



EU Cloud Edge IoT.eu
UNLOCK-CEI

Communications, dissemination and engagement plan



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D5.1 – Communications, dissemination and engagement plan

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Glossary of terms

Item	Description
CEI	Cloud-Edge-IoT
DMP	Data Management Plan
EC	European Commission
EUCloudEdgeIoT	Short Name to refer to The European Cloud, Edge and IoT Continuum, an inter-project umbrella initiative of which UNLOCK CEI is a member
HE	Horizon Europe
IoT	Internet of Things
LSPs	Large Scale Pilots
KER	Key Exploitable Result
KPI	Key Performance Indicator
PM	Person Month
SDO	Standard Development Organisation
SG	Stakeholder Group
UTM	Urchin Tracking Module
TF	Task Force
VCA	Value Chain Adopter
VP	Value Proposition
WP	Work Package

Abstract

This document provides information on how the project plans to conduct communication and dissemination activities, as well as target and engage the main stakeholders through the various channels such as the website, social media, events, etc. The document specifies the role of UNLOCK CEI within the umbrella initiative named “European Cloud, Edge and IoT Continuum” which is a portfolio of 6 Research and Innovation Actions jointly supported by two CSAs that will report on the results and activities of a series of other projects and initiatives in the Cloud, Edge, IoT domains. The deliverable also describes the first actions undertaken, contacts established and quantitative and qualitative indicators that will be used to measure the impact of the project.

Keywords

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

Executive Summary

This document is a direct output of WP5 which has the main objective of **communicating** and raising awareness on the project and its results, **disseminating** major outputs and **engaging** with key stakeholders to support the overall project's objectives.

The document provides information on how the project plans to target the main stakeholders, describing all relevant channels such as the website, social media, events, tools etc.

The deliverable starts with positioning the project in the larger umbrella initiative named "European Cloud, Edge and IoT Continuum", formed upon request of the European Commission to help synergise the efforts of a series of funded projects in these domains.

Being part of such a wider network has an impact on the overall communication, dissemination and engagement strategy which will be developed as much as possible in a synergistic and coordinated way with Open Continuum, a CSA focused on the supply side of the Cloud-Edge-IoT (CEI) Continuum, while UNLOCK CEI is focused on the demand side.

Considering that the joint and coordinated communication strategy also has an effect on the UNLOCK CEI project's specific strategy, the document dives into a description of UNLOCK CEI's overall objectives and the link of the communication, dissemination and engagement WP with such objectives, highlighting the supportive and horizontal role of such activities. Links between this plan and other project outputs and deliverables are made explicit wherever possible.

The methodology is then presented together with allocated resources that involve all partners. The core of the deliverable is represented by the last two sections, namely i) the stakeholder analysis, which includes descriptions of the various stakeholder groups, their current challenges, the benefits the project could deliver to them and the targeted channels and messages to convey; ii) the Communication, Dissemination and Engagement Plan detailing the envisaged activities and preliminary results characterising each of the project phases or happening horizontally throughout the whole project.

The target KPIs are also listed with their connections to other WPs' KPIs and conclusions are drawn on the main pillars and key messages of the presented strategy.

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1. Introduction

According to the latest EU Commission studies¹, around 80% of the processing and analysis of data currently takes place in data centres and centralised computing facilities, while 20% in smart connected objects.

Under this scenario, the traditional Internet of Things (IoT) infrastructure that implies smart objects are used for data collection while the computing resources are centrally stored in the cloud still holds.

However, predictions say that these percentages are already changing and will switch in the next few years, with 80% of data coming from smart devices. This means a shift in the current infrastructure, where computing processing and storage capabilities will increasingly need to be located at the “edge” of cloud infrastructures, near the multiple data sources represented by smart devices.

The evolution towards a new infrastructure is characterised by the increasing convergence of the currently “formally” separated cloud, edge and IoT technologies.

1.1 The European Cloud, Edge and IoT Continuum

1.1.1 Overall purpose

In order to guide the business and technical convergence of these three domains, the EC has requested the creation of a joint umbrella initiative, named “the European Cloud, Edge and IoT Continuum”, which will help a series of relevant projects funded under the **Meta-Operating Systems for the Next Generation IoT and Edge Computing Cluster** (see Figure below), to join the forces and synergise for the development of the future CEI market.

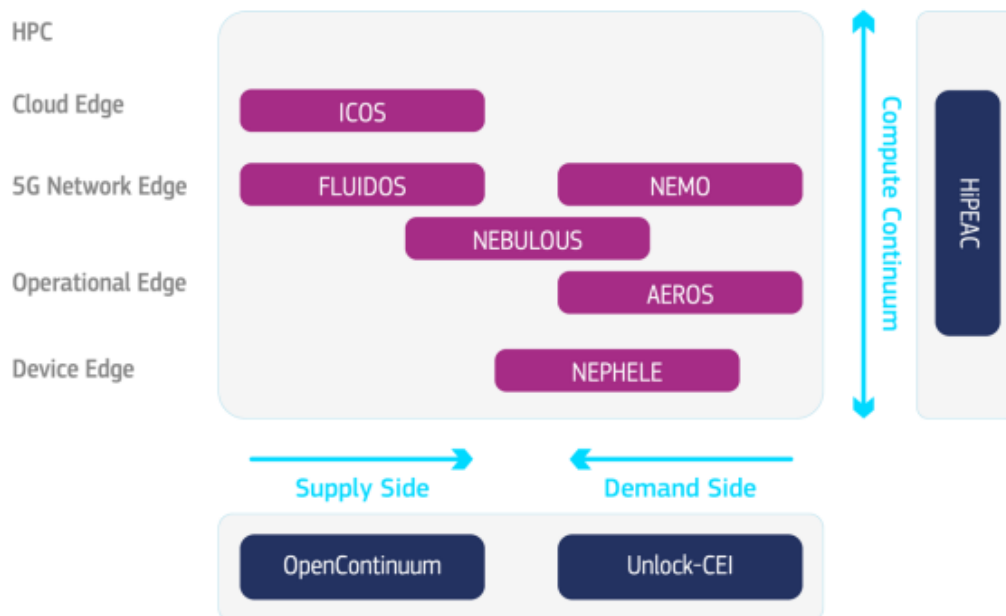


Figure 1 - Projects funded under the Meta-Operating Systems for the Next Generation IoT and Edge Computing. Source EC

¹ HORIZON-CL4-2021-DATA-01: WORLD LEADING DATA AND COMPUTING TECHNOLOGIES presentation by Max Lemke, Head of Unit Internet of Things – European Commission – DG CONNECT

1.1.2 Expected results

The European Cloud Edge IoT Continuum aims to strengthen European supply and value chains in cloud and edge computing by integrating elements of 5G connectivity, the Internet of Things, AI and cybersecurity and is expected to become the reference and collection point for all the main results and communities brought together by mentioned cluster projects. The umbrella initiative is also supposed to host the results and outputs of possible future project funded under similar calls. In reaching these goals, the umbrella initiative will leverage on the main results of the [H-Cloud](#) and [NGIoT](#) project, respectively active in consolidating and growing the cloud computing and IoT European communities of research projects, innovators and industry players. The main role would be indeed to bring together such communities in a merged environment.

1.1.3 Organisation and roles

Two Coordination and Support Action (CSA) projects, namely **UNLOCK CEI** and **Open Continuum** will act as the coordinators of the umbrella initiative, each with a specific focus. More precisely, UNLOCK CEI is positioned at the demand side of the CEI continuum while Open Continuum will cover the supply side. The cooperation among UNLOCK CEI and Open Continuum is wide and touches several areas, namely: **strategic liaisons, standards and architecture interoperability, sectors and market evolution, ecosystem evolution, interaction with the Meta-Operating Systems cluster and communication**. For each of these activities specific representatives and contact points coming from either UNLOCK CEI or Open Continuum are identified and will be responsible for reporting on the joint activities to the EC representatives. Regarding the Communication aspects, the joint task force between the two CSAs is already active and engaged in a series of communications assets that are better detailed in section 5. At the moment, members of the inter-CSA Communications Task Force include the following, but the composition will be formally defined when Open Continuum officially starts in September 2022:

- **UNLOCK CEI:** Maria Giuffrida, Nicholas Ferguson, Cristina Mancarella, Filomena Minichiello (Trust-IT, UNLOCK CEI Communications Leader); Richard Stevens, Golboo Pourabdollahian (IDC, UNLOCK CEI Coordinator)
- **Open Continuum:** Giovanni Rimassa, Federico Facca, Margherita Trestini, Darren Perera, Monique Calisti, Valentin Popescu (Martel Innovate, Open Continuum Coordinator and Communications Leader)
- **Representatives from the EC**

1.2 UNLOCK CEI General Objectives

The UNLOCK CEI project 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.

