
- Produce and disseminate sector-based brochures and digital content.
- Develop and launch the CEI demand-side radar by the end of 2023.
- Engage industry stakeholders across various sectors, enhancing awareness and collaboration.

Main Activities Performed:

- Organised a [market-oriented webinar \(the project's third overall\) with an AI-Sprint](#) in May 2023.
- Launched a series of sector-based industry impact events (see more details in the section about events):
 - Manufacturing event on 10 July 2023, followed by a physical session at the EBDVF 2023 conference.
 - Upcoming participation in ENLIT in November 2023, focusing on the energy sector.
- Delivered a set of events to promote the open calls of MetaOS projects. These events were led by [Task Force 4 - Ecosystem Engagement](#), with the support of UNLOCK-CEI Communications team
 - [Capitalising on Cloud-Edge-IoT: Building your next product, finding your next market opportunity](#)
 - [Giving Energy an Edge: Showcasing the Edge to Cloud Continuum in Energy](#)
- Produced sector-based brochures in collaboration with WP1 and WP3.
- Developed sector-based spotlight use case webpages as part of T5.2 activities and in anticipation of the first version of the CEI demand-side radar.

Main Results:

<https://www.eucloudedgeiot.eu>

 @EU_CloudEdgeIoT |  company/ eucloudedgeiot

- This campaign during its intermediate phase has successfully navigated the complexities of market-specific engagements and has laid a robust foundation for continued growth and impact in various industry sectors.
- The combination of sector-specific events, targeted brochures, and digital content development has not only enhanced the project's visibility but also deepened its connection with industry stakeholders.
- The campaign kicked off with a market-oriented event with the AI-Sprint project in May 2023, setting the tone for a series of impactful sector-based industry events.
- Later, a significant event focusing on manufacturing was held on July 10, 2023, online, followed by a physical session at the EBDVF 2023 conference. This event not only provided critical insights into the manufacturing sector but also served as a platform for stakeholders to engage and share knowledge.
- Two events were then held to promote the open call opportunities of MetaOS projects, respectively in September 2023 for all sectors and in November 2023 with a focus on the energy sector.
- Additionally, preparations are underway for the UNLOCK-CEI's upcoming participation in the ENLIT event on 28-30 November 2023, which promises to be a cornerstone event for the energy sector.
- Alongside these events, the campaign has been active in producing sector-based brochures in collaboration with WP1 and WP3. These brochures have played a key role in disseminating industry-specific insights, contributing significantly to the campaign's outreach efforts.
- Furthermore, the development of sector-based spotlight use case webpages as part of T5.2 activities has added another dimension to the campaign. These webpages not only highlight specific applications and innovations but also enhance the visibility of the project's impacts across various sectors.



Figure 4 - Sample materials produced for campaign 4

3.1.5. Campaign 5 – Midterm Achievements and Impact (concluded)

This campaign was focused on showcasing the project's achievements and impacts and centred around the organisation of the first project annual event, providing a platform for discussing the project's impacts and future directions, with dedicated communication and dissemination material

Duration: M14 July 2023 – M16 September 2023

Main goals and target KPIs

- Host the first online stakeholder annual event to enhance engagement and collaboration.
- Launch the first set of CEI user stories, providing real-world insights into the project's impact.
- Publish the project white paper detailing the challenges and opportunities of CEI stakeholders across various sectors, enhancing awareness and collaboration.
- Develop and release a communication video pill to promote the annual event and amplify outreach.

Main Activities Performed

- Organised and executed the first online stakeholder annual event on 25 September 2023, fostering a platform for comprehensive discussion and stakeholder interaction.
- Developed and released the first three CEI user stories, capturing diverse experiences of industrial actors
- Compiled and published a detailed white paper, providing a nuanced analysis of the challenges and opportunities in the realm of CEI, as part of the project's broader dissemination strategy.
- Produced and launched a communication video pill, designed to advertise the annual event and engage a wider audience.

Main Results:

The Midterm Achievements and Impact campaign, focusing on critical milestones between July and September 2023, enhanced the project's outreach and stakeholder engagement:

- The first online stakeholder annual event, held on 25 September 2023, attracted 120 registrants and over 70 live participants fostering rich discussions.
- The launch of the first set of CEI user stories, presented in D5.6, marked a pivotal moment in the campaign, offering tangible, real-world examples of the project's impact and reach. These stories were instrumental in bringing to life the theoretical aspects of the project, making them relatable and accessible to a broader audience.
- Furthermore, the publication of the project white paper on the challenges and opportunities of CEI, also detailed in D5.6, provided a comprehensive overview of the current landscape. This document served as a key resource for stakeholders, outlining both the potential challenges and the vast opportunities within the CEI ecosystem. It played a crucial role in setting the strategic direction for future phases of the project.

Overall, the Midterm Achievements and Impact campaign significantly contributed to the project's visibility, engagement, and strategic development. The combination of the stakeholder event, user stories, and the white paper effectively bridged the gap between the project's goals and its tangible impacts, paving the way for continued success and influence in the project's subsequent phases.

The presented campaigns collectively demonstrate UNLOCK CEI's strategic approach to communication and engagement, with each campaign tailored to address different aspects of the project and its stakeholders.

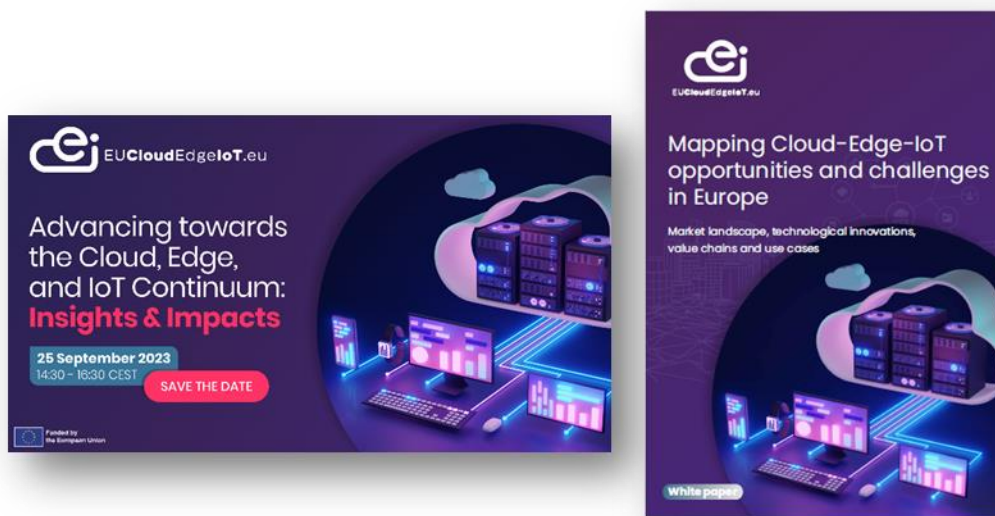


Figure 5 - Sample materials produced for campaign 5

3.2. Horizontal Activities

In this section, we focus on the horizontal activities of UNLOCK-CEI, encompassing the continuous, overarching efforts that form the backbone of our communication strategy. These activities play a crucial role in sustaining the initiative's momentum, within the EUCEI wider efforts, expanding its reach, and nurturing an engaged and informed stakeholder community.

3.2.1. Website

As part of the agreement with Open Continuum and the European Commission, there is not a dedicated UNLOCK-CEI website. Rather, a joint EUCEI website was designed and developed to encompass all activities carried on by UNLOCK-CEI and Open Continuum, as well as gradually host information from all the Research and Innovation projects working on the CEI Continuum. The website serves as the central channel for communication and engagement, providing stakeholders with all the essential information about the EUCloudEdgeIoT umbrella initiative.

The website was initially released as a temporary landing page during its preliminary phase, made available since UNLOCK-CEI's Kick Off on 1st June 2022. As described in D5.1, the landing page featured a hero section prominently displaying the initiative's name and description, which redirected visitors to the European Strategy for data. It consisted of several informative sections, including opportunities for industrial players, links to relevant existing projects and initiatives within domains the IoT and Cloud domains like [NGIoT](#) and [H-Cloud](#), and details about the project's initial presentation at IoT Week 2022. Additionally, visitors were encouraged to subscribe to the project's newsletter and connect through social media.

Following the landing page, a first iteration was planned and executed. The activities for the release of the first full version of the website were led by the Trust-IT/COMMpla (UNLOCK-CEI) with the collaboration of Martel Innovate (Open Continuum), involving the EC representatives at major development milestones. The marketing team initiated the website development process by creating an initial website structure and appearance draft, aligning with the main project goals and adhering to UX design principles. Subsequently, the graphic team utilised their expertise to craft an aesthetically appealing mock-up. The technical team then engaged in the subsequent implementation and testing phases, cycling back to the marketing team for

feedback. During the mock-up phases, the tool FIGMA facilitated seamless interactions and collaboration among the various teams, which followed the development workflow depicted below.

