CORENEXT

D8.1

COREnext Impact Master Plan

AUSTRALO

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Revision v1.0

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Authors	Arantxa Echarte (AUS), Blanca Arregui (AUS)
Contributors	All partners (see below)
Reviewers	Raymond Knopp (Eurecom), David Choukroun (Sequans), Efstathios Katranaras (Sequans), Fredrik Tillman (Ericsson), Patrick Pype (NXP), Michael Roitzsch (BI), Laurent Petit (RAD)

Abstract

This document outlines the dissemination, communication, and exploitation strategies for the COREnext Horizon Europe project. This plan will be relevant throughout the length of the project and will be adapted to best suit the needs of the project at every given time and stage of development. The aim of this plan is to deliver against established KPIs and maximise the outreach and exploitation potential of COREnext.

Keywords

Impact, communication, dissemination, exploitation, community building, outreach, stakeholder management, commercialization, business models, intellectual property, standardization, open source. B5G/6G ecosystem, application sector, microelectronics ecosystem, system architecture, security, sustainability, privacy and responsible data, interoperability, robotics, reliable end-to-end connectivity, Internet of Things, AI, and technologies beyond 5G/6G.

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Contributing Partners

Abbreviation	Company name
BI	BARKHAUSEN INSTITUT
AUS	AUSTRALO
CHAL	CHALMERS TEKNISKA HOGSKOLA
CEA	COMMISSARIAT AL ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES
EAB	ERICSSON
CYB	CYBERUS TECHNOLOGY
EUR	EURECOM
IFAG	INFINEON TECHNOLOGIES AG
IMEC	INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM
NXP	NXP SEMICONDUCTORS
RAD	RADIALL
SEQ	SEQUANS
TUD	TECHNISCHE UNIVERSITAET DRESDEN
TIM	TELECOM ITALIA

WINGS	WINGS ICT SOLUTIONS
IMS	INSTITUT POLYTECHNIQUE DE BORDEAUX
ETHZ	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH
IHP	IHP MICROELECTRONICS
NOK	NOKIA NETWORKS GERMANY
NNF	NOKIA NETWORKS FRANCE
IIV	NNF/IIIV LABS
INFAT	INFINEON TECHNOLOGIES
KAL	KALRAY

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Executive Summary

This deliverable sets the strategy and plan (framework, guidelines and means) for the project's **Communication, Dissemination and Exploitation** activities. These activities are separate but strongly intertwined and the correct management of those is crucial to secure the right visibility and results. The proposed document also serves to design and establish the initial COREnext Stakeholder Collaboration Framework, developed to identify the ecosystem of entities relevant to the project's innovations and findings. Leveraging this context will help COREnext disseminate its findings and secure its exploitation ambitions.

The **strategies** set out in this document aim to:

- **Ensure the development of appropriate means of communication** of the project's results outside of its consortium, with the intention of raising awareness and leveraging relevant synergies.
- **Increase the project's impact** on the identified target audiences, both for further commercial and research purposes.
- **Foster stakeholders' engagement** with the consortium, in order to give consistency and continuity and longevity to the project's findings and expected outcomes.

Moreover, the Communication, Dissemination and Exploitation plans will also serve an internal purpose. This plan will help consortium members to always be aware of outreach activities pursued by other partners, while at the same time participating and contributing to the achieved results within this area of work. These plans will be subject to constant evaluation and revision throughout the duration of the COREnext. project, so as to have a constantly updated and accurate depiction of relevant shifts in scope, progress made and challenges ahead.

This report will describe the strategies, methodologies and tools that are necessary to achieve the above.

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Acronyms and Definitions

AI	Artificial Intelligence
ASIC	Application-Specific Integrated Circuit
CC	Creative Commons
C&D	Communication and Dissemination
CPU	Central Processing Unit
DoA	Description of Action
EC	European Commission
FPGA	Field-Programmable Gate Array
GPU	Graphic Processing Unit
HEV	Hybrid Electric Vehicle
HPC	High Performance Computing
IPCE	Important Project of Common European Interest
JU	Joint Undertaking
KDT	Key Digital Technologies
O-RAN	Open Radio Access Network
OTT	Over The Top
RAN	Radio Access Network
SNS	Smart Networks and Services
TT	Technology Transfer
TRL	Technological Readiness Level
WP	Work Package

1 Introduction – Purpose and Scope

The current document, **D8.1 – COREnext Impact Master Plan**, is part of COREnext's **WP8 – Impact, Outreach and Collaboration.** It encompasses **Task 8.1, focused on Dissemination and Communication activities**; **Task 8.2**, centered on **Innovation Management, Exploitation, and Sustainability**; **and Task 8.3 Stakeholder Collaboration Framework**, responsible for managing and enhancing the project's ecosystem dynamics.

This WP and its deliverables will be led by **AUSTRALO**, who will apply their marketing expertise and proprietary methodologies. AUSTRALO will lead T8.1 and T8.3. **WINGS**, the partner responsible for the project´s Data Management, will lead T8.2.

WP8 will be receiving inputs from all partners and will contribute to the impact of the rest of technical work packages (WP2-WP8) and working closely with WP7 for dissemination purposes. This work package activities will have a cross-cutting influence over the work plan, putting in place the measures that will maximise the impact.

D8.1 is the first of a series of WP8 deliverables. D8.1 represents COREnext projection of the Communication, Dissemination and Exploitation strategies in the initial stages of the project, hence this can be regarded as a living document, possibly subject to changes during the three-year duration of the project. The Interim Impact Reports (D8.2 M18) and Final Impact Reports (D8.2 M36) will highlight the impact of the project's activities in relation to dissemination and communication, new business opportunities, knowledge creation and standardization throughout the length of the project. Lastly, this report verifies the delivery of milestone 2, 'Website & social media', as described in the DoA.

The main goal of WP8 is to fast-track and amplify knowledge transfer between COREnext and its target stakeholder base, reinforcing the value streams of the project and capitalising on the results obtained.

The specific **objectives** related to D8.1 are to:

- **Operate a collaboration framework** that will identify and build synergies with a range of target groups, covering the collaboration with the 6G-IA and Horizon/SNS initiatives.
- **Design and execute dissemination and communication strategies** to efficiently raise awareness about the project´s outcomes, promoting the activities and results among a critical mass.
- **Manage the assets and innovation through performance indicators and IPR management**, developing exploitation roadmaps, sustainability, and business models of the key results.
- **Contribute** actively to relevant **standardisation** actions.

2 Stakeholder Collaboration Framework

COREnext aims to create a longer-term impact for the Destination *'Digital and emerging technologies for competitiveness and fit for the Green Deal'*, strengthening human capital in research and innovation, enhancing innovative skills, and fostering the creation and diffusion of knowledge and innovation openly within society. For this purpose, COREnext is designing and operating the **Agile Stakeholder Engagement Framework** (**Figure** 1), an AUSTRALO methodology designed to continuously develop and strengthen communication streams with key stakeholder groups; creating collaboration links with the Voice of European Industry and Research for Next Generation Networks and Services 6G-IA, its members, Working Groups, and the projects emerging form the Smart Networks and Services (SNS) and Key Digital Technologies (KDT) JUs; and forging institutional relationships and joint activities with EU tech partnerships, networks, associations and Task Forces.

The main aim of this communication and dissemination (C&D) strategy is to amplify COREnext's obtained benefit from navigating an ecosystem of initiatives, organisations and agents with a given position of influence and interest on the project's performance and outcomes: its stakeholders, while at the same time creating new synergies over the project's lifetime, enabling greater exposure, and extending its range of action.

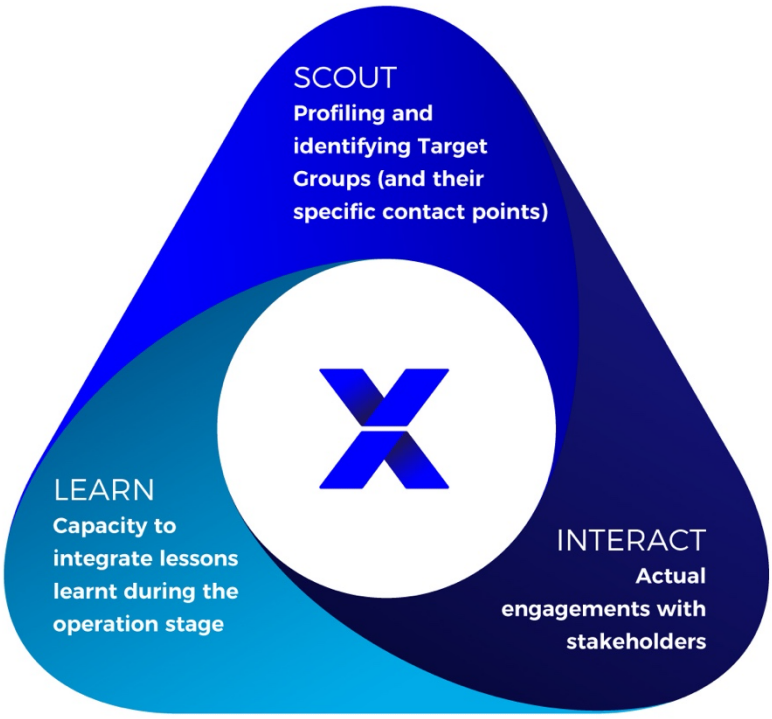

Figure 1. COREnext Stakeholder Collaboration Framework

Additionally, as part of COREnext methodology for an Agile Stakeholder Framework, using tools such as EU Survey, the project will set up surveys and opinion polls among key actors to collect feedback about critical needs and potential issues (validation of priorities, execution, etc.). This will allow a broader view of the project's ambition and scope and insights on how to better tailor dissemination actions to a specialised audience. Dissemination will be further discussed in section 3.

2.1 Structure of the Methodology

This framework's operation follows an iterative approach based on approximately 6-month sprints, along 3 phases (**scout**, **interact**, **learn**), to incrementally build and reinforce engagement. The 6-month sprint length is a variable length, as the timeline might need to change to align to key technical developments and/or research findings.

Scout – Explore and Map

This first phase explores, maps, and classifies target groups (and specific individuals) in terms of their relevance to the scope and impact of the project's work plan. COREnext builds upon the work done at COREnect, an initiative that brought together European major players in microelectronics and telecommunications to develop a strategic roadmap of core technologies for future connectivity systems allowing to build technological sovereignty in 5G and beyond 5G. Moreover, it relies on the sound experience and active involvement of consortium members in related initiatives, and on key players that must be considered as the baseline for successful engagement.

The key result from the scouting phase will be the project's stakeholders map, a visual mind map to identify and list key actors (groups and/or individuals) within the context of the project and classify and understand these audiences as per their degree of impact in the project's execution and success at different stages of the project.

Interact – Collaborate and Advocate

This second phase comprises all interactions with the identified target groups, thus supporting the activities outlined in the Dissemination, Communication and Exploitation plans for the project. This is the phase where COREnext will collaborate with advocate initiatives (listed below) in the intersection of system architecture, security, sustainability, privacy and responsible data, interoperability, robotics, reliable end-to-end connectivity, AI, and technologies beyond 5G/6G. Whenever relevant, the project will formally join specific task forces and working groups, contribute to scientific publications and participate in events. Feedback extracted from previous sprints will be used to improve on the efficiency and impact of these interactions.

Learn – Adapt and Feed Back

In this last phase, the consortium will learn and adapt based on how these interactions play out and insights obtained from stakeholder consultation (i.e., quick surveys or interviews to gather valuable external feedback about the project and its operation). These best practices will in turn feed the next scouting (phase 1) sprint.

2.2 Key Audience and Target Groups: Stakeholder Map

A good understanding of COREnext target audience, stakeholder profiles and their influence along the value chain is essential to craft successful Dissemination, Exploitation and Communication

Plans. **Figure** 2 shows an initial mapping of the key players for COREnext. The context of these initiatives is further expanded below to gain a better understanding of each of the stakeholder grouping relevant to the project.

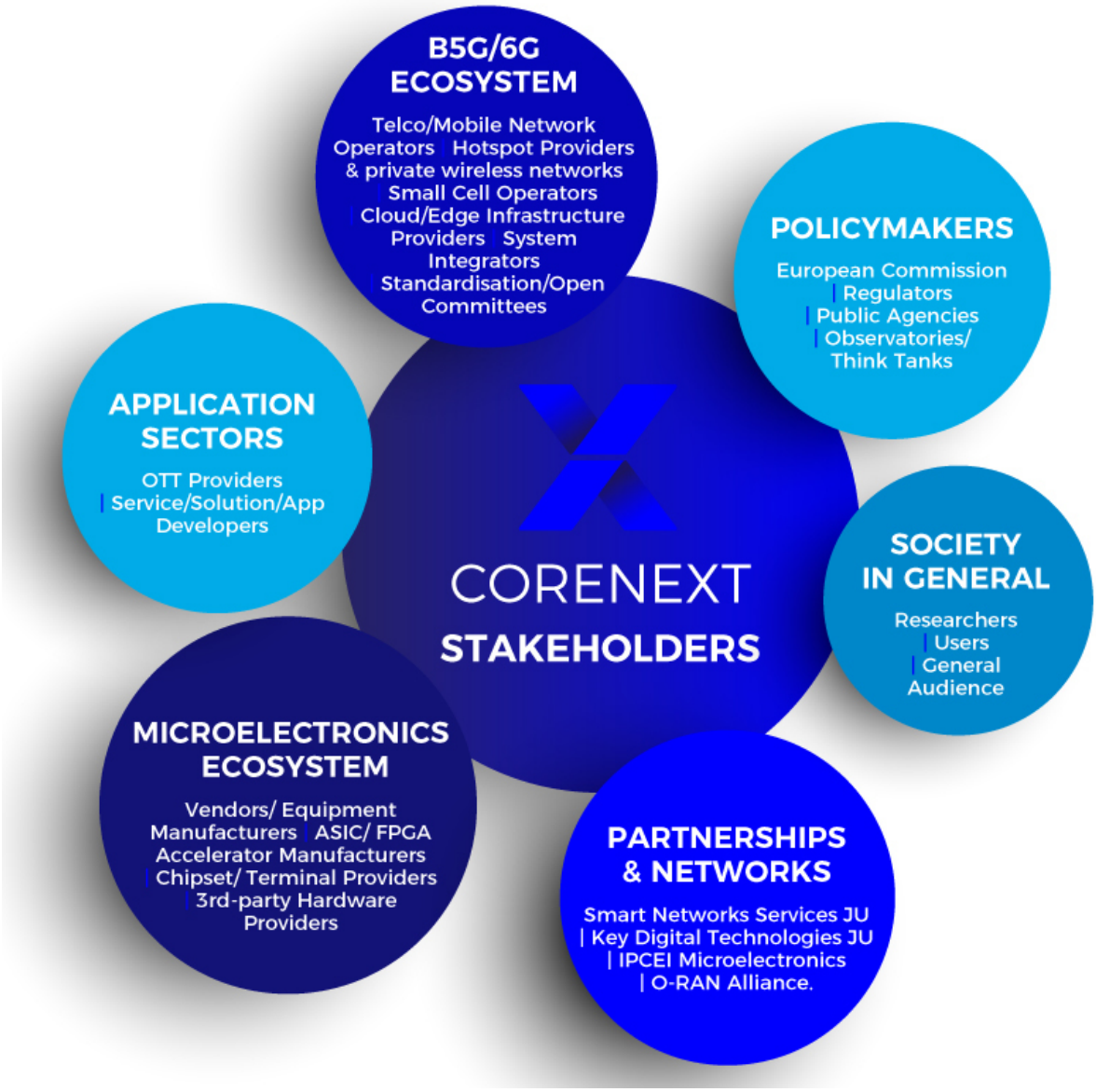

Figure 2. COREnext stakeholder map

B5G/6G Ecosystem

This category encompasses the players working on research outputs, innovation findings, business activities and standardisation efforts concerned with B5G and 6G virtualised RAN disaggregated architecture –i.e., the main audience for COREnext. Examples within this group are telco/mobile network operators, Hotspot providers & private wireless networks, cloud/edge infrastructure providers, system integrators, standardisation/open committees, open-source initiatives for telecommunications.

