# **European Core Technologies for future connectivity systems and components**

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## Deliverable

# D4.3 Final report on community building and outreach

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# **Document History**

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0.2	15.06.2022	B. Arregui (AUSTRALO), A. Bedeschi (6G-IA), P. Cogez (AE- NEAS), A. Kaloxylos (6G-IA), J. Magen (AUSTRALO)	Contributions to all sections	
0.3	23.06.2022	B. Arregui (AUSTRALO), A. Bedeschi (6G-IA), P. Cogez (AE- NEAS), B. Debaillie (imec), J. Magen (AUSTRALO), Y. Zou (TUD)	Final contributions	
1.0	29.06.2022	J. Magen (AUSTRALO)	Final editing further to reviews	





# **List of Abbreviations**

Abbreviation	Denotation		
5GAA	5G Automotive Association		
5G-ACIA	5G Alliance for Connected Industries and Automation		
6G-IA	6G Smart Networks and Services Industry Association (formerly 5G IA 5G Infrastructure Association)		
AENEAS	Association for European NanoElectronics ActivitieS		
Al	Artificial Intelligence		
AIOTI	The Alliance for Internet of Things Innovation		
CSA	Coordination and Support Action		
DoA	Description of the Action		
EBU	European Broadcasting Union		
ECS	Electronic Components and Systems		
ECSEL	The ECSEL JU, the PPP for Electronic Components and Systems		
ECSO	European Cyber Security Organisation		
EFECS	European Forum for Electronic Components and Systems		
EG	Expert Group		
ETP	European Technology Platform		
ETPIS	European Technology Platform on Industrial Safety		
ETSI	European Telecommunications Standards Institute		
GA	Grant Agreement		
GSMA	Global System for Mobile Communications		
JU	Joint Undertaking		
KDT	Key Digital Technologies		
MoU	Memorandum of Understanding		
NESSI	Networked European Software and Services Initiative		
NetworldEurope	The ETP for communications networks and services		
NGMN	Next Generation Mobile Networks		
PPP	Public-Private Partnership		
PSCE	Public Safety Communications Europe		
SNS	Smart Networks and Services		
SRIA	Strategic Research & Innovation Agenda		
WG	Working Group		
WP	Work package		
WWRF	World Wireless Research Forum		





# **Table of contents**

Docur	nent History	2
List of	Abbreviations	3
Table	of contents	4
1	Introduction – Overall Strategy	5
1.1	Introduction	5
1.2	Stakeholder engagement and community building strategy	5
1.3	Outreach, dissemination and exploitation strategy	7
2	Final Report on Stakeholder Engagement and Community Building Outreach	8
2.1	Stakeholder engagement	8
2.2	SMEs in the COREnect ecosystems	9
2.3	Stakeholder identification	10
2.3.1	COREnect provisioning ecosystem: the COREnect community	11
2.3.2	COREnect use-case ecosystem: users of the COREnect technologies	12
3	Final Report on Outreach, Dissemination and Exploitation Strategy	13
3.1	Current outreach of the COREnect ecosystem	13
3.1 3.2	Current outreach of the COREnect ecosystem  Outreach via workshops and events	
		16
3.2	Outreach via workshops and events	16 41
3.2 3.3	Outreach via workshops and events	41 43
3.2 3.3 3.4	Outreach via workshops and events  Reaching out to the COREnect users  Dissemination and promotion activities	16 41 43
3.2 3.3 3.4 3.4.1	Outreach via workshops and events	16 41 43 43
3.2 3.3 3.4 3.4.1 3.4.2	Outreach via workshops and events  Reaching out to the COREnect users  Dissemination and promotion activities  COREnect web site  COREnect social media	16 43 43 45
3.2 3.3 3.4 3.4.1 3.4.2 3.4.3	Outreach via workshops and events  Reaching out to the COREnect users  Dissemination and promotion activities  COREnect web site  COREnect social media  COREnect newsletters	16 43 43 45 48
3.2 3.3 3.4 3.4.1 3.4.2 3.4.3	Outreach via workshops and events  Reaching out to the COREnect users  Dissemination and promotion activities  COREnect web site  COREnect social media  COREnect newsletters  COREnect press releases	16 43 43 45 48 50
3.2 3.3 3.4 3.4.1 3.4.2 3.4.3 3.4.4	Outreach via workshops and events  Reaching out to the COREnect users  Dissemination and promotion activities  COREnect web site  COREnect social media  COREnect newsletters  COREnect press releases  COREnect White Paper	164143455052
3.2 3.3 3.4 3.4.1 3.4.2 3.4.3 3.4.4 3.4.5	Outreach via workshops and events  Reaching out to the COREnect users  Dissemination and promotion activities  COREnect web site  COREnect social media  COREnect newsletters  COREnect press releases  COREnect White Paper  Achievements, Conclusions and Next Steps	164143455052
3.2 3.3 3.4 3.4.1 3.4.2 3.4.3 3.4.4 3.4.5	Outreach via workshops and events  Reaching out to the COREnect users  Dissemination and promotion activities  COREnect web site  COREnect social media  COREnect newsletters  COREnect press releases  COREnect White Paper  Achievements, Conclusions and Next Steps  Achievements vs. COREnect objectives	16414345505253



# 1 Introduction – Overall Strategy

### 1.1 Introduction

Deliverable 4.3 reports on the activities and achievements related to community building and outreach all along the COREnect project, with a focus on the second year of the project (i.e., from 1<sup>st</sup> July 2021 to 30<sup>th</sup> June 2022)<sup>1</sup>. This is done by analysing the progress made in tasks 4.1 "Stakeholder engagement and community building" and 4.2 "Outreach, dissemination and exploitation".

In addition, this document includes some ideas for the next steps to be performed after the completion of COREnect.

Although the measures against COVID-19 have been progressively lifted up during the 2<sup>nd</sup> year of the project, most events were still organised online, with the exception of the 4<sup>th</sup> COREnect workshop, held at EuCNC2022 in Grenoble, France.

The activities and achievements covered in this deliverable are in line with the expectations.

# 1.2 Stakeholder engagement and community building strategy

As recommended in Deliverable 4.2, the stakeholder engagement and community building activities in the 2<sup>nd</sup> part of the COREnect project focused on three aspects: stakeholder engagement, SMEs in the COREnect ecosystem, and stakeholder identification, with a stronger focus on engagement and less focus on identification. COREnect's overall strategy remained the same, as no revision or deviation were deemed necessary. It is reminded below<sup>2</sup>.



Figure 1: COREnect's Agile Engagement Stakeholder Framework<sup>3</sup>

<sup>&</sup>quot;Sprint Qx" in Figure 1 refers to a generic time period defining each cycle. The full cycle for COREnect lasts about 6 months.



Deliverable 4.2 "Interim report on community building and outreach" focused on the results from Year 1 of the project.

<sup>&</sup>lt;sup>2</sup> For more details on the agile engagement stakeholder framework, refer to section 2.1.1 of Deliverable 4.1.





Within the stakeholder analysis, COREnect identified the target audiences, grouped them according to their level of participation, interest, and influence in the project, determining how best to involve each of these stakeholder groups throughout the project.

The stakeholder engagement continued strongly, with the work performed in the COREnect Expert Groups (leading in particular to Deliverable 3.7 "Core Technologies Development Recommendations and Guidelines", that is part of the COREnect roadmap), and the outreach, dissemination and exploitation strategies performed in Year 2, described in section 3.

The main mechanisms used for reaching out to the different COREnect community stakeholders during Year 2 of the project were:

- **Web site**: COREnect kept the web site dynamic, to grasp the attention and engage with its audience. The communication team published public consultations and new webpage sections. Articles were regularly added to the news page.
- Email campaigns: several email campaigns were performed during the year, to announce events and deliverables. This included the COREnect participation at EuCNC and the related 3<sup>rd</sup> workshop, the announcement of the policy workshop, and announcing the various COREnect deliverables and especially the roadmap documents. Dedicated web pages were created for the results of the workshops and for the roadmap, and promoted via emails. This supported the COREnect web site to be considered as the main entry point for COREnect-related information. Content always summarised the initiative's goal, highlighting the target audience and the benefits, along with links to the articles and project documentation (i.e., link to Zenodo).
- **Events organisation**: organising events like webinars and workshops, e.g., EuCNC & 6G Summit, policy workshop, proved to be effective to interact and engage with the project's related communities. These types of events were also useful for gathering feedback about the project, and an opportunity to explain COREnect results and achievements.
- Social media strategy: social media was an essential strategy within the project. It allowed to reach, nurture, and engage with the COREnect target audience no matter their location. A well-planned social media strategy to spread the word about the project proved to be a good a way of maintaining the interaction with the audience. It also turned to be a good tool to attract different types of stakeholders. It helped to 1) build an online community, 2) keep the community informed about the project's activities, and 3) engage the community. In this second part of the project, the social media community grew substantially.
- Newsletters: A newsletter strategy is a very useful tool to keep the community informed and engaged with the latest news. It is also a good tool to identify the type of stakeholders that subscribe to the newsletter. By the end of the project, there were 157 subscribers to the newsletter, most of them from the SNS and KDT communities. The newsletter could be used to reach large audiences as COREnect also published the newsletter on Zenodo, the web site and on social media. Monitoring them is key to improving and seeing what interests our audience the most. This allowed us to make decisions for the next newsletters.
- Open consultations: an "open consultation" was launched via the COREnect web site, and more informal consultations happened within the Expert Groups and via social media, in particular to get feedback on draft documents, helping to finalise the COREnect roadmap.