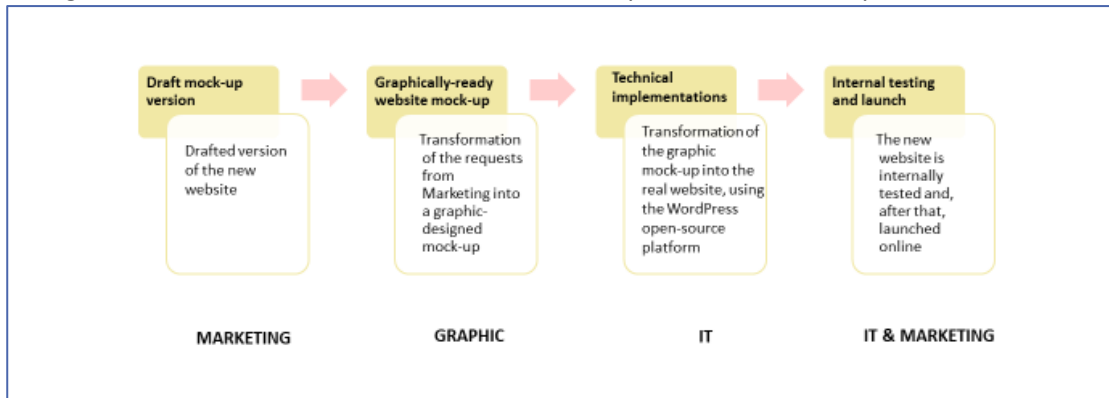


Figure 6 - Website development workflow

3.2.1.1. Wireflow, wireframes and Mock-Ups

As part of the design and development process of EUCEI's website, several wireflows and wireframes were developed. To begin with, the initial requirements were translated into key concepts. In particular, the homepage was built to communicate the initiative's main assets, goals and, in time, the main results achieved. In this way, the first wireframes were developed to start the website's construction, defining the communication message aligned with the selected colour palette. The figure on the right side of this text displays the wireframe produced before the launch of the first full version of the joint EUCEI website. It was developed on the collaborative tool MIRO to allow more efficient and effective collaboration among the various teams involved

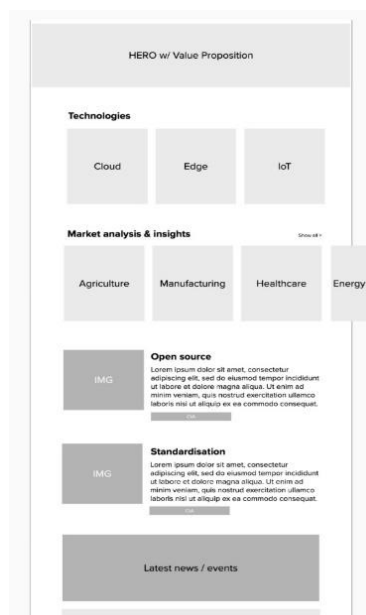


Figure 7 - Website first release - homepage wireframe

After validating the website's main concept and revising it with the needed iterations, a series of mock-ups has been produced to translate the key message present in the wireframe (see figures below depicting the main sections of the homepage in the first iteration) into an effective graphical user interface. Different mock-ups were discussed among the UNLOCK-CEI and Open Continuum consortia and, in a second instance, with <https://www.eucloudedgeiot.eu>

the European Commission's Project Officers to whom the mock-up and first active version of the website were presented during the coordination meeting dedicated to Task Force 6 (TF6- Communications) held on 26th October 2022 and the feedback and approval to make this version public was gained. The colour palette and designs adopted aligned with decisions made in consultation with Open Continuum representatives.

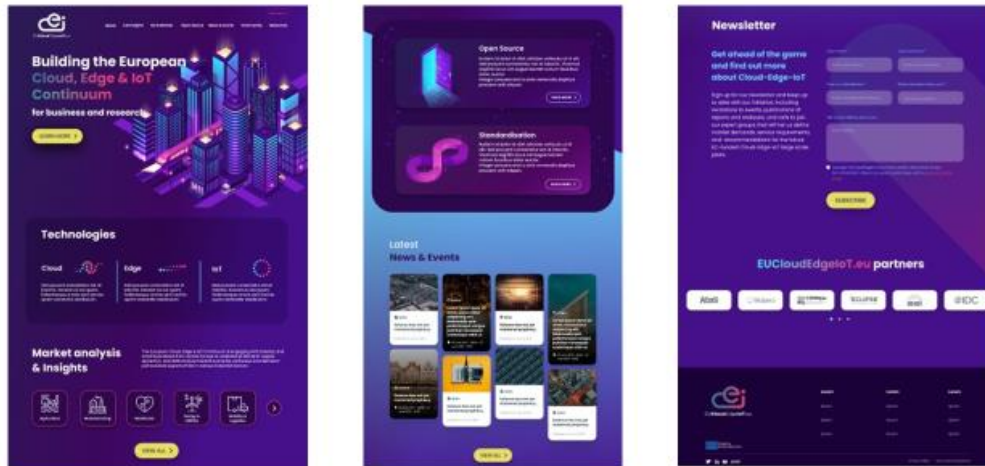


Figure 8 – Homepage Mockup – First version of the website online in November 2022

3.2.1.2. Website technical details

After validating the results and reaching a consensus, the website was developed on the WordPress content management system (CMS), written in PHP and run on a MySQL or MariaDB database. WordPress was chosen for its many advantages, including a diverse range of functionalities, especially the vast selection of plugins that extend existing features and the abundance of themes available for flexible and visually appealing designs. Iterations refined its visual identity as the website evolved, incorporating feedback from consortium partners and the European Commission.

The website was developed following SEO-driven principles, further enhanced by installing the Yoast SEO WordPress plugin. Comprehensive website analytics are gathered and presented on a customised dashboard, with monthly tracking conducted through Google Analytics to derive detailed statistics on website visitors and user behaviour. This proactive monitoring system allows tracking the project's KPIs related to website performance, promptly identifying potential issues and implementing corrective actions. The Google Analytics profile was set up in the first month to collect datasets regarding visitors' clicks on calls to action and conversions. Subsequently, a Looker Studio dashboard automatically retrieving information from Google Analytics was set up to easily monitor relevant website metrics and KPIs, as shown in the figure below, updated as of 27th November 2023. The graph below shows a website performance which remains positive and growing with respect to the interim results presented at the review in M09. We register a 61.6% engagement rate (higher than the industry average of 50%), reflecting strong user interest and interaction. We have achieved 27,900 views and 10,900 sessions, averaging 4.3 sessions per user, indicating a consistent revisit rate. While there is a slight 33% decrease in conversions which will need to be further investigated, this could be the outcome of various factors, such as external factors or market trends that may not directly reflect the site's content or user experience quality or it could signal a shift in user interaction patterns. However, it is important to consider that these metrics do not include users who reject cookies, possibly skewing some data insights.

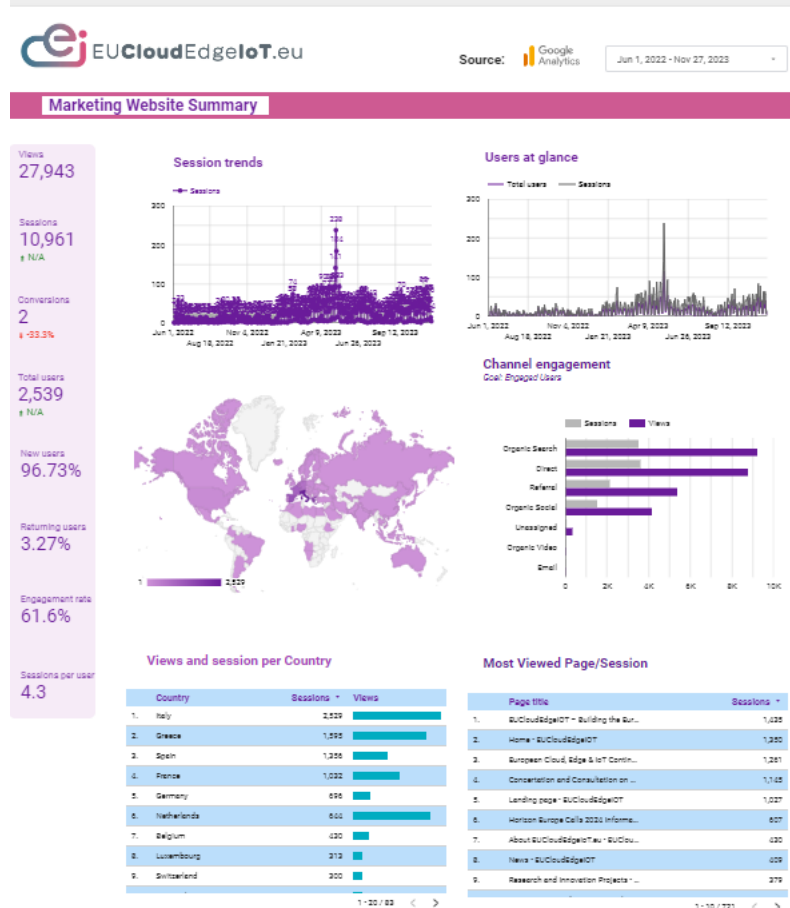


Figure 9 - Looker Studio Website Analytics Dashboard

The Trust-IT + COMMpla tech team maintains the website and routinely performs hosting management, technical maintenance, and monitoring. Conversely, the website's administration runs with a two-tier model featuring Trust-IT/COMMpla and Martel Innovate team members, given their shared responsibility in the TF6. All members act as website administrators with the same titles.