These agents undertake to investigate, advance, and demonstrate the technical features offered by advanced communication and computing capabilities for high performance base station

management, trustworthy end-to-end-trusted services, and an open multivendor architecture. The project will engage with key representatives to exchange and encourage the Technology Transfer (TT) of its outcomes, and to define a robust roadmap for the emergence of a European capability in this communication-computing domain. This category includes **research-oriented institutions** (technical universities, RTOs, spin-offs) and **business-driven organisations** (from start-ups to innovation units in large-scale industry) that will contribute to the technical ambition. Technical committees driving standardisation and openness will be highly considered, especially those working and extending Open Radio Access Network (RAN).

Microelectronics Ecosystem

COREnext onboards some of the most relevant European microelectronics players who are also partners at the European Processor Initiative (e.g., **CEA, INFINEON, ETHZ, CHAL**). Examples of stakeholders within this group are vendors/equipment manufacturers, ASIC/ FPGA accelerator manufacturers, chipset/ terminal providers, 3rd-party hardware providers.

This ecosystem will support the better understanding of the newest and future developments in connectivity domain and end-to-end systems and will be crucial in regard to R&I activities for seizing an abundance of business opportunities in supplying network infrastructure and massive connected devices globally. Additionally, this ecosystem might generate new possibilities for large scale private and public investment, considering the great business opportunities as well as the importance of European technology sovereignty in B5G/6G domain. Lastly, this approach might contribute to a safe integration of 3rd-party heterogeneous hardware components while also supporting the development of offers for use cases, applications, and verticals.

Partnerships & Networks

One of the main intentions of COREnext is to harness the **capacity of initiatives advocating for B5G/6G, computing and microelectronics in Europe.** Examples of these initiatives are smart networks services JU, key digital technologies JU, IPCEI microelectronics and the O-RAN alliance.

These segments will, for example, include the SNS, the KDT and the Important Project of Common European Interest (IPCEI). The project will engage with for example **key working groups, running 5G PPP/upcoming SNS projects**, as previously done with COREnect **–led by the core team behind COREnext**; Hexa-X, the first official research initiative to accelerate and foster 6G research and drive EU leadership, led by **NOK**, with **EAB**, **CHAL**, **CEA**, **TUD**, **TIM**, and **WINGS** as partners; and the latest Hexa-X-II, also including SEQ and IMEC as partners. COREnext will also focus on Europe's digital sovereignty and its capacity to produce high-quality microelectronics by engaging with associations such as the Association for European NanoElectronics Activities (AENEAS), and will Lastly, will also engage with the **Important Project of Common European Interest (IPCEI)**, supporting new microelectronic products across industry, making sure the value chain is reliably available to local players in Austria, Finland, France, Germany, Italy and the UK.

The project will leverage the consortium's leadership and participation in different ecosystems to create synergies, bridging the collaboration between the 'B5G/6G Ecosystem' and 'Microelectronics Ecosystem'. For example, COREnext will capitalise the active involvement of the consortium in the 6G Smart Networks and Services Industry Association (6G-IA), with **TIM**, **EAB** and **NOK** as Board Members, and **CEA**, **CHAL**, **EUR**, **IMEC**, **TUD**, **IHP**, **AUS**, **WINGS**, **INFINEON** and **SEQ** as Full Members. NOK is coordinator of the communication stream of IPCEI, with **CEA**, **NXP** and **INFINEON** also as core members. Another example of the excellent positioning of COREnext is the **O-RAN Alliance**, the community of mobile network operators, vendors, and research & academic institutions operating in the Radio Access Network (RAN) industry, where **TIM** is member of the Board of Directors, and **BI** and **EUR** are partners; and the NGMN Alliance, pursuing mobile

telecommunication services with a particular focus on supporting 5G's full implementation, the route to disaggregation, sustainability and green networks, where **TIM** is also member of the Board of Directors, with **RAD** as a partner and **EUR** and **TUD** as advisors.

The same will apply to existing memberships with bodies such as **IEEE, Next G Alliance, 6G-IA, ETSI, ATIS, TSDSI, AWPC, Aeneas, Eposs, RISC-V International, OpenHW Group, MTT, NGMN, 3GPP, NetworldEurope (SME WG), Association Française des industries du Numérique and Federation Française des Telecom, ORAN Alliance, ACM, OpenHW group, ITU, IETF, Optica, Photonics 21, Eureka ITEA, Eureka CELTIC next, IOWN, NEM, Europe and Systematic Paris Region** cluster. The engagement with these key initiatives and organisations should enhance the work done by COREnext.

Application Sectors

Examples of stakeholders with whom COREnext aim to engage in this section are OTT providers, service/solution/App developers.

Although set in a low-for-market TRL, COREnext will assess the requirements and feasibility studies that will nurture the uptake of future disaggregated RAN architecture for small cell networks and cloud-based macro-RANs. The ambition is to trigger interest from Over-The-Top (OTT) players and vertical-oriented sectors with high requirements in throughout and/or latency (e.g., Media, Manufacturing or Mobility), reinforcing the path towards exploitation and industrial commitment in the longer term. This will lead to better understanding and control across the whole value chain, supporting the development of new use cases and applications. Such development also offers great potential for environmentally compatible management, in particular for resource efficiency and the reduction of emissions. The project will investigate the opportunities brought to each of the vertical sectors targeted.

Policymakers

Policy makers (i.e., regulators, public agencies, observatories/think tanks) are responsible for setting the rules and public incentives for designing and implementing the European strategy, as well as strengthening Europe's digital transformation, human capital, and competitiveness. COREnext will aim to contribute to policy task forces and working groups (where and when relevant) shaping policies related to B5G/6G evolution and digital transformation. The primary representative will be the European Commission (EC), with particular look into the EU toolbox for 5G security, European Chips Act and Green Deal roadmaps.

Society as a Whole

There is a unique opportunity for the European ecosystem to capture and blend its competitive advantage beyond 5G and future 6G infrastructures, interoperability standards, green strategies, and forward-thinking regulations around the next generation of communication computing domain. The intended COREnext 6G applications will permeate people's personal life and will be deployed in critical infrastructure, offering great benefits to the European economy and society. The project will encourage a common understanding on the benefits of the internet-of-things (IoT) for critical and sustainable infrastructure, as well as cooperative personal robotics for everyone.

Related EU Projects

COREnext is the only project under topic **HORIZON-CL4-2022-DIGITAL-EMERGING-01-30,** focusing on European Enabling technologies for Beyond 5G/6G but already has plans to cooperate with initiatives such as CSAs around B5G/6G, namely Coordination of European Smart Network actions (HORIZON-CL4-2023-DIGITALEMERGING-01-26), SNS operational CSA (SNS-2022-STREAM-CSA-01) and SNS External Cooperation and Global 6G Events (SNS-2022-STREAM-

CSA-02). Additionally, under the same thematic priority '**Digital, Industry and Space**' we can find projects such as the already mentioned **Hexa-X-II**, a holistic **flagship towards the 6G network platform and system, to inspire digital transformation**, for the world to act together in meeting needs in society and ecosystems with novel 6G services, with whom COREnext already holds strong links.

Other thematic priorities close to COREnext are Information and Communication Technologies, and Secure Societies-protecting Freedom and Security of Europe and its Citizens. The work that COREnext will develop will also build upon EU historical topics such as Secure, dependable, and trusted infrastructures (2007), Assurance and Certification for Trustworthy and Secure ICT systems, services, and components (2016) and Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises (2019).

A non-comprehensive but extensive list of European funded projects in the intersection of **system architecture, security, sustainability, privacy and responsible data, interoperability, robotics, reliable end-to-end connectivity, AI, and technologies beyond 5G/6G** with whom COREnext might aim to connect with the ambition to align synergies and take these aspects further is presented as Annex A.

2.3 EU research and Technology Networks

DIHs – Digital Innovation Hubs

In the context of digital transformation in Europe, DIHs are set up as one-stop shops to help companies become more competitive when creating or improving on their products and services using digital technologies. To fulfil this mission, DIHs provide innovation services, such as financing advice, training and skills development that are needed for a successful digital transformation [1]. Below is a non-comprehensive list of some DIHs working on the realms of digital technologies, AI, security and IoT among others.

DIHNET is a project that created a sustainable pan-European network of networks, with a focus on regional DIHs.

AGORA DIH develops the key enabling technologies of Agora EDIH, Cybersecurity and AI, for digital transformation in Industry 4.0. Particularly, Agora EDIH will focus on Agrofood, quality of life, driving activities and energy and sea and marine affairs.

AI EDIH Hungary focuses on the key technology area of artificial intelligence supporting the exploitation of its potential and targeting to increase national and European competitiveness and economic growth and technology sovereignty. The project aims to support the digital transition of companies (SMEs, small mid-caps, start-ups) and public sector organisations to create and implement AI-enabled products, services with special focus on priority industries.

AM-EDIH provides world-class services for boosting industrialisation of Additive Manufacturing through digitalisation and thereby increasing sustainability and competitiveness of European manufacturing industry.

AIR-Andalusia is conceived as a supporting tool to foster the digital transformation of the region, focused on applied Artificial Intelligence and Robotics for (a) SMEs and small mid-caps and (b) public sector organisation, as varied a sectoral coverage as possible.

AIRE facilitates innovation in Estonian manufacturing by bringing together the core competencies of universities, science parks and research centres in the fields of AI and robotics, and the SMEs in Estonia and Europe, working in close collaboration with other AI-related centres and initiatives in Estonia and Europe.

CONNECT 5 is a DIH for Connectivity, CPS, IoT, Cloud/Edge and Data Analytics aims to create and operate a national and European reference DIH supporting the digital and green transformation of SMEs and public organizations.

EDIH-Applied CPS is a network of technology leaders in Austria. Manufacturing, construction, and mobility SMEs benefit from 33 tailor-made services for access to cyber-physical systems, in particular to: Sensor technology and embedded systems; Smart systems integration; Digital twinning and data usage and Blockchain and distributed ledger technology.

EDIH Saxony focuses on digital applications in smart production, data mining, health, mobility, smart energy, smart living, and smart building.

Crowd in motion aims to accelerate the use of crowd technology and AI for motion data analytics through Internet of Things (IoT)

DAMAS is focused on two digital key technologies indicated by the Digital Europe Programme (DEP): HPC and AI. It is then specialised along the following digital enablers: Cloud & Edge computing; Big Data Analytics, High Performance Data analytics; Computational Fluid Dynamics; Virtual Reality/Augmented reality; Fast Prototyping including 3D printing; Additive manufacturing; Digital Twin Simulation & Modelling; Space Technologies - Geo Information and Sustainable Computing.

DIHNAMIC aims to give access to AI-based digital technologies, advanced robotics, digital twinning, and intelligent systems.

EDIH CTU represents a major European Digital Innovation Hub in the Czech Republic in the field of Artificial Intelligence (AI) and Machine Learning (ML) transferring trustworthy solutions and services to the industry, health, transportation, and energy sectors.

CyberSec offers small and medium enterprises (SMEs) as well as state and self-government institutions the whole range of services that allow their secure existence in fully digitalized environment.

2.4 Stakeholders Map Analysis

As part of this WP activity, members of the consortium got together to analyse the stakeholders' positioning in regard to engagement at this early stage of the project. **Figure** 3 below depicts the stakeholders influence and interest positioning in regard to the project in month six, and **Figure** 4 below depicts the engagement priorities for each of the stakeholder groups. This positioning will be reassessed throughout the iterations of the Agile Stakeholder Framework, and C&D strategies will align to the arising needs and priorities.