In particular, the project has set the following general objectives:

- **Objective 1:** Carry out a systematic assessment of the current state of the open European CEI ecosystem, analysing the business opportunities brought by this paradigm change
- **Objective 2:** Define market scenarios for the development of the open European CEI ecosystem and a CEI Readiness Framework
- **Objective 3:** Build and activate the CEI Industry Constituency, i.e., a group of industry stakeholders representing the most important or promising value chains in Europe for CEI potential demand, to aggregate demand needs and identify demand-pull drivers for CEI adoption
- **Objective 4:** Develop a productive and effective interface between the demand constituency and the supply side to improve the market readiness and successful adoption of these technologies

In addition to the four general objectives listed above, the Communication, Dissemination and Engagement WP is especially focused on a **fifth objective** which is to **create awareness of CEI in Europe and generate impact**.

1.3 UNLOCK CEI Communication and Dissemination Objectives

Communication and dissemination refer to the wide diffusion and exchange of information related to the project and its results. While communication is more generally aimed at informing about the initiative and what has been achieved, dissemination is more oriented towards spreading specific project outcomes in order to favour and encourage their adoption or use.

Specific communications and dissemination **objectives** of UNLOCK CEI include:

- **Boosting the diffusion of awareness and knowledge** about the current and future market trends in CEI and the future market scenarios (supporting particularly objectives 1 and 2 – focused on landscape analysis and market scenarios and addressed by WP1 and WP2 respectively)
- **Promoting the specific project results** and assets to generate awareness and encourage adoption (transversal to all project objectives)
- **Promoting the main benefits and impacts** of CEI for various stakeholders (supporting particularly objective 3 – building of demand constituency and addressed by WP3)
- **Facilitating the interaction and dialogue between demand and supply** of the CEI continuum engaging in a joint and coherent communication strategy with the supply side/technology developers across Europe (supporting particularly objective 4- developing productive and effective interface between the demand constituency and the supply side and addressed by WP4)

These objectives will be achieved through a set of communication and dissemination activities including:

- **Delivering a communication strategy and plan with measurable targets in order to motivate continuous activities and measure impact, including:**
 - Community development
 - Web analytics
 - Social media analytics
 - Community database profiling
- **Designing, populating, and maintaining a web platform** jointly with Open Continuum in the form of a highly dynamic, responsive, and interactive website, and producing a variety of branded communication materials, including:
 - Brochures
 - Videos
 - Newsletters
 - Press releases
 - Posters, flyers and gadgets
 - Policy Briefs
 - Branding Package
- **Producing high-quality and relevant content** for the project web platform, LinkedIn, Twitter and YouTube, creating media content on major achievements and insights on project developments
- **Disseminating key projects results** such as landscape analysis and reports, support tools, policy insights, to specific stakeholder categories

1.4 UNLOCK CEI Engagement Objectives

Engagement refers to the identification, analysis, planning and execution of actions aimed at influencing stakeholders' behaviour and triggering an action or response. Differently from communication and dissemination, engagement implies necessarily a two-way relation where the target stakeholder interacts with the project.

Specific engagement **objectives** of UNLOCK CEI include:

- **Building an international, consolidated community covering the various** stakeholders who play a role within the CEI ecosystem (see more details in section 4, transversal to all project objectives)

- **Supporting** CEI demand market analysis and understanding by encouraging interested stakeholders to share their views (complementing the survey effort undertaken under WP1 to address objective 1)
- **Supporting** the requirements' collection and the development of the CEI Readiness Framework, by ensuring that user needs and ideas are taken into account (specifically supporting objective 2 and WP2)
- **Supporting** the recruitment of Value Chain Adopters, as part of the Demand Constituency developed under WP3 to pursue objective 3 (see more details in section 4)

These objectives will be achieved through a set of engagement **activities** including:

- **Implementing a multi-stakeholder engagement plan**, targeting primary stakeholders through social media channels, at UNLOCK CEI and external events, and targeting secondary stakeholders through ICT and business channels, building on existing collective networks with close interaction with the relevant initiatives in the CEI domain
- **Developing an engaging visualisation tool for market landscape results**, i.e., the demand side radar that visualises and charts the evolution of the landscape including vertical sectors, technologies and market pathways
- **Organising vertical sector facing technology impact** events to lay the ground for potential engagement in future large-scale pilots and adoption.
- **Organising interactive webinars and supporting the organisation of hands-on workshops**, in synergy with WP1-4
- **Collecting and publishing user stories and testimonials** that capture the benefits of the technologies on various vertical sectors and individual stakeholders, expressing these benefits using terms and language that are meaningful to the demand constituency
- **Running large-scale marketing campaigns**, such as Pay-Per-Click on demos and other videos, and press and stakeholder recruitment campaigns
- **Supporting the setup and running** of the VCA groups
- **Setting-up a series of engagement mechanisms in both the website and other communication channels**. Such mechanisms include open consultations, online forums, interactive polls. More details on this are presented in section 5

1.5 Related Deliverables

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 therefore relevant to WP5 activities and represent the source of content for most of the website and social media activities. In particular, the following deliverables are closely related to D5.1 Communication, Dissemination and Engagement:

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 will report on essential trends, definitions and market insights which will be used as primary material to feed the communication content which is planned as part of D5.1
2	D2.1 (M12)	Readiness Framework and Service Requirements	D5.1 contributes to D1.2 via its engagement activities with relevant users and stakeholders whose viewpoints are to be considered
3	D3.1 (M6)	CEI ecosystems overview with the	D5.1 supports the analysis and recruitment of targeted VCA via personalised messaging and value propositions

		value chain adopter groups	
4	D4.3 (M24)	Pilot factory outcomes	D5.1 supports D4.3, a deliverable on one of the prominent hands-on events in the project as part of its events management activities
5	D5.2 (M18), D5.3 (M30)	Updated Communications, dissemination and engagement plan (first and second updated release)	D5.2 and D5.3 represent updated versions of D5.1
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 D5.1
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 defined in D5.1
5	D5.8 (M18), D5.9 (M30)	Sustainability Plan	D5.1 will define assets to be produced and that represent the cornerstone of the future Sustainability Plan
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

2. UNLOCK CEI Contribution, Impact and Assets

Next-generation edge computing and data technologies and infrastructures which are needed for European competitiveness in the data economy must not only be developed, but also deployed and adopted by European organisations to enable the European single market for data and a Europe fit for the digital age. However, the speed of technology change is so fast that industrial stakeholders are struggling to adapt to a multi-cloud infrastructure environment and to deal with the paradigm change created by a CEI scenario. Many European organizations, including SMEs, may choose to rely on global providers such as cloud hyper-scalers to manage this transition, with a high likeliness of customer-lock-in situations.

In this context, UNLOCK CEI's main contribution is to enable a change of perspective, moving away from a technology push scenario towards a demand and market driven one where the needs of potential business users and other stakeholders are understood and communicated to the supply side so to bridge any gaps and allow CEI to become an enabler of innovative solutions and services.

This approach is sustained by aggregating the demand side participants, analysing and representing their needs, by connecting the CEI providers and matching their solutions and requirements with users' needs, and by supporting the development of concrete use cases that can inform future Large-Scale Pilots (LSPs).

2.1 Impact

By fulfilling its objectives (see section 1.2), UNLOCK CEI's value is to concretely support the adoption of CEI with an inclusive approach that points at involving the main relevant stakeholders in the process of building and establishing collaborative value chains, defining and understanding roles and contributions of each actor to the value chains and producing the main outputs of the project. UNLOCK CEI has a highly practical nature and, as a new type of demand side CSA, has the main role of bringing together the community to favour

mutual understanding and collaborations, ensuring that the needs of CEI customers are met by service offers, providing networking opportunities and producing insights and recommendations for future policy interventions.

The expected impacts of the project are the following:

- **Impact 1: Improved European leadership in the global data economy**, thanks to awareness and positioning of European industry players, an engaged network of value chain actors, validation of key actors' CEI adoption readiness, lower barriers to integration and collaboration via the relationships developed
- **Impact 2: Maximised social and economic benefits from the wider and more effective use of data**, thanks to the identification of key actors and events within the priority value chains where the integration of the developed technologies will have the strongest impact, the proposal of a sustainable approach to implementations towards pre-defined market scenarios, and the position of specific social and economic criteria for data use within the technology development community and portfolio projects
- **Impact 3: Reinforced ability for Europe to manage urgent societal challenges**, by stimulating whole chain and value network partnerships for the joint deployment of CEI technologies, as well as pilots and market trials
- **Impact 4: Contribution to the design of HE next generation Large Scale Pilots (LSPs)**, via the release of the CEI Demand Landscape, the validation of requirements, the establishment of a demand-supply dialogue

WP5 will directly support the project towards achieving the expected impact by ensuring that the project is well positioned in the CEI ecosystem and leveraging on measures to monitor and maximise the impact (see more in section 5).