#### 1.3 Outreach, dissemination and exploitation strategy

Key activities and objectives of Task 4.2 "Outreach, dissemination and exploitation" included:

- Promoting the COREnect community with specific banners on social media, pointing at the web site, and using it as the main entry to discover more about the project and the COREnect community.
- Disseminating the project results to engage the relevant stakeholders. For this goal, the COREnect project made the results open to access by uploading the deliverables and white papers to Zenodo, and publishing them on the web site and on social media.
- Increasing awareness and promotion towards targeted external stakeholders to maximise the visibility of the project, its community, and its impact on the European industry and beyond. A public project web site, COREnect social media (Twitter and LinkedIn Group), and newsletters have been launched and regularly filled with updated content.
- Organising events and workshops to disseminate the work done by the Consortium. Some results were presented at the workshops, e.g., the COREnect White Paper, and the COREnect Roadmap. There are dedicated sections on the COREnect web site for the workshops and the roadmap.
- Working towards a closer relationship between the ECS and the SNS communities, mutually enriching their long-term roadmaps and paving the way to research activities bringing together actors of the two communities.

Work on this area is described in section 3.





# 2 Final Report on Stakeholder Engagement and Community Building Outreach

At the end of Year 1 of the COREnect project, as stated in the Deliverable 4.2, progress had been made on the three aspects of stakeholder identification, stakeholder engagement, and SMEs in the COREnect ecosystem, but more needed to be done during the 2<sup>nd</sup> year. The project decided to spend most of the effort on stakeholder engagement, as only minor issues had been raised at the end of Year 1, to finalise stakeholders' identification. That included a dedicated effort on engaging SMEs. The following sub-sections provide details on the activities performed during this reporting period.

## 2.1 Stakeholder engagement

Stakeholders continued to be engaged during Year 2 of the projects through multiple means: the CORE-nect Expert Groups, the 6G-IA / 5G PPP / SNS communities (especially via 6G-IA), the ECS / KDT / Chips Act communities (especially via AENEAS), and the NetworldEurope community (especially via AUS-TRALO). Interaction with other 5G PPP projects and in particular the flagship project Hexa-X also happened.

The release of the Chips Act and the start of the microelectronics IPCEI helped mobilise the ECS community. The launch of Phase 1 of the SNS JU also supported the engagement of the community -and it is expected that the topic of components for connectivity might be present in the SNS Phase 2 work programme. COREnect promoted the involvement of experts in the preparation of the new release of the NetworldEurope SRIA, where a dedicated section components for connectivity is included, and in the preparation of the latest edition of the ECS SRIA, that includes specific sections on connectivity.

Contacts with the automotive industry were established by COREnect, in particular to draft the automotive section of the COREnect White Paper.

During Year 2 of the COREnect project, important changes took place:

- In July 2021, the '5G Infrastructure Association' (5G IA) changed its name to '6G Smart Networks and Services Industry Association' (6G-IA)<sup>4</sup>, and greatly increased its membership.
- In November 2021, Council Regulation 2021/2085 established the Smart Networks and Services Joint Undertaking (SNS JU) as well as the Key Digital Technologies Joint Undertaking (KDT JU)<sup>5</sup>.

The 6G-IA represents the private side in both the 5G Public Private Partnership (5G-PPP) and the SNS JU. 6G-IA's primary objective is to contribute to Europe's leadership on 5G, 5G evolution and SNS/6G research. The KDT JU is the successor to the ECSEL JU programme, with the main objective of assuring world-class expertise in these key enabling technologies, essential for Europe's competitive leadership in the era of the digital economy.

Both the evolution of the 6G-IA association and the start of the SNS JU had a significant positive impact on COREnect project's work, outreach and dissemination activities. First, 6G-IA's membership in 2022 more than tripled compared to the previous year. In May 2022, 6G-IA had 203 Full Members<sup>6</sup> and 44

<sup>6</sup> https://6g-ia.eu/members-2/



<sup>4</sup> https://6g-ia.eu

https://eur-lex.europa.eu/eli/reg/2021/2085





Associate Members<sup>7</sup> (cf. figure below). Many new SNS stakeholders with interest/involvement in COREnect's activities joined the association and receive information on key COREnect initiatives, publications, and events.

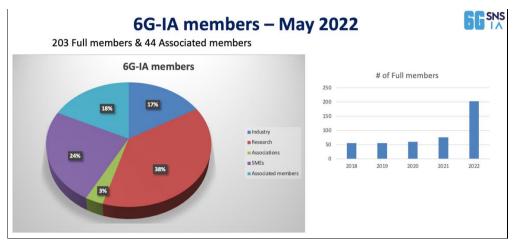


Figure 2: 6G-IA membership in May 2022

Moreover, the collaboration between the SNS JU and the KDT JU has been improved, with the objective to accelerate the development and deployment of technologies for beyond 5G and 6G systems based on European electronic components and systems (ECS). In this context, on June 7, 2022, 6G-IA and AE-NEAS signed a Memorandum of Understanding<sup>8</sup>, to further strengthen the synergies between the SNS private stakeholders, represented by 6G-IA, and the ECS industry ecosystem, represented by AENEAS.

The two following events further contributed to stimulate collaboration among the KDT/microelectronics and telecommunications sectors:

- On January 27, 2022, the 6G-IA organised a virtual 'SNS JU Public Information Day'9 to present the SNS Work Programme and discuss the opportunities for projects under the SNS JU first call. There were 741 unique registrations to the event including many KDT/microelectronics organisations.
- On March 7, 2022, the 6G-IA participated in the SNS JU launch event "On the road to 6G"<sup>10</sup>, that took place at Mobile World Congress Barcelona on March 1, 2022. The event attracted a big audience, including many stakeholders from the KDT/microelectronics domain.

#### 2.2 SMEs in the COREnect ecosystems

COREnect continued to engage with SME communities from both ECS and SNS, especially via the general dissemination activities, but also with specific SME-oriented actions. Information on COREnect achievements, deliverables and workshops were promoted towards the SNS and ECS communities, the former via a specific liaison with the NetworldEurope SME WG, and the latter via the involvement of SME representatives in the COREnect workshops. The 3rd COREnect workshop included an afternoon session

https://6g-ia.eu/single\_post/?slug=launch-event-of-the-smart-networks-and-services-joint-undertaking



https://6g-ia.eu/associates-members/

https://6g-ia.eu/single\_post/?slug=aeneas-and-6g-ia-join-forces-to-build-synergies-for-european-leadershipin-next-generation-telecommunications

https://6g-ia.eu/event/sns-ju-public-information-day/





more specifically dedicated to SMEs, and was organised in cooperation with the NetworldEurope SME WG and the European DIGITAL SME Alliance. More details on workshops are provided in section 3.

Interaction with SMEs at those various opportunities, as well as an analysis of other events, reports and studies focusing on SMEs, were used to make a number of recommendations related to SMEs, that appear in the final COREnect roadmap, especially with a dedicated section in Deliverable 2.2.

It is also worth mentioning that the MoU signed by 6G-IA and AENEAS specifically promises to "particularly focus on SMEs and opportunities for participation in EU, national and transnational R&I funding instruments".

## 2.3 Stakeholder identification

The stakeholder pictures and accompanying glossary that were released in Deliverable 4.2 was already considered as being pretty complete and stable. Still, there were a few minor issues that were to be considered. Here are the issues that were addressed during Year 2 of the project, leading to some revisions in the stakeholder pictures.