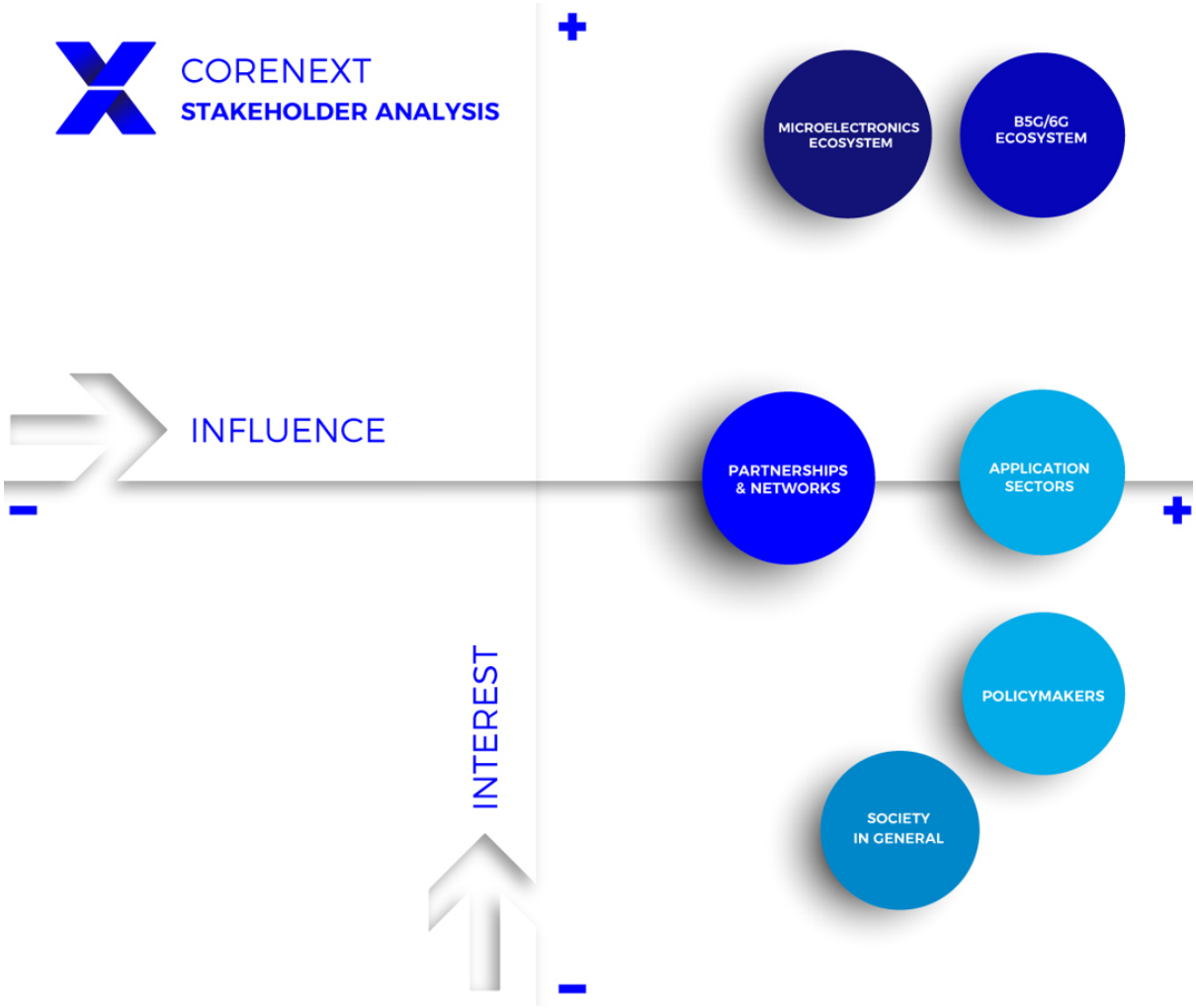

Figure 3. COREnext Stakeholder influence/interest analysis in month six

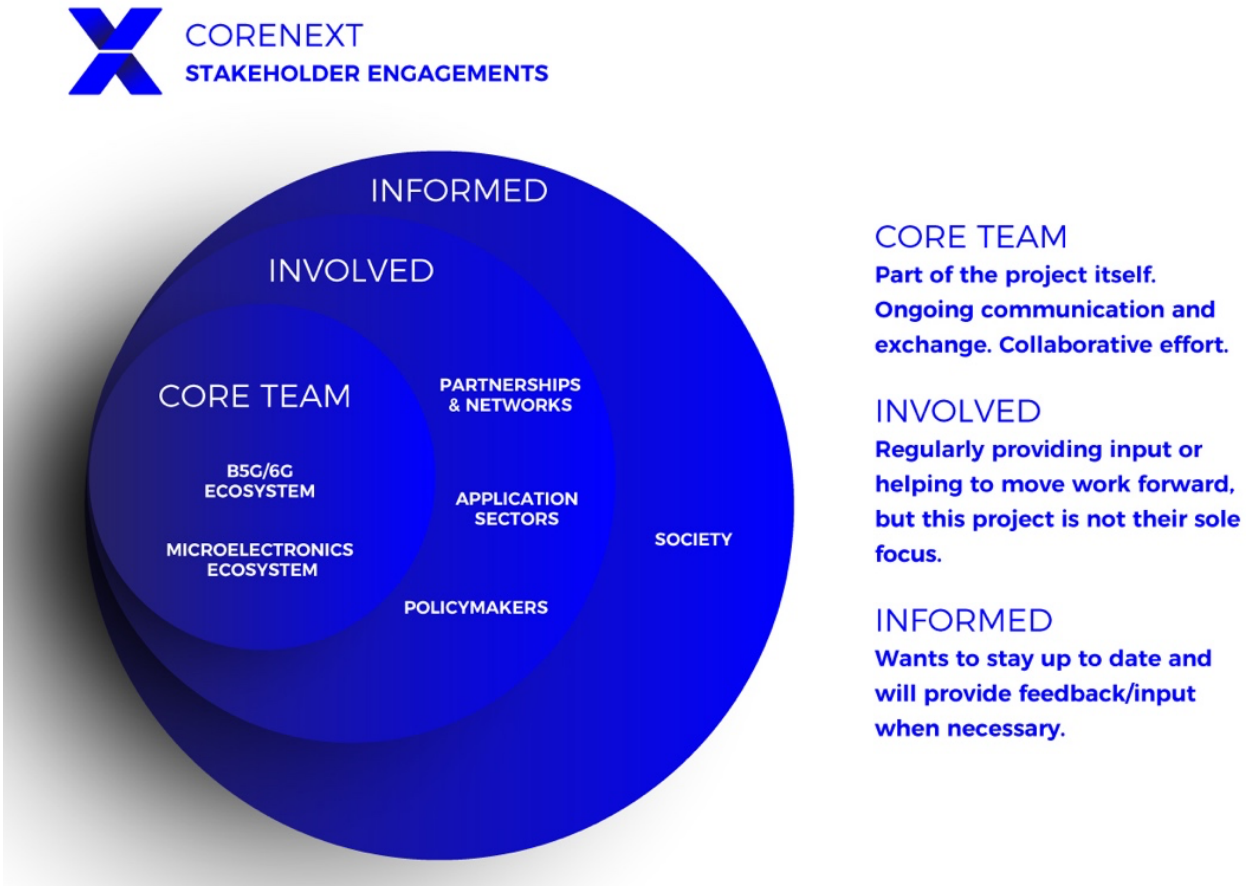

Figure 4. COREnext Stakeholder engagement positioning in month six

3 Communication and Dissemination

Effective communication and dissemination play a crucial role in Horizon Europe projects, including COREnext. In order to maximize the project's visibility and impact, a comprehensive and flexible communication and dissemination plan is essential. This plan should take into account external factors and challenges that may arise, adapting accordingly to ensure effectiveness.

While communication and dissemination are interconnected activities, we have chosen to address them separately in this document. However, it is important to acknowledge that they are closely dependent on one another (as per **Figure** 5). Throughout the entire lifespan of the project, we will explore the similarities and convergences between these two activities, recognizing their shared objectives and strategies. By doing so, we can ensure a cohesive and coordinated approach to communication and dissemination, enhancing the project's overall success and reach.

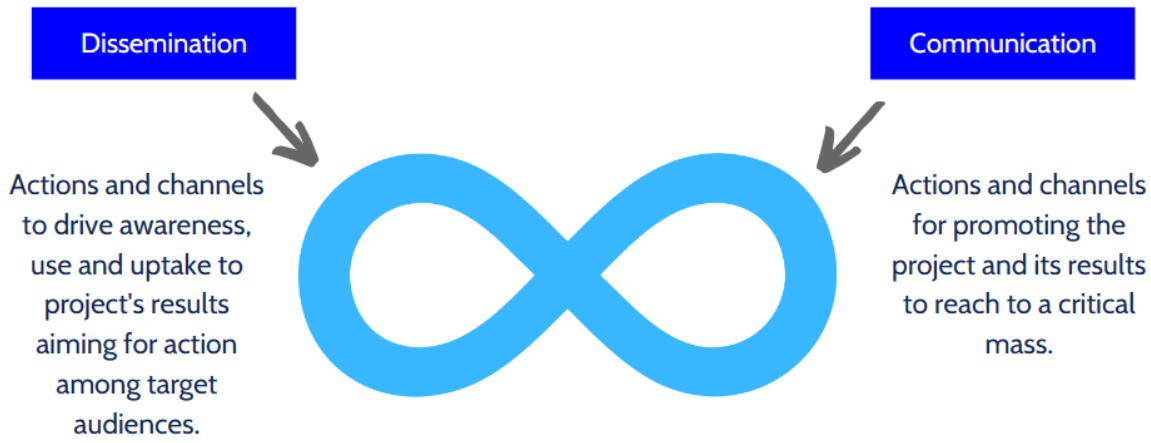

Figure 5. COREnext Communication and dissemination flows

During the first six months of the project, WP8 invested considerable effort to make COREnext known in the European ecosystem of projects dealing with B5G/6G, security and trustworthiness, carrying out a well-structured and planned series of activities.

Some key results, from the period between month one and month six, that underlie this effort are:

- Established recognisable brand.
- Creation of promotional and multimedia materials.
- Established presence on social media, with more than 800 followers (510 Twitter/ 283 LinkedIn).
- 10 posts/news/articles on the website.
- Participation in 9 events.
- Launch of the first project Newsletter. 118 subscribers.

3.1 Communication Plan

COREnext has developed a comprehensive communication plan that aims to effectively engage with all possible target groups and stakeholders defined above. To achieve this, COREnext is

adopting a funnelled approach (see **Figure** 6), which focuses on generating awareness and conveying key aspects and benefits of the project to all target audiences and end users.

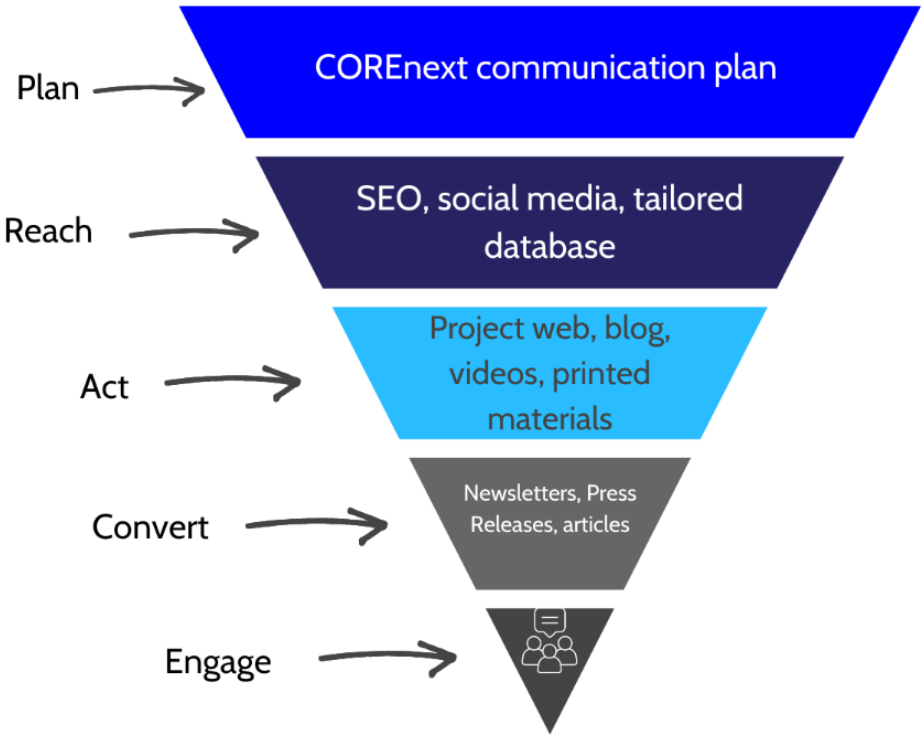

Figure 6. COREnext communication plan

Good communication is extremely important for Research and Innovation projects to effectively share information about the project and its achievements with a wide audience. Easily interpretable, comprehensible, and recognizable visual materials have been and will be created and shared, enabling COREnext concepts and advantages to be instantly identifiable to a broader audience, while simultaneously fostering and nurturing interest in the project and its key outcomes.

Bespoke content will be developed and communicated to specialised target groups, as described above, to establish and sustain an active stakeholder ecosystem. In a similar vein, pertinent information will be gleaned from project deliverables, partner interviews, pilot case studies, and industry reports, and disseminated through COREnext communication channels to booster user engagement. This plan includes, as stated above, reaching out to different groups of stakeholders, and creating opportunities for them to give feedback and contribute their ideas.

The communication plan for the target audience of the COREnext project should be developed based on a thorough understanding of their needs, interests, and communication preferences. Here are some steps that can be taken to create an effective communication plan:

- **Identify the target audience:** As mentioned earlier, the target audience for the COREnext project includes stakeholders such as researchers, industry professionals, policymakers, and the general public. Each of these groups has different communication needs, so it's important to identify them and understand their perspectives.

- **Define communication objectives:** Once the target audience has been identified, the communication objectives should be defined. These objectives should be specific, measurable, and relevant to the target audience.
- **Choose communication channels:** Different communication channels should be selected based on the target audience's preferences. For example, industry professionals may receive updates via email or social media, while policymakers may receive updates through official channels such as press releases or websites.
- **Create content:** The content of the communication should be created based on the target audience's interests and needs. For example, if the target audience is interested in the automotive sector, the communication should highlight how the COREnext project's technology can improve safety and performance in the industry.
- **Evaluate communication effectiveness**: It's important to evaluate the effectiveness of the communication plan regularly. This can be done by monitoring website traffic, social media engagement, and feedback from the target audience. Based on the evaluation, the communication plan will be adjusted to meet the target audience's needs better.

Main Goals

The primary purpose of the communication activities is to **inform the stakeholders about the activity of the project and its main results and achievements**. The Communication plan is driven by key objectives that are crucial to its deployment. Although communication objectives may be treated as a single block, some relate to specific target groups only and thus, will be approached with specific tools and activities throughout the lifespan of the project (see **Fehler! Verweisquelle konnte nicht gefunden werden.**).

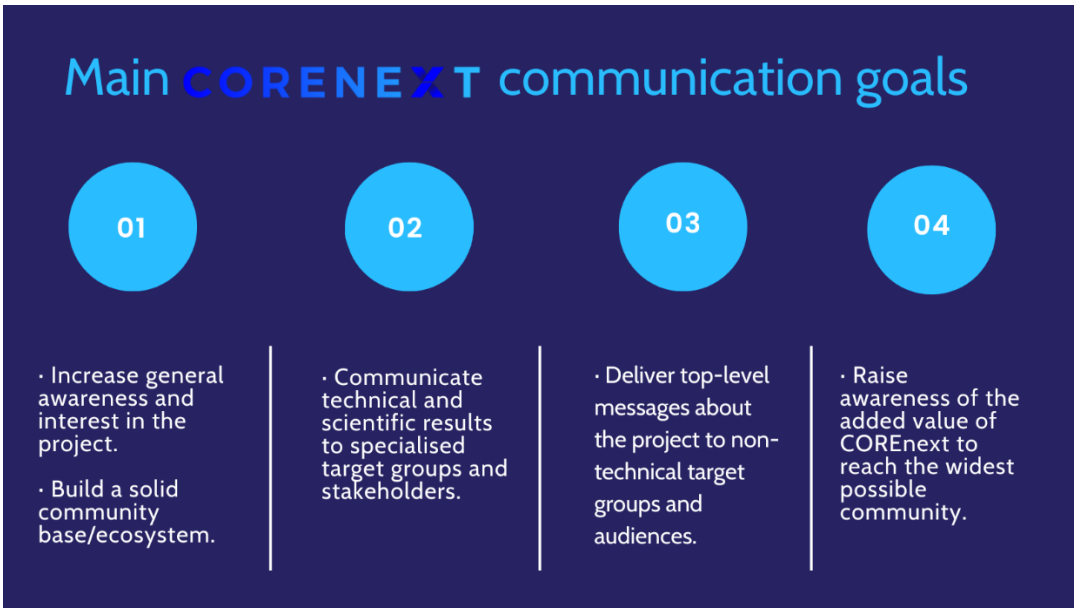

Figure 7. COREnext Communication Goals

By addressing these objectives in a targeted and strategic manner, the communication plan will help ensure that COREnext mission, activity and results are effectively communicated and understood, leading to broader engagement and support for the project goals. **Table** 1 presents how the project will aim to target each specific stakeholder group.

	Boost awareness & interest	Communicate technical & scientific results	Deliver top-level messages about the project	Raise awareness in non-specialised audience
B5G/6G Ecosystem	✓	✓		
Microelectronics Ecosystem	✓	✓		
Partnerships and Networks	✓		✓	
Application Sectors	✓	✓		
Policy makers	✓	✓	✓	
Society as a whole	✓			✓

Table 1. COREnext communication goals and target audiences

Phases and Timeline

The implementation of communication activities for COREnext will occur in three distinct phases as seen in **Figure** 8: **Identify & Plan, Implement** and **Target**. These phases are closely intertwined with dissemination efforts as well. The primary aim of these communication activities is not only to generate excitement and interest about the project but also to actively engage a community of end-users who can interact with and offer valuable feedback to support the project's ongoing activities.

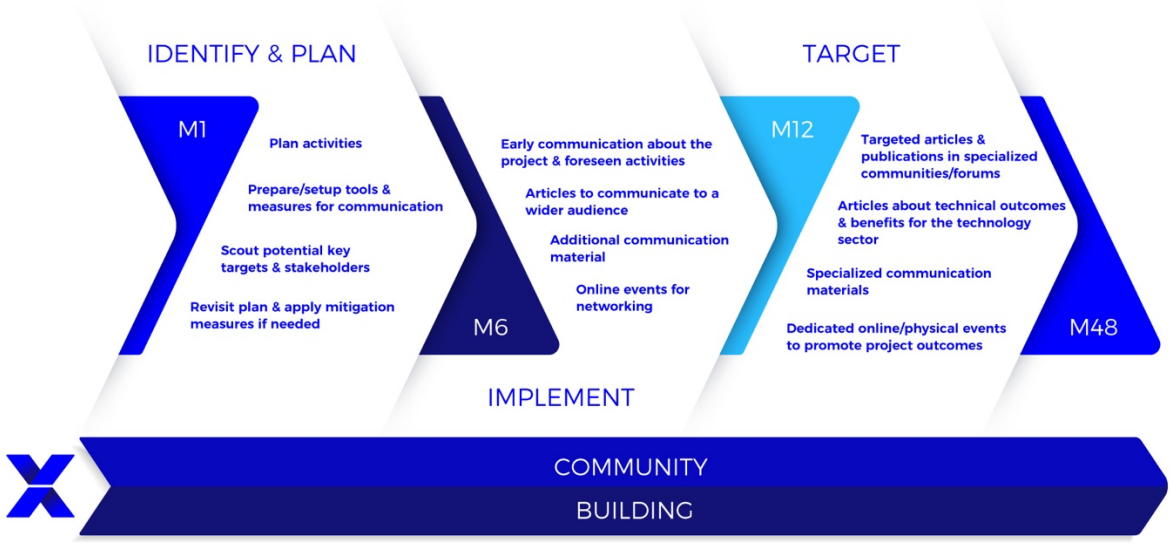

Figure 8. COREnext Community building phases

Identify & Plan

The initial communication phase will commence in the first month of the project, focusing primarily on **planning** all activities, establishing key communication tools and channels (such as the website and social media), and **identifying** potential target groups and stakeholders. It's important to note that the identification process will continue throughout the entire project. This first phase also

incorporates the concept of revisiting the plan: as needed, the communication plan will be periodically reviewed and adjusted to accommodate any specific needs or circumstances that may arise. Additionally, during this phase, preliminary communication activities, such as press releases and the website launch, will be carried out.