2.2 Communication and dissemination assets

The main tangible assets generated by the project include:

- The **euclouedgeiot.eu** platform: the web platform will be developed within the joint umbrella initiative (EUCEI Continuum). It will include all the main project results and will be handed over to the EC at the end of the project.
- The **joint social media channels** with content produced (Twitter, LinkedIn, YouTube)
- The **CEI Readiness Framework**, a consistent and comprehensive framework for exploring future market development scenarios, integrating macro-economic factors, policy/regulatory factors, global technology and digital innovation megatrends, as well as CEI supply-demand relationships and market player dynamics, useful to inform policy interventions and investment decisions
- The **CEI demand side radar**, as an important visualisation tool for the CEI demand landscape that will provide major insights towards the design of HE next generation LSPs
- The **commercial feasibility assessment framework**, to support the testing of pre-market technologies via defined and freely available toolkits
- An **engaged community**, of 2000+ stakeholders belonging to the main SG targeted by the project and described in section 4

WP5 will contribute to the dissemination and encourage the use of the first four assets and results above listed, while being the main responsible of the asset constituted by the community generated.

3. Methodology

The UNLOCK CEI Communication Methodology and Stakeholder Engagement Journey (see the Figure below) ensures that every single communication, dissemination and engagement activity is connected to the goals of the project.

The applied approach is derived from the inbound methodology, which combines targeted content marketing, automation, SEO and other techniques to maximise the results of communication and engagement activities.

Every communication and dissemination activity will be mapped to the **Attract – Convert – Close – Delight – Promote** process. This ensures a logical progression through the following profiles:

- **Stranger**, i.e., someone who is not familiar with the project
- **Visitor**, i.e., someone who interacts with the digital content
- **Lead**, i.e., UNLOCK CEI's target stakeholder who has shown interest in what the project communicates and disseminates and expressly requested UNLOCK CEI to engage with them.
- **Customer/CEI Adopter**, i.e., a stakeholder who has actively participated in the project initiatives and is interested in using its results and assets
- **Promoter**, i.e., stakeholders who are so pleased with their interactions with UNLOCK CEI that they are happy to promote the project's outputs, services and results. Promoters, in turn are a key element to attract new strangers, who can initiate the cycle again.

While the phases from Attract to Convert are more focused on awareness raising and pure communication, the Close to Promote phases are fundamentally the expression of engagement actions.

The described process ensures an interconnected and efficient communications and engagement ecosystem which will be built in synergy with Open Continuum and capitalising on the already existing networks and communities that Open Continuum will inherit from related projects in the Cloud and IoT domains. More specifically, in the attract phase both projects can work together to attract the general audience they are targeting (see UNLOCK CEI's target stakeholders in chapter 4) using some common communication assets, such as the joint website and social media channels. The audience will then split at the close phase as each project will use their specific content, activities and engagement techniques to build their specific databases and implement mechanisms to lead contacts towards the delight and promote phases.

Measuring feedback meaningfully through KPIs is an important step of the process as feedback can be used to take corrective actions needed to fruitfully activate the virtuous cycle described above. Measurement can be achieved by organising important phases of the project as campaigns. Under each campaign, specific communication actions are planned and metrics are measured, which contribute to the achievement of the project's overall goals. Where specific targets are not specified, moving benchmarks will be applied (e.g., next target = latest result achieved + 10%).

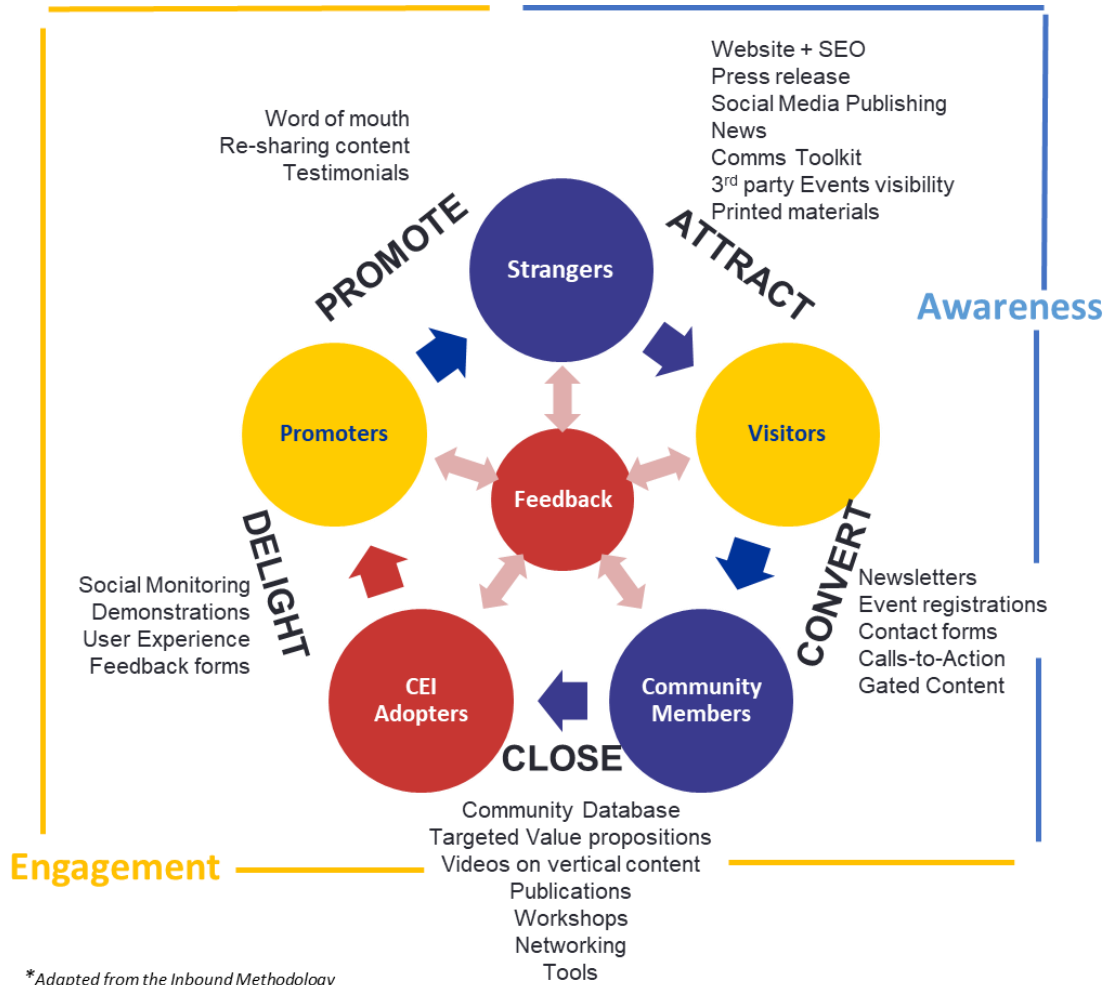


Figure 2 - UNLOCK-CEI's communication and dissemination methodology and stakeholder journey

4. Stakeholders Analysis

Different stakeholders have different engagement priorities. This section aims at providing some preliminary insights about such differences.

Primary stakeholders represent the main engagement targets for UNLOCK CEI, while **secondary** and other stakeholders represent target groups that can also benefit from UNLOCK CEI's outputs or influence and encourage the adoption and exploitation of its results in some way. UNLOCK CEI will focus its messaging on the main target audiences as described below.

4.1 Primary Stakeholders

There are 4 main Stakeholder Groups (SG) identified as primary for the project's purposes.

4.1.1 Business Users

This SG includes companies (both SMEs and Large enterprises) possibly interested in using CEI, and operating in various industrial sectors, such as manufacturing, building, mobility, energy, agriculture.

This SG strives for effective and efficient applications that can allow catching business opportunities, which are not fully realisable with "today's technology". In these applications, CEI technologies are often applied "in the background", so they serve as enabling technologies that go mostly unnoticed by the user.

Therefore, the main **challenges** of this SG could be related to lack of or incomplete knowledge about the benefits brought by the CEI paradigm shift. Smaller companies may be unaware if and to which extent their

required solutions strive for CEI technologies and, consequently, which requirements for CEI technologies and CEI services they have. Another challenge is the inability to engage with CEI providers individually in an effective way. Additional challenges affecting both small and larger companies may include 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.

The **benefits** brought by UNLOCK CEI to this SG include a better understanding of CEI potentialities in terms of concrete use cases and application areas, the possibility for their needs and voices to be heard and transferred to providers thus be taken into account in the development and provision of solutions, the understanding of industry-specific dynamics and market trends.

The **main message** to express their specific value proposition would be:

“Identify a common ground with the whole value chain for your specific CEI-based use cases, contribute to the definition of a wide range of innovative CEI services and solutions and a gain a simplified access and connection to CEI providers and other value chain actors, to boost your competitiveness”

Communication and Engagement channels include:

- The website
- Social media channels
- Videos
- Webinars
- Newsletters
- Flyers
- Workshops, especially the user-oriented ones, wave 1 and 2 (see more details in section 5)
- Pilot Factory event
- Success stories

4.1.2 Industrial and Technology Associations

This SG has the potential to represent the voices of many players at the same time. However, depending on their dimension, possible vertical focus or stage of development, associations could have a larger experience on strategy and governance issues but not on the offering of actual services and infrastructures. Vertical associations, moreover, may have a deep understanding of their sector of reference but miss a clear picture of the status of other industrial sectors.