The website and database instances are monitored automatically by the Uptime Robot (uptimerobot.com), a free service to monitor if the website or any other endpoint is up. In case of failure, the system sends an email to flag the problem. The notification is emailed to the Trust-IT/COMMpla's technical team and via other channels (Internal Technical Communication Channel, private Smartphone of key technical employees of Trust-IT) exploiting 3rd party webhooks. As for hosting, Trust-IT currently hosts the website on its virtual servers in AWS (Amazon Web Services). AWS guarantees the servers to be in the Ireland region, to maintain all the data in the European Union.

4.2.2.3. Website iterations

As a result of the process outlined above, the first website iteration was released in October 2022.

A second iteration was released in February 2023 and this time it was led by Open Continuum, with Trust-IT (UNLOCK-CEI) covering a supporting role. Following feedback from the European Commission, the new version further reinforced the previous structure, adding sections resulting from EUCEI's evolution. New pages included EUCEI's Task Forces, RIA projects, open calls, and a summary of the first cloud-edge-IoT market insights which is an example of specific contributions provided by Unlock-CEI in the revamped version of this website, leveraging on the information in D1.1, Cloud-Edge-IoT Demand Landscape and D5.4, EU Demand Side Radar, as well as the online tool Infogram to create graphics, charts and dashboards, as the one provided below. Further details on this specific content is reported in D5.4

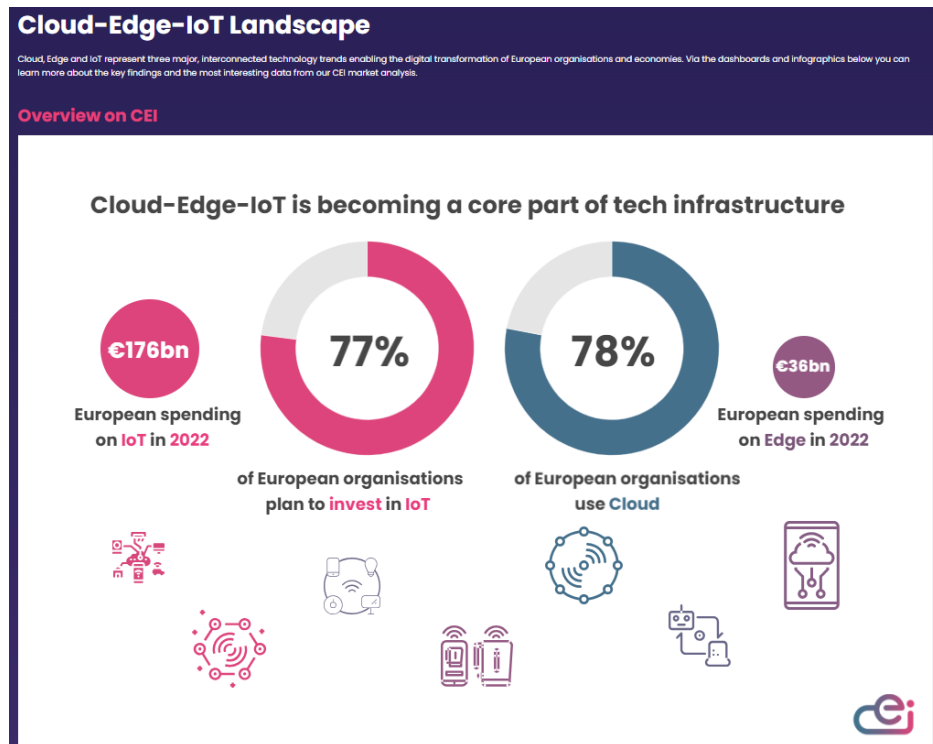


Figure 10 - Market forecast page (available since February 2023) developed on Infogram

Finally, in June 2023, there was a third iteration to improve the showcase and retrieval of relevant information. This iteration was implemented following indications from the EC with the Open Continuum team taking a leading role. The third version of the website implemented updates and enhancements to the previous iteration's functionalities using the Elementor Pro plugin—a versatile drag-and-drop page builder for WordPress. With this upgrade, the website's design and dynamism were significantly improved. The UNLOCK-CEI team leveraged the Graphina Pro interactive advanced visualisation plugin, which enabled the creation of engaging charts for cloud-edge-IoT content. This choice allowed for the seamless replacement of the less mobile-responsive Infogram, further enhancing the website's overall quality and user experience.

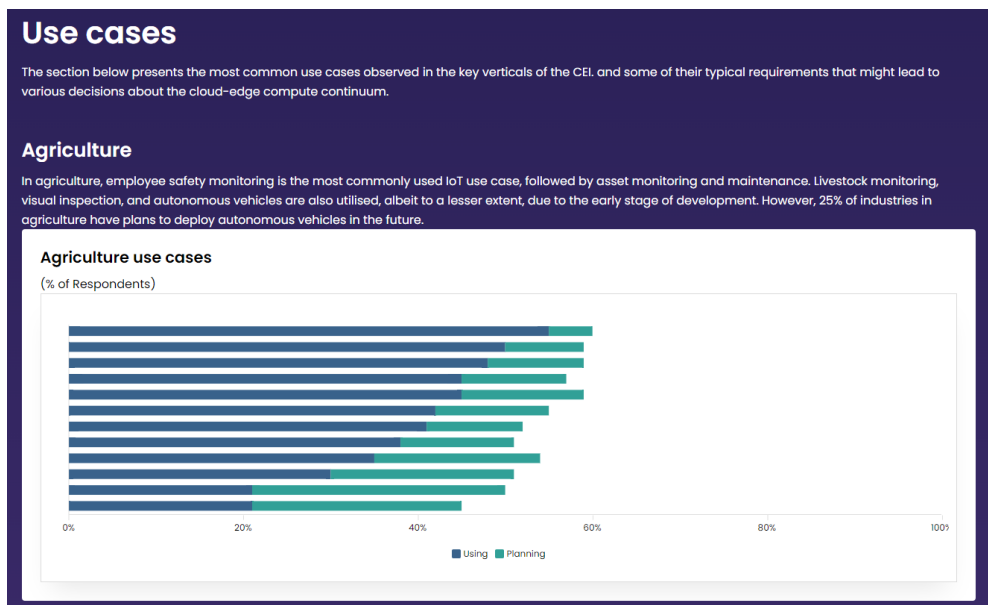


Figure 11 - Market forecast use cases in value chain sectors as displayed in Graphina Pro

As part of the third website iteration, a further update on the UNLOCK-CEI's side was the creation of an industry spotlight subsection documenting main insights and key use cases gained for each value chain industrial sector – Agriculture, Energy, Healthcare, Manufacturing, and Transportation. The full set on industry spotlight pages are accessible via the home page of the website, as displayed below. An example dedicated to the Manufacturing sector is available in the respective [industry spotlight page](#) that also contains “Industry Spotlight Use Cases” sections curated based on comprehensive surveys conducted by IDC in 2023, targeting market and industry professionals across Europe. The examples accompanying each spotlight use case category are derived from use cases executed by the Research and Innovation Action teams within the EUCloudEdgeIoT community.

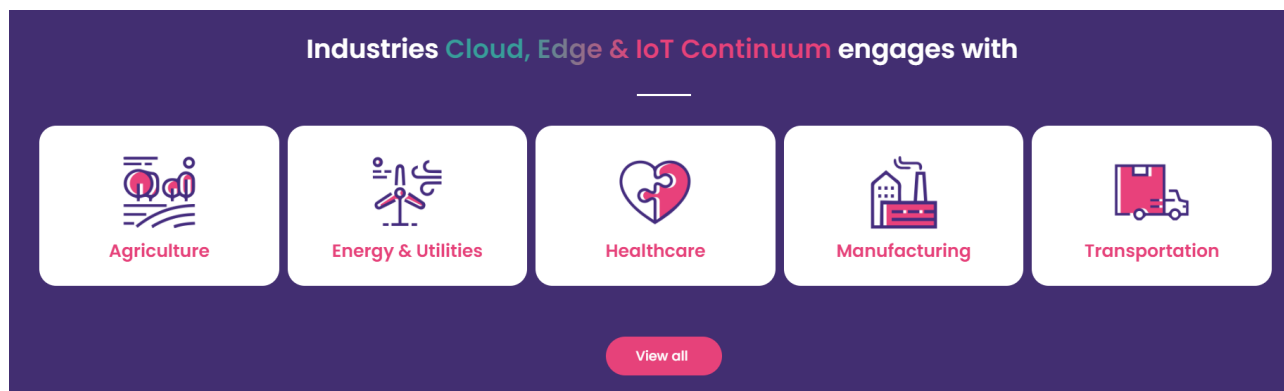


Figure 12 - Industry Spotlight pages on the EUCEI homepage, available since June 2023

The next iteration of the website will be completed by end of 2023 and will include an important update, i.e. the integration of the first comprehensive version of the demand-side radar as planned in D5.4. The radar also represents one of the project's Key Exploitable Results as described in D5.8

3.2.2. Social Media Channels

To engage with its stakeholders, build its community, and gather input, UNLOCK-CEI uses various social media platforms in synergy with Open Continuum, producing high-quality and highly relevant content to publish on each. The media teams of both CSAs apply a multi-stakeholder engagement plan, targeting primary stakeholders through social media channels at internal and external events, and targets secondary stakeholders through ICT and business channels, building on existing collective networks with close interaction with the EUCEI community and other relevant initiatives.