Implement

The second phase, beginning in month six, will focus on **implementing** first phase communication activities. These efforts aim to inform both the broader public and specific communities about the project existence, as well as its upcoming activities and initiatives. Emphasis will be placed on utilizing online tools and strategies, as they tend to have a more extensive reach compared to traditional methods. During this phase, networking opportunities will be pursued through participation in webinars or other online events, along with the publication of articles about the project on platforms such as CORDIS. This phase will continue throughout the project duration, primarily concentrating on conveying the project general aspects to a wide range of stakeholders.

Target

The third communication phase will commence around month twelve, as it necessitates the project reaching a relatively mature stage with initial, tangible outcomes being released. During this phase, **targeted** communication activities will be carried out, such as creating and sharing articles, blog posts, or other content specifically addressing particular project outcomes and benefits. This phase will also involve hosting and/or participating in online events (or in-person events, if feasible) to showcase COREnext innovations and producing targeted communication materials (e.g., videos) for the relevant community. This phase will run concurrently with phase two, as it concentrates on targeted communication efforts for specific audiences, rather than activities aimed at the entire community.

To make the project easily identifiable to a wider audience, COREnext has designed a communication strategy with visually appealing and easily understandable material that highlights its concepts and benefits. These materials are aimed at generating interest and cultivating further engagement with the project and its outcomes.

In addition, custom content will be produced and communicated towards specialised target groups to create and maintain an active stakeholders' ecosystem. This will involve extracting relevant information from project deliverables, partner interviews, pilot case studies, industry reports, and other sources. This information will then be relayed through COREnext communication channels to further support active user engagement.

This communication (and dissemination) strategy has been developed to increase the visibility of the project and support its progress during the initial six months. The strategy is intended to ensure that the project's activities and outcomes are effectively communicated to the target audience and that the project receives adequate attention and recognition. The strategy will provide a roadmap for communicating with various stakeholders and engaging with them, identifying appropriate channels and tools for disseminating information about the project and creating a consistent message that effectively conveys the project's goals and objectives. This approach can help to establish the project's presence in the community, build momentum and support, and ensure that the project stays on track towards achieving its desired outcomes.

C&D Tools and Materials

The COREnext project will provide a range of C&D tools to effectively reach the intended audiences in a friendly and cohesive manner. These tools will be specifically designed to cater to the unique

communication needs of each phase outlined in the COREnext Communication plan, as shown in **Table** 2.

	B5G/6G Ecosystem	Microelectronics Ecosystem	Partnerships and Networks	Application Sectors	Policy makers	Society as a whole
Website	✓	✓	✓	✓	✓	✓
Social media	✓	✓	✓	✓	✓	✓
Newsletters	✓	✓	✓	✓	✓	✓
Press releases	✓	✓	✓	✓	✓	
Slide decks and one pagers	✓	✓	✓	✓		
Printed materials	✓	✓	✓	✓	✓	✓
Multimedia	✓	✓	✓	✓	✓	✓

Table 2. COREnext C&D tools and target audiences

The project team recognizes the importance of tailoring the communication approach to suit different stages of the project. Therefore, the toolkit will consist of various resources, such as templates, guidelines, and materials, which will be customized accordingly.

These communication tools will serve as practical aids for the project team, ensuring that they can effectively convey information to the right audiences at the right time. By utilizing these tools, the team will maintain consistency in messaging and presentation, fostering a coherent and unified communication strategy throughout the project's lifecycle.

Brand

COREnext created a recognizable visual identity that is composed of the following elements, which are accessible via Zenodo (a European open access platform. More in section 4):

- Project **logo** and **icons** as per **Figure** 9 [2]
- COREnext **banners** as per **Figure** 10 [3].
- COREnext **COMMUNICATION GUIDELINES** (**Figure** 11): a document created to guide the partners in their comms and dissemination activities. (At the deliverable being written, the guidelines **are in process).**
- **COREnext BRANDING GUIDELINES** (**Figure** 11): a document explaining how to correctly use the COREnext logo and branding elements, such as colour palette, logo, templates etc. [4]

CORENEXT

Figure 9. COREnext logos & Icons

Figure 10. Examples of COREnext banners

CORENEXT

COMMUNICATION AND DISSEMINATION

GUIDELINES

Dissemination and communication efforts are essential for the success of COREnext by promoting the project's objectives, activities and achievements. Given its relevance, every single partner in the consortium has a dedicated effort in this task, T8.1 and T8.3.

These guidelines will support such contributions.

Internal communication
Website
Social media
Partners involved - social media profiles
Project in a nutshell
Newsletters
PR Material
Merchandising
Slide-deck
Participation in events
Technical & scientific publications
Open access repository
Branding
GDPR compliance
Imagery
EU logo & Disclaimer

Figure 11. COREnext Communication & Branding Guidelines for partners

COREnext Website – www.corenext.eu

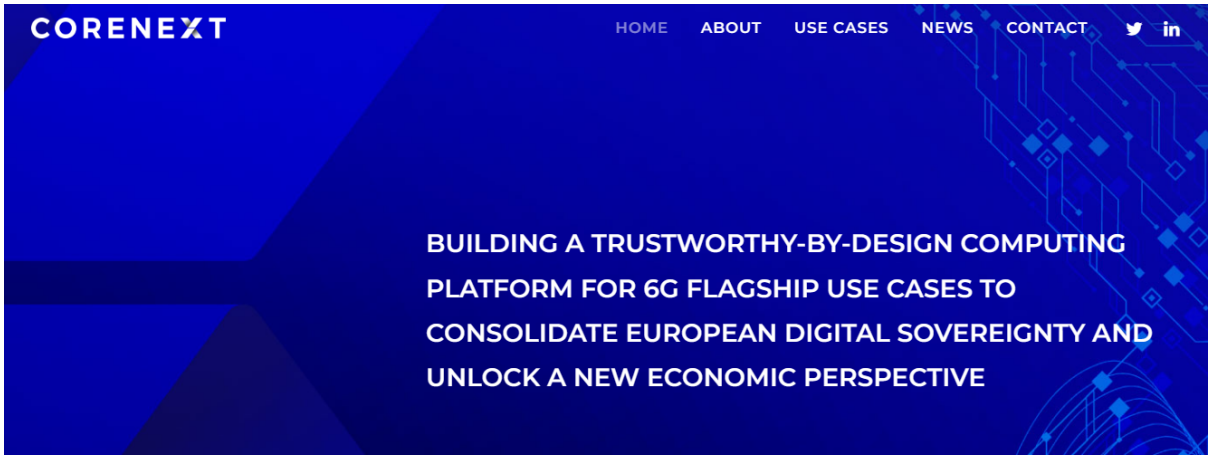

Figure 12. COREnext website home page

The developed public website will serve as a platform to present the main concepts and approach of the project, as well as share news, findings, and results from our use cases. The website will play a pivotal role in maximizing the project's visibility, introducing visitors to the rationale behind COREnext, and educating them about its underlying concept. In addition, the website (**Figure** 12) will act as the primary gateway to all public documentation, articles, and deliverables. See website structure in **Figure** 13.

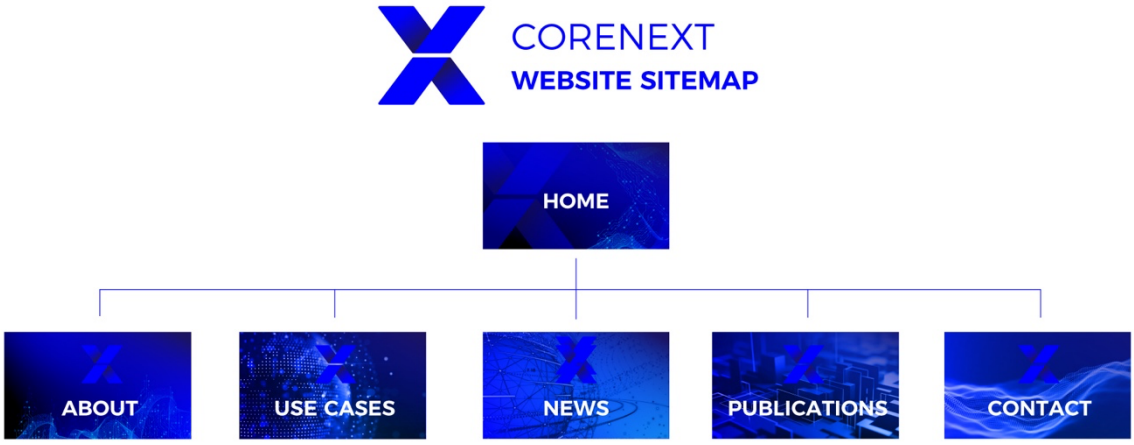

Figure 13. COREnext.eu website structure

COREnext is committed to regularly publishing original content in the form of blog posts on its website under the NEWS section, with a target of 50 blog posts throughout the project duration. These blog posts will serve as promotional material, highlighting events participated in by the project, key results, important facts, essential materials, and more. By directly linking these blog posts to our social media channels, we do not only boost traction, but also drive more visitors to our website, effectively increasing overall engagement and awareness of COREnext activities and achievements. The Publications section on the website will present the scientific publications and the public deliverables.

Within the past six months, a series of blog articles has been released (10 in total between month 1 and six), addressing a variety of topics related to the COREnext project, like for example, Securing IoT Systems and Ensuring Trustworthiness Extended Reality and COREnext participation at the EuCNC event.

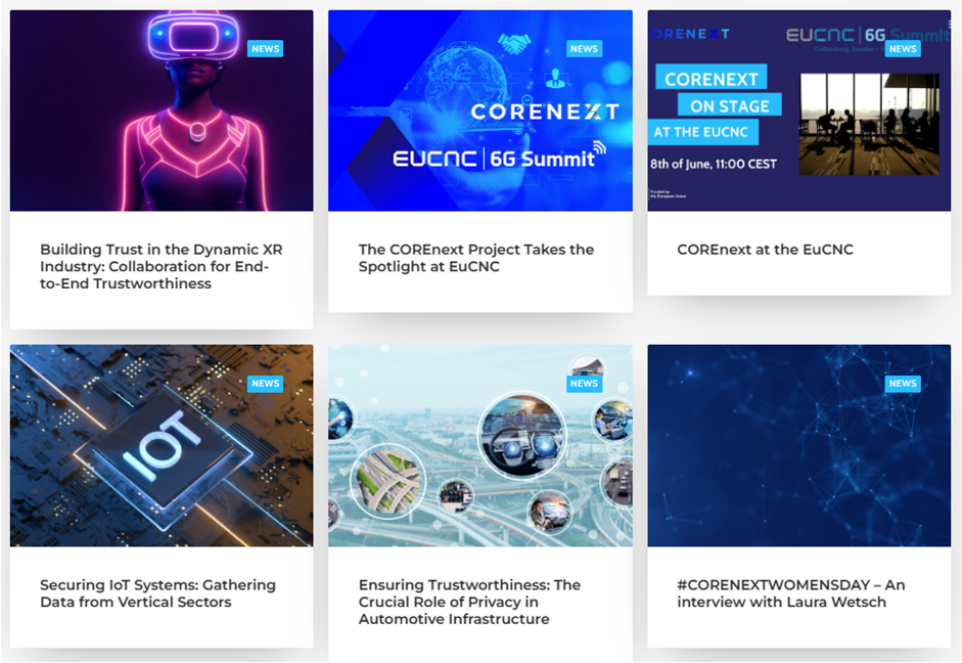

Figure 14. Examples of COREnext articles on the website

Social Media – Twitter, LinkedIn, and YouTube

Twitter: COREnext (@COREnext_EU) / Twitter

LinkedIn: https://www.linkedin.com/company/corenext-eu

YouTube: COREnext project - YouTube

Social media channels provide a powerful way to engage with stakeholders across a wide range of industries and sectors, making them an essential tool for any organization seeking to build strong relationships with its stakeholders. COREnext will create and maintain an active presence through three social media channels: Twitter, LinkedIn, and YouTube (Fig. 14-16). **Twitter** and **LinkedIn** have been selected as they have proven to be most effective when engaging with technology communities. A dedicated **YouTube** channel for the project has also been set up, as a way to upload and share COREnext workshop recordings, official introductory videos and/or any other multimedia content produced throughout the project's run.

Activities on social media channels have been planned according to a social media strategy, developed to accomplish specific goals intended to garner the project awareness necessary for effective dissemination and efficient community building. These goals include increasing newsletter subscribers, website visitors, Zenodo metrics (views and downloads), and our online community of social media followers.

The overall strategy is based on key elements of social media engagement, utilising all available variables to our advantage in reaching a broad audience and conveying our message to target stakeholders. The key elements of engagement are as follows:

- **Post regularly**: Effective posting on social media relies on consistency. The project will employ optimization and scheduling tools (e.g., Hootsuite) to post regularly and at optimal times of the day–when most traffic on Twitter and LinkedIn occurs for our target audience–thus enhancing engagement and organic views.
- **Use references and keywords in posts**: Linking our tweets to key players by actively tagging relevant accounts in the conversation and including trending hashtags–especially from our partners–to leverage their existing networks and amplify the project voice. This helps provide a wider outreach by tapping into the existing audience of these accounts.
- **Actively share content from the community**: Sharing news and information not only related to our project but also relevant to our community and the technology sector so that the project attracts more followers and gains more traction.
- **Differentiate posts between Twitter and LinkedIn**: Recognizing the inherent differences in tone between social media platforms (e.g., LinkedIn vs. Twitter) is essential. For instance, we might capitalise on LinkedIn professional nature and more "serious" tone, as well as the general perception that information there tends to be more reliable. This means that individuals with genuine interest in the topics that COREnext addresses will invest more time reading what we share on this platform. For this reason, information shared on LinkedIn needs to be fine-tuned, incorporating longer text, more detailed information, and highly specific hashtags. Twitter posts will be concise versions of these, conveying the same message.
- **Boost promotion of project content**: Creating and promoting a variety of project content in our social media strategy is crucial for raising awareness about COREnext across channels. Consequently, project articles will be frequently linked to via our social media channels, accompanied by various project facts, creative and appealing custom graphics, and call-to-action messages.
- **Renew and redesign social media strategy and content**: Periodically revisiting and updating the social media strategy and content every 3 or 4 months ensures that the project remains relevant and engaging to its audience. This continuous improvement process will help maintain interest and attract new followers.
- **Create traction by tagging influential partners**: Making posts that directly tag influential partners within our consortium not only fosters collaboration but also helps broaden our reach. By leveraging the established networks of our partners, we can extend our message to an even wider audience, promoting awareness and engagement with the project.