Examples of such aggregators include:

Industry-focused	Technology-focused
European Factories of the Future Research Association (EFFRA), Enterprise Europe Network, SME United, WMF – World Manufacturing Forum, IVI – Industrial Value Chain Initiative, ACEA – European Automobile Manufacturers Association, AIRE - Airlines International Representation in Europe, UNIFE- The Association of the European Rail Industry, FFPA - Flexible Factory Partner Alliance, IEEE Standards Association programme, European Partnership for a climate neutral, sustainable and productive Blue Economy; European Partnership for Safe and Sustainable Food Systems	AIOTI, BDVA/DAIRO, GAIA-X, ECSO, EPoSS, ATIS (Alliance for Telecommunications Industry Solutions), European Partnership for Smart Networks and Services (SNS) and the European Partnership for High Performance Computing (EuroHPC) who are all part of the Transcontinuum Initiative (TCI), European Alliance for Industrial Cloud, Edge and Data

Table 2 - Examples of industrial and technology associations

The **benefits** brought by UNLOCK CEI to this SG include a better understanding of possible CEI -based solutions, service offerings, user and provider business models, as well as the opportunity to learn from different industrial sectors that may share similar challenges or needs.

The **main message** to express their specific value proposition would be:

“Promote your associations’ needs and priorities within a multi-stakeholder community and contribute to the deployment of CEI, learning about solutions, business models and success initiatives”

The main Communication and Engagement Channels for this SG are:

- Networking & personal contacts
- Face-to-face meetings
- Website
- Workshops or events
- Success stories

4.1.3 Tech Providers and Tech Developers

This SG includes **infrastructure** providers such as hardware, chips and device providers, system integrators and maintainers, edge and multi-cloud platforms, connectivity and open-source projects.

Moreover, it includes **service and application** providers (e.g., of embedded intelligence and applications, computing, storage, analytics, network slices, orchestrators, security) as well as **data management** professionals like Intermediators, Connectors, Federators, Pipelines, Resellers, Brokers.

The main **challenges** of this SG could be of both technical and strategic nature. From a technical viewpoint, these actors may face capability and scaling complexities due to the remote and heterogeneous nature of edge computing as well as experience interoperability problems. Other problems could be related to logistics complexities linked to the management of various computing, storage and network systems in multiple geographical locations as the edge computing paradigm requires. Also, bandwidth bottlenecks and costs may rise, together with security threats and data access control which becomes more difficult to monitor when data is handled by different devices.

From a strategic, organisational and commercial perspective, providers might lack full knowledge about their end-users needs or struggle in finding a balance between the user needs and their IT infrastructure. Also, they might struggle in positioning themselves clearly in the new CEI supply chain.

The **benefits** brought by UNLOCK CEI to this SG include a direct link with CEI business users with consequent better understanding of their needs. Also, they have the possibility to engage in a unique ecosystem of research and industrial players that may help solve any technical challenge faced by their organisation and cooperate to find innovative solutions, understanding better their role and proposition in the CEI tech delivery supply chain.

The **main message** to express their specific value proposition would be:

“Understand your users’ better and find partnership opportunities to better prepare your organisation to technically support the development of the future CEI infrastructure”

- Website
- Social media channels
- Videos
- Webinars
- Newsletters
- Flyers
- Tech Impact events
- Success stories

4.1.4 Research and Innovation Organisations

This SG includes R&D Industry Departments, Research Institutions and Universities, Research Associations, Digital Innovation Hubs, Research projects.

These players may **lack** full contact with the business community and market players. They could have problems in understanding or testing the suitability and readiness of their research for the go-to market or lack specific skills or resources on topics that are often essential in research projects, for instance related to standardisation efforts and outputs.

UNLOCK CEI aims to target specifically the research community under WP4 which will be supported by WP5 in the communication and engagement activities related to useful tools for research projects such as the CEI landscape radar and the commercial feasibility assessment tool, as well as market data, projections and use cases.

The communication towards this SG may be summarised with the following **message**

“Test your research results and go-to market strategy via dedicated tools and get in contact with both business users and other research projects to improve your results and create synergies and partnerships with industrial actors”

The main Communication and Engagement Channels can be:

- Website
- Social media channels
- Videos
- Webinars
- Newsletters
- Flyers
- Pilot Factory events
- Success stories

One of the goals of the project, specifically under WP3, is to constitute **Value Chain Adopters Groups** that are formed by representatives across all the main SGs here identified. WP5 will support such goal with dedicated engagement and communication activities, better described in chapter 5.

4.2 Secondary Stakeholders

4.2.1 Citizens and General Public

This SG includes all possible users or indirect beneficiaries of CEI including citizens, general public and society at large.

This SG has currently low awareness about these technological trends and how a paradigm shift from cloud to edge to IoT affects their daily life, thanks to the data collected and analysed in smart devices. Getting in touch with the project, the SG can understand the benefits and opportunities that can generate from the development of CEI demand. These include value added services for citizens in areas like health (e.g., improving at-home medical monitoring, providing healthcare services in remote or rural areas), mobility (e.g., car performance monitoring, autonomous driving), retail (e.g., identification, reduction and prevention of out-of-stock, supply chain traceability to be informed about food origin and quality), etc.

The main messaging for this SG revolves around this concept:

“Discover the opportunities and benefits that CEI can bring to your life and how it can improve your daily activities”

The main Communication and Engagement Channels can be:

- Website

- Social media channels
- Videos
- Webinars

4.2.2 Policy Makers and other facilitators

This SG includes tech facilitators such as policy makers, public bodies and Standard Development Organisations (SDOs). These actors need to understand investment priorities for the development of CEI and act to support the main actors of the CEI value chains in working towards the growth of the CEI market, encouraging CEI adoption and reducing barriers to its development.

UNLOCK CEI will benefit this SG by providing a landscape view of the technologies under development, their comparison and their market readiness also in terms of standardisation needs and maturity. These insights will support the development of future funding programmes as well as provide direct inputs towards the shaping of the next Large-Scale Pilots (LSPs) through regular outputs and engagements.

The main message for this SG is as follows:

“Get novel insights to strategically define instruments and actions in support of the future deployment of CEI to reduce adoption barriers, thus leading to a stronger future CEI adoption and a more dynamic data market”.

The main Communication and Engagement Channels for this SG are:

- Website
- Social media channels
- Webinars or Events
- Newsletters
- White papers and landscape reports
- Policy Briefs

The following table summarises the described stakeholder analysis

SG	Challenges	Value	Channels and materials	Targeted message
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.	Website, social media, videos, workshops and webinars, newsletters, flyers, Pilot Factory event, success stories	Identify a common ground with the whole value chain for your specific CEI-based use cases, contribute to the definition of a wide range of innovative CEI services and solutions and a gain connection to CEI providers and other value chain actors

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	Networking and personal contacts, face-to-face meetings, website, social media, events, success stories	Promote your associations' needs and priorities within a multi-stakeholder community and contribute to the deployment of CEI, learning about solutions, business models and success initiatives
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 better understanding of their needs, collaboration opportunities with research and industrial players, better understanding of their role and proposition in the CEI tech delivery supply chain.	Website, social media, videos, workshops and webinars, flyers, Tech Impact events, success stories	Understand your users better and find partnership opportunities to prepare your organisation to technically support the development of the future CEI infrastructure
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 market, lack of specific skills or resources	Access to research insights based on CEI landscape radar and market data or projections, test results via commercial feasibility assessment tool,	Website, social media, videos, workshops and webinars, flyers, pilot factory event, success stories	Test your research results and go-to market strategy via dedicated tools and get in contact with both business users and other research projects to improve your results and create synergies and partnerships with industrial actors
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	Website, social media, webinars, videos	Discover the opportunities and benefits that CEI can bring to your life and how it can improve your daily activities

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 LSPs	Website, social media, events, white papers, reports, policy briefs	Get novel insights to strategically define instruments and actions in support of the future deployment of CEI
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Table 3 - Summary of Stakeholder Analysis

5. Communication, Dissemination and Engagement Plan

In executing its communication, dissemination and engagement plan, UNLOCK CEI will follow a double track. On an inter-CSA level, overall strategic guidelines agreed upon with Open Continuum as part of the EUCEI Continuum joint initiative (as detailed in section 5.1) will be defined.

On a project level, the communication will adhere to the inter-CSA guidelines while taking a phased approach with specific, targeted and measured activities that directly support project goals and checkpoints, following the defined project phases summarised starting from paragraph 5.2 below. Note that, in some cases, the same activity or tool can be used to pursue both communication and dissemination objectives. Such different roles are specified when appropriate.

5.1 The European Cloud, Edge and IoT Continuum joint communication effort

A joint marketing and communication strategy for the European Cloud-Edge-IoT Continuum (also, in short, EUCEI Continuum or EUCloudEdgeIoT) is being planned among UNLOCK CEI (demand side CSA) and Open Continuum (supply side CSA). The scope of the plan is to define common principles to adequately promote the European Cloud Edge and IoT initiative during the following months and to harmonise activities among the 2 CSAs, in order to maximise impact, develop a coherent, shared voice and effectively engage with all the CEI stakeholder communities.