Issue raised	How the issue was addressed
The stakeholders involved in using the components in their 6G-related products were better identified, both as part of the COREnect community (i.e., the ones developing 6G-related products and solutions), and in the use case community (i.e., the ones who need to use 6G-related products to develop innovative solutions dedicated to vertical sectors).	Information from the market segments devised by the Expert Group was used. The "5G/6G COREnect technology Users / Intermediaries" were replaced with those market segments.
The ECS "categorization" might need to be further revised. For example, the term "service provider" may mean "IC design houses" or "IC design service providers", that is different. The difference between "material suppliers" and "material providers" need to be clarified, as well as the position of the foundries.	The classification of the ECS SRIA was used to revise the stakeholder provisioning ecosystem picture.
The list of initiatives and projects can never be complete, and may be perceived as excluding others. This should be better explained.	A footnote was added in both pictures with further explanation.

The revised stakeholder pictures are shown in the following sub-sections.





### 2.3.1 COREnect provisioning ecosystem: the COREnect community

# COREnect Provisioning Ecosystem: The COREnect Community (June 2022)

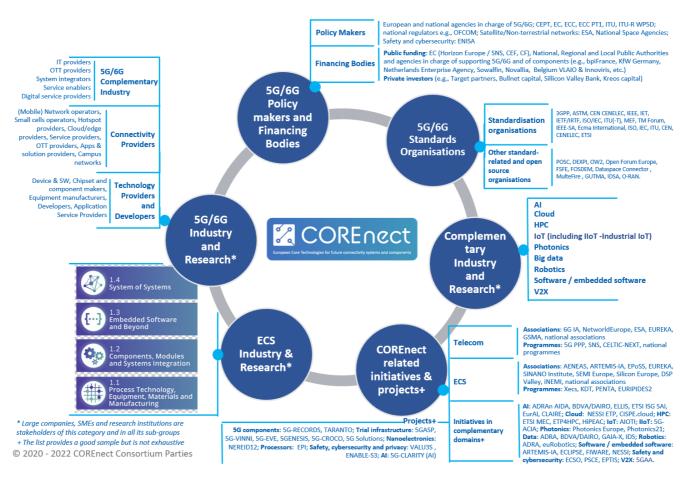


Figure 3: COREnect provisioning ecosystem stakeholder picture





# 2.3.2 COREnect use-case ecosystem: users of the COREnect technologies

# COREnect Use-Case Ecosystem: Users of the COREnect Technologies (June 2022)

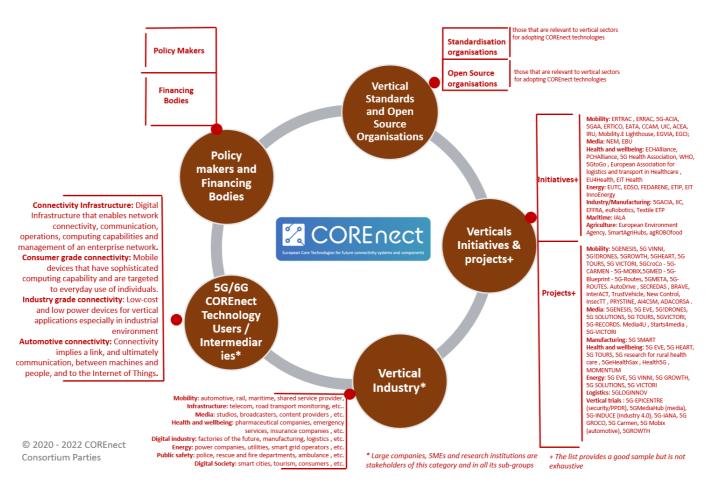


Figure 4: COREnect use-case ecosystem stakeholder picture







# 3 Final Report on Outreach, Dissemination and Exploitation Strategy

## 3.1 Current outreach of the COREnect ecosystem

Deliverable 4.1 explained that MS Teams was selected to engage with the experts, especially those from the COREnect Expert Groups, considering that the COREnect project targets deep involvement of, and open communication with, their experts. To stimulate this, the COREnect team has created a dedicated MS Teams workspace which is broadly accessible by all experts from within and outside the consortium. Today, more than 100 persons have access to this workspace. All these experts have equal rights to consult and edit the shared material, and to use the MS Teams features to communicate, brainstorm and interact. Still, we have structured the workspace such that experts can easily connect with the community within their expertise domain. According to the three expert groups defined in the project, we have created the corresponding chat channels and SharePoint folders<sup>11</sup>.

In preparation of the initial, intermediate and final roadmap deliverables, this MS Teams platform was extensively used by the experts to exchange ideas, viewpoints and material, and to jointly draft documents and perform online brainstorms. In preparation of the final roadmap document, the MS Teams platform was mainly used for consolidation through focussed actions, including focussed discussion and document reviewing, and less for gathering new material and viewpoints. As such, the chat and Share-Point function of the MS Teams platform was mostly used.

The access permissions for the experts to the MS Teams platform was maintained throughout the entire duration of the project. Few experts encountered some difficulties to access the MS Teams workspace for the first time, but such problems were resolved rather quickly. Over the last project months, only few new experts were added.

#### **Expert recruitment & public consultation:**

In February 2022, a public consultation was opened on the web site, to collect feedback on the intermediate roadmap. The goal of this consultation was to collect input and achieve a consensus on the approach and the content to move towards a final roadmap document. The public consultation was accompanied with relevant information for the respondents to address the request: the intermediate roadmap document was added, together with summary reports of this roadmap and the related Expert Groups, and the COREnect White Paper.

Accompanying actions were carried out to promote the consultation:

• **social media campaigns** on the COREnect social media and on the 5GPPP LinkedIn Group were put in place, to invite people to participate.

<sup>11</sup> This text is extracted from Deliverable 4.2, and is still valid.







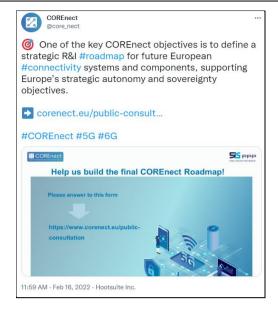


Figure 5: COREnect Public Consultation tweet



Figure 6: COREnect Public LinkedIn post

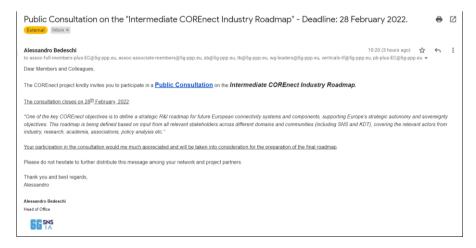


Figure 7: Email invitation







Newsletters: information on the open consultation was included in a couple of newsletters.



Figure 8: COREnect Newsletter 17.02.2022<sup>12</sup>



Figure 9: AENEAS February 2022 Newsletter

The received feedback was incorporated to consolidate the roadmap.

<sup>&</sup>lt;sup>12</sup> https://bit.ly/COREnect Newsletter 17Feb22







# 3.2 Outreach via workshops and events

# "Microelectronics and connectivity: Europe going forward": 3rd COREnect workshop, February 1<sup>st</sup>, 2022

The initial plan was to hold the 3<sup>rd</sup> COREnect public workshop in co-location with the 2021 European Forum on Electronic Components and Systems. Unfortunately, due to the ongoing sanitary crisis, EFECS had to be organised as an online event, for the second year in a row. Due to the general fatigue of the community vs. online events, it was felt that adding an online workshop after the plenary EFECS session would not attract the desired number of attendees. Also, given that there was no physical venue, the rationale for co-location (people physically present at the main event being more likely to extend their stay for a co-located workshop) was no longer there. As a result, that 3<sup>rd</sup> public workshop was re-scheduled on February 1<sup>st</sup>, 2022.

In a first instance, it had been decided to organise two separate workshops: the 3<sup>rd</sup> COREnect workshop, and an additional workshop focusing on SMEs, in cooperation with the European DIGITAL SME Alliance and the NetworldEurope SME WG. Each of those workshops were planned to last ½ day. Eventually, it was agreed to merge the two workshops and organise a 1-day workshop, organised in cooperation between COREnect, the SME WG, and the European DIGITAL SME Alliance, with a strong focus on SMEs in the afternoon session.

There was a total of 129 participants in the workshop<sup>13</sup>, out of 207 people who had registered. Leveraging the recent availability of the deliverable D3.4, "Intermediate COREnect industry roadmap", and of the 2022 edition of the ECS SRIA, this workshop evidenced the strong synergies already developed between the COREnect roadmap and the respective SRIA of the ECS and SNS communities.

The agenda displayed on the web site was as follows:

On the 1st of February, the 3rd COREnect workshop will take place: "Microelectronics and connectivity: Europe going forward". The workshop is organised by the COREnect project with the NetworldEurope SME WG and the European DIGITAL SME Alliance.

(\*An email with connection info has been sent to all registered people. If you have not received anything, please check your spam folder. Sorry for any inconvenience caused).