Figure 15. CORENext Twitter account

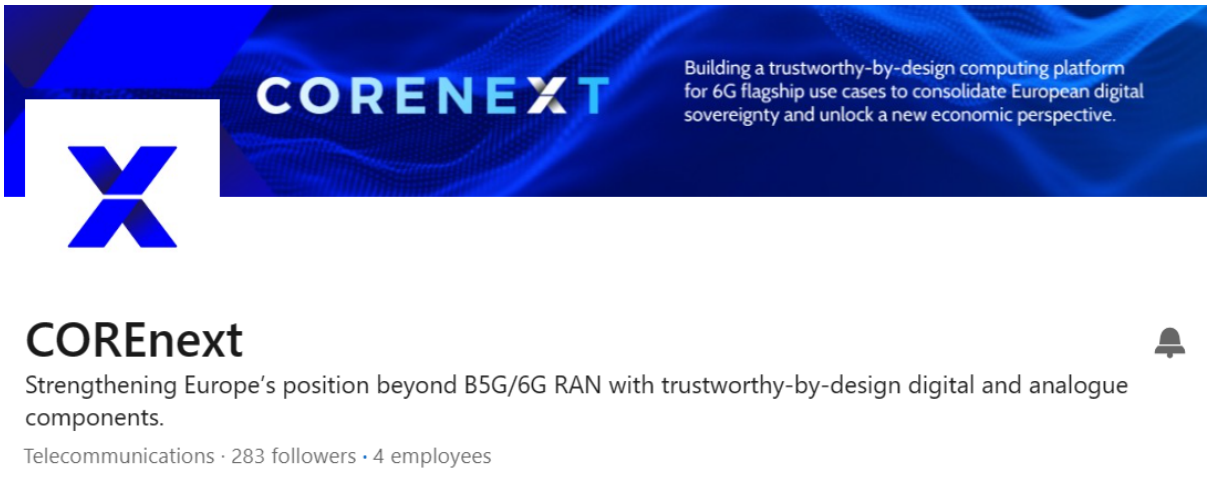

Figure 16. CORENext LinkedIn account

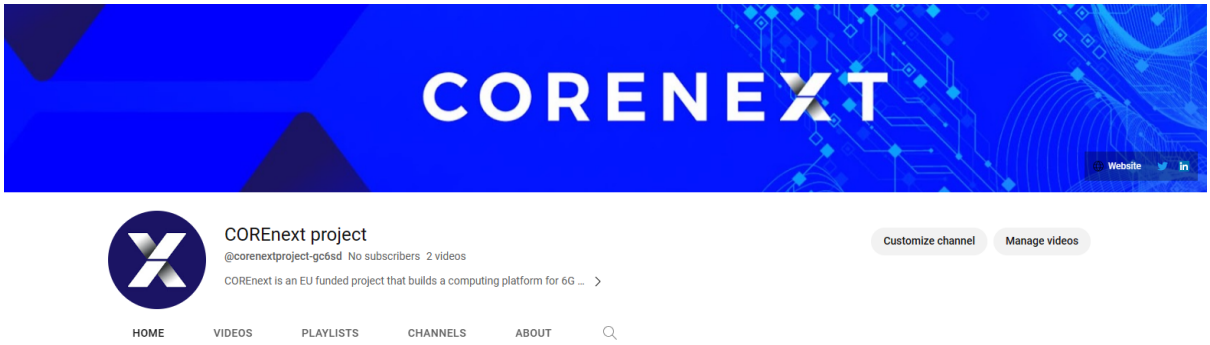

Figure 17. CORENext YouTube channel

Figure 18 and **Figure** 19 are examples of campaigns that demonstrate how the project aims to use C&D to further its aims and objectives. Fig. 17 refers to the 'Women Series', a campaign that run during the months of February and March 2023 to celebrate Women and Girls in Science Day (February 11), and International Women's Day (March 8). This campaign highlighted the women involved in the project through members interviews posted on social media and as seen in Fig. 18, this post had the high rate of **2,736 impressions**.

COREnext is committed to actively further advocate for female participation and special emphasis will be given throughout the project to women in STEM, promoting an emerging presence and role of female researchers in the project (>30%). This is an example of such activity and similar campaigns will follow.

Figure 18. COREnext – Example of LinkedIn post - Women Series

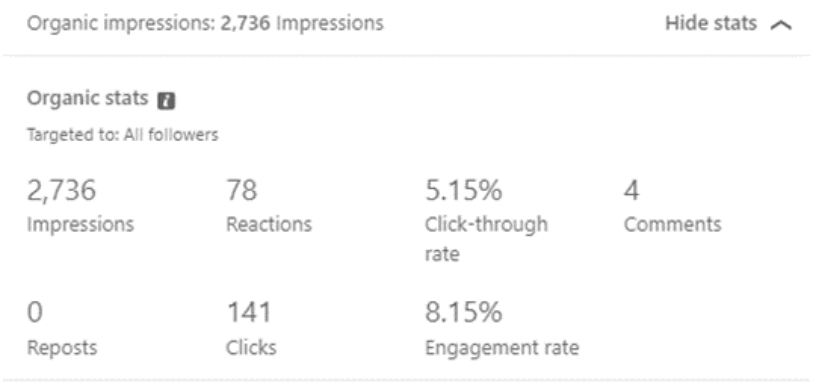

Figure 19. Statistics related to the Fig. 17 post

Another LinkedIn campaign with significant outreach was the publication of the COREnext project featured at the EuCNC conference in Gothenburg in June 2023. The first video from Fredrik Tilman got **207 views** and this post got **668 impressions.**

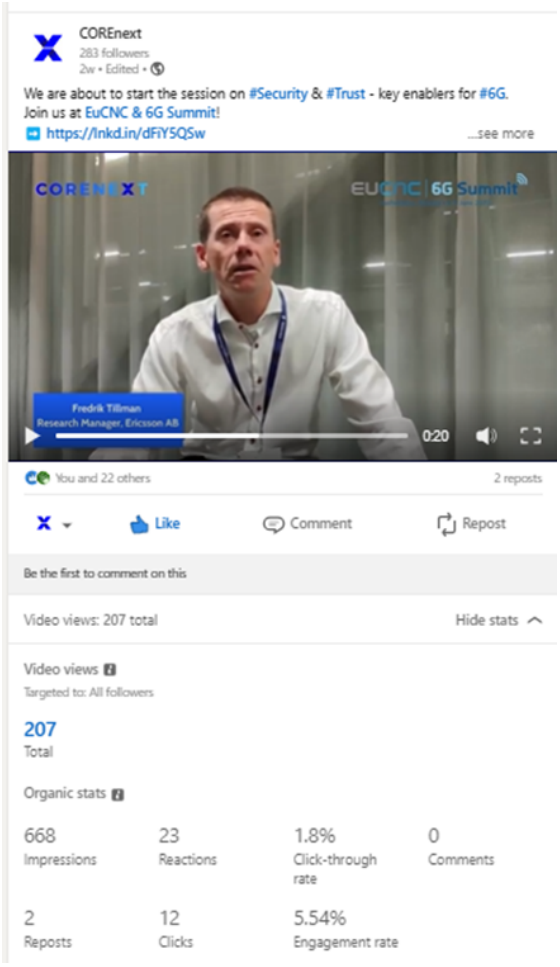

Figure 20 COREnext at EuCNC LinkedIn post

Once the CA is signed, COREnext will launch several social media campaigns to engage with its audience. These campaigns will include initiatives like 'Meet our Team' and 'WP Series', which aim to introduce the project team and showcase the different work packages within COREnext.

Newsletters

Online newsletters can be an effective tool for engaging with stakeholders and providing them with insights into the main activities and accomplishments of a project (see **Figure** 21). COREnext will publish Newsletters quarterly.

The project will also aim to contribute to well-known newsletters published by the European Commission or associated initiatives and newsletters that already have a strong audience in COREnext's areas of study. Additionally, by collaborating with our most established partners who have extensive networks in the system architecture, security, sustainability, privacy and responsible data, interoperability, robotics, reliable end-to-end connectivity, AI, and technologies beyond 5G/6G, we can further enhance our project presence and reinforce our commitment to advancing knowledge in these domains.

The first COREnext newsletter was released on the **22nd of May 2023**, reaching out to more than 110 subscribers. The newsletter has been published on Zenodo[5] and social media and it will soon be accessible via the project website.

Figure 21. COREnext First Newsletter

The newsletter has been shared on **LinkedIn** and **Brevo**. Brevo drives the website traffic, while through LinkedIn we leverage the following benefits:

- **Reaching a professional and targeted audience**: LinkedIn is a platform primarily used by professionals, making it an ideal medium to engage with stakeholders in the AI and haematology fields.
- **Expanding our network**: By using LinkedIn Newsletters, we can capitalize on our existing connections and reach their extended networks, increasing the visibility of our content.
- **Encouraging engagement**: LinkedIn enables users to like, comment, and share content, fostering interaction and discussion among our target audience.
- **Tracking performance**: With LinkedIn built-in analytics, we can monitor the performance of our newsletters and refine our strategy based on the insights gained from user engagement.

This targeted approach to newsletter dissemination ensures that we effectively communicate our progress and achievements to the most relevant audiences, fostering interest and support for the project goals and outcomes.

Press releases

COREnext intends to publicize its major achievements and progress by creating and disseminating press releases to a wide range of stakeholder audience and media, including both general and specialized publications. The first press release announcing the project's launch was drafted and it will be published on the News section on the project's website once the CA is signed. Additionally, the press release will be shared internally with project partners so that they can leverage the

content as a reference point for communicating the project through their own networks, channels, and newsrooms. This coordinated approach to press release distribution will help to ensure that the project's key milestones and accomplishments are effectively communicated to a diverse audience. A **database** is in continuous development to disseminate promotional material like for example the **Press Release.**

Slide decks and pitch decks

Professionally designed **slide decks** serve as powerful engagement tools, effectively conveying COREnext vision and scope to specialised audiences in a visually appealing manner. A master slide deck has been thoughtfully designed to effectively convey the COREnext branding and message. The master slide deck[6] is available for access through the project's open-access community at Zenodo. By utilizing this engagement tool, COREnext can build awareness of its work among relevant stakeholders in a visually recognisable manner.

Figure 22. COREnext Slide Deck

Additionally, well-designed **pitch decks** or **one-pagers** of the project can be a powerful engagement tool to share the project's vision and scope with specialised audiences in a clear, attractive way. The deck ensures that stakeholders can easily and effectively present the project core concepts and objectives when invited to participate in events related to the project field.

Figure 23. COREnext Pitch Deck

Promotional Materials – Printed/Digital Materials

Brochures, catalogues, posters, and any other paper-based resource intended for promotional use will be designed and branded to present the project effectively and professionally. Most of the PR material will be available in a digital format, with the option to print it out when required (e.g., for display in events, workshops, fairs, etc.). However, recognising the importance of environmental sustainability, COREnext is committed to minimising its ecological footprint. One way the project will contribute to this effort is by prioritising digital delivery of communication materials for example utilising electronic formats such as PDFs, online platforms, and email to disseminate communication materials, thereby reducing the need for printing. By opting for digital distribution, COREnext aims to minimize paper waste and promote an eco-friendlier approach to communication. Instead of relying on physical copies, the project

Promotional Materials - Videos

Using multimedia materials, such as videos on popular platforms like YouTube, is an effective and engaging method of introducing the project to a wide audience. To take advantage of the kick off meeting, interviews were conducted with the WP (Work Package) leaders to provide an overview of the project. These interviews were aimed at gathering insights and perspectives from the WP leaders involved in the project.

Figure 24. COREnext video screenshot

This video is now privately available only, and it will be published once the CA is signed.

Figure 25. COREnext EuCNC 2023 videos

Two further videos have been published at the COREnext YouTube channel: one at the beginning of the 2023 EuCNC conference, with Fredrik Tilman (Ericsson) explaining the project and the reason why it was important to be at EuCNC, and another one at the end of the event with a summary of the speakers that participated. Both videos gained 23 views.

Additional communication related actions

Communication Task Force

Recognising the importance of strategic communication, COREnext is actively building a dedicated Communication Task Force. This task force will be composed of experts in communication, marketing, and public relations from other projects related to the COREnext topics, who will work collaboratively to develop and implement a comprehensive communication strategy. The Communication Task Force will be responsible for identifying the most effective communication channels and tactics to maximize the impact and visibility of all project's results. They will tailor the communication efforts to suit different target audiences, considering their specific interests, needs, and preferences. Additionally, the Communication Task Force will explore innovative approaches to engage with stakeholders and the general public. This may include organizing events, workshops, webinars, or interactive platforms to facilitate dialogue and collaboration.

Internal Communication Strategy

A clear, effective internal communication strategy is key to ensure that interests are aligned within the consortium, and everybody is duly informed of the latest developments.
Our internal communication strategy for example includes:

- **Communication representatives'** appointment: We asked all consortium members to appoint a comms representative that will attend WP8 meetings, will contribute to communication and dissemination activities and will contribute to internal and external effective and efficient communication.
- **Communication plan:** We produce and present quarterly communication plans to inform consortium members about up-and-coming campaigns and C&D activity. Additionally, when relevant, we liaise directly with communication departments to further leverage C&D capabilities within the project.
- **WP8 meetings:** For the first six months WP8 meetings took place monthly. These meetings served as a means to enhance internal communication and foster greater

engagement among team members. In the future, and while the project develops, we will establish a series of regular check-ins, bi-weekly, designed to strengthen the project internal communication channels and make them more engaging. The objective is to utilize these check-ins to keep all members updated on the project overall progress, news, and to facilitate a more streamlined and efficient management of communication processes, ultimately enhancing the overall productivity and cohesion of the project.

3.2 Dissemination Plan

Effective dissemination is crucial for COREnext, as it seeks to not only share its results with potential users and research peers but also make them accessible to a broader community, including industry, academia other digital stakeholders, etc. To achieve this goal, COREnext has formulated a comprehensive and flexible dissemination plan that seeks to increase awareness of project results, foster understanding, and encourage action among key target audiences. The implementation of this plan will aid in the adoption of outcomes, best practices, and research insights generated throughout the project's lifecycle, thereby enhancing the project impact.

Main Goals

The dissemination goals and communication activities are closely intertwined with the overall project objectives. These goals aim to have a broader impact beyond the project's boundaries. By combining dissemination and communication efforts, we can optimize the extent and effectiveness of our project outcomes, making sure that they are readily available and have a significant impact. The main and key objectives of the dissemination strategy are as shown in **Figure** 26.

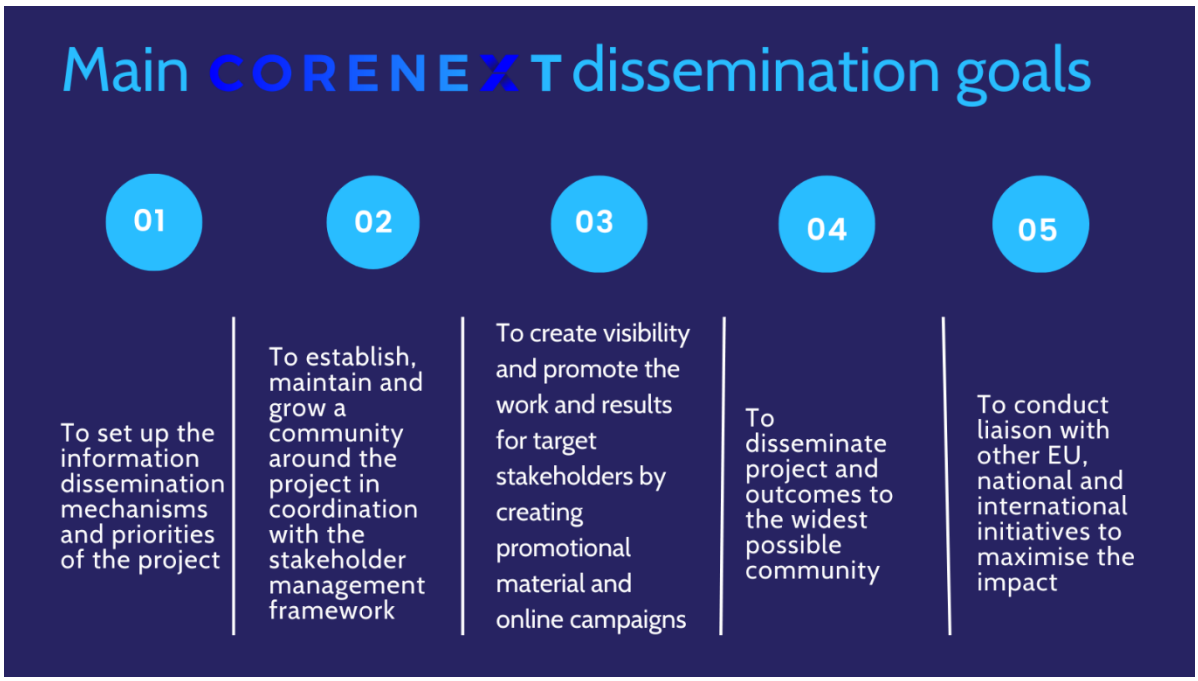

Figure 26. COREnext dissemination goals

COREnext Dissemination plan will be implemented in three different phases (**Identify & Study**, **Outreach & Engagement**, **Evaluate & Present**) across four action frameworks: **analyse, match-participate, leverage-evaluate-refine, contribute, and promote** (as seen in **Figure** 27). The key difference to the Communication plan is that these 3 phases do not span the whole project timeline, but instead have more specific start and end dates, having the possibility to adjust any of them if necessary.

Figure 27. COREnext Dissemination plan

Identify and Study (M1-M6)

During phase 1, COREnext analysed the project's framework as well as defined priorities and actions for the first year of the project, paying special attention to internal and external barriers that might slow down dissemination activities. As described above, for this initial phase, a first set of promotional material (produced in the context of COREnext Communication plan) was prepared and delivered.