From the onset of UNLOCK CEI's activities (June 2022), the 2 CSAs have started to cooperate informally to deliver a unified branding and approach, waiting for the official start of Open Continuum in September 2022. The first joint activities, currently ongoing, have focused on the creation of:

- Joint logo, colours and branding
- Design and development of a joint website
- Joint setup and management of social media channels (Twitter, LinkedIn, YouTube)
- Joint press release

At inter-CSA level, specific "Task Forces" (TFs) are being set up. In particular, the inter-CSA Communications Task Force, which will lead to the definition of the official Joint Communication Strategy will be active in delivering principles for managing communication channels (e.g., the social media channels) and following uniform procedures (e.g., creation of an inter-CSA mailing list and Editorial Board to decide upon and schedule contents incoming from the 2 CSAs).

Both CSAs will commit to respecting the joint plan that will be drafted and detailed as part of future deliverables.

Regarding the status of the four main activities listed above, the projects have so far delivered the following joint outputs:

- **3 proposals** for the logo have been prepared in different formats and will be shared and discussed with EC members involved in the inter CSA TFs to agree on the final choice
- A **sitemap** has been prepared by the two CSAs, containing the main sections that we plan to include in the joint website, together with the wireframe of the website. This preliminary draft includes in green the contents that we plan to implement already in the very first iteration of the website (e.g., the about section to describe the initiative and the two coordinating CSAs – UNLOCK CEI and Open Continuum, news and events both organised by the two CSAs and external ones, existing community of projects in the cloud and IoT fields), while in other colours the sections that will be developed in following phases. The image below provides a view of the current proposal of sitemap. Technical aspects are being discussed by the technical teams of the two CSAs and implementation is expected to be completed by **M4 (September 2022)** after joint discussion and agreement with the EC about the proposed website structure.
- Joint **social media channels** (Twitter, LinkedIn, YouTube) have been setup and are currently active and being populated
- The joint press release will be prepared in September 2022, when Open Continuum also officially starts

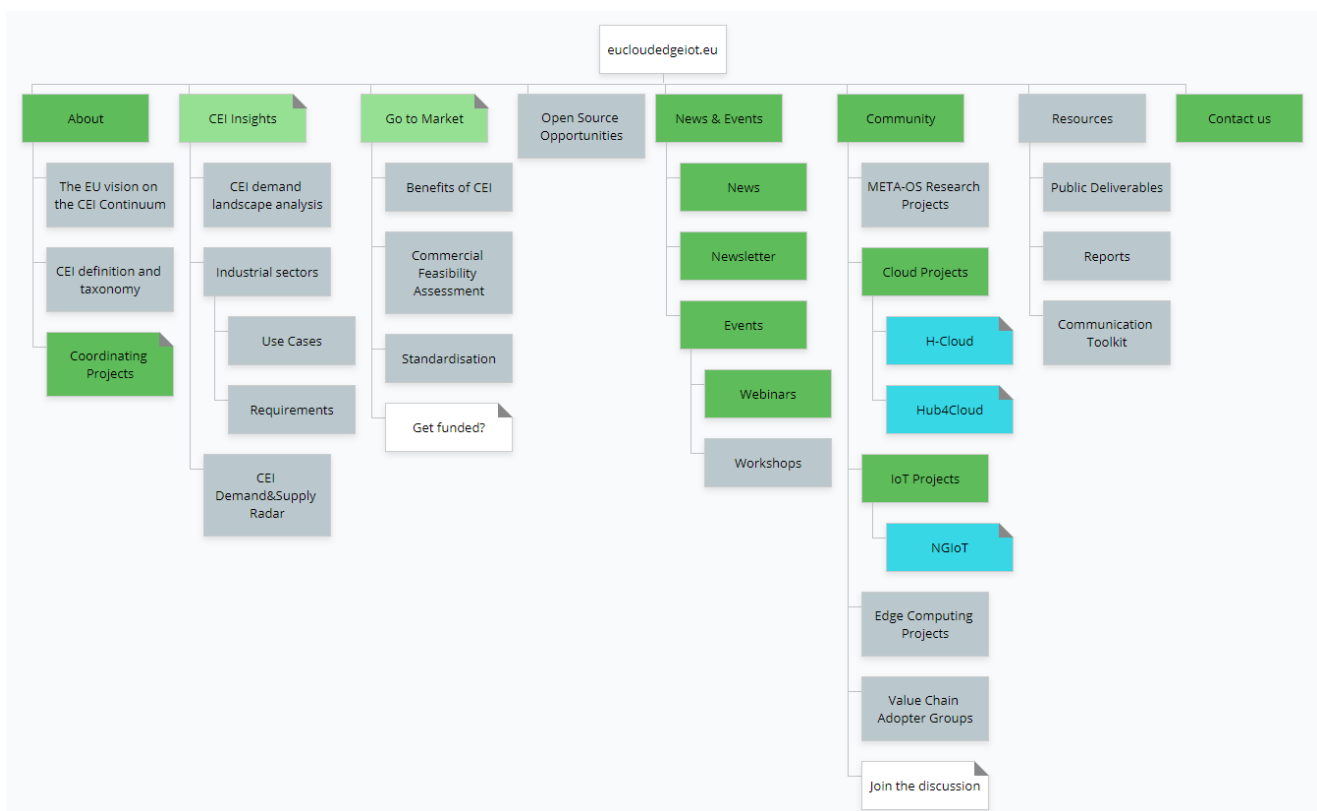


Figure 3 - euclouledgeiot.eu draft sitemap

Given these joint activities, UNLOCK CEI will then follow its own project timeline to work towards the joint communication strategy and produce contents to populate the common website. The details of UNLOCK CEI-specific communication and engagement activities are defined below.

5.2 UNLOCK CEI specific communication and dissemination plan

The following sub-paragraphs describe the communication, dissemination and engagement activities and tools the project is going to use through the different phases that characterise its lifecycle.

5.3 Phase 1: Develop (M1-6)

The develop phase covers the initial months of the project and has the main objective of performing preliminary analysis, gather data and use cases, understand the scenario and start building the community, setting up relationships with identified key stakeholders. It also serves the purpose of presenting the project externally, raise awareness, attract interest and build knowledge about CEI specific concepts and terms.

This phase goes from 1st June 2022 to 30th November 2022

The activities planned in this period distinguished according to their **communication**, **dissemination** and **engagement** purposes are summarised in the following table:

Activity	Communication and Dissemination	Engagement
Branding	Create a recognised and unified logo and branding within the European Cloud, Edge and IoT Continuum	
Website	Launch the website (a temporary landing page has been available since the project's kick-off)	Open Registrations and collect data for community building
Social Media	Setup of social media channels (done at project kick-off)	
Project's promotion	Promote project's goals and expected activities, and key concepts related to CEI, press release about the project launch	
Newsletter	Setup the newsletter mailing list, launch of 2 quarterly newsletters	
Events	Organise 1 Introductory webinar in M4 to present the initiative, discuss about challenges and opportunities and attract stakeholders to support the VCA recruitment activities guided by WP3 Participate at third party events	Attract interest and recruitment of new VCA and projects.
Communication collaterals	Produce roll-up banner and flyers, Institutional presentation and Communication Kit	
Value Chain Adopters	Provide visibility for VCA and their organisations on website and social media	Support their recruitment via targeted messages, presentations and campaigns
Edge Tech Task Force	Provide visibility for TF members and their organisations on website and social media	Engage projects via events, social media and website content

Table 4 - Communication, Dissemination and Engagement Activities in the Develop Phase

5.3.1 Preliminary results of the Develop Phase

At the moment of writing this deliverable, the activity of creating a project branding and identity is in progress with constant interaction with Open Continuum and has led to the following preliminary results:

- A landing page about the initiative has been setup together with social media channels (more details in the respective sub-sections 5.7.1 and 5.7.2).
- A first introductory webinar has been scheduled and is being organised on 19th September 2022 with the aim of establishing the project’s identity and presence among its key stakeholders.
- The project has attended its first external event at the IoT Week 2022 (see Figure below) with dedicated presentations in two slots. These were very impactful sessions, directly organised by the EC and including key relevant stakeholders among the speakers and participants in the sessions.

The audience directly reached in this initial phase, to date, is 120 unique contacts. More precisely, 100 contacts derive from the project’s social media channels and newsletter subscription, while the remaining 20 include industry, research and association representatives that have directly got in contact with project’s partners during the IoT Week.



Figure 4 - UNLOCK CEI at the IoT Week 2022

5.4 Phase 2: Engage (M7-18)

The goal of this phase is to deep dive in the understanding of the needs and requirements for CEI development, identify value chain dynamics, collect use cases in order to explore demand-pull business opportunities for CEI solutions and define frameworks and draft landscape scenarios, in a collaborative way interacting with all relevant stakeholders.

This phase goes from 1 December 2022 to 30th November 2022.