#### PART 1: 09:30 AM - 12:30 PM CET

- Welcome Yaning Zou, TUD, COREnect Project Manager and Moderator of the workshop (5 mn)
- The Importance of Microelectronics and Connectivity for Europe Marco Ceccarelli, EC/DG CNECT (15 mn)
- IPCEI 2 Goals and Status Nicolas Gouze, VDI-VDE/IT, on behalf of the German Federal Ministry for Economic Affairs and Climate Action, supported by its funding agency VDI/VDE Innovation + Technik GmbH (15 mn)
- Q&A (15 mn)
- Connectivity-related Topics in the ECS SRIA Patrick Cogez, AENEAS (15 mn)
- Microelectronics-related Topics in the SNS SRIA Alex Kaloxylos, 6G-IA (15 mn)
- Q&A 10 (mn)
- Coffee break (10 mn)
- Hexa-X 6G Vision/Use Cases/ KPIs/KVIs Mikko Uusitalo, Nokia (15 mn)
- General Introduction to the COREnect Roadmap Björn Debaillie, imec (10 mn)
- Results from COREnect Expert Group 1 "Compute & Store" Gerhard Fettweis, TUD, EG1 Chair (15 mn)

Figures provided by 6G-IA, via Webex statistics from the online meeting.



-





- Results from COREnect Expert Group 2 "Connect & Communicate" Piet Wambacq, imec, EG2 Chair (15 mn)
- Results from COREnect Expert Group 3 "Sense & Power" Manuela Neyer, Infineon, EG3 Chair (15 mn)
- Q&A (15 mn)

#### PART 2: 13:30 - 17:00 CET

- Opportunity for SMEs around Microelectronics and Connectivity
- 5G and beyond: sparking a Cambrian explosion in the IT ecosystem Werner Haas, Cyberus (10 mn)
- Showcasing the power of 5G devices for professional content production: the 5G-RECORDS approach –
   Manuel Fuentes, Fivecomm (10 mn)
- Acceleration for 5G infrastructure and edge computing Benoit De Dinechin, Kalray (10 mn)
- Electronic and photonic novel key-enablers in the 5G-PHOS network architecture (Paul van Dijk, LioniX International) (10 mn)
- Keynote: Extending Digital Sovereignty to 6G: a Hardware Perspective Sebastiano Bertani, Tanaza, European DIGITAL SME Alliance (20 mn)
- Q&A (10 mn)
- Coffee break (10 mn)
- COREnect Strategy/Vision: White Paper and Initial Analysis on Investment Requirements Fredrik Tillman, Ericsson, and Patrick Pype, NXP (20 mn)
- SMEs in the Microelectronics and Connectivity Ecosystem Initial Recommendations Jacques Magen, AUSTRALO, NetworldEurope SME WG Chair (10 mn)

Panel: "Connectivity and Microelectronics, the twin foundations of European digital sovereignty and economy" – includes Q&A with all participants (90 mn)

Moderator: Gerhard Fettweis (TUD, COREnect Project Coordinator); participants: Mohand Achouche (Nokia), Frederic Gianesello (STMicroelectronics), Frank Hofmann (Bosch), Werner Haas (Cyberus), Benoit De Dinechin (Kalray), Kari Leino (Business Finland), Bernard Barani (EC/DG CNECT).

- What are the major challenges Europe facing right now in the microelectronics and connectivity domains? Is the trend of disaggregation and ORAN a friend or foe?
- How should Europe act and what would be the roles of different stakeholders, e.g., large industry, SMEs, RTOs, academia, public authority? What would be the required investment and conditions?
- Is this domain an opportunity for European SMEs, and how? If so, what should be done to support SMEs?
- What are the conditions for the emergence of one or more "European champions" in the field?

The following communication and dissemination activities were put in place prior to the workshop:

**Web site:** A new dedicated web page was created, with the information on the date, the speakers, the form, the GDPR and private policy, as well as the NetworldEurope SME WG and the European SME DIGITAL Alliance logos, as co-organisers of the workshop.

**Social media**: some tweets and posts were prepared and released on the COREnect Twitter and LinkedIn accounts, informing about the agenda and registration process linking to the web site. Information on the workshop was also posted on the 5GPPP LinkedIn group.

- Number of tweets published: 24
- Number of LinkedIn posts published: 24







Figure 10: COREnect 3<sup>rd</sup> workshop tweet



Figure 11: COREnect 3<sup>rd</sup> workshop tweet







Figure 12: COREnect 3<sup>rd</sup> workshop tweet

**Mailing**: announcement and information on the workshop were disseminated to various mailing lists, including the COREnect Expert Groups, NetworldEurope, 6G-IA / 5G PPP / SNS and AENEAS / ECS mailing lists.

**Newsletters**: a few COREnect newsletters included information about the workshop, and relayed in some web pages, as laid out in the table below.

Newsletter	3rd workshop	COREnect/AUS- TRALO	https://bit.ly/COREnect_News- letter_18Nov2021	18.11.2022
Web site – events	3rd workshop	AENEAS	https://aeneas-office.org/	20.12.2021
Web site – events	3rd workshop	AIOTI	https://aioti.eu/events/3rd- corenect-workshop-microelec- tronics-and-connectivity-eu- rope-going-forward/	11.01.2022
Newsletter	3rd workshop	AENEAS	AENEAS Newsletter: Aeneas (aeneas-office.org)	13.01.2022
Web site – events	3rd workshop	6G-IA	https://6g-ia.eu/event/3rd- corenect-workshop/	17.01.2022







Figure 13: COREnect newsletter 18.11.202214

During the workshop, some posts were published on Twitter and LinkedIn: 18 tweets were published during the event were, as well as 2 LinkedIn posts.



Figure 14: COREnect tweet during the 3<sup>rd</sup> workshop

https://bit.ly/COREnect 4th Newsletter









Figure 15: COREnect tweet during the event

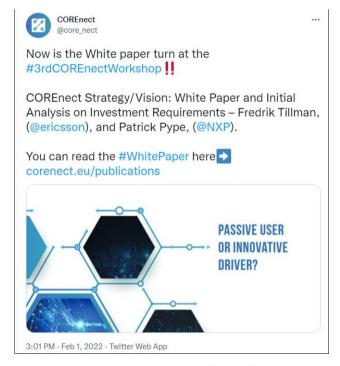


Figure 16: COREnect tweet during the event







Figure 17: COREnect tweet during the event



Figure 18: COREnect LinkedIn post before starting the event





After the event, information about the public consultation and about Deliverable 3.4 were published both on Twitter and LinkedIn, as a follow-up to the workshop.



Figure 19: COREnect tweet after the 3<sup>rd</sup> workshop

Finally, after the 3<sup>rd</sup> workshop, a dedicated web page was created on the web site with results from all COREnect workshops. An article on the 3<sup>rd</sup> workshop was published in this section: "Microelectronics and connectivity: Europe going forward".

"Microelectronics and connectivity: Europe going forward": 3rd
COREnect workshop
On the 1st of February, the workshop "Microelectronics

Figure 20: article about the 3rd workshop on the web site<sup>15</sup>

and connectivity: Europe going forward" took place.

<sup>&</sup>quot;Microelectronics and connectivity: Europe going forward": 3rd COREnect workshop — corenect



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The recordings of the session were uploaded to the COREnect YouTube channel<sup>16</sup>.

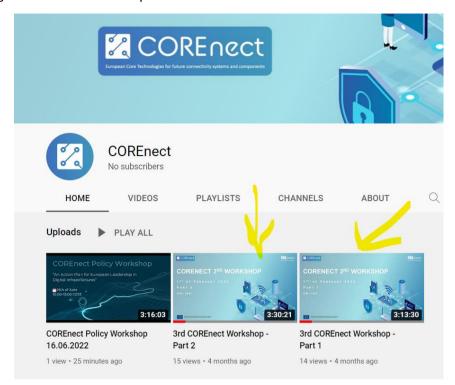


Figure 21: COREnect YouTube channel

The workshop also brought additional visitors on the COREnect web site. Below the statistics on the consultation of the web site during the workshop, on the 1st of February.



Figure 22: COREnect web analytics during the workshop of 1st of February

<sup>&</sup>lt;sup>16</sup> COREnect - YouTube







# "Telecommunications and microelectronics: How should Europe (re)-act?": 4<sup>th</sup> COREnect workshop at the EuCNC & 6G Summit 2022, June 7, 2022

The purpose of this workshop was to present the key findings of the three COREnect Expert groups to a broad ICT audience (i.e., a roadmap on how Europe should (re)act in micro-electronics for connectivity solutions). Additionally, after 2 years of intensive activities COREnect's recommendations were presented. More than 25 people participated in this part of the workshop and remained present for the whole duration.