Outreach and Engagement(M6-M18)

The main goal of the second phase is to increase impact and awareness generated during the first phase and showcase COREnext achievements. All channels will be adequately tailored to find the proper means to engage and collaborate with identified target groups. This will help increase the potential impact of the project's results. Participation and/or hosting workshops, ad hoc events, tutorials/webinars (if necessary) will boost the dissemination process as a whole. For this phase, specific promotional material will be produced.

Evaluate and Present (M18-M36)

This final phase will leverage the general awareness raised by the two previous phases, with the aim of attracting more potential end users interested in COREnext results. All outcomes of the two earlier phases will be evaluated and, if necessary, priorities, measures and dissemination channels will be refined. Participation in events, workshops, conferences, together with partner contributions to publications in targeted specific media online, printed media and research journals will be key to maximize impact and boost visibility.

Dissemination Tools and Materials

As mentioned, Communication and Dissemination activities are inherently interlinked and therefore some tools are shared between both. Below (Table 3) is the list of specific dissemination tools and specific target groups envisioned for COREnext.

	B5G/6G Ecosystem	Microelectronics Ecosystem	Partnerships and Networks	Application Sectors	Policy makers	Society as a whole
Project docs	✓	✓	✓	✓	✓	
Peer- reviewed publications	✓	✓		✓		

Technical publications	✓	✓		✓		
Open Access repository	✓	✓	✓	✓	✓	
Stakeholder consultation	✓	✓		✓		
Conferences & workshops	✓	✓	✓	✓	✓	✓
Congresses, exhibitions & demo spaces	✓	✓	✓	✓	✓	✓

Table 3. COREnext Dissemination tools and target audiences

Project Documentation

Documentation material in the form of public deliverables will be made available through COREnext open access repository at Zenodo and CORDIS, the European Commission's primary source of results from Horizon Europe projects. Public documentation will also be accessible through the project official website.

Peer-Reviewed Publications

COREnext intends to publish and contribute to peer-reviewed publications in top scientific journals in our main areas of research. As a Research & Innovation Action, one of the primary goals is to ensure that technical achievements and technological findings are adequately showcased and made available to a larger research community and scientific domains.

This activity is also linked to the Data Management Plan (DMP) that will be prepared within WP1 (M6 and led by WINGS) based on the Guidelines on Open Access to Scientific Publications and Research Data in Horizon Europe. The DMP will be used by the consortium partners for the effective management of the project's research datasets and results, including publications.

Table 4 shows some of the relevant journals identified by the consortium members.

Journal	Link
IEEE	IEEE - The world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.
IEEE T-MTT	IEEE Xplore: IEEE Transactions on Microwave Theory and Techniques
IEEE JSSC	IEEE Xplore: IEEE Journal of Solid-State Circuits
IEEE T-THz Science and Technology	IEEE Xplore: IEEE Transactions on Terahertz Science and Technology
Springer CSSP	Circuits, Systems, and Signal Processing | Home (springer.com)
IEEE Trans SP	IEEE Xplore: IEEE Transactions on Signal Processing
IEEE Sig Proc Letters	IEEE Xplore: IEEE Signal Processing Letters
IEEE JSTSP	IEEE Xplore: IEEE Journal of Selected Topics in Signal Processing
EURASIP JASP	EURASIP Journal on Advances in Signal Processing | Home page (springeropen.com)

IEE Microwave MTT	IEEE Microwave Theory and Technology Society | MTT-S
IEEE T-VLSI	IEEE Xplore: IEEE Transactions on Very Large Scale Integration (VLSI) Systems
IEEE T-CAS I/II	IEEE Xplore: IEEE Transactions on Circuits and Systems II: Express Briefs
IEEE T Computer	IEEE Xplore: IEEE Transactions on Computers

Table 4. Identified relevant journals

COREnext consortium partners are committed to use the Open Research Europe open access publishing platform for scientific articles to enable rapid publication times and publication outputs that support research integrity, reproducibility, transparency and enable open science practices. The project will use widely self-archiving services for research communities like ResearchGate or Academia, that will allow a balance between traditional publications and open-access. Project participants, for various reasons, may need to submit articles to journals (or proceedings) that only offer a lower level of open access, requiring either parallel publication or an embargo period. The need for this will be evaluated on a case-by-case basis and benefits will be balanced against the less convenient or delayed access to the result. In any case, the final author's version of every accepted paper will be made publicly available, in accordance with the rules posed by many journals.

Additionally, COREnext provides added value to the European research community by promoting open-source code. In particular, part of the work of COREnext will involve the use and promotion of open-source code (e.g., in the M³ platform lab showcase). Creative Commons (CC) licenses will be used for sharing research data and academic publishing and in particular, CC-BY (By Attribution) license for open access papers, which permits sharing and reuse of the material for any purpose as long as the original authors are credited. These licenses will be applied to items uploaded to the European OpenAIRE Research Data Repository **Zenodo**, specifically set up for the project as seen in **Figure** 28.

Zenodo: CORENEXT project | Zenodo

As mentioned above, Zenodo is a part of the OpenAIRE initiative, Europe's hub for open access infrastructure research. Following the European Commission guidelines for Open Science, as already stated, COREnext already has a dedicated Zenodo community and repository in place for the project, where we will be uploading publications, public deliverables, data, press releases and more as the project progresses.

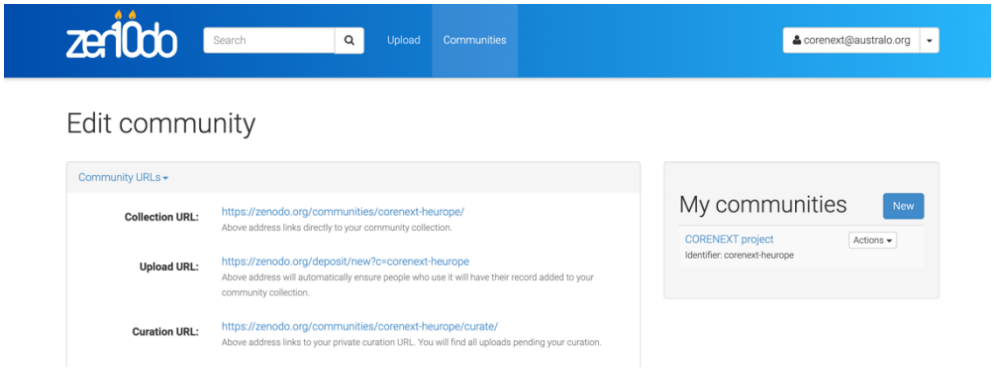

Figure 28. COREnext Zenodo

Events

Table 5 is an indicative list of events that have been identified by the COREnext consortium as significant for the duration of the project. This list will be continuously updated with inputs from partners and depending on the maturity of the project at a given stage.

Event	Link
5GMETA Second Hackathon	Hackathon May - 5GMETA (5gmeta-project.eu)
EEE International Conference on Communications: Sustainable Communications for Renaissance	IEEE ICC 2023 - IEEE International Conference on Communications | 28 May - 01 June 2023 // Rome, Italy (ieee-icc.org)
1st IEEE ICASSP Signal and Data Processing for Next Generation Satellites (SDP-NGS) workshop	Home (cttc.es)
EuCNC & 6G Summit	EuCNC & 6G Summit (2023)
AIOTI Webinar: Open Calls Opportunities	AIOTI webinar: presenting Open Call Opportunities – AIOTI
IEEE International Conference on Network Softwarization – Call for Papers	IEEE NetSoft 2023 | 9th IEEE International Conference on Network Softwarization | 19-23 June 2023 // Madrid, Spain (ieee-netsoft.org)
TeraFlowSDN Hackfest	TeraFlow SDN – ETSI Hackfest in NetworkX | TeraFlow (teraflow-h2020.eu)

Table 5. Key events targeted by COREnext

Table 6 lists the events (conferences, congress, exhibitions, workshops, etc.) that COREnext members have attended in the first six months of the project. The involvement in these events was related to the project in different degrees of specificity. This is common at this early stage of the project.

Event	Title	Date	Link
Workshop	Recent developments of D-band plastic waveguide links based on channel bonding architectures	March 2023	- PMF 2023 workshop (kuleuven.be)
Event	D-band (110-170 GHz) receiver/transmitter chipsets for	March 2023	Program - PMF 2023 workshop (kuleuven.be)

	wireless and Plastic Microwave Fiber (PMF) communication for data rates up to and above 100 Gbps		
Event	Efficient Wireless Coupling for PMF Data Links	March 2023	Program - PMF 2023 workshop (kuleuven.be)
Event	Emerging Application and System Aspects of PMF Technology	March 2023	Program - PMF 2023 workshop (kuleuven.be)
Workshop	PMF workshop	March 2023	Program - PMF 2023 workshop (kuleuven.be)
Conference	IEEE International Solid State Circuit Conference (ISSCC)	February 2023	ISSCC 2023 Advance Program 2-8-2023 (mirasmart.com)
Event	EuCNC - Security and trust – key enablers for 6G	June 2023	Special Session 11 - EuCNC

Table 6. Key events COREnext attended between M1 and M6

These events serve as a vital tool for engaging with and reaching the COREnext community, and our partners will continue to participate in such events as the project progresses and matures. For example, attending these events has already produced conference papers like for example 'Emerging Application and System Aspects of PMF Technology' by Siegfried Krainer, IFAT, and presentations on 'Recent developments of D-band plastic waveguide links based on channel bonding architectures' by José Luis González-Jiménez, CEA.

As we move forward, we remain committed to identifying and leveraging opportunities to participate in relevant events that align with our objectives. Online events have proven to be a more sustainable and equally effective alternative to traditional in-person events in the European context. By leveraging the benefits of online events, organizations can more easily connect with stakeholders from diverse backgrounds and achieve their engagement goals in a cost-effective and environmentally conscious manner.

Training

All online tutorials prepared by COREnext will be made publicly available through the project's website and will be posted in a public service. These will be all licensed via a Creative Commons license (likely "CC BY") to maximise reuse of the knowledge.

For instance – **BI's OpenLab** has the mission to participate and co-organise tutorials and showcases to educate a public audience about applied research. In this capacity, BI participates in museum exhibitions like in Deutsches Hygiene Museum or the Dresden Long Night of Science; **IHP** organises at least one summer school for students around topics related to hardware for AI applications, and at least once per year excursions for the students to IHP fab.

4 Exploitation Plan

4.1 Exploitation Strategy and Expected KERs

Strategy

The exploitation strategy of the project follows a stepwise approach and will be based on the combination of a bouquet of activities which will span throughout the project duration but will vary in intensity based on the amount of information that can be made available and the results that will be produced during the project lifetime. In addition, different exploitable assets will be exploited by different stakeholders based on the management of IPRs. The project's exploitation **strategy** will comprise activities which include:

- the identification of the innovative exploitable assets of the project, whether these are scientific results or technological components, which it will deliver,
- the documentation of an IPR management strategy based on the principles which will guide the joint (If applicable) and individual exploitation capabilities of the project partners,
- the analytical definition of all possible exploitation models, which have been preliminary identified and are outlined in the following paragraphs, and
- the validation of the aforementioned exploitation activities through the project's demonstrators.

The consortium recognizes two main **exploitation models** for the project results:

1. The **research** exploitation model, which implies the re-utilization of the research know-how acquired in future research activities, and
2. The **technological** exploitation model, which implies the re-utilization of the technological know-how acquired for the development of innovative products and the provision of advanced services built on top of them.

However, not all project partners and interested stakeholders may exploit all project results using the models defined above. The exploitation models of the project results will be dependent upon three main parameters: a) the nature and interests of the project partners and stakeholders in general; b) the distribution model of the project results; c) the distribution of the IPRs amongst the project partners.

Expected Key Exploitable Results

COREnext has already identified three main Key Exploitable Results (KERs) listed below, indicating the measures on how they are meant to be capitalized.

KER #1: Trustworthy Disaggregated Computing Architecture

One of the key exploitable results of the project will be the definition of a trustworthy disaggregated computing architecture by elaborating on disaggregation dimensions, data flows, and attacker model from requirements and at the same time analysing and balancing the trade-off between trustworthiness and efficiency.

Project partners will exploit work on trustworthy disaggregated computing architecture by proposing among others, a solution to secure hardware resources on the execution platform. A risk analysis will be driven, and most significant risk will be addressed and prevented with main objective to keep processing performances. The solution will be integrated to the global project architecture (i.e., Trustworthy Disaggregated Computing Architecture) and validated on the project testbed. Specifically, **NNF** will work in securing computing in the presence of untrusted FPGA components. Several security frameworks exist covering classical CPUs and GPUs usage in cloud.

For FPGA-based cloud solutions, similar mechanisms do not exist. One objective is to propose, implement and evaluate a secured framework, considering multi-tenant FPGA-based cloud solutions. Moreover, partners' work on open-source hardware activities will support both the commercial exploitation activities of COREnext that make use of trustworthy disaggregated computing architecture. Also, project's outcomes will be used to guide the standardization of 5G-advanced and 6G RAN as well as the corresponding optical solutions.

KER #2: Trustworthy Digital and Analogue Components in Base Station, Terminal, Edge Cloud

A key exploitable result will be the advancement of digital processing capabilities on the component level. Improvements will be realized in terms of operation latency, throughput, and energy efficiency. Embedded trustworthiness primitives such that security and privacy are design goals from the beginning is considered as well. Also, this key exploitable result considers the mechanism and method for identifying radio HW devices based on their unique physical properties to support trustworthy wireless access and sensing as well as ultra-high-speed, short-range data interconnect based on low-power and low-cost H-band transceiver circuits and plastic microwave fibres.

Each partner will exploit this result according to their core business focus. For instance, **EAB** and **NOK (&_NNF)** as global leading vendors will exploit the results of the project to develop the next generation of end-to-end communication systems. **CHAL** and IMEC will exploit the knowledge about hardware components and systems for sub-THz secure communication links. **IFAG & IFAT** will exploit new solutions for sub-THz wireless connectivity, high data-rate interconnects, and high-resolution sensors for applications like next generation telecom, datacom and sensing, securing IFAT & IFAG's European leading position as a chip set provider for such systems. **IHP** will benefit from end-to-end solutions for high throughput backhaul/fronthaul links as well as hardware for access points. **NXP** will benefit from a mixed analogue-digital solution and antenna integration capabilities. These will be differentiators on the market for future joint sensing-6G chips and application solutions. In addition, local and international partners can receive early access to upcoming advanced technologies and prototype modules to accelerate next generation products.

KER #3: Trustworthy IoT and Vertical Services and Applications

Various partners are working on aspects related to trustworthy IoT and vertical services and applications. Specifically, project partners offer integrated digital solutions for citizens, businesses, and public administrations.

Apart from key benefits in digital and analogue components, partners such as **BI, TIM, WINGS** and others will also contribute to the delivery of platforms and solutions for trustworthy IoT and vertical services and applications which will leverage on trustworthy disaggregated computing architecture as well as trustworthy digital and analogue components. Learning about new technologies or new infrastructure solutions helps to envision possible new services to improve existing ones and enhance them with trust and safety aspects.

4.2 COREnext Market Aspects and Value Proposition

The paragraphs below provide initial Information about the global radio access network market overview as well as the anticipated needs for enhanced capacity and trustworthiness of new devices and services. COREnext's unique **value proposition** is to strengthen European position in

beyond B5G/6G RAN disaggregated architectures by adding trustworthy-by-design digital and analogue components.

Market Overview

The global radio access network market size was valued at $17.80 billion in 2018, and is projected to reach $44.78 billion by 2026, growing at a CAGR of 11.3% from 2019 to 2026[1]. The significant impacting factors in the RAN market trends include rise in demand for mobile broadband services, increase in network densification, and growing mobile data traffic. However, concerns related to fibre backhaul, privacy and security tend to be important. Such factors are making the need of trustworthy networking components and communications in general, more important. At the same time, the global network security market size is projected to grow from $27.4 billion in 2021 to more than $60 billion in 2028 at a CAGR of 12% during 2021-28. As we understand from the data, both networking and network security markets seem to experience a heavy growth during the next 5-7 years and as a result the project will be perfectly positioned for the development and deployment of trustworthy, secure analogue and digital networking components.