The activities planned in this period distinguished according to their **communication**, **dissemination** and **engagement** purposes are summarised in the following table

Activity	Communication and Dissemination	Engagement
Website V2	Launch an updated version of the website	Collect data for community building Update content to attract and engage visitors
Social Media	Develop and publish content	
Project’s promotion	Promote project’s preliminary results, including use cases	
Newsletter	Launch of 4 quarterly newsletters	

Events	<p>Organise 1 project update webinar about intermediate results</p> <p>Organise 1 webinar focused on research projects operating in the CEI domain</p> <p>Organise First Online Forum Event</p> <p>Organise First and Second Impact event on a vertical sector to disseminate the benefits of CEI technologies and their impact on value chains. The sectors will be defined in accordance with the project partners.</p> <p>Participate at third party events</p>	<p>Attract interest and engage with VCA, projects and other stakeholders.</p> <p>Support organisation of Wave 1 and Wave 2 workshops, conceived as highly interactive events to collect experts' ideas, experiences and feedback on project results</p> <p>Online Forum Event as a multi-stakeholder engagement opportunity to validate results to date as well as gather input for activities such as market scenarios and the feasibility tool</p> <p>First and Second Impact event to lay the ground for potential engagement in future large-scale pilots and adoption.</p>
Communication collaterals	<p>Update roll-up banner and flyers</p>	
Policy briefs	<p>Develop Policy brief from intermediate results</p>	
Videos	<p>Promote interviews with project partners, VCA members, informational videos on CEI definitions and concepts, use cases</p>	<p>Engage with VCA interviewed</p>
Value Chain Adopters	<p>Provide visibility for VCA and their organisations on website and social media</p>	<p>Animate the discussion among VCA through social media channels and video interviews with experts</p>
Edge Tech Task Force	<p>Provide visibility for TF members and their organisations on website and social media</p>	<p>Engage projects via events, social media and website content</p>
CEI Landscape	<p>CEI demand side radar as a visualisation tool</p>	<p>Extract of CEI landscape survey questions to be published and distributed through the website, used during webinars and social media campaigns to extend respondent pool and engage the community</p>
Commercial Feasibility tool		<p>Commercial Feasibility tool for projects and companies to test their readiness to enter the CEI market</p>

Table 5 - Communication, Dissemination and Engagement Activities in the Engage Phase

5.5 Phase 3: Validate (M19-24)

The goal of this phase is to validate previously collected requirements and scenarios to trigger feedback and refinement.

This phase goes from 1 December 2023 to 31st May 2024.

The activities planned in this period distinguished according to their **communication**, **dissemination** and **engagement** purposes are summarised in the following table

Activity	Communication and Dissemination	Engagement
Website	Communicate main project's updates	Collect data for community building Update and enrich content to attract and engage visitors
Social Media	Develop and publish content	
Project's promotion	Promote project's updated results	
Newsletter	Launch of 2 quarterly newsletters	
Events	Organise 1 webinar on project's updated results Organise Third and Fourth Impact events on vertical sectors to disseminate the benefits of CEI technologies and their impact on value chains Participate at third party events	Attract interest and engage with VCA, projects and other stakeholders. Support organisation of Wave 3 workshops, to validate synthesised market scenarios among cross-domain experts Third and Fourth Impact event to lay the ground for potential engagement in future large-scale pilots and adoption. Support organisation of the Pilot Factory event as an engagement opportunity for partnerships around CEI pilot actions
Communication collaterals	Update roll-up banner and flyers	
Policy briefs	Develop Policy brief from updated results	
Videos	Promote case studies, success stories, validated requirements, project results	Engage with VCA interviewed
Value Chain Adopters	Provide visibility for VCA and their organisations on website and social media	Animate the discussion among VCA through social media channels, video interviews with experts and, if needed, discussion spaces on the website
Edge Tech Task Force	Provide visibility for TF members and their organisations on website and social media	Engage projects via events, social media and website content
CEI Landscape	Update CEI demand side radar	Extract of CEI landscape survey questions to be published and distributed through the website, used during webinars and social media campaigns to extend respondent pool and engage the community
Commercial Feasibility tool		Commercial Feasibility tool for projects and companies to test their readiness to enter the CEI market

Open Consultation	Publish Open Consultation	Receive feedback and collect opinions from stakeholders
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Table 6 - Communication, Dissemination and Engagement Activities in the Validate Phase

5.6 Phase 4: Embed (M25-30)

In the last phase, possible future market structures will be evaluated for their desirability, as well as for their feasibility, based on the maturity of the required technology. A practical tool for assessment of go-to-market strategies will be also be available as an asset.

This phase goes from 1st June 2024 to 30th November 2024.

The activities planned in this period distinguished according to their **communication**, **dissemination** and **engagement** purposes are summarised in the following table

Activity	Communication and Dissemination	Engagement
Website V3	Deliver an updated version of the website	Collect data for community building Update and enrich content to attract and engage visitors
Social Media	Develop and publish content	
Project's promotion	Promote project's updated results	
Newsletter	Launch of 2 quarterly newsletters	
Events	Organise 1 webinar on project final results Organise Second Online Forum event Organise Fifth Impact event on vertical sectors to disseminate the benefits of CEI technologies and their impact on value chains Participate at third party events	Attract interest and engage with VCA, projects and other stakeholders. Fifth Impact event to lay the ground for potential engagement in future large-scale pilots and adoption. Support organisation of the Pilot Factory event as an engagement opportunity for partnerships around CEI pilot actions
Communication collaterals	Update roll-up banner and flyers	
Policy briefs	Develop Policy brief from final results	
Videos	Promote project results and recommendations, success stories	Engage with VCA interviewed
Value Chain Adopters	Provide visibility for VCA and their organisations on website and social media	Animate the discussion among VCA through social media channels, video interviews with experts and, if needed, discussion spaces on the website
Edge Tech Task Force	Provide visibility for TF members and their organisations on website and social media	Engage projects via events, social media and website content
CEI Landscape	Update CEI demand side radar	

Commercial Feasibility tool		Commercial Feasibility tool for projects and companies to test their readiness to enter the CEI market
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Table 7 - Communication, Dissemination and Engagement Activities in the Embed Phase

5.7 Horizontal Activities

This paragraph describes activities that are carried out on a continuous basis for the whole duration of the project and in any phase with a more general aim and responding either to general communication, dissemination purposes or specific engagement actions. While specific targets on the number of some horizontal activities to be produced for each phase (e.g., number of newsletters and events) have been described in sections from 5.2 to 5.5, in the following sections more details on how such activities are structured and managed are provided

5.7.1 Website and Web presence

UNLOCK CEI’s website is the central channel for communication and engagement, and contains all important information that stakeholders need to know about the project. Based on the agreement in place with Open Continuum and the European Commission a unique [umbrella website](#) will be designed and developed for all the projects working on the CEI Continuum

In a preliminary phase, the website has been developed in the form of a temporary landing page, available since the UNLOCK CEI’s Kick Off on 1st June 2022. The landing page presents a hero page with the name of the initiative redirecting to the European Strategy for data, as shown in the Figure below, and consists of the following sections:

- Opportunities for industrial players
- Links to relevant existing projects and initiatives in these domains, such as NGIoT and H-Cloud and the IoT Week where the project has been presented
- Invite to subscribe for the project’s newsletter
- Link to the social media channels

The colours and designs used in this phase are neutral as the main decisions in this regard are taken together with the Open Continuum representatives

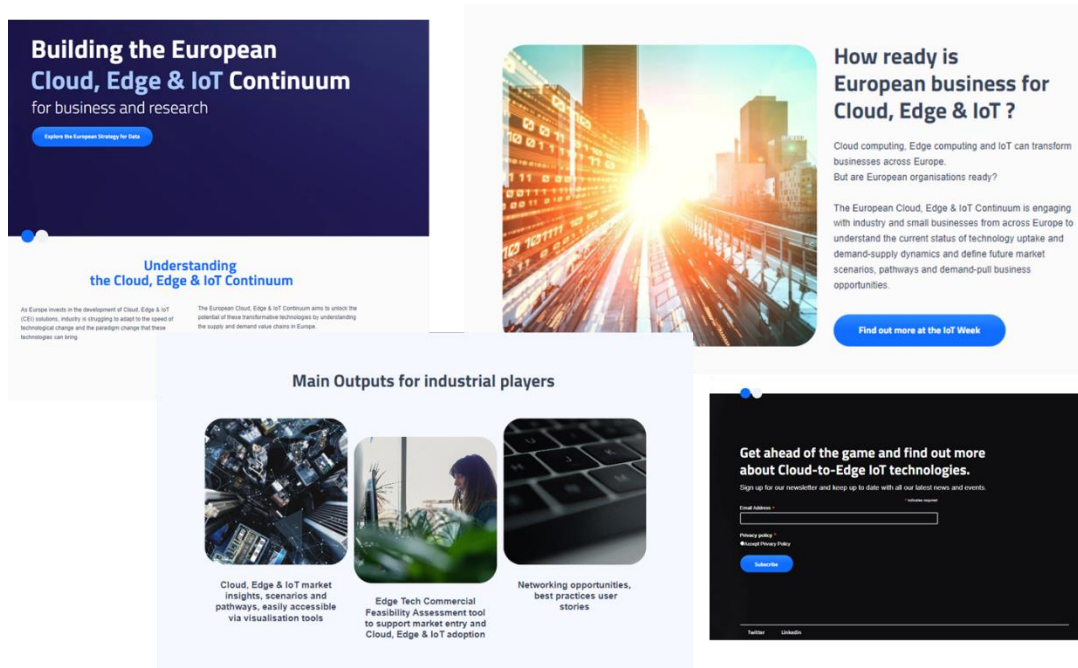


Figure 5 - Selected visuals from the eucloudedgeiot.eu landing page

The number of unique visits to main services and downloads of outputs will be measured and communicated to the consortium, by using analytics data and a dedicated dashboard.