At the time of writing (November 2023), the initiative accounts on X, LinkedIn, and YouTube are set up and active.

The overall social media community has started its expansion and already counts 1180 followers across all the three channels. Most of these are from LinkedIn, which has a high rate of engagement by very relevant members of the community, including CEI service providers. X is also a key channel for the project and gains high levels of reach and impressions due the sense of community that has been built on the channel, not only with project partners, but also with relevant stakeholders within the space together with academics and researchers from across Europe. The community on X has been organically grown, meaning that all impression, reach and engagement levels are of high quality, as only the most relevant EUCEI and EUCEI-related content is posted. Such content also includes live tweeting during events such as webinars, which garner much attention. The growth of both LinkedIn and X are consistent and will provide excellent platforms with interested and engaged communities, ideal for communication and dissemination going forwards.

An overview of the social media activities is provided below.

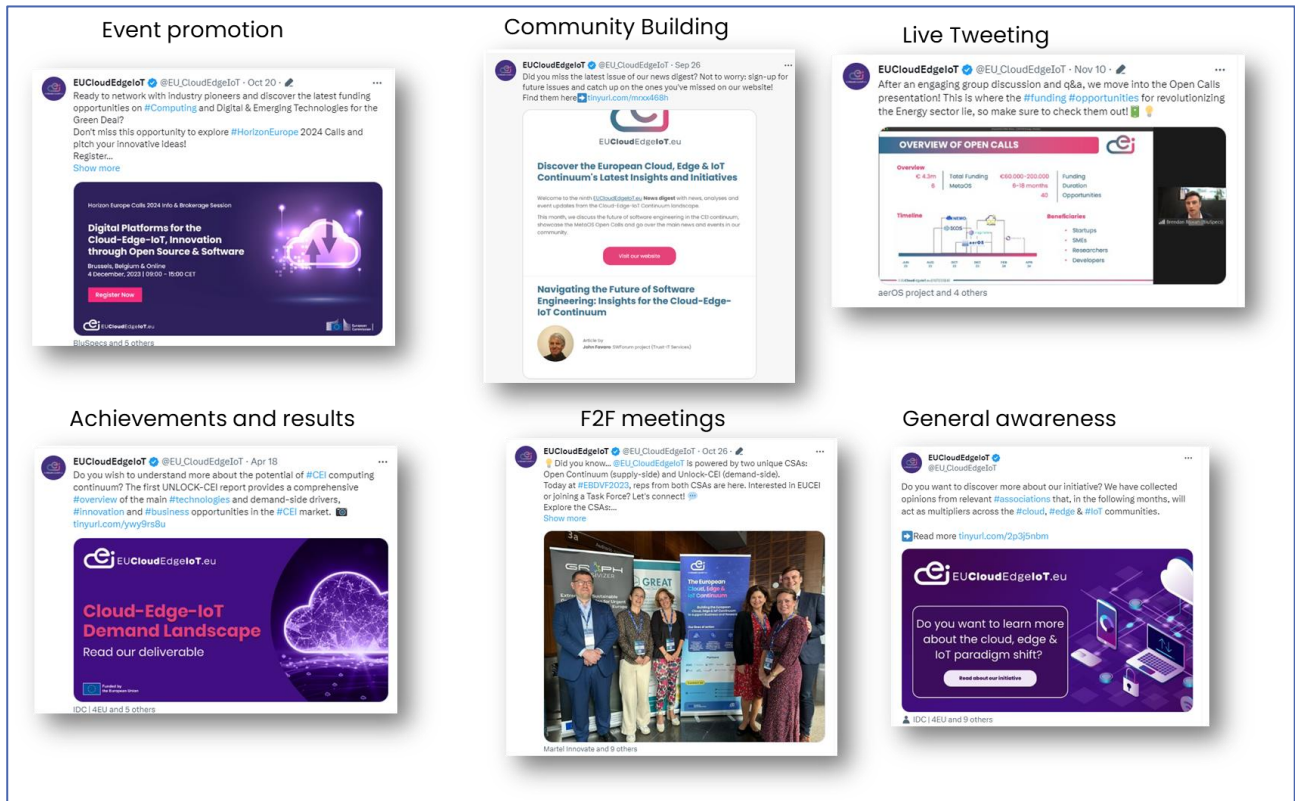


Figure 13 - Sample social media posts

3.2.3. Events

During its first 18 months of activity, UNLOCK-CEI has organised directly a large amount of events and taken part in third party events as well. These are overall tracked in a shared file with the whole consortium. The main events for the reporting period covered in this deliverable are described in the following paragraphs with a specific focus on those directly foreseen by UNLOCK-CEI Grant Agreement and the additional ones requested by the EC and organised within TF6. In addition to the events listed here, additional webinars and online workshops have been organised by TF4 and TF5 led by UNLOCK-CEI whose details are contained in the project technical report. The full list of events is also reported at the end of this chapter. For all the events, dedicated banners and digital promotion activities were produced as detailed in the “materials” section.

3.2.3.1. Webinars

UNLOCK-CEI has overall directly organised 3 main webinars with the main involvement of WP5 whose details are summarised below

#	Title	Date	Registrants	Live Attendants	Recording views
1	Understanding Cloud-Edge-IoT: challenges and opportunities	19 th September 2022	100	52	93
2	Shaping the uptake of CEI-based services to support industrial use cases	6 th February 2023	103	48	69
3	Computing continuum and the role of AI as a complementary technology: European market forecast and insights	24 th May 2023	78	41	83

Table 4 - List of UNLOCK-CEI webinars up to M18

3.2.3.2. Tech Impact Vertical Events

UNLOCK-CEI has overall directly organised 2 main tech impact vertical events on the manufacturing (split into an online and offline “episode” and energy industry (offline). These are additional but synergistic with the sector-based workshop waves organised by WP3 and WP2 with the main involvement of WP5 whose details are summarised below. The additional 3 events will be hosted in the second part of the project with the next one being an online event focused on the agriculture industry.

#	Title	Date	Registrants	Live Attendants	Recording views
1	Cloud-Edge-IoT Innovations in Manufacturing: Unveiling Market Insights and Use Cases [online part]	10 th July 2023	90	54	91
2	Accelerating the adoption of manufacturing use cases through computing continuum and data spaces [offline part, hosted by EBDVF 2023]	27 th October 2023	N/A	35	N/A
3	Energy Data Spaces – Technologies [offline, hosted by ENLIT 2023]	29 th November 2023	N/A	N/A at the time of this deliverable submission	N/A

Table 5 - List of UNLOCK-CEI Tech Impact Vertical events up to M18

3.2.3.3. EC Events

As detailed in the campaigns chapter, UNLOCK-CEI has been involved in the organisation of two EC events. The first one was primarily led by Open Continuum, the Consultation and Concertation event for the EUCEI community in May. The second one is jointly organised by both CSAs with UNLOCK-CEI playing a major role in the offline setting. The event is upcoming and will be hosted in Bruxelles on a full day on 4th December 2023. The event will also be accessible online and streamed via the EUCEI website and youtube channel. The Horizon Europe Calls 2024 Information & Brokerage Session, part of the EUCloudEdgeIoT initiative will focused on topics like Smart IoT Platforms, Cloud-Edge-IoT Solutions, and Open Source for Cloud/Edge. The event will include pitch sessions, networking opportunities, and discussions on Horizon Europe 2024 Calls, offering participants the chance to present ideas, network with industry leaders, and build collaborations. Targeted at companies, universities, research institutes, SMEs, and individuals, the session will aim to foster partnerships and extend scientific networks. The outcomes and results of this event will be reported in the next deliverable D5.3.

3.2.3.4. First Online Stakeholder Forum Event

The "[Advancing towards the Cloud, Edge, and IoT Continuum: Insights and Impacts](#)" event, held on 25th September 2023 provided insights into UNLOCK-CEI results and its ongoing efforts as part of EUCEI, allowing participants to explore preliminary results and impacts also from various TFs within the initiative. The diverse range of participants included industry professionals, researchers, policymakers, and technology enthusiasts. Keynote speeches, panel discussions, and presentations focused on industry requirements, market trends, and success stories in sectors like manufacturing, energy, healthcare, agriculture, and transportation, aiming to bridge demand and supply through collaborative frameworks and use case ecosystems. The event counted 122 registrants, 76 unique live participants and 18 speakers. [The video recording](#) of the event counts 141 views.