The market of B5G and 6G require increased compute capacity to meet expected demand. However, many of these data flows through the spectrum of disaggregated services are privacy sensitive. As a result, there is a clear need for developing trustworthy digital and analogue components in base station, terminal, edge cloud as part of a disaggregated computing architecture for supporting IoT and vertical services and applications. COREnext has dedicated work packages and proof-of-concepts for addressing the aforementioned aspects in an efficient manner.

COREnext offers scalable and virtualizable accelerators based on RISC-V extensions and FPGAs and thus answer the need for European capabilities for enabling hardware, computing, and signal processing technologies for B5G and 6G infrastructures, in the context of disaggregated, virtualized networks. Also, partners will develop a trustworthy-by-design platform and thus answer the need for European capabilities for B5G/6G computing based on a new computing architecture for base stations. This architecture efficiently and securely integrates third-party accelerators capable of supporting even the most demanding B5G/6G processes in cloud servers, base stations, and client-side devices.

COREnext will strengthen European position in B5G/6G RAN disaggregated architectures by adding trustworthy-by-design digital and analogue components.

Business Model

The project is expected to unveil new business opportunities for vendors, operators, tech providers and institutes seizing the nature of the B5G/6G RAN disaggregated architectures. Vendors will be able to leverage on trustworthy equipment and newly emerging technologies. On the other hand, technology providers will strengthen their position as infrastructure suppliers to realise the transformation of the B5G/6G RAN towards trustworthiness and disaggregation, while others will create value from the added value vertical services and applications. Such aspects will definitely enhance the revenue streams of the involved stakeholders and strengthen Europe's position in trustworthy disaggregated computing with novel digital and analogue components.

4.3 COREnext IPR Management Strategy

COREnext will consider three main elements of an effective system to protect and exploit Intellectual Property (IP). *Firstly,* a system that enables the **protection of IP** (e.g., patents, copyrights, brand, industrial design) that includes clarity about the ownership and use of IP rights, the rights and freedom of parties to transfer (assign) IP, and the freedom to publish. *Secondly,* a **technology**

transfer framework, preferably with the support of specialised knowledge transfer offices with professional staff, such as the European IPR Helpdesk. *Thirdly,* a **fair law enforcement system** in each partner's country caters to dispute settlement and can award penalties and sanctions where appropriate.

4.4 COREnext Contribution to Standardisation

COREnext sets out a roadmap for contributing to different standardisation technical committees and open initiatives as listed in the table below (Table 7). This activity aims to identify significant opportunities to push contributions into future standards, pre-normative activities, and open collaborative development environments.

BODY	SCOPE
ETSI ZSM	Solutions and technologies to enable agile, efficient, and qualitative management and automation of emerging and future networks and services. Enhancement of zero-touch management with trustworthiness.
ETSI MSG	The Mobile Standards Group focuses on the development of harmonized standards for cellular systems. Their work covers 3GPP standards as well as O-RAN specifications. BI is contributing its expertise on multilateral security and cryptography, which we also bring to COREnext.
ITU-T SG15/Q2	This group deals with conceptual and architectural aspects of the optical access network down to the component level. It particularly contributes actively to the evolutions of G.fast and GPON access technologies. Results and learnings as well as solution approaches from COREnext will be forwarded into discussions and learnings from the standardisation discussions will be considered during the further conceptual work in COREnext.
IEEE802.1	Nokia is leading the work on fronthauling for 4G/5G in IEEE 802.1 (with the 802.1CM specification). In both IP routing and Optics domain, Nokia is a strong contributor to the evolution towards SDN/NFV including architecture and information and data models. In particular, Nokia contributes actively to the application of SDN for transport in multiple SDOs/industry forums. In how far results from COREnext will affect these technologies is yet open and matter of later investigation. If given, communication in both directions between the standardisation body and project will be enabled and supported here.
3GPP RANx,	Nokia holds several leadership positions in 3GPP, including CT1 Chair, SA3 Chair, and RAN2 vice-chair. In the context of COREnext we currently mainly consider two expert groups as relevant for an informational exchange with the project: 3GPP TSG RAN WG2 (RAN2), which is in charge of the Radio Interface architecture and protocols (e.g., MAC, RLC, PDCP, SDAP), the specification of the Radio Resource Control protocol and the Radio Resource Management procedure. 3GPP TSG RAN WG3 (RAN3) is responsible for the overall UTRAN/E-UTRAN/NG-RAN architecture and the specification of protocols for the related network interfaces. We will foster the communication (in both directions) between 3GPP bodies and the project. If meaningful this might even result in proposing project outcomes for standardisation in future releases. Other bodies beside RAN2 and RAN3 may of course be considered.
O-RAN Alliance	The O-RAN Alliance creates specifications for the disaggregation and the openness of the RAN, which will become a fundamental building block of

	upcoming private and public 5G networks. BI contributes to the security aspects of these specifications. The trustworthiness enablement from COREnext will strengthen the security posture of O-RAN.
OpenHW Group	OpenHW provides an infrastructure for hosting high quality open-source HW developments in line with industry best practices. COREnext members ETHZ, NXP, CEA, KAL are actively involved in the working groups of OpenHW and will be able to leverage the work done on RISC-V and open-source hardware by the group as well as contribute to the OpenHW ecosystem.
RISC-V Foundation	The RISC-V ISA delivers a new level of free, extensible software and hardware freedom on architecture, paving the way for the next 50 years of computing design and innovation. RISC-V relies on its members taking active part in various committees to develop and ratify future extensions to the ISA and work in COREnext will flow into these discussions through activities of RISC-V partners ETHZ, NXP, CEA
PULP	The Parallel Ultra Low Power (PULP) platform is the flagship project of the Digital Circuits and Systems Group of ETH Zurich and is a permissively licensed open-source project that provides energy efficient computer architecture implementations based on the RISC-V ISA described using System Verilog. One of the leading open-source hardware sources, PULP platform-based solutions have found wide use both in industry and academia. The project will foster the design of novel many-core RISC-V accelerators and instruction set extensions which contribute to extending the PULP framework.
Safety-Critical Systems Club (SCSC)	The Safety-Critical Systems Club is a not-for-profit organization of professionals for sharing knowledge about system safety. Especially relevant is the "Security Informed Safety Working Group", providing a comprehensive set of guidelines and best practices to design and protect safety critical systems while considering the integration of safety and security principles. Since security and safety are important aspects of trustworthiness the project will not only benefit from inputs from the working group.
Gem5 Open Source	Gem5 is a cycle-accurate hardware simulator, which BI uses for research. BI has contributed code in the past and offers additional components for hardware-level security.
OpenAirInterface	OpenAirInterface (OAI) is a 3GPP compliant open-source RAN and Core network software suite for cloud-native x86 and ARM architectures. EUR is founding member and lead contributor and several CORENEXT industry members are strategic partners of OAI (NOK, ERI, SEQ). OAI will be used for proof-of-concept studies in CORENEXT and can be used for contributions stemming from its results in particular related to disaggregated architecture components, HW accelerators, security paradigms and RISC V support.

Table 7. Relevant identified Standardisation bodies and groups

5 Monitoring of Communication, Dissemination and Exploitation Efforts

Continuous monitoring and customisation of both the Communication and the Dissemination and the Exploitation Plan are fundamental elements of COREnext success. Continuous monitoring allows the consortium to anticipate and mitigate any deviations affecting the project timeline or its resources. It also addresses potential implementation issues and helps assess whether further action is required to ensure objectives are met. On this topic, the consortium will focus on the pre-assessment of information needs, monitoring frequency and a methodology for collecting evidence.

The execution and effectiveness of these plans is dependent on close monitoring, flexible and prompt response mechanisms. Impact KPIs have already been defined for these areas, though they remain confidential and have only been disclosed to the European Commission's representatives and shared internally within the COREnext consortium. In this sense, internal Communication and Dissemination reporting tools and resources have also been made available to all partners involved, so that they may report and track their individual Communication and Dissemination efforts. These tools will also host and aid the reporting and follow-up on Exploitation-related efforts, such as: publications on standardization mechanisms, white papers on key results, demos, and exhibitions for the COREnext platform and services.

5.1 C&D Databases and Task Calendar

An internal database listing all shared resources available in each partners' networks: newsletters and magazines, journals, conferences, and events. This database will serve as a common knowledge base for Communication & Dissemination efforts.

Additionally, WP8 is preparing a GDPR compliant stakeholder database to facilitate efficient dissemination of information, allowing interested parties to access and utilize the project's results in a streamlined manner.

Additionally, an internal calendar monitors the progress of various tasks, starting from the beginning of the project. The tasks include creating the Logo and branding guidelines, selecting Fonts and a colour palette, developing a deliverable template, drafting a Press Release, designing the project's Website and Slide-deck, establishing social media channels, and preparing a communication kit for partners. The internal calendar serves as a tool to ensure that all tasks are completed on time and to track the progress of the project's communication and dissemination activities.

5.2 C&D&E Tracker

A simple tracker to list and report all efforts linked to communication, dissemination and exploitation of the project and its results. This is a collective effort to which all partners should contribute. Whenever a partner participates in a communication or dissemination action/activity or dedicates efforts/resources to contribute and drive the project exploitation strategy, it needs to be reported to keep full traceability and collect evidence for the European Commission.

5.3 Editorial Calendar

An internal calendar to plan content for the project expected articles (short pieces linked to milestones, general progress and/or findings) and agree on the best publication dates and

platforms (project website, blogs, social media, etc.). This tool will also help keep track of all external mentions, articles or press features on the project.

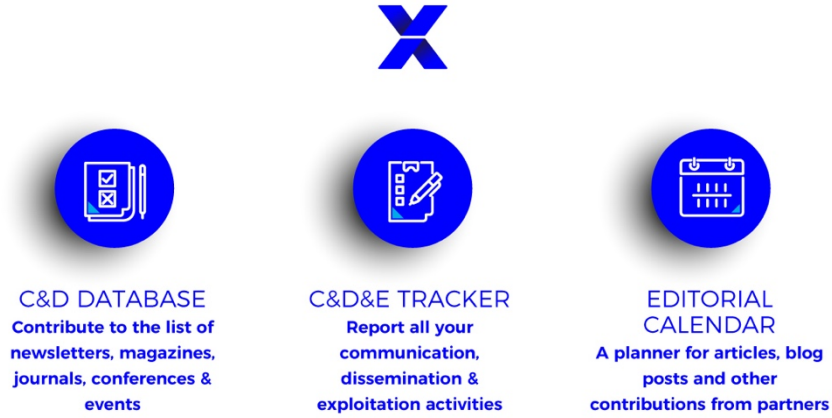

Figure 29. Internal communication, dissemination & exploitation tools

In order to provide a public view into COREnext's exploitation-related activities, the consortium will make use of online channels already made available by the project. Through the project official **website**, COREnext has the ambition to keep a constant communication flow about exploitation activities to the wider EU society. The website will allow people to easily access relevant documents, public strategies and reports related to our exploitation activities. Additionally, the adoption of a communication strategy involving **social media** like LinkedIn and Twitter facilitates reaching out to the wider EU society in a direct, informal manner, while also allowing the general public to be informed about individual and consortium-wide exploitation activities.

5.4 Analysis of Online Channels and Key Performance Indicators (KPIs)

Beyond recording KPIs and monitoring and publishing activity, COREnext aims to analyse KPI related data to better understand and improve the outreach of our communication effort. We record and analyse google and LinkedIn analytics to observe trends regarding follower numbers, geolocation, occupation, and industry. By consistently monitoring and analysing this KPI related data, COREnext can make informed decisions to refine and enhance their online strategies.

We analyse the data monthly and this iterative approach ensures continuous improvement, enabling COREnext to forge stronger connections, expand its reach, and effectively communicate its message to a wider audience. To amplify the project impact and expand the reach, active involvement from all consortium partners is essential. So far, in the first six months, COREnext has witnessed a commendable and steady rise in the number of followers on both Twitter and LinkedIn (800 by month 6). This upward trajectory is a testament to the effective implementation of well-thought-out social media strategies and tactics aimed at nurturing a growing online presence.

To maintain this positive momentum and drive continuous growth, COREnext has employed a range of measures. These measures encompass a comprehensive approach that goes beyond merely accumulating followers. Instead, the focus lies on engaging the audience, fostering meaningful interactions, and directing their attention towards the official website.

- Through the **meticulous implementation of various social media strategies**, COREnext has successfully curated compelling content that resonates with the target audience. This content includes informative articles, engaging visuals, industry insights, and thought-provoking discussions. By consistently providing valuable and relevant information, COREnext has managed to captivate the interest of its online followers.
- In addition to **content creation**, COREnext has also utilized targeted tactics to drive traffic to their website. These tactics involve strategically placed call-to-action buttons, promotional campaigns, and optimized landing pages. By leveraging these techniques, COREnext has effectively directed the online audience towards the official website, fostering deeper engagement and facilitating the conversion of interested followers into active participants.

The steady growth in the number of followers serves as a tangible indicator of the expanding online community. Moreover, the increased interaction rates, such as likes, comments, and shares, demonstrate the level of engagement and resonance of COREnext content. The success of these efforts can be measured through various Key Performance Indicators (KPIs).

6 Conclusions

This deliverable outlines COREnext **stakeholder collaboration framework** and **communication and dissemination** strategies, as well as the project approach towards **exploitation** of results for business, standardization and IPR purposes. All these tasks fall into the scope of WP8 (i.e., develop and operate a collaboration framework, design, and implement C&D strategies, assess the footprint of the project through KPIs and develop an effective framework for IPR management and contribute to relevant standardization bodies and committees).

With regards to the **stakeholder collaboration framework**, COREnext impact has been identified and evaluated across a wide spectrum of entities, encompassing the B5G/6G ecosystem, application sector, microelectronics ecosystem, relevant partnerships and networks, policy makers and society as a whole. The aim is to understand the ecosystem of actors which might be interested in the project findings, to develop a specific value proposition for each category to disseminate them.

The stakeholder engagement efforts will be developed through **an agile communication methodology**. This methodology, organised in six-month sprints along three phases (scout, interact, learn), is designed to continuously develop and strengthen communication streams with key stakeholder groups. The outputs of these sprints will be a **stakeholder map** that will evolve through the duration of the project, **publications**, **social media campaigns**, **surveys** and more.

This deliverable presents that COREnext seeks to establish robust synergies with leading expert networks in fields such as **5G/6G** including **initiatives and networks**, **EU projects**, **open access platforms**, **DIHs** and **European clusters**. Additionally, COREnext members will leverage connections with these stakeholders through existing memberships and associations.

The **Communication and dissemination (C&D) section** presents how C&D activities are planned and will be implemented for the full duration of the project (three years). The **communication plan objectives** include: enhancing general awareness and interest, clearly conveying technical and scientific results, delivering high-level messages, and promoting awareness. The **dissemination plan** goals are interlinked with those already set for communication activities and also with the overall project objectives: they are all geared towards creating impact beyond the boundaries of the project. Dissemination will be directed to raising awareness of project results and aiming for action among key stakeholders, mostly through publication of results and research and business events, while facilitating uptake of outcomes and research insights through open science practices, building the bases for a successful exploitation of results.

The **communication activities** will occur in three iterative but distinct phases: **Identify & plan; Implementation phase; and target**. These phases are closely intertwined with dissemination efforts as well. The primary aim of these communication activities is not only to generate excitement and interest around the project but also to actively engage a community of end-users who can interact with and offer valuable feedback to support the project's ongoing activities. Similarly, dissemination activity will be implemented in three different phases during the length of the project: **Identify & Study**; **Outreach & Influence**; **Evaluate and Present**.

The C&D plan adopts a streamlined approach to ensure targeted yet extensive communication and dissemination. For this purpose, a series of **communication and dissemination tools** will be made available to allow the project to reach the right audiences in a friendly and coherent way. This communication toolkit will have specific functions and will be tailored to specific communication

and dissemination needs for all phases of the COREnext C&D plan. Examples of these tools are: the **website**, **social media**, **newsletters**, **press releases**, **slide decks**, **printed material**, **email campaigns**, **surveys**, **multimedia**, **events,** and **conferences**.