To this purpose, WP5 will develop an interactive analytics dashboard that allows immediate access to the most important website metrics, such as number of unique visitors (users) and pageviews.

A full version of the website will be jointly developed with the sister CSA in the Define Phase of the project.

5.7.2 Social Media Management

To engage with its stakeholders, build its community, and gather input and feedback on its activities, UNLOCK CEI uses various social media platforms, producing high-quality and highly relevant content to publish.

At the time of writing (August 2022), the project's accounts on Twitter, LinkedIn and YouTube are set up and active under the umbrella name of EUCloudEdgeIoT.

The overall community has started to be formed and counts 159 followers. Most of these are from **LinkedIn**, which has a high rate of engagement by very relevant members of the community, and the possibility to target and invite individuals to engage with the project page. The majority of followers belong to the Information Technology and Service Industry, followed by Research, Telecommunications, Management Consulting and Computer Software. **Twitter** is also a key channel for the project which will need to be further developed as the project kicks off its public activities, such as introductory webinars with live tweeting. Both LinkedIn and Twitter will provide excellent platforms with interested and engaged communities, ideal for communication and dissemination going forwards. The editorial plan for the initial phase of the project is focused on the communication of general information about the initiative and its goals, participation at events and content-focused posts disseminating information and definitions of key concepts and terms in the CEI domain.

Going forward, LinkedIn will be used mainly for updates, blog posts and sharing of presentations from events. Twitter will be used for sharing video pills, live tweeting and quick information on the project. Some of the current Twitter followers already act as multipliers and influencers as they have a high number of followers in areas connected to the project, such as @NetTechEU (6497 Followers), @enable_ie (822 Followers), @EFFRA_Live (3474 Followers), Cyber Security News (29900 Followers).

A YouTube channel has also been setup to post video streams from webinars and events as well as informative or promotional videos.

An overview of sample social media activities is provided below.

Promotion of



Project Launch



Participation at IoT Week



Info about the context



Figure 6 – Sample posts on the project’s social media Twitter Channel (@EU_CloudEdgeIoT)

5.7.3 Community Building

A community-building database has been set up to keep track of how the community will grow overtime, and to categorise relevant stakeholders based on relevant variables (e.g., SG, country, type of organisation, technology of interest, industry).

The community database is divided into outreach contacts which include publicly-available contact details of strategic organisations to reach out to but that have not necessarily opted-in, internal project contacts, and the UNLOCK CEI Community mailing list database which includes contacts that have specifically requested to be informed about the project developments and are considered high-value contacts because they are potential providers, users or other stakeholders relevant to UNLOCK CEI and they have expressly requested for UNLOCK CEI to engage with them. Contacts for the Community mailing list will be acquired via registration on the web platform, subscription to the newsletter, social media networks connections, registration to UNLOCK CEI webinars, event participation, partner efforts and synergies, ad-hoc initiatives and presentations, strategic collaborations. Synergies with the existing communities in the IoT and Cloud domains will be exploited also as part of the collaboration with Open Continuum. By the end of the project, 2000 contacts will have to be recorded in the project’s database. The database is GDPR-compliant with all contacts consenting to receiving emails from the project. Having converted from visitors by providing their contact details, these contacts are considered leads, and form the basis for further nurturing either as a possible user and adopter of the results of the project.

5.7.4 Newsletter

UNLOCK CEI will regularly send newsletters (at least quarterly) to its subscribers to inform them of the project’s activities to engage them, invite them, and to share events and dissemination material. The first

newsletter will be focused on the presentation of the project and the promotion of the first introductory webinar.

The newsletters will be customised according to UNLOCK CEI’s activities and opportunities, so each stakeholder receives content and information that is relevant to their area of interest. Newsletter performance metrics (e.g., open rate and click-through rate) will be calculated and used as internal feedback to improve content and focus on the most successful elements.

5.7.5 Audio, video & communications materials

At the beginning of the project some communication material, namely photos, videos and banners were produced to give general information about the project and promote the landing page and social media channels. These will be progressively made available on the website and other channels following an editorial plan aligned with the phases of the project and in synergy with the content produced by Open Continuum. Additional material, including flyers, new banners and videos, infographics and online and printed graphical elements will be delivered along the whole duration of the project. QR codes will be used on printed material to create a cross-channel experience and redirect users to other relevant content.



Figure 7 - Roll-up Banner to promote the initiative

5.7.6 Events

A long list of events is planned over the 30-month duration of the projects, distinguishing between webinars (online events of shorter duration and more informative nature for a wider audience) and workshops (online or physical events of longer duration and characterised by a high level of interaction with more selected participants). External events, i.e., events not organised by the Consortium, will be attended as well. The preliminary plan of events is displayed in the figure below

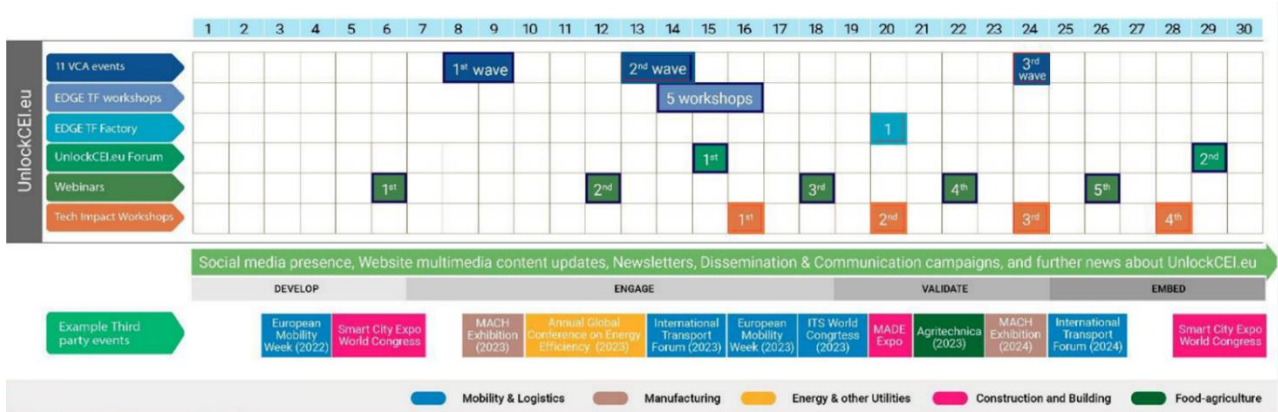


Figure 8 - UNLOCK CEI plan of events

VCA events, the Edge Task Force Workshops and the Pilot Factory will be mainly organised by WP2, WP3 and WP4, where WP5 will play only a support role. The remaining webinars and events will be instead directly managed by WP5.

In addition, a final conference will be organised to present the overall results of the project.

For each event in programme a set of activities to ensure their smooth execution and effectiveness in terms of communication and branding will be conducted, namely:

- **Before the event:** promotion on website (with dedicated pages) and social media with clear call to actions, setup of registration form with project branding and relevant information to then classify the registered contacts, setup of different registration links to track the origin of the participant (e.g., e-mail, social media, website), design and production of stakeholder-tailored collateral for distribution at events.
- **During the event:** project background for panellists, interactive polls, live tweeting
- **After the event:** recordings and presentation slides, registration and attendance list, feedback survey to participants, gathering of contacts in the database and follow-ups, post-event news and reports

5.7.7 Synergies

Many of UNLOCK CEI’s activities have implications on other initiatives or can benefit from their outputs so it is vital to collect inputs and requirements from stakeholders and organisations or projects that play a part in the project achieving its goals.

To involve its stakeholders, the project website will be designed in a way to become a dynamic, responsive and interactive platform, including easy access points for SGs, contact us form to collect questions online, newsletter form, events.

Aside from this, the project will not only strictly cooperate with the projects funded under the same call in the European Cloud, Edge and IoT umbrella initiative, but will also leverage its partners’ networks and previous experience to work closely with a set of projects that share synergies with UNLOCK CEI and that project partners have already established connections with. An initial list of such projects is provided below.