### Workshop's agenda:

#### Session 1 - 14:00.15:30 CEST

Key findings of the Expert Groups – Expert Groups Co-Chairs: Gerhard Fettweis (TUD), Frederic Gianesello (STMicroelectronics, and Manuela Neyer (Infineon).

White Paper - Fredrik Tillman, Ericsson.

#### Session 2 - 16:00-17:30 CEST

COREnect's view on how Europe should (re)-act – Yaning Zou, (TUD), Jacques Magen (AUSTRALO) and Frederic Gianesello (STMicroelectronics (30' + 10' Q&A)

Panel: What is needed to implement the roadmap? (40' + 20' Q&A)

Moderator: Gerhard Fettweis

Panellists:

Mohand Achouche - Nokia

Benoit de Dinechin - Kalray

Björn Ekelund - Ericsson AB

Frederic Gianesello - STMicroelectronics

Heiner Heiss - Infineon

Andreas Müller - Bosch & 5G-ACIA



The feasibility of these recommendations was discussed extensively in a panel of leading experts in the area. More than 30 participants watched the panel. Here as well, the audience remained present for the whole duration of the panel<sup>17</sup>. This number is considered as very satisfactory, considering the high number of parallel workshops at the conference.

Most of the attendants participated in person in Grenoble at EuCNC. There were also a few online participants (figure for online participation provided by EuCNC).









The following activities were put in place before the workshop.

**Web site:** a dedicated article was published for the 4<sup>th</sup> COREnect workshop on the "workshop" webpage to announce the workshop, along with the agenda and the instructions to register at <a href="https://www.corenect.eu/workshops/telecommunications-and-microelectronics-how-should-europe-re-act-eucnc-workshop.">https://www.corenect.eu/workshops/telecommunications-and-microelectronics-how-should-europe-re-act-eucnc-workshop.</a> The agenda was updated regularly.

**Emailing**: announcement of the workshop as well as information and links to the web page were disseminated a couple of times to the relevant mailing lists, including the COREnect Expert Groups, NetworldEurope, 6G-IA / 5G PPP / SNS and AENEAS / ECS mailing lists.

Social media: the workshop was announced on the COREnect social media channels.

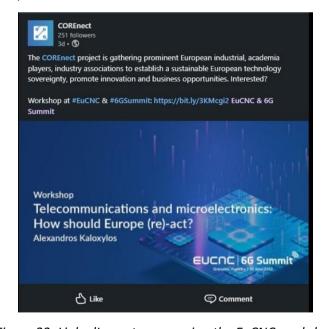


Figure 23: LinkedIn post announcing the EuCNC workshop





### Newsletter

A newsletter was released on the 1<sup>st</sup> of June, announcing the workshop and the registration.



Figure 24: COREnect Newsletter – 1st of June

During the event, COREnect posted live on social media. 12 posts were published on LinkedIn. 16 tweets were posted on Twitter.







Figure 25: LinkedIn post during the workshop

Many posts reached more than 300 people. The LinkedIn post above reached 329 people and got more than 75 clicks, as shown in the analytics below.



Figure 26: LinkedIn analytics of the above post







Figure 27: One of the tweets posted during the workshop



Figure 28: One of the tweets posted during the workshop

Some of the tweets reached more than 50 people and engaged with 8 (people who liked the tweet, or shared it).





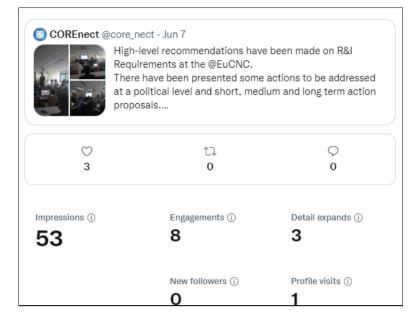


Figure 29: Statistics from the previous tweet.

During the EuCNC workshop day, 55 people visited the COREnect web site. In average, each visitor spent three minutes and a half on the web site. A total of 182 web pages were viewed.



Figure 30: COREnect web site analytics on the 07.06.2022

After the workshop, some posts were published on social media, and an article was published on the web site<sup>18</sup>. In addition, a newsletter was released, with information on the workshop.

<sup>&</sup>lt;sup>18</sup> COREnect At The EuCnC — corenect









Figure 31: COREnect June Newsletter







Figure 32: Tweet from the COREnect consortium



Figure 33: COREnect web site article about the EuCNC workshop





# "An Action Plan for European Leadership in Digital Infrastructures": COREnect Policy Workshop, June 16, 2022

More than 100 people registered to attend the workshop through the COREnect web site. There were eventually 54 attendees.

The COREnect Policy Workshop brought together stakeholders from the microelectronics and connectivity domains, from public authorities as well as private organisations, to discuss the priorities and recommendations from the COREnect roadmap, and how to implement the concrete steps required to achieve European leadership in microelectronics and connectivity within the next 10 years through a concrete action plan. The objective was to pave the way towards defining a concrete way forward bringing Chips act into reality in the connectivity domain, building a solid foundation towards a prosperous European digital decade, through the constitution of a combined microelectronics and connectivity European ecosystem.

### Workshop's agenda:

10:00-10:05 Opening Jacques Magen, AUSTRALO, NetworldEurope SME WG Chair. (Presentation)

10:05-10:25 Chips Act – A European Strategy on semiconductors in 6G systems for the Digital Decade Marco Ceccarelli, Programme Officer – Microelectronics and Photonic Industry. EC/DG CNECT. (Presentation)

10:25-10:45 A Strategic Roadmap for Strengthening European Leadership on Microelectronics and Connectivity. Fredrik Tillman, Research Manager at Ericsson, & Frederic Gianesello, RF Technical Leader, STMicroelectronics. (Presentation).

#### 10:45-11:35 Panel #1

Learning from the COREnect roadmap and the existing landscape (KDT and SNS JU, IPCEI, Chips Act proposal, existing initiatives at MS level): what would be the required strategic actions to address EU concerns on its autonomy in trusted critical connectivity infrastructures?

Moderator: Yaning Zou, COREnect Technical Manager, TUD.

Julia Jasinska, Head of international relations & strategic advocacy, Government Affairs International Nokia. Peter Stuckmann, Head of Unit, DG CNECT, EC.

Ben Ruck, Programme coordinator European R&D&I programmes, Ministry of Economic Affairs, The Netherlands. Ingrid Moerman – Director of the Deterministic Networks program at imec, and Chair of the Board of the public safety operator ASTRID in Belgium

#### 11:35-11:45 Coffee break

11:45-12:55 **Panel #2**. How can we use the existing and planned European landscape to invest and provide policy support for implementing an innovative and vibrant microelectronics and connectivity ecosystem, and an abundant pool of skills & competence?

Colin Willcock, Chair of the Board, 6G-IA, SNS Governing Board. (Presentation).

Caroline Bedran, General Director of AENEAS and member of the KDT Governing Board.

Brit Helle, Head of EUREKA Secretariat

Kari Leino, Business Finland

Christian Dubarry, head of the European pole and International Relations at BPI France.

Héctor Donat Añó, CEO, Fivecomm. (Presentation).

Laith Altimime, President, SEMI Europe. (Presentation).

Moderator: Patrick Pype, Director of Strategic Partnership, NXP

12:55-13:00 Conclusion Yaning Zou, COREnect Technical Manager, TUD.







The following activities took place before the workshop.

The policy workshop had been announced along with the agenda and the registration form at https://www.corenect.eu/workshops/an-action-plan-for-european-leadership-in-digital-infrastructures-corenect-policy-workshop. Several banners were created, to be posted on the social media channels.



Figure 34: social media banner to announce the policy workshop



Figure 35: social media banner to announce the panellists of the policy workshop Social media: a social media campaign was carried out on the COREnect social media.



Figure 36: LinkedIn post to announce one of the panellists of the policy workshop





**Emailing:** considering that the policy workshop was the week after the 4<sup>th</sup> COREnect workshop, both workshops were advertised at the same time (cf. emailing for 4<sup>th</sup> COREnect workshop). A last reminder focusing solely on the policy workshop was sent a few days prior to the date of the workshop.

#### **Newsletter:**

A newsletter was released on the 1st of June, announcing the workshop and the registration.



Figure 37: COREnect Newsletter - 1st of June

6GIA hosted the virtual meeting on Webex. During the event, COREnect posted live on social media. 7 posts were published on LinkedIn. Some of the posts reached more than 300 people.







Figure 38: COREnect LinkedIn post during the workshop

As shown below, the post above was probably viewed by more than 400 people (456 "impressions").