For example, the public **website** serves as a vital tool to maximize the project visibility and acts as the primary entry point for showcasing its core ideas, approach, news, findings, and results; **social media** aims to support the increase of newsletter subscribers, website visitors, Zenodo metrics (views and downloads), and our online community of social media followers; **newsletters** serve as an effective engagement tool, offering insights into a project key activities and accomplishments; **press releases** showcase and emphasize the project significant milestones; and expertly crafted **slide decks** or **one-pagers** serve as potent engagement tools, effectively conveying COREnext vision and scope to specialised audiences in a visually appealing and concise manner. Additionally, **brochures, catalogues, posters**, and other paper-based/digital resources are also valuable for promotional purposes. Most of these materials will be available in digital format, allowing for easy printing when needed, such as during events, workshops, or fairs.

Other aspects of the C&D plan presented in this report, are COREnext commitment to present its work and findings on open access platforms and journals like for example **Zenodo**, **CORDIS** and the project official **website**; the planned contribution to peer-reviewed publications in top **scientific journals**; the planned stakeholder **consultation**; the attendance to conferences, events and exhibition opportunities; the planned effective **internal communication strategy** that ensures that interest are aligned within the consortium and everybody is duly informed of the latest developments; and the planned **collaborative communication cluster** with other relevant initiatives. Lastly, COREnext aims to develop **training** and make it publicly accessible.

The **Exploitation section** summarises the exploitation strategy and expected Key Exploitable Results (KERs). This section presents two main exploitation models, **research and technological,** and the scope of three main KERs: **Trustworthy Disaggregated Computing Architecture; Trustworthy Digital and Analogue Components in base station, terminal, and edge cloud; Trustworthy IoT and vertical services and applications**. The exploitation section is contextualised within a **market overview** and portrays a potential **business model** for COREnext outputs. Lastly, this section covers the **IPR management strategy** and the potential COREnext contributions to **standardisation**.

Continuous monitoring and **customization** of the C&D&E Plan are fundamental elements of COREnext success, and this is why we already established tools to monitor communication, dissemination, and exploitation efforts. These tools include: a **C&D database,** a **C&D&E tracker**, and **editorial calendar** and **KPI analysis**.

This document shows the work done in WP8 in the first six months of the project, and also serves as a preliminary roadmap for COREnext communication, dissemination, and exploitation activities. Due to its release in the early stages of the project, the concretisation of certain aspects of these strategies might be subject to changes throughout the length of the project. Therefore, this can be considered as a living document, and all changes will be adequately reflected in successive iterations of upcoming Impact Reports **D8.2 (M18)** and **D8.2/2 (M36).**

7 Annex A

List of Potentially Relevant European Funded Projects

COREnext aims to capture and blend the European competitive advantage beyond 5G and future 6G infrastructures, interoperability standards, green strategies, and forward-thinking regulations around the next generation of communication computing domain. As part of a scoping exercise for the initial stage of the Impact plan, the project has identified other funding topics and funded projects in the intersection of **system architecture, security, sustainability, privacy and responsible data, interoperability, robotics, reliable end-to-end connectivity, AI, and technologies beyond 5G/6G** with whom COREnext might aim to connect with the ambition to align synergies.

Examples of topics with whom COREnext intersects are listed here and specific project information is listed in Tab. 9 below.

HORIZON-CL4-2022-TWIN-TRANSITION-01-06: ICT Innovation for Manufacturing Sustainability in SMEs (I4MS2) (Made in Europe Partnership) (IA)

HORIZON-CL4-2021-DATA-01-01: Technologies and solutions for compliance, privacy, preservation, green and responsible data operations.

HORIZON-CL4-2022-DIGITAL-EMERGING-01-39: Ultra low energy and secure networks (RIA)

HORIZON-JU-SNS-2022-STREAM-A-01-04: Evolved Architecture for Global Green

HORIZON-JU-SNS-2022-STREAM-D-01-01: SNS Large Scale Trials and Pilots (LST&Ps) with Verticals.

HORIZON-CL4-2021-TWIN-TRANSITION-01-12: Breakthrough technologies supporting technological sovereignty in construction (RIA)

HORIZON-CL4-2021-TWIN-TRANSITION-01-01: AI enhanced robotics systems for smart manufacturing (AI, Data and Robotics – Made in Europe Partnerships) (IA)

HORIZON-CL4-2021-HUMAN-01-01: Verifiable robustness, energy efficiency and transparency for Trustworthy AI: Scientific excellence boosting industrial competitiveness (AI, Data and Robotics Partnership) (RIA)

HORIZON-JU-SNS-2022-STREAM-A-01-06: Trustworthy and Reliable End-to-end connectivity Software platforms

HORIZON-JU-SNS-2022-STREAM-B-01-04: Secure Service development and Smart Security

HORIZON-CL4-2021-HUMAN-01-02: European coordination, awareness, standardization & adoption of trustworthy European AI, Data and Robotics (AI Data and Robotics Partnership) (CSA)

HORIZON-CL4-2022-DATA-01-04: Technologies and solutions for data trading, monetizing, exchange, and interoperability (AI, Data and Robotics)

HORIZON-CL4-2021-DIGITAL-EMERGING-01-12: European Network of Excellence Centres in Robotics (RIA)

HORIZON-CL4-2021-DATA-01-05: Future European platforms for the Edge: Meta Operating Systems (RIA)

HORIZON-JU-SNS-2022-STREAM-B-01-03: Communication Infrastructure Technologies and Devices

HORIZON-CL4-2022-DATA-01-01: Methods for exploiting data and knowledge for extremely precise outcomes (analysis, prediction, decision support), reducing complexity and presenting insights in understandable way (RIA)

HORIZON-CL4-2022-DIGITAL-EMERGING-01-38: International cooperation in semiconductors (CSA)

HORIZON-CL4-2021-DIGITAL-EMERGING-01-01: Ultra-low-power, secure processors for edge computing (RIA)

HORIZON-CL4-2021-DIGITAL-EMERGING-01-26: Coordination of European Smart Network actions (CSA)

HORIZON-JU-SNS-2022-STREAM-C-01-01: SNS experimental Infrastructure

HORIZON-JU-SNS-2022-STREAM-B-01-01: System Architecture

HORIZON-JU-SNS-2022-STREAM-B-01-05: 6G Holistic System

HORIZON-JU-SNS-2022-STREAM-B-01-02: Wireless Communication Technologies and Signal Processing

HORIZON-JU-SNS-2022-STREAM-A-01-07: Real/time Zero/touch Service Technologies

HORIZON-JU-SNS-2022-STREAM-A-01-05: Edge Computing Evolution

ICT-2007.1.4: Secure, dependable and trusted infrastructures

ICT-42-2020: Information and communication technology

GARRI-6-2014: Reducing the risk of exporting non ethical practices to third countries

DS-01-2016: Assurance and Certification for Trustworthy and Secure ICT systems, services and components

DS-07-2017: Cybersecurity PPP: Addressing Advanced Cyber Security Threats and Threat Actors.

FETPROACT-EIC-05-2019: FET Proactive: emerging paradigms and communities

SU-DS03-2019-2020: Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises

Topic	Title	Acronym
HORIZON-KDT-JU-2021-1-IA	Sustainable tecHnologies enabling Future Telecommunication applications	SHIFT
	Heterogeneous Integration for Connectivity and Sustainability	HICONNECTS
	Digitalization of Power Electronic Applications within Key Technology Value Chains	PowerizeD
	14 Anstrom CMOS IC technology	14ACMOS
HORIZON-CL4-2022-TWIN-TRANSITION-01-06	Regions and (E)DIGs alliance for AI-at-the-Edge adoption by European Industry 5.0 Manufacturing SMEs	AI REDGIO 5.0
	Artificial Intelligence in Manufacturing for Sustainable Applications at SMEs	ARISE
HORIZON-CL4-2021-DATA-01-01	Digital Technologies ActiNg as a Gatekeeper to information and data flOws	TANGO
	TRUST AND PRIVACY PRESERVING COMPUTING PLATFORM	TRUSTEE
	Trustworthy, Energy-Aware federated Data Lakes along the computing continuum	TEADAL
	Green responsible privacy preserving dAta operaTIONs	GLACIATION
HORIZON-KDT-JU-2021-2-RIA	OPEVA – Optimization of Electric Vehicle Autonomy	OPEVA
HORIZON-CL4-2022-DATA-01-04	Federated decentralized trusted dAta Marketplace for Embedded finance	FAME
	Promoting and Incentivising Federated, Trusted, and Fair Sharing and Trading of Interoperable Data ASsets	PISTIS
	Universal Platform Components for Safe Fair Interoperable Data Exchange, Monetisation and Trading	UPCAST
HORIZON-CL4-2021-DIGITAL-EMERGING-01-12	European ROBotics and AI Network	euROBIN
HORIZON-CL4-2021-DATA-01-05	Autonomous, scalablE, tRustworthy, intelligent European meta Operating Systems for the IoT edge colour continuum	aerOS
	Flexible, scaLable and secUre decentralized Operating	FLUIDOS
	A META OPERATING SYSTEMA FOR BROKERING HYPER-DISTRIBUTED APPLICATIONS ON CLOUD COMPUTING CONTINUUMS	NebulOus
HORIZON-JU-SNS-2022-STREAM-D-01-01	Trials supported by Smart Networks beyond 5G	TrialsNet
	Fields Trials beyong 5G	FIDAL

	Advanced 5G Open Platform for Large Scale Trials and Pilots across Europe (IMAGINE-B5G)	IMAGINE-B5G
	Trial PlAtform foR 5G EvoluTion-Cross-Industry On Large Scale	TARGET-X
HORIZON-CL4-2021-TWIN-TRANSITION-01-12	Human Centered Technologies for a Safer and Greener European Construction Industry	HumanTech
HORIZON-CL4-2022-DIGITAL-EMERGING-01-38	International Cooperation On Semiconductors	ICOS
HORIZON-CL4-2022-DIGITAL-EMERGING-01-39	Agile uLtra Low EnerGy secuRe netwOrks	ALLEGRO
HORIZON-JU-SNS-2022-STREAM-A-01-06	An Artificial Intelligent Aided Unified Network for Secure Beyond 5G	NANCY
HORIZON-CL4-2022-DATA-01-01	EXPeriment driven and user eXPerience oriented analytics for eXtremely Precise outcomes and decisions	ExtremeXP
HORIZON-CL4-2021-DIGITAL-EMERGING-01-01	Seamless design of smart edge processors	CONVOLVE
HORIZON-JU-SNS-2022-STREAM-B-01-04	Confidential Computing and Privacy-preserving Technologies for 6G	CONFIDENTIAL6G
	Holistic, Omnipresent, Resilient Services for future 6G Wireless and Computing Ecosystems	HORSE
	Privacy-first Security Enablers for 6G Networks	PRIVATEER
	secuRe design and deployment of trustworthy cOntinUum computing 6G Services	RIGOUROUS
HORIZON-CL4-2021-DIGITAL-EMERGING-01-26	Starting the Sustainable 6G SNS Initiative for Europe	6GStart
HORIZON-JU-SNS-2022-STREAM-C-01-01	6G-BRICKS: Building Reusable testbed Infrastructures for validating Cloud-to-device breakthrough technologieS	6G-BRICKS
	6G eXperimental Research infrastructure to enable next-generation XR services	6G-XR
	Supporting Architectural and technological Network evolutions through an intelligent, secured and twinning enabled Open eXperimentation facility	6G-SANDBOX
HORIZON-CL4-2021-TWIN-TRANSITION-01-01	Flexible, scaLable and secUre decentralized Operating	CONVERGING
	COGNitive Industries for smart MANufacturing (COGNIMAN)	COGNIMAN

HORIZON-JU-SNS-2022-STREAM-A-01-04	Green Technologies for 5/6G Service-Based Architectures	6Green
HORIZON-JU-SNS-2022-STREAM-B-01-03	6G Non Terrestrial Networks	6G-NTN
	6G SHort range extreme communication IN Entities	6G-SHINE
	Flexibly Scalable Energy Efficient Networking	FLEX-SCALE
	ETHER – sElf evolving terrestrial/non/Terrestrial Hybrid nEtwoRks	ETHER
	Truly Sustainable Printed Electronics/based IoT Combining Optical and Radio Wireless	SUPERIOT
HORIZON-JU-SNS-2022-STREAM-B-01-01	Deep Programmability and Secure Distributed Intelligence for Real-Time End-to-End 6G Networks	DESIRE6G
	Programmable AI-Enabled DeterminIstiC networking for 6G	PREDICT-6G
	Distributed Artificial Intelligence-driven open and programmable architecture for 6G networks	ADROIT6G
	DETERMINISTIC E2E COMMUNICATION WITH 6G	DETERMINISTIC6G
HORIZON-JU-SNS-2022-STREAM-B-01-05	A holistic flagship towards the 6G network platform and system, to inspire digital transformation, for the world to act together in meeting needs in society and ecosystems with novel 6G services	Hexa-X-II
HORIZON-JU-SNS-2022-STREAM-B-01-02	Towards an AI-native, user-centric air interface for 6G networks	CENTRIC
	TERAhertz integrated systems enabling 6G Terabit-per-second ultra-massive MIMO wireless	TERA6G
	A Dual-frequency Distributed MIMO Approach for Future 6G Applications	6GTandem
	THz Industrail Mesh Networks in Smart Sensing and Propagation Environments	TIMES
	TERahertz ReconfigurAble METAsurfaces for ultra-high rate wireless communications	TERRAMETA
HORIZON-JU-SNS-2022-STREAM-A-01-07	Automated zero-touch cross-layer provisioning framework for 5G and beyond vertical services	ACROSS
HORIZON-JU-SNS-2022-STREAM-A-01-05	AI-powered eVolution towards opEn and secuRe edge architEctures	VERGE
HORIZON-CL4-2021-HUMAN-01-02	AN AI ON-DEMAND PLATFORM TO SUPPORT RESEARCH EXCELLENCE IN EUROPE	AI4EUROPE
	AI, Data and Robotics ecosystem	Adra-e
HORIZON-CL4-2021-HUMAN-01-01	mUlti-Level Trustworthiness to Improve the Adoption of hybrid artificial intelligencE	ULTIMATE

	Application Aware, Life-Cycle Oriented Model Hardware Co-Design Framework for Sustainable, Energy Efficient ML Systems	SustainML
ECSEL-2019-1-IA	Building the fully European supply chain on RFSOI, enabling new RF domains for sensing, communication, 5G and beyond	BEYOND5
ECSEL-2018-2-RIA	Technology and hardware for neuromorphic computing	TEMPO
ICT-42-2020	European Core Technologies for future connectivity systems and components	COREnect
ICT-56-2020	Next GENeration IoT SOlutions for the Universal Supply chain	iNGENIOUS
ICT-2007.1.4	International Co-operation in Trustworthy, Secure and Dependable ICT infrastructure	INCO-TRUST
DS-01-2016	Security Assurance FramEwoRk for networked vEhicular teChnology	SAFERtec
DS-07-2017	Advanced Cyber-Threat Intelligence, Detection, and Mitigation Platform for a Trusted Internet of Things	CYBER-TRUST
SU-DS03-2019-2020	Enhancing Digital Security, Privacy and TRUST in softWARE	TRUST aWARE
FETPROACT-EIC-05-2019	Transparent, Reliable and Unbiased Smart Tool for AI	TRUST-AI
GARRI-6-2014	Creating and enhancing TRUSTworthy, responsible and equitable partnerships in international research	TRUST

Table 8. List of potentially relevant projects

[1] DIH Europe website. https://digital-strategy.ec.europa.eu/en/activities/edihs (Accessed 26 June 2023)
[2] Zenodo link to COREnext visual material. https://zenodo.org/record/7950919/files/COREnext%20logos.zip?download=1 (Accessed 26 June 2023)
[3] Zenodo link to COREnext banners. https://zenodo.org/record/7950880/files/COREnext%20brand%20banners.zip?download=1 (Accessed 26 June 2023)
[4] Zenodo link to COREnext colour paletter, logo and templates. https://zenodo.org/record/7950868/files/corenext-brand-guidelines.pdf?download=1 (Accessed 26 June 2023)
[5] Zenodo link to the first COREnext Newsletter. https://zenodo.org/record/7955864/files/COREnext%201st%20Newsletter.pdf?download=1 (Accessed 26 June 2023)
[6] Zenodo link to COREnext master slide deck. https://zenodo.org/record/7950956/files/COREnext_slide_master_SMALL.pptx?download=1 (Accessed 26 June 2023)