Project name	Description	Connection with UNLOCK CEI
EU-IoT	EU-IoT is a CSA which coordinates a portfolio of projects funded under the Horizon 2020 ICT-56 ‘Next Generation Internet of Things’ Research and Innovation Actions (RIAs). These RIAs are tasked with developing and trialling next-generation architectures that underpin the deployment and accelerated development of edge computing,	These projects were awarded towards the end of the Horizon 2020 Framework, as IoT has evolved from its relatively delineated field and scope to merge into the computing continuum from human to cloud. While the previous decade can be marked by the widescale adoption of cloud computing and the rise of the hyperscalers, the next decade

	distributed intelligence, federated microservices, collaborative IoT and tactile interfaces integrating holistically those enabling technologies such as DLTs and 5G.	will see the rise of the edge and a distributed approach to data and intelligence.
NGIoT	The Next Generation Internet of Things (NGIoT) initiative is a growing community of projects and related initiatives at work to maximise the power of IoT made in Europe. NGIoT works to lower the barrier for adoption and development of IoT-empowered solutions, by supporting business models, innovation and skills.	The NGIoT Initiative is the stepping stone towards the Cloud-Edge-IoT paradigm which is being precipitated by the convergence of the cloud and edge. This is being driven by the increased computing power available on chips and devices and the realisation of the collaborative IoT enabled by 5G technologies. It is resulting in the processing of data closer to source.
H-Cloud	HORIZON CLOUD is a European Commission initiative that aims to consolidate and grow the Cloud Computing research and innovation community in Europe. To achieve this ambition, HORIZON CLOUD brings together innovators, policy makers, Cloud Computing researcher, industry players, and users into an open, participatory, and sustainable forum.	Being focused on one of the technological domains of the CEI, this project is fundamental for the work of UNLOCK CEI, especially regarding the existing wide community developed by H-Cloud which could be approached and involved via the new channels set up under the EU Cloud Edge IoT umbrella initiative managed by UNLOCK CEI and Open Continuum
AI-SPRINT	AI-SPRINT defines a novel framework for the design and operation of AI applications in computing continua. It goes beyond supporting AI applications development by enabling the seamless design and partition of AI applications among the plethora of cloud-based solutions and AI-based sensor devices, providing security and privacy guarantees.	The projects cover similar technological domains and aim to overcome current challenges towards a more secure, accessible and transparent computing continuum. The industrial partners engaged in AI-SPRINT could be a target group to be engaged in UNLOCK CEI workshops.
Adra-e	ADRA-e is actively supporting the ADRA Association on AI, Data and Robotics in promoting a trustworthy, safe and robust AI, Data and Robotics ecosystem, compatible with EU values and regulations.	This project shares with UNLOCK CEI the mission of responding to modern challenges including the digital transition, industrial competitiveness, and technological sovereignty
StandICT.eu 2023	StandICT.eu 2023 has the central goal to ensure a neutral, reputable, pragmatic and fair approach to support European and Associated states presence in the international ICT standardisation scene.	StandICT runs Technical Working Groups made of standards experts in charge of mapping the standardisation landscape and gaps in specific ICT domains. One of the active TWG is focused on IoT and Edge. The project is also planning events dedicated to Cloud, Edge and IoT technologies in early 2023

HSbooster.eu	HSbooster.eu's central goal is to boost the entire European Standardisation dialogue between H2020 and HE projects with corresponding SDOs to increase the European impact on standardisation and strengthen EU competitiveness	HSbooster.eu provides its services across several horizontal and vertical domains, including new generation technologies, as the ones covered in UNLOCK CEI
6GStart	6GStart is a CSA driving strategic R&I orientations from the European ICT community, the 5G Public Private partnership and the Smart Networks and Services. It is developing methodologies for collecting metrics data and coordinating results and initiatives at EU scale, including Member States while facilitating international cooperation across key regions and promoting European priorities.	Connectivity technologies are enablers and complementary to the CEI continuum ecosystem.

Table 8 - Preliminary projects, outside of the EUCloudEdgeIoT initiative, identified for synergies

5.8 KPIs measurement and contribution to project KPIs

WP5 has set up the following KPIs which are listed together with their due date and the plan towards that target over the four phases of the project

KPI	Target Deadlines	and Plan	Other supported/connected KPIs
Website unique 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
Twitter Followers and LinkedIn connections	1000+ (M30) LinkedIn 1000+ (M30) Twitter	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
People engaged via workshops	1000 participants overall (M30)	Promotion of events via <ul style="list-style-type: none"> • Newsletter • Social media 	KPI 1.3 Identification of top 3 CEI use cases (WP1) KPI 2.1 Develop 25 service requirements (WP2)

		<ul style="list-style-type: none"> Website 3rd Party events	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)
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)
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)
CEI case studies	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)
CEI case studies 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)
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 organised under WP2 and WP3	KPI 1.3 Identification of top 3 CEI use cases (WP1)
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)

Policy briefs	4 (M30)	<p>2 briefs by M18 – November 2023 (Engage Phase)</p> <p>1 brief by M24 - May 2024 (Validate Phase)</p> <p>1 brief by M30 -November 2024 (Embed Phase)</p>	KPI 2.4 Identify 10 key actions, decisions or framework conditions for future market scenarios (WP2)
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	<p>KPI 4.3 20 supply side actors participating in cross-project CEI tech task force. (WP4)</p> <p>KPI 4.5 5 technical developer events by domain providing inputs for the feasibility (WP4)</p>
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
Newsletters	10 (M30)	<p>2 Newsletters by M6 (Develop Phase)</p> <p>4 Newsletters by M18 (Engage Phase)</p> <p>2 Newsletters by M24 (Validate Phase)</p> <p>2 Newsletters by M30 (Embed Phase)</p>	KPI 5.4 Multi-stakeholder community database (WP5)
Webinars	5 (M30)	<p>1 Webinar by M6 (Develop Phase)</p> <p>2 Webinars by M18 (Engage Phase)</p> <p>1 Webinar by M24 (Validate Phase)</p> <p>1 Webinar by M30 (Embed Phase)</p>	<p>KPI 5.4 Multi-stakeholder community database (WP5)</p> <p>KPI 3.1 Organize 5 value chain adopter groups (WP3)</p>
Technology Impact Events	5 (M30)	<p>2 Tech Impact Events by M 18 (Engage Phase)</p> <p>2 Tech Impact Events by M 24 (Validate Phase)</p>	<p>KPI 5.4 Multi-stakeholder community database (WP5)</p> <p>KPI 3.1 Organize 5 value chain adopter groups (WP3)</p>

		1 Tech Impact Event by M30 (Embed)	
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)

Table 9 - Communications, Dissemination and Engagement KPIs

5.9 IPR policy

UNLOCK CEI will produce a wide variety of 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.

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

The material will be included in an appropriate public service (e.g., website, YouTube and other social channels) or repository (e.g., Zenodo).

The project will provide open access to any peer-reviewed scientific publication produced.

This policy will ensure that the widest possible audience is aware of the UNLOCK CEI achievements and that they can build on them in the future.

Detailed Data Management activities will be addressed in the D6.2 - Data Management Plan to which all activities conducted for Communication, Dissemination and Engagement purposes will adhere for the whole duration of the project.

6. Conclusions

As described in this deliverable, UNLOCK CEI will carry out communication, dissemination and engagement activities in a structured manner, to ensure the project reaches its overall goals. While the majority of communication activities will be carried out by WP5, specific engagement actions, such as the VCA recruitment and workshops or the Tech Edge Task Force of Projects will see other WPs (namely 2,3 and 4) in a leading role and WP5 in a supporting role.

This will be done according to UNLOCK CEI's Communications and Dissemination methodology and stakeholder journey (see Section 3.2).

Specifically, on the communication, dissemination and engagement activities, the project will undertake a phased approach, reflecting the key activities of the project:

- Phase 1 – Develop
- Phase 2 – Engage
- Phase 3 - Validate
- Phase 4 - Embed

<https://www.eucloudedgeiot.eu>

Each phase plans specific activities which will allow to implement timely actions and use relevant messaging while enabling an organised way of monitoring communication and dissemination KPIs and how they are contributing to the overall project KPIs (see Section 5.8).

This plan has been prepared in August 2022 and takes into account the current relative lack of restrictions related to COVID-19. Any possible change related to future evolution of the pandemic situation or other external events as well as deviations occurring based on project evolution or best practices will be documented in the future versions of this deliverable due in M18 and M30.

Annex – Resources for communication and dissemination

UNLOCK CEI's communication, dissemination and engagement activities are a joint, coordinated effort of all the project's partners, namely IDC ITALIA SRL, EGI Foundation, VDI/VDE-IT, BluSpecs, Trust-IT srl and COMMpla (Affiliated Entity of Trust-IT) who have committed to contribute according to the effort (PMs) allocated to them in the table below.

WP	WP title	Lead	Start	Finish	IDC	VDI	EGI	BLU	TRU	COM	Total
WP5	Communication, Dissemination and Engagement	TRU	1	30	6	3	2	3	12	7	33
T5.1	Communication and Dissemination	TRU	1	30	1	1	0	1	4	2	9
T5.2	EU demand side radar	IDC	6	30	3	0	0	0	2	3	8
T5.3	Outreach and engagement	TRU	1	30	1	1	1	1	4	2	10
T5.4	Sustainability and exploitation	TRU	12	30	1	1	1	1	2	0	6

Table 10 - WP5 Effort Overview

The coordination among all the partners involved will be ensured via periodic meetings. Moreover, all the main communications materials (e.g., website pages, logos, flyers, posters) will be shared with the consortium for feedback and approval.