Figure 14 - Promotional banner of the Yearly Online Stakeholder Event - September 2023

3.2.3.5. Third-Party Events

UNLOCK-CEI has actively participated in 14 third-party events and meetings, progressing towards its ambitious goal of attending 30 external events by the end of the project. This involvement in external events is a strategic move to enhance the project's visibility, foster collaborations, and gain insights from a broader community. By engaging with diverse stakeholders at these events, UNLOCK-CEI aims to integrate external expertise and feedback into its activities, thereby enriching its own knowledge base and strengthening its position in the field. This approach is crucial for achieving the project's overarching objectives and maximising its impact in the industry. The table below provides a full overview of all the events the projects has been involved in, either as organiser or participant for a total of **38 overall events**.

#	Title	Date	Organiser	Location
1	IoT week 2022	21-22 June 2022	Third Party	Dublin
2	H-Cloud Comms Meeting	7 September 2022	Third Party	Online
3	Understanding CEI: challenges and opportunities	19 September 2022	UNLOCK-CEI (Trust-IT)	Online
4	IoT Exhibition	20 September 2022	Third Party	Amsterdam
5	EBDVF 2022	22 November 2022	Third Party	Prague
6	EFECS	25 November 2022	Third Party	Amsterdam
7	AIOTI Webinar: IoT, Cloud, Edge Computing Continuum From Research to Deployment	30 November 2022	Third Party	Online
8	Walk & Talk Webinar - Digital Transformation through Standardisation: IoT and Edge	13 December 2022	Third Party	Online
9	EU-IoT Communication TF	16 December 2022	Third Party	Online
10	TF5 – TF4 Kick-off meeting	16 January 2023	UNLOCK-CEI (IDC and BLU)	Online

11	Shaping the uptake of cloud-to-edge based services to support industrial use cases	6 February 2023	UNLOCK-CEI (Trust-IT)	Online
12	Official Launch of the EU-CEI Community	8 February 2023	EUCEI	Online
13	TF5 “Market and Sectors” Workshop on use case development	13 February 2023	UNLOCK-CEI (IDC and BLU)	Online
14	Demand pull drivers for Cloud Edge IoT in the manufacturing sector	16 February 2023	UNLOCK-CEI (VDI)	Online
15	Demand pull drivers for Cloud Edge IoT in the agriculture sector	17 February 2023	UNLOCK-CEI (VDI)	Online
16	Software Technologies and Standards: Enabling interoperability and Innovation	21 February 2023	Third Party	Online
17	AIOTI Early Innovation Champions Task Force Webinar: Success in managing Open Calls in IoT and Edge	27 February 2023	Third Party	Online
18	Demand pull drivers for Cloud Edge IoT in the healthcare sector	10 March 2023	UNLOCK-CEI (VDI)	Online
19	Demand pull drivers for Cloud Edge IoT in the transportation sector	17 March 2023	UNLOCK-CEI (VDI)	Online
20	Demand pull drivers for Cloud Edge IoT in the energy sector	23 March 2023	UNLOCK-CEI (VDI)	Online
21	EU-IoT final event	30 March 2023	Third Party	Online
22	Concertation and Consultation on Computing Continuum: From Cloud to Edge to IoT	10-11 May 2023	Open Continuum	Bruxelles
23	Joint workshop of TF5 and LeADS on digital skills for CEI	18 May 2023	UNLOCK-CEI and LEADS (IDC and BLU)	Online
24	Computing Continuum and the role of AI as a complementary technology: European market forecast and insights	24 May 2023	UNLOCK-CEI and AI-Sprint (IDC and Trust-IT)	Online
25	HiPEAC community meeting	27 June 2023	Third Party	Online
26	AIOTI webinar: presenting Open Call Opportunities	6 July 2023	AIOTI and UNLOCK-CEI (BLU)	Online
27	Cloud-Edge-IoT Innovations in Manufacturing: Unveiling Market Insights and Use Cases	10 July 2023	UNLOCK-CEI (Trust-IT and IDC)	
28	Capitalising on Cloud-Edge-IoT: Building your next product,	20 September 2023	UNLOCK-CEI (BLU)	Online

	finding your next market opportunity			
29	HiPEAC community meeting	22 September 2023	Third Party	Bruxelles and Online
30	Advancing towards the Cloud, Edge, and IoT Continuum: Insights and Impacts	25 September 2023	UNLOCK-CEI (Trust-IT)	Online
31	NexusForum 2023	5-6 October 2023	Third Party	Bruxelles
32	AIOTI Signature Event	10 October 2023	Third Party	Bruxelles
33	AI-Sprint Final Event	11 October 2023	Third Party	Milan
34	Driving a digital advantage with intelligent infrastructure management in EMEA	18 October 2023	Third Party	Online
35	Mobility and Transportation: Evolving Value Chains and Market Dynamics in the Computing Continuum [EBDVF 2023]	25 October 2023	UNLOCK-CEI (VDI)	Valencia
36	Accelerating the adoption of manufacturing use cases through computing continuum and data spaces [EBDVF 2023]	27 October 2023	UNLOCK-CEI (IDC)	Valencia
37	Giving Energy an Edge: Showcasing the Edge to Cloud Continuum in Energy	10 November 2023	UNLOCK-CEI (BLU)	Online
38	Energy Data Spaces – Technologies [ENLIT 2023]	29 November 2023	UNLOCK-CEI (Trust-IT)	Paris

Table 6 - List of UNLOCK-CEI events

3.2.4. Videos

As part of the project's communication and dissemination campaign #1 (general awareness, see section 3.1), four video pills were published in the early days of the EUCloudEdgeIoT.eu initiative (from July 29 to August 28, 2022), describing and promoting the UNLOCK-CEI project's main aims and envisioned outcomes, in the context of the EUCloudEdgeIoT initiative. Meanwhile, in July 2022, the UNLOCK-CEI project set up and launched the YouTube account of the EUCloudEdgeIoT.eu initiative. At present, the channel incorporates videos produced by the UNLOCK-CEI and Open Continuum CSA projects and joint initiatives. The first video was published on July 28 2022, in concurrence with the release of the first video pill. Video published so far mainly include interviews with project members and project-related events, particularly webinars and other community-related initiatives. Moreover, as anticipated, UNLOCK-CEI, contributed to the EUCEI video interviews realised during the Concertation and Consultation event organised by Open Continuum on May 2023, which are still being released progressively.

A complete overview of the videos published by the UNLOCK-CEI project either as a direct owner or as a collaborator can be found below.

#	Type	Title	Publication Date	Views	UNLOCK-CEI role/contribution
1	YouTube Video	Top 5 Benefits of Edge computing	28 July 2022	30	Owner

2	Video Pill (Twitter)	Building the European Cloud, Edge & IoT Continuum for business and research	29 July 2022	223	Owner
3	YouTube Video	Get ahead of the game and find out more about Cloud-to-Edge-IoT technologies	1 August 2022	141	Owner
4	Video Pill (Twitter)	Building the European Cloud, Edge & IoT Continuum for business and research (part II)	13 August 2022	68	Owner
5	Video Pill (Twitter)	Building the European Cloud, Edge & IoT Continuum for business and research (part III)	28 August 2022	57	Owner
6	YouTube Video [webinar recording]	A new initiative to facilitate the technical and business convergence of cloud, edge and IoT	26 September 2022	91	Owner
7	YouTube Video	EUCloudEdgeIoT introduction	22 November 2022	76	Owner
8	YouTube Video	Value Chain Adopter Groups First Workshop Wave - Presentation	16 January 2023	20	Owner
9	YouTube Video [webinar recording]	Shaping the uptake of cloud-to-edge based services to support industrial use cases	7 February 2023	69	Owner
10	YouTube Video	Official Launch EUCEI Community	9 February 2023	41	Owner with OpenContinuum
11	YouTube Video	Concertation and Consultation on Computing Continuum: From Cloud to Edge to IoT	25 May 2023	58	Event supporter
12	YouTube Video [webinar recording]	Computing Continuum & the role of AI as a complementary technology: EU market forecast and insights	25 May 2023	52	Owner
13	YouTube Video	OpenSwarm: Networking, constrained AI, swarm programming	27 June 2023	70	Event supporter
14	YouTube Video	TaRDIS: Trustworthy And Resilient Decentralised Intelligence For Edge Systems	6 July 2023	45	Event supporter
15	YouTube Video	Cloud-Edge-IoT Innovations in Manufacturing: Unveiling	11 July 2023	92	Owner