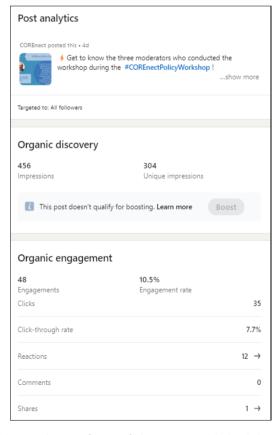


Figure 39: LinkedIn analytics of one of the posts published during the workshop







### 13 tweets were posted on Twitter.



Figure 40: COREnect tweet example during the workshop

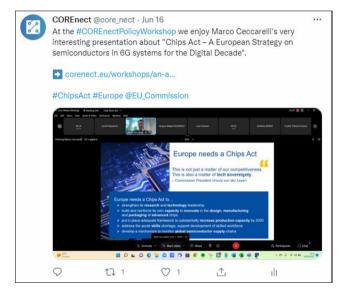


Figure 41: COREnect tweet example during the workshop



Figure 42: Twitter analytics of one of the tweets published during the workshop





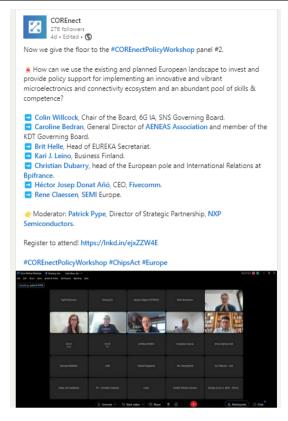


Figure 43: COREnect LinkedIn post example during the workshop

During the policy workshop day, 11 people visited the COREnect web site, spending an average of one minute and a half minutes viewing the web pages.

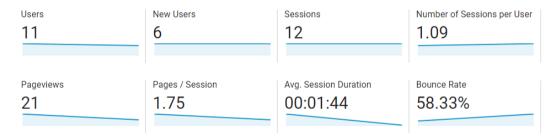


Figure 44: COREnect web site analytics on the 16th of June 2022

After the workshop, the recordings of the session were uploaded to the COREnect YouTube channel<sup>19</sup>, an article about the workshop was published on the web site, and a newsletter with information on the workshop was released.

COREnect - YouTube









Figure 45: COREnect June newsletter with the information of the workshop





# Watch The COREnect Policy Workshop Video!

Jun 16



The COREnect Policy Workshop took place today, June 16, 2022 - 10.00-13.00 CEST - Online.

#### WATCH THE FULL VIDEO at this link!

The COREnect Policy Workshop brings together stakeholders from the microelectronics and connectivity domains, from public authorities as well as private organisations, to discuss the priorities and recommendations from the COREnect roadmap, and how to implement the concrete steps required to achieve European leadership in microelectronics and connectivity within the next 10 years through a concrete action plan.

This should lead to defining a concrete way forward bringing Chips act into reality in the connectivity domain, building a solid foundation towards a prosperous European digital decade, through the constitution of a combined microelectronics and connectivity European ecosystem.

If you want to check the agenda and speakers who participated in the workshop, please click here.

Figure 46: Article with the recording of the workshop published on the web site

After the COREnect policy workshop, the European Commission published a piece of news regarding the roadmap presented on the 16<sup>th</sup> of June during the COREnect policy workshop<sup>20</sup>. This information was relayed on the COREnect web site, and it was included in the last COREnect Newsletter.



Figure 47: European Commission news in relation to the COREnect roadmap, after the policy workshop

European think tank COREnect launches Roadmap towards Leadership in Chips for 6G | Shaping Europe's digital future (europa.eu)



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### Participation in other workshops and events

#### COREnect (virtual) booth at EFECS 2021, 24-25 November, 2021

COREnect attended the EFECS 2021 event with a virtual booth. The booth was actually attended by 29 visitors over the two days of the event. Much information was made available for the booth, including links to all COREnect deliverables that were available at that time, links to the two press releases that had been issued, and links to the Twitter and LinkedIn COREnect accounts. A specific header image and a specific background image were prepared for the virtual booth, accompanied by the COREnect logo.



Figure 48: COREnect specific PR material prepared for the EFECS 20221 booth

### Virtual ICT-52 Workshop on 6G, 3-4 February, 2022

COREnect participated in the workshop "Virtual ICT-52 Workshop on 6G" that was held on February 3-4, 2022<sup>21</sup>. The workshop was organised by the European 6G Flagship project Hexa-X, together with other ICT-52 6G projects, including COREnect. COREnect led a session entitled "HW for 6G", and gave the following presentations<sup>22</sup>:

- "Trustworthy and Energy efficient computing in 6G";
- "RF enabling technologies for THz communications and sensing";
- "Sensor Processing in 6G".

## 3.3 Reaching out to the COREnect users

In the second year of the project, other strategic verticals sectors selected by COREnect were approached, in particular via the broad dissemination channels of 6G-IA and AENEAS. 6G-IA and AENEAS dissemination activities for the COREnect project reached out a large number of stakeholders from domains beyond telecommunications and microelectronics. In particular, information on COREnect publications, events, consultations and activities were distributed through several ad hoc mailing lists.

As far as 6G-IA is concerned, such mailing lists included:

<sup>&</sup>lt;sup>22</sup> Available on video at https://youtu.be/ozJPRVxCmYs.



https://hexa-x.eu/ict-52-workshop-on-6g/





- Individual vertical organisations that are either Full Members (<a href="https://6g-ia.eu/members-2/">https://6g-ia.eu/members-2/</a>) or Associate Members (<a href="https://6g-ia.eu/associates-members/">https://6g-ia.eu/members-2/</a>) of the 6G-IA from the following strategic sectors:
  - o Mobility, transport and logistics (e.g., automotive, maritime, railways, airport, containers);
  - Health sector (e.g., hospitals, medical research centres, providers of medical appliances and solutions);
  - o Media and multimedia (e.g., virtual and augmented reality, events, entertainment);
  - Security and Cybersecurity;
  - o Energy;
  - Space (ESA).
- European Associations that are 6G-IA Full Association Members, <a href="https://6g-ia.eu/association/">https://6g-ia.eu/association/</a>), including:
  - Alliance for Internet of Things Innovation (AIOTI);
  - ERTICO (active in the field of mobility, transport and logistics);
  - Networked European Software and Services Initiative (NESSI);
  - OPENAIRINTERFACE SOFTWARE ALLIANCE;
  - Public Safety Communications Europe (PSCE);
  - World Research Forum (WWRF).
- '6G-IA Partners' including associations with which 6G-IA collaborates via MoU or other forms of agreement:
  - 5G Automotive Association (5GAA);
  - 5G Alliance for Connected Industries and Automation (5G ACIA);
  - o 5G Health Association;
  - European Broadcasting Union (EBU);
  - o GSMA;
  - o ETSI;
  - Photonics21;
  - o NGMN;
  - Celtic-Next;
  - European Green Vehicles Initiative Association for the 2Zero partnership (EGVIAfor2Zero).
- 5G PPP and 6G-IA Work Groups (<a href="https://5g-ppp.eu/5g-ppp-work-groups/">https://5g-ppp.eu/5g-ppp-phase-3-projects/</a>), in which several verticals organisations and associations are involved as WG members and/or project beneficiaries.
- '5G PPP / SNS Newsletter mailing list', including approximately 3,000 external subscribers and comprising many stakeholders from verticals. This was an important dissemination channel as the monthly Newsletter often included information from the COREnect project.

AENEAS communication activities regarding COREnect were addressed to more than 467 organisations. While the founders of AENEAS do belong to the microelectronics domain, AENEAS reached out to actors from the full Electronic Components and Systems value chain and their applications, including<sup>23</sup>:

- Consumer Audio/Video (5%);
- Automotive (22%);
- Industrial (31%);
- Medical (9%);
- Telecom (7%);
- Data Process (20%).

<sup>&</sup>lt;sup>23</sup> Figures from an AENEAS confidential internal study, released end of 2020.







#### 3.4 Dissemination and promotion activities

Key dissemination and promotion activities were successfully carried out as planned during the 2<sup>nd</sup> year of the project:

- Three press releases were issued, in December 2021, May 2022, and June 2022.
- The 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> Newsletters were released in February, May and June 2022.
- Some major updates were made to the COREnect web site: public consultations, new dedicated page for the workshops, new dedicated web page for the roadmap deliverables, publication of news items and of deliverables, press releases and Newsletters.
- Some social media campaigns were put in place with special banners and different links and monitoring, for specific communication actions.
- AENEAS disseminated the COREnect activities to the ECS community and 6G-IA to the SNS community via their newsletters/newsflashes, social media, mailing lists, and press contacts.

#### 3.4.1 COREnect web site

The web site served as a general presentation of the purpose of the COREnect project, showing information about the different work packages, Expert Groups, News, workshops, results, publications, consortium, etc. A dedicated web page was added to provide all relevant information about the COREnect workshops<sup>24</sup>. This web page is directly accessible via the top menu.



Figure 49: COREnect dedicated webpage for workshops

Considering that the final roadmap was the most important achievement of the project, a dedicated web page focusing on the roadmap was also added to the COREnect web site<sup>25</sup>. This web page is directly accessible via the top menu.

The Consortium and the EG pages were updated.

https://www.corenect.eu/roadmap



https://www.corenect.eu/workshops





Several articles were published on the News web page<sup>26</sup>: 3<sup>rd</sup> Newsletter (June 2021), COREnect participation at the EuCNC Summit (June 2021), COREnect General Assembly (August 2021), Interview with TUD (October 2021), 4<sup>th</sup> Newsletter (November 2021), Interview with Ericsson (December 2021), an article about the Whitepaper (December 2021), Interview with 6G-IA (January 2022), 3<sup>rd</sup> workshop article (February 2022), AENEAS interview (March 2022), Bosch interview (March), Nokia interview (April), an article about the roadmap (May 2022), Memorandum of understanding between AENEAS and 6G-IA (June 2022), COREnect at the EuCNC (June) 2022), COREnect Policy Workshop video (June 2022), "European Think Tank COREnect Launches Roadmap Towards Leadership in Chips for 6G" (June 2022).



Figure 50: screenshot of the latest articles on the news page

The main deliverables and papers and other documents were published on the "Publications" webpage.



Figure 51: Publications section on the COREnect web site – page screenshot

https://www.corenect.eu/news



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During the second year of the project, the COREnect web site had an average of 772 active users. The highest number of visitors are from the United States, Germany and France.

	2021		2022
1 Day Active Users	7 Day Active Users	14 Day Active Users	28 Day Active Users
7	207	337	772
% of Total: 100.00% (7)	% of Total: 100.00% (207)	% of Total: 100.00% (337)	% of Total: 100.00% (772)

Figure 52: Average statistics of the number of visitors on the COREnect web site



Figure 53: Analytics of the countries of origin of the COREnect web site visitors

#### 3.4.2 COREnect social media

LinkedIn and Twitter have been used to build a community around the challenges of COREnect, and to expand the communications in relation with the events in which the consortium participates. The social media are managed (internally) thanks to a posting calendar helping to schedule the content, daily and weekly.

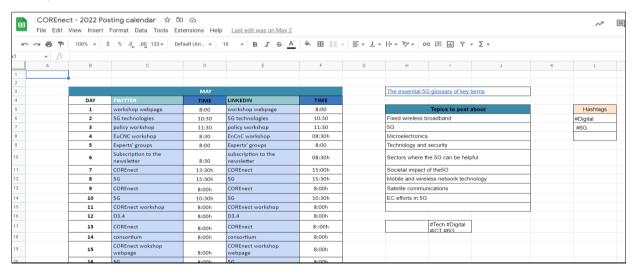


Figure 54: COREnect (internal) posting calendar





The marketing strategy is adapted to each channel. Twitter is used towards a broader audience, while LinkedIn focuses on longer posts that should be more relevant to technical experts. The content shared on both is sometimes adapted, as the Twitter channel does not allow to write many characters.

Relevant profiles are monitored, and information about COREnect is published. COREnect social media are also used to promote information from other projects and initiatives, whenever relevant. On both Twitter and LinkedIn, COREnect also promotes articles and events, in which some of the project partners participate.

COREnect gets more traffic / interaction on LinkedIn than on Twitter, although the number of followers is higher on Twitter. This seems to indicate that COREnect may have a more "professional" audience on LinkedIn, with experts interacting, and a broader and more "general" audience on Twitter, where people are rather monitoring information on COREnect.

	Social Network	Sessions	% Sessions
1.	LinkedIn	393	57.54%
2.	. Twitter	275	40.26%

Figure 55: social media accounts from where the COREnect web site gets the traffic

By June 21st, 2022, the COREnect Twitter account had 703 followers.



Figure 56: Screenshot of the Twitter profile with the number of followers

Average profile visits in the last 3 months of the project: 1,500 visits to the Twitter account.





By June 21st, 2022, the COREnect LinkedIn group had 276 followers.



Figure 57: screenshot of the LinkedIn profile with the number of followers

Average profile visits in the last 3 months of the project: 25 visitors.





#### 3.4.3 COREnect newsletters

The 4th and 5th COREnect newsletters were issued respectively on November 18, 2021, and February 5, 2022. They were broadly disseminated to the ECS and SNS communities, especially via the 6G-IA and AENEAS.

The 4<sup>th</sup> Newsletter included: COREnect's white paper COREnect's booth at EFECS, an Interview with Yaning Zou, and an announcement of the COREnect 3<sup>rd</sup> workshop.

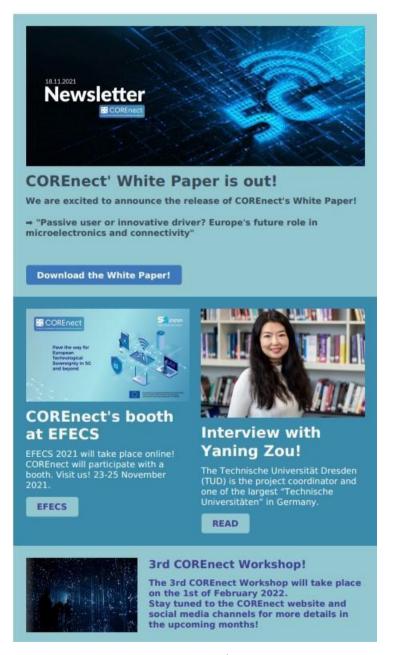


Figure 58: COREnect 4<sup>th</sup> Newsletter





The 5<sup>th</sup> Newsletter included: an article about the 3rd COREnect workshop, "Microelectronics and connectivity: Europe going forward", an Interview with Alexandros Kaloxylos (Executive Director of the 6G-IA), and an announcement of the COREnect policy workshop.



Figure 59: COREnect 5<sup>th</sup> Newsletter





The 6<sup>th</sup> Newsletter was released at the end of June with the information on the two workshops (article about the COREnect experience at the EuCNC, and the video of the policy workshop). The piece of news with the article from the European Commission was also included, along with the COREnect final roadmap.



Figure 60: COREnect 6<sup>th</sup> Newsletter

## 3.4.4 COREnect press releases

COREnect's 3rd press release was issued in December 2021. All project partners contributed to its preparation and agreed on its content. The press release was widely distributed on the COREnect web site, COREnect social media channels, and was relayed by 6G-IA and AENEAS and all other COREnect partners. The press release was downloaded almost 400 times.





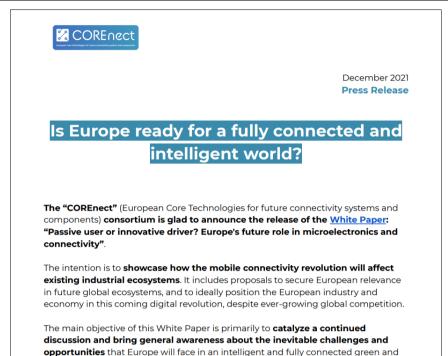


Figure 61: COREnect 3<sup>rd</sup> Press Release

The 4<sup>th</sup> COREnect Press release was issued on the 15<sup>th</sup> of June, 2022. It focused on the final COREnect Roadmap, and the main contributors from the EGs. It includes the link to the roadmap specific section on the web site. All project partners contributed to its preparation and agreed on its content. The press release was widely distributed on the COREnect web site (in the Publication section and in the roadmap section), COREnect social media channels, and was relayed by 6G-IA and AENEAS and all other COREnect partners.

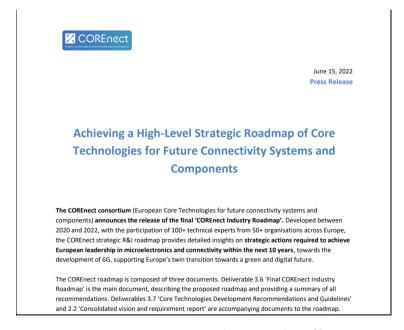


Figure 62: COREnect 4th Press Release<sup>27</sup>

https://rebrand.ly/COREnect PressRelease June2022



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### 3.4.5 COREnect White Paper

In November 2021, the COREnect White Paper was released, entitled "Passive user or innovative drivers? Europe's future role in microelectronics and connectivity"28. The main intention of this White Paper was to showcase how the mobile connectivity revolution will affect existing ecosystems and verticals, and present proposals to secure European relevance in future global ecosystems and position European wide industry and economy ideally in this coming digital revolution despite ever-growing global competitions.