	[webinar recording]	Market Insights and Use Cases			
16	YouTube Video	CHARITY: Cloud for Holography and Augmented Reality	13 July 2023	28	Event supporter
17	YouTube Video	PHYSICS: Optimized Hybrid Space-Time in FaaS	13 July 2023	24	Event supporter
18	YouTube Video	EUCloudEdgeIoT.eu: Building the computing continuum for business and research [enriched version]	19 July 2023	125	Script Producer/Event supporter
19	YouTube Video	TEADAL: Trustworthy, Energy-Aware federated Data Lakes along the computing continuum	29 July 2023	44	Event supporter
20	YouTube Video	OASEES: Open autonomous programmable cloud apps & smart sensors	29 July 2023	66	Event supporter
21	YouTube Video	SmartEdge: Semantic Low-code Programming Tools for Edge Intelligence	16 August 2023	40	Event Supporter
22	YouTube Video	SERRANO: Transparent Application Deployment in a Secure, Accelerated and Cognitive Cloud Continuum	16 August 2023	30	Event Supporter
23	YouTube Video	AI-SPRINT: Artificial Intelligence in Secure Privacy Preserving Computing Continuum	16 August 2023	35	Event Supporter
24	Video pill (Twitter)	An open invitation to Unlock-CEI's YI event	30 August 2023	87	Owner
25	YouTube Video	NEPHELE: Lightweight software stack & synergetic metaorchestration framework for computing continuum	7 September 2023	59	Event Supporter
26	YouTube Video	IOT-NGIN: IoT Engine for the next Generation of Internet	7 September 2023	36	Event Supporter
27	YouTube Video	ACES: AutopoieticCognitive Edge-cloud Services	7 September 2023	50	Event Supporter
28	YouTube Video	TERMINET: Next Generation Smart Interconnected IoT	7 September 2023	40	Event Supporter
29	YouTube Video [webinar recording]	Capitalising on CEI Webinar: Building your next product, finding your next market opportunity	21 September 2023	115	Owner

30	YouTube Video [webinar recording]	Advancing towards the Cloud, Edge, and IoT Continuum: Insights and Impacts	27 September 2023	142	Owner
31	YouTube Video	AerOS - Autonomous, Scalable, Trustworthy, Intelligent EU Meta-OS for the IoT edge-cloud continuum	3 November 2023	34	Event Supporter
32	YouTube Video	ASSIST-IoT: Architecture for scalable, human-centric, Intelligent, Secure, and Tactile nextgen IoT	10 November 2023	12	Event Supporter
33	YouTube Video	COSMOS: DevOps for Complex Cyber-Physical Systems	10 November 2023	17	Event Supporter
34	YouTube Video [webinar recording]	Giving Energy an Edge webinar recording	17 November 2023	94	Owner
35	YouTube Video	MLSysOps: Machine Learning for Autonomic System Operation in the Heterogeneous Edge-Cloud Continuum	24 November 2023	49	Event Supporter

Table 7 - Complete list of videos

3.2.5. News Digest

The UNLOCK-CEI News Digest is a key communication channel of the EUCloudEdgeIoT initiative, collaboratively managed by UNLOCK-CEI and Open Continuum, with contributions from TF6 members. This digest serves as a central platform to disseminate the latest news and developments within the Cloud, Edge, and IoT continuum spectrum, encompassing various aspects such as events, news, open calls, and research papers. The News Digest offers a comprehensive overview of ongoing initiatives, providing insights into various themes like software engineering in the cloud-edge-IoT continuum, enabling technologies, market potentials, and future research directions. It is designed to keep the community informed and engaged with the latest trends and discussions in the field. At the time of writing 10 issues have been released to the 331 subscribers. The whole set of releases is accessible on the EUCEI website [here](#)

3.2.6. Materials

The communication and dissemination efforts of the UNLOCK-CEI initiative encompass a comprehensive array of materials designed to maximise impact and reach. This includes two distinct roll-up banners, one for general purposes and another specifically crafted for the upcoming InfoDay. To ensure consistency across various platforms, a series of templates, customized Zoom backgrounds, and social media banners were developed for each event. Additionally, industry-focused brochures and VCA flyers were created to provide in-depth insights into specific sectors, enhancing the project's relevance and appeal to industry stakeholders. The production of post-event reports for Webinar #1 in September 2022, Webinar #3 in May 2023, and the Manufacturing Online Tech Impact Webinar in July 2023, further strengthened the initiative's communication strategy. These reports not only captured key highlights and learnings but also served as valuable resources for wider dissemination. Some examples of the materials produced were already reported as part of the campaigns chapter. Additional samples are provided in the image below. In addition to this list, UNLOCK-CEI contributed to the realisation of dissemination material within TF6 specific activities. Some are reported [here](#).

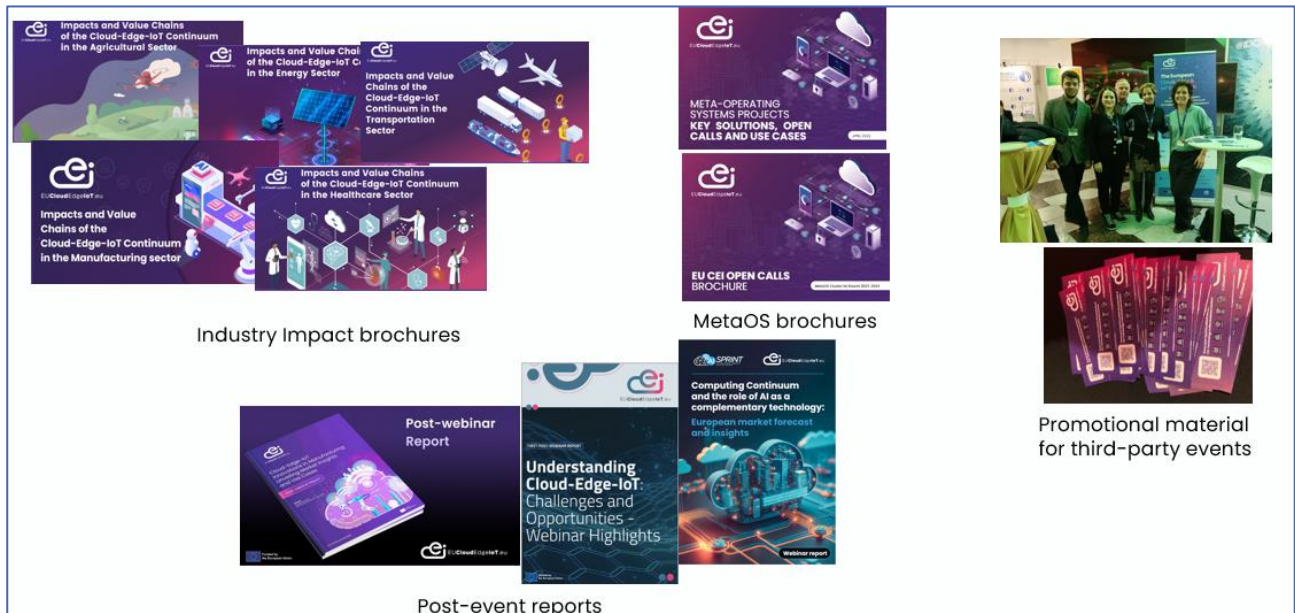


Figure 15 - Sample communication materials produced

3.2.7. Zenodo Community

In the summer of 2022, UNLOCK-CEI set up and launched the EUCloudEdgeIoT.eu Zenodo Community. Given the open-access nature of the Zenodo research data repository, key documents such as public deliverables, presentations, reports and other material related to EUCloudEdgeIoT.eu can be freely viewed and downloaded. As of November 2023, the community counts a total of 46 publications. Of these, 15 belong to the UNLOCK-CEI project, 3 to Open Continuum, 3 to both projects and 4 are submitted by other members of the EUCEI community. Statistics on the published material are available below

#	Publication name	Publication type	Publication Date	Owner	Views	Downloads
1	Understanding Cloud-Edge-IoT: challenges and opportunities - Webinar slides	Presentation	5 October 2022	UNLOCK-CEI	152	105
2	Join Our Value Chain Adopter groups - Promotional Flyer	Other (Flyer)	9 October 2022	UNLOCK-CEI	225	138
3	Understanding Cloud-Edge-IoT: Challenges and Opportunities - Webinar Highlights	Report	11 October 2022	UNLOCK-CEI	133	111
4	Shaping the uptake of cloud-to-edge based services to support industrial use cases	Presentation	20 February 2023	UNLOCK-CEI	74	47
5	TRANSACT Project - Delivering innovation that matters to you	Presentation	17 March 2023	TRANSACT	78	35

6	Demand-pull Drivers for Cloud Edge IoT in the Energy Sector	Presentation	3 April 2023	UNLOCK-CEI	41	19
7	Software Technologies and Standards: Enabling Interoperability and Innovation	Report	6 April 2023	SWForum	159	103
8	Cloud-Edge-IoT Demand Landscape	Project Deliverable	12 April 2023	UNLOCK-CEI	324	243
9	CEI ecosystems overview with the value chain adopter groups	Project Deliverable	12 April 2023	UNLOCK-CEI	142	110
10	Scaling Performance Up of Managed Applications on NUMA Systems	Preprint	9 May 2023	AERO/ELEGANT	195	69
11	Overview of CEI continuum	Presentation	11 May 2023	UNLOCK-CEI	81	69
12	Harnessing Hardware Acceleration with RISC-V and the EU Processor	Preprint	16 May 2023	AERO	128	56
13	Project brochure	Other (Brochure)	16 May 2023	UNLOCK-CEI/OpenContinuum	249	130
14	Communications, dissemination and engagement plan	Project Deliverable	16 May 2023	UNLOCK-CEI	86	61
15	Meta-operating systems projects: Key solutions, open calls and use cases	Other (Brochure)	16 May 2023	UNLOCK-CEI/OpenContinuum	331	186
16	Transparent OS support for variable translation sizes	Poster	29 May 2023	aerOS	52	30
17	Technology scoping paper	Project Deliverable	9 June 2023	UNLOCK-CEI	283	232
18	Computing Continuum and the role of AI as a complementary technology: European	Report	16 June 2023	UNLOCK-CEI	116	68

	market forecast and insights					
19	Sector-specific service requirements, data flows and revenue streams in Cloud-Edge-IoT value networks	Project deliverable	28 June 2023	UNLOCK-CEI	115	75
20	EU Demand Side Radar	Project deliverable	28 June 2023	UNLOCK-CEI	61	47
21	Updated report of CEI demand landscape	Project deliverable	3 July 2023	UNLOCK-CEI	93	85
22	The research community booklet	Other (Booklet)	4 July 2023	UNLOCK-CEI/Open Continuum	386	224
23	Driving Innovation in the Cloud-Edge-IoT Continuum (A summary of the Concertation Meeting in Brussels on May 10, 2023)	Report	17 July 2023	Open Continuum	83	67
24	The European vision and research directions in the Cloud-Edge-IoT domain for 2025-2027 (Executive Summary)	Report	17 July 2023	Open Continuum	225	163
25	The European vision and research directions in the Cloud-Edge-IoT domain for 2025-2027 (Distillation of the Concertation Meeting in Brussels on May 11, 2023)	Report	19 July 2023	Open Continuum	164	132
26	The research community booklet	Other	21 July 2023	UNLOCK-CEI/Open Continuum	384	224
27	Cloud-Edge-IoT Innovations in Manufacturing: Unveiling Market	Report	21 July 2023	UNLOCK-CEI	119	68

	Insights and Use Cases					
28	Innovating Quality Management: Pioneering Cloud-Edge-IoT and Digital Twin Solutions in Manufacturing	Poster	7 August 2023	UNLOCK-CEI	144	108
29	Readiness Framework and Service Requirements	Project Deliverable	25 August 2023	UNLOCK-CEI	45	34
30	EUCEI Task Force 5: Markets and Sectors - Workshop 2 outcomes: Catalogue of use cases	Presentation	28 August 2023	UNLOCK-CEI	112	90
31	A Multifaceted Memory Analysis of Java Benchmarks	Preprint	7 September 2023	ELEGANT INCODE	1314	199
32	Unified Shared Memory: Friend or Foe? Understanding the Implications of Unified Memory on Managed Heaps	Preprint	7 September 2023	ELEGANT AERO INCODE	93	24
33	Beehive SPIR-V Toolkit: A Composable and Functional API for Runtime SPIR-V Code Generation	Preprint	8 September 2023	ELEGANT AERO INCODE	19	16
34	NebulOuS: A Meta-Operating System with Cloud Continuum Brokerage Capabilities	Conference Paper	14 September 2023	NebulOuS	38	24
35	Impacts and Value Chains of the Cloud-Edge-IoT Continuum in the Manufacturing Sector	Other	18 September 2023	UNLOCK-CEI	58	29
36	Mapping Cloud-Edge-IoT opportunities and challenges in Europe	Working Paper	25 September 2023	UNLOCK-CEI	163	126
37	On the Edge: Marking the impact of the CEI	Working Paper	25 September 2023	UNLOCK-CEI/Leads	96	71

	continuum on skills demands					
38	Advancing Towards the Cloud, Edge and IoT Continuum: Insights and Impacts	Presentation	27 September 2023	UNLOCK-CEI	36	17
39	Developing a Reference Architecture for the Continuum - Concept, Taxonomy and Building Blocks	Working Paper	3 October 2023	Open Continuum/TF3	301	212
40	EUCEI Open Calls Brochure	Other	4 October 2023	UNLOCK-CEI aerOS Fluidos ICOS NebulOuS NEMO Nephele	37	22
41	The Power of Cloud-Edge-IoT and 5G for Advanced Intralogistics Management	Poster	13 November 2023	UNLOCK-CEI	57	25
42	Giving Energy an Edge: Showcasing the Edge to Cloud Continuum in Energy	Presentation	17 November 2023	UNLOCK-CEI	34	11
43	Impacts and Value Chains of the Cloud-Edge-IoT Continuum in the Transportation Sector	Other	22 November 2023	UNLOCK-CEI	2	2
44	Impacts and Value Chains of the Cloud-Edge-IoT Continuum in the Energy Sector	Other	22 November 2023	UNLOCK-CEI	4	4
45	Impacts and Value Chains of the Cloud-Edge-IoT Continuum in the Healthcare Sector	Other	22 November 2023	UNLOCK-CEI	1	1

46	Enhancing Real-Time Connectivity and Agile Decision-Making in Automotive Manufacturing with Multi-Access Edge Computing	Poster	24 November 2023	UNLOCK-CEI	89	9
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Table 8 - Zenodo publications

3.3. KPIs measurement and contribution to project KPIs

In D5.1, WP5 had set up the following KPIs which are listed together with their due date and the plan towards that target over the phases of the project. The table is now reported with the status towards the achievement of such KPIs at M18. The data show a positive outlook with all the KPIs well achieved, on track or sometimes exceeding their intermediate target.

KPI	Target Deadlines	and Plan	Other supported/connected KPIs	Status at M18
Website visits	15,000 (M18) 40,000 (M30)	Using relevant keywords SEO Cross-link with social media content Pay-per click campaigns UTM codes for URLs to track traffic generated by campaigns	All KPIs, as project dissemination effort	21,922* (achieved) *This estimate is derived from the number of sessions reported by Google Analytics, adjusted to compensate for an average cookie rejection rate of 50%
Twitter Followers and LinkedIn connections	1000+ LinkedIn (M30) 1000+ Twitter (M30)	200+ cumulative followers per channel by M6 -November 2022 (Develop Phase) 600+ cumulative followers per channel by M18 -November 2023 (Engage Phase) 800+ cumulative followers per channel by M24 - May 2024 (Validate Phase) 1000+ cumulative followers per channel by M30 -November 2024	All KPIs, as community building effort	653 followers on LinkedIn (achieved) 496 followers on X (the M18 objective was not achieved, but the figure is on track and showing positive trends. Moreover, please note that all targets reported in the column "plan" rather than "targets and deadlines" like this one are not officially mandated by the GA but only internally set as a guidance to the final official target
People engaged via workshops	1000 participants overall (M30)	Promotion of events via <ul style="list-style-type: none"> Newsletter Social media Website 3rd Party events 	KPI 1.3 Identification of top 3 CEI use cases (WP1) KPI 2.1 Develop 25 service requirements (WP2)	700+ (target was not set for M18, but KPI is on track to potentially exceed the final target)

			KPI 5.4 Multi-stakeholder community database (WP5)	
Videos	5 videos (M30)	1 video by M6 - November 2022 (Develop Phase) 2 videos by M18 - November 2023 (Engage Phase) 1 video by M24 - May 2024 (Validate Phase) 1 video by M30 - November 2024 (Embed Phase)	KPI 5.2 visits to website and social media followers (WP5)	3 videos (2-3 min) (achieved)
Video pills for social media	10 videos (M30)	2 videos by M6 - November 2022 (Develop Phase) 4 videos by M18 - November 2023 (Engage Phase) 2 videos by M24 - May 2024 (Validate Phase) 2 videos by M30 - November 2024 (Embed Phase)	KPI 5.2 visits to website and social media followers (WP5)	6 video pills (<1 min) with the latest two being produced at ENLIT at the time of this deliverable's submission (achieved)
Video visualisations	1000+ visualisations (cumulative for all videos)	Publication on YouTube, socials, website, newsletters. Periodic reshares with relevant tags	KPI 5.2 visits to website and social media followers (WP5)	800+ (target was not set for M18, but KPI is on track to potentially exceed the final target)
CEI user stories	10 (M30)	2 per each vertical sector To be identified and produced once the VCA groups are active and engaged (M6-30)	KPI 1.3 Identification of top 3 CEI use cases (WP1) KPI 3.1 Organize 5 value chain adopter groups (WP3)	3 completed (target was not set for M18, but KPI is on track to reach the final target)
CEI user stories visualisation	2000+ page views	Publication on website, socials, newsletters, news pieces and open access repositories, e.g., Zenodo. Periodic reshares with relevant tags	KPI 5.2 visits to website and social media followers (WP5)	150 views (target was not set for M18, the publications are too recent to provide a valid statistic but there is the expectation that the final KPI can be reached)
Use case entries in the CEI radar	60 (M30)	To be started after M6 once the landscape survey and use cases start being developed (WP1). The cases will be collected also through workshops	KPI 1.3 Identification of top 3 CEI use cases (WP1)	In cooperation with WP1 and WP2 more than 30 use case solutions have been identified to populate the first version of the radar. Although the target was not set for M18, the KPI is on track to reach the final target)

		organised under WP2 and WP3		
Participation at third party events	30 (M30)	Participated in 1 event in M1 (IoT Week) A list of events has been identified as shown in section 5.5.6	KPI 5.4 Multi-stakeholder community database (WP5) KPI 1.3 Identification of top 3 CEI use cases (WP1)	14 (target was not set for M18, but KPI is on track to reach the final target)
Policy briefs	4 (M30)	2 briefs by M18 – November 2023 (Engage Phase) 1 brief by M24 - May 2024 (Validate Phase) 1 brief by M30 - November 2024 (Embed Phase)	KPI 2.4 Identify 10 key actions, decisions or framework conditions for future market scenarios (WP2)	1 whitepaper published in M16 in substitution of the initially planned policy briefs. As detailed in D5.6 this is also due to postponement in the organisation of some key activities in WP2 and WP3 such as the wave 2 workshops that would provide insights for recommendations. The plan provided in D5.6 allows to be on track to reach the final target
Projects funded under HORIZON-CL4-2021-DATA-01-05, HORIZON-CL4-2022-DATA-01-02, and HORIZON-CL4-2022-DATA-01-03 participating at webinars	30 (M30).	Projects involved in the Edge Tech Task Force will be invited at webinars and events. Stronger relationships with these projects will be created under the umbrella initiative “EUCloudEdgeIoT” which is better described in section 5.1	KPI 4.3 20 supply side actors participating in cross-project CEI tech task force. (WP4) KPI 4.5 5 technical developer events by domain providing inputs for the feasibility (WP4)	40+ project participants joining our events also via the activities of the TFs (achieved)
Multi-stakeholder community database	2000+ (M30)	Contacts will be acquired via registration on the web platform, subscription to the newsletter, social media networks connections, registration to webinars, event participation, partner efforts, synergies and strategic collaborations	All KPIs, as community building effort	650+ (target was not set for M18, but KPI is on track to reach the final target)
Newsletters	10 (M30)	2 Newsletters by M6 (Develop Phase) 4 Newsletters by M18 (Engage Phase) 2 Newsletters by M24 (Validate Phase) 2 Newsletters by M30 (Embed Phase)	KPI 5.4 Multi-stakeholder community database (WP5)	10 (target for M18 exceeded)
Webinars	5 (M30)	1 Webinar by M6 (Develop Phase)	KPI 5.4 Multi-stakeholder	3 (achieved)

		2 Webinars by M18 (Engage Phase) 1 Webinar by M24 (Validate Phase) 1 Webinar by M30 (Embed Phase)	community database (WP5) KPI 3.1 Organize 5 value chain adopter groups (WP3)	
Technology Impact Events	5 (M30)	2 Tech Impact Events by M 18 (Engage Phase) 2 Tech Impact Events by M 24 (Validate Phase) 1 Tech Impact Event by M30 (Embed)	KPI 5.4 Multi-stakeholder community database (WP5) KPI 3.1 Organize 5 value chain adopter groups (WP3)	2 (achieved)
Online Forum Events	2 (M30)	1 Online Forum Event by M18 1 Online Forum Event by M30	KPI 5.4 Multi-stakeholder community database (WP5) KPI 1.3 Identification of top 3 CEI use cases (WP1)	1 (achieved)

Table 9 - Status of Communication, Dissemination and Engagement KPIs at M18

4. IPR Policy

UNLOCK- CEI has produced over 80 different documents and materials, including presentations, videos, documentation, deliverables, reports and tools. The UNLOCK-CEI management of Intellectual Property Rights (IPR) strongly favours wide dissemination, open access, and reuse (academic and commercial) of the project's results.

As already anticipated in D5.1, the project will apply an IPR policy that manages the IP generated within the project, and also includes reserving the rights generated by vesting ownership in the corporate project participants. The Consortium Agreement between the partners manages all IPR issues.

Whenever possible UNLOCK CEI adopts the following license for results:

Creative Commons attribution license CC BY 4.0 for documents, reports, presentations etc., unless otherwise agreed and for justified reasons. This allows sharing and adaptation of material as long as the work is appropriately attributed

All the material currently produced and suitable for public dissemination are being uploaded in the appropriate public official channels (i.e., website, YouTube and other social media channels) or repository (i.e., Zenodo).

Detailed Data Management activities are addressed in the D6.2 - Data Management Plan to which all activities conducted for Communication, Dissemination and Engagement purposes adhere for the whole duration of the project. Additional considerations on the IPR of selected KERs are included in D5.8 Sustainability Plan. By the end of the project, the consortium will also consider uploading its main achievements and results into the [Horizon Results Platform](https://horizon-results.eu)

5. Conclusions and next steps

Based on the information provided so far, it is possible to state that UNLOCK-CEI has demonstrated the capability to generate adequate impact through its diverse communication, dissemination, and engagement strategies. The establishment of a robust online and offline identity has been a cornerstone of this first period of activity, providing a solid foundation for the project's presence in the digital and physical realms. This dual approach has significantly amplified online visibility, attracting a broader audience and fostering deeper engagement.

Key to the project's achievements has been the increasing awareness and engagement among stakeholders, reflecting a growing interest and active participation in the project's activities. Efforts to engage VCAs have been particularly important, ensuring that the project's outputs are aligned with real-world needs and are readily adoptable.

The dissemination of preliminary results has played a critical role in sharing early successes and lessons, contributing to a well-informed and engaged community. This has enhanced transparency and encouraged feedback and collaboration.

Additionally, focused community-building activities have nurtured a strong network of stakeholders. This community-centric approach has fostered a collaborative environment, enabling shared learning and partnerships, and setting the stage for sustained impact and growth of UNLOCK-CEI and the EUCEI initiative.

In terms of community, it is also important to highlight that the integration of a wider range of Research and Innovation Actions (RIAs) beyond the core MetaOS projects has marked a significant expansion in our scope, embracing emerging domains like cognitive cloud and swarm computing.

The presented communication campaigns, from general awareness to industry insights and midterm achievements, alongside robust horizontal activities such as online presence, event organisation, and the creation of diverse communication materials, have collectively enhanced UNLOCK-CEI's identity and reach.

By analysing the results so far, our top-performing posts and formats have varied across platforms, reflecting our audience's diverse interests. Social media content has shown higher engagement in visual and interactive formats, while in-depth articles on our website have attracted a more focused audience. Industry-focused events and webinars have been particularly successful in fostering in-depth discussions and stakeholder engagement. Therefore, as a key learning, tailoring content to specific channels has been effective in maximising reach and engagement. Continuous engagement and feedback from the community and the EC commissioners via TF monthly meetings have been vital in refining our strategies.

The impact of all these activities through both qualitative and quantitative measures (see the KPI section and the tables with the metrics of all our distributed videos and materials), is documented in this deliverable. This document, therefore, stands as a comprehensive reference for all stakeholders, encapsulating the efforts, achievements, and lessons learned in advancing the ever-evolving CEI landscape through UNLOCK-CEI.

As UNLOCK-CEI transitions into the critical 'validation' and 'embed' phases in the latter half of the project, its activities are being tailored to these specific objectives. These phases focus on demonstrating the practicality and effectiveness of the initiative's outputs and ensuring their integration into broader industry practices and policies. In parallel, UNLOCK-CEI will continue contributing to a series of strategic initiatives to amplify its influence and achieve its objectives within the broader EUCEI initiative. The collaboration within TF6 will remain vital for guiding the project's trajectory. This cooperative effort will be augmented by an ongoing commitment to horizontal activities, ensuring consistent engagement and a constant presence across various communication platforms.

More in detail, the next planned main activities for UNLOCK-CEI include the following:

- **Industry Insights Campaign:** A key activity in the 'validation' phase is the continuation of the ongoing industry-focused campaign. Our next sectoral event will target the agriculture industry and is planned

for early 2024. This event, similarly to the other industrial tech impact events, will be designed to showcase interesting use cases and validate the relevance and efficacy of Cloud, Edge, and IoT technologies in agriculture, highlighting how these technologies can be integrated into this sector and bring benefits.

- **EC-Event Support Campaign – focus on the Info day on December 4th, 2023:** As part of UNLOCK-CEI's commitment to the wider EUCEI ecosystem, the project is organising, jointly with Open Continuum, an InfoDay in cooperation with the European Commission. This event, while not directly related to showcasing UNLOCK-CEI results, plays a vital role for the future legacy of the project by facilitating future research and development in the Cloud, Edge, and IoT fields. It serves as an opportunity for announcing future calls for research projects, thereby contributing to the ongoing evolution of these technologies and nurturing the growth of the ecosystem by providing significant networking opportunities.
- **VCA Support Campaign - Wave 2:** The second round of the VCA campaign to support the related workshops aligns with the 'validation' phase, aiming to apply and test strategies and approaches developed by UNLOCK-CEI. These workshops will be essential for demonstrating the practical applications and benefits of the initiative's work with value chain adopters.
- **KER Valorisation and Impact Campaign (M24-M30):** Scheduled for the last six months of the project, this campaign will focus on promoting and embedding UNLOCK-CEI's Key Exploitable Results (KERs) within the industry and policy spheres. Activities will include disseminating key findings, engaging stakeholders in policy discussions, and ensuring the project's impact is deeply rooted in relevant sectors.

These activities are aimed at leaving a lasting impact and solidifying UNLOCK-CEI's role in shaping the future of digital innovation in Europe.

The updated version of communication, dissemination and engagement plan (D5.3) will be delivered at the end of the project in Nov 2024 (M30).