The White paper was disseminated through Zenodo, Rebrandly, the News webpage and the Publications webpage, social media channels, and NetworldEurope, AENEAS and 6G-IA networks.

By the end of the project, the White Paper had been downloaded more than 1,300 times.



Figure 63: Cover of the COREnect White Paper

https://www.corenect.eu/publications







#### 4 **Achievements, Conclusions and Next Steps**

This section provides a summary of the achievements in WP4, in relation with the objectives in the original DoA.

#### Achievements vs. COREnect objectives 4.1

Sub	-objectives	Measure of Achievement	Achieved
1.a	COREnect will bring together the stakeholders that should be involved in such a community, starting with the organisations involved in this project, in the ICT-42 Innovation Actions, and in the existing communities where part of the stakeholders shall be involved, primarily the SNS and KDT communities.	Initiate and proceed with the creation of a dedicated "European Core Technologies for future connectivity systems" community, i.e., the COREnect community.	The COREnect provisioning ecosystem picture was finalised (cf. section 2.1). Moreover, a "COREnect community" has been engaged by the project, via the work of the COREnect Expert Groups, and the high level of participation in the events organised by COREnect along with EFECS and EuCNC, involving both the ECS/KDT and the SNS communities, in particular thanks to the engagement of stakeholders from 6G-IA, 5G PPP, SNS, NetworldEurope, and AENEAS (cf. section 3.1). Finally, a COREnect Policy Workshop was organised on June 16, 2021, and gathered highlevel speakers and panellists from both industry (SNS and ECS) and public authorities, hopefully paving the way for future support and adoption of the COREnect roadmap by both private and public stakeholders. A major milestone in achieving the build-up of a "COREnect community" was the signature of the MoU between 6G-IA and AENEAS.
2.a	Organisation of a COREnect workshop by 5G IA and AE-NEAS for knowledge sharing on this topic.	Obtain reciprocal knowledge of current Strategic Research Agendas and processes for elaboration.	In addition to the two workshops already organised at EFECS and EuCNC during the 1st year of the project, the 3rd COREnect Workshop was held on February 1st, 2022, just after EFECS. The 4th COREnect workshop was organised as part of EuCNC2022, on June 7th, in Grenoble, France. Both workshops were quite successful events (cf. section 3.1).
2.b	Availability of a mapping of relevant contributing experts of both communities, providing inputs for recruiting and engaging external technical experts for roadmapping activities.	Identification of the contribu- tors of the two Strategic Re- search Agendas pertinent to the definition of a roadmap of core technologies for future connec- tivity systems.	Contributors to the sections that are most relevant to COREnect in the ECS SRIA and the NetworldEurope SRIA were identified in D4.1. Every effort was made to engage with the AENEAS and NetworldEurope / 5G PPP / SNS stakeholders during Year 2 of the project, via Expert Groups and workshops.
3.b	COREnect will engage with the industrial, academic and SME communities to make them aware of the new community being built up and of the opportunities that it brings in economic and socie-	Promote the preliminary results obtained by the COREnect community to engage and mobilise potential future "champions" as well as potential future users and investors.	The 4th, 5 <sup>th</sup> and 6 <sup>th</sup> COREnect newsletters, the 3 <sup>rd</sup> and 4 <sup>th</sup> press releases, COREnect events, activity on social media, the public consultation, and the release of the project deliverables, allowed to effectively inform and engage the ECS and 5G PPP / SNS communities.





Sub-objectives	Measure of Achievement	Achieved
tal terms. To do so, it will dis-		
seminate effective material		
to the most relevant external		
stakeholders and invite those		
stakeholders in workshops		
and events to make them		
aware of what this commu-		
nity will produce in the future.		

### The 6G-IA / AENEAS MoU: a major milestone towards the build-up of a "COREnect community"

The COREnect proposal claimed that "a new COREnect community will emerge from the close collaboration between Smart Networks and Services (SNS) and Key Digital Technologies (KDT) communities". In that respect, a major milestone was reached through the announcement, on June 7<sup>th</sup>, 2022, of the signature of a Memorandum of Understanding (MoU) between the 6G-IA and AENEAS<sup>29</sup>. This announcement was relayed on the COREnect web site and on the COREnect social media channels, in addition to being published on the 6G-IA and AENEAS web sites and relayed on their respective social media channels.

This MoU demonstrates both associations' ambition to build on their relationship established within COREnect and further strengthen the synergies between the private side of the European ICT sector and the ECS ecosystem. It also aligns with the European Commission's ambition to drive closer collaboration and more efficient synergies between the two respective European Partnerships, that were set up late 2021.

Among the key actions foreseen in the MoU, AENEAS and 6G-IA have agreed to encourage sharing of non-confidential information through awareness raising events such as conferences and webinars. These will particularly focus on SMEs and opportunities for participation in EU, national and trans-national R&I funding instruments. The associations will also explore possible future coordination among funding instruments, and work to increase cross-fertilisation and mutual contributions to strategic research and innovation agendas, as well as the promotion of cross-domain projects where this appears to be feasible (e.g., EUREKA Clusters). Through such actions, they aim to benefit both their communities along with Europe's wider social, economic, and environmental goals.

Of course, community building will continue after the end of the COREnect project. Still, this MoU is considered as a major stepping stone towards the realisation of that long term goal -and a key achievement for the COREnect project.

## 4.2 Achievements in relation to the meetings of the COREnect Expert Groups

By the end of the project, a total of 105 experts were registered in the EGs, representing 54 different organisations. 46% of the experts come from industry, and 54% from research institutes, universities and one from a European agency. Details have been laid out in section 3.1.1.2. The following table describes the initial achievements in relation with the expected impact of the project when it comes to roadmapping:

https://www.corenect.eu/news/memorandum-of-understanding-signed-between-aeneas-and-6g-ia







Expected impact - Indicators	Initial results achieved
Number of industry domains involved in the roadmapping activities	Mainly ECS and SNS stakeholders have been involved in the EGs, as they constitute the basis of the COREnect community. Expertise from space, automotive and industry 4.0 are also taken account in the roadmapping activities.
Number of industry domains to which COREnect disseminates the roadmap	For example: Mobility, transport and logistics; Health sector; Media and multimedia and consumer electronics; Security and Cybersecurity; Energy; Space and defence; Data Process. See complete list in Subsection 3.3.
Number of large enterprises and SMEs involved in the roadmapping activities	21 large companies and SMEs have been involved in the EGs.

The form used for the open consultation launched on the COREnect web site was also used in informal discussions with experts from the EGs. A lot of feedback was obtained in this more informal manner, ensuring the relevance of roadmap to a wide range of stakeholders in the microelectronics, telecom and vertical sectors.

#### 4.3 **Dissemination achievements**

The average monthly visits to the COREnect web site are more than 700 in the second year of the project. The number of downloads of the various documents available on the web site is laid out in the following table.

Item	Number of downloads
COREnect deliverables	2,086 (*)
COREnect White Paper	1,337
D3.4 Intermediate COREnect Industry Roadmap	363
COREnect Roadmap related deliverables (D3.6, D3.7, D2.2)	386 (*)
Presentations from the 3 <sup>rd</sup> COREnect Workshop	697
IPCEI ON MICROELECTRONICS AND COMMUNICATION TECHNOLOGIES (IPCEI ME/CT)	78
SENSE AND POWER	102
EG2: CONNECT AND COMMUNICATE ROADMAP OVERVIEW AND FIRST CONCLUSIONS	92
Connectivity related Topics in the ECS SRIA	24
INTRODUCTION TO THE CORENECT ROADMAP	95
SMES IN THE MICROELECTRONICS AND CONNECTIVITY ECOSYSTEM INITIAL RECOMMENDA- TIONS	16
Extending Digital Sovereignty to 6G: a Hardware Perspective	20
COREnect Strategy and vision: White paper and initial analysis on investment requirements	14
Manycore Acceleration for 5G Infrastructure and Edge Computing	28
EG1 "COMPUTE & STORE" Key results	90





Item	Number of downloads
THE EU PERSPECTIVE: MICROELECTRONICS AND CONNECTIVITY	40
Hexa-X 6G Vision, Use Cases, KPIs/KVIs	28
Microelectronics related topics in the SNS SRIA	24
Microelectronics related topics in the SNS SRIA	16
Electronic and Photonic novel key-enablers in the 5GPHOS network architecture	16
Showcasing the power of 5G devices for professional content production: the 5G-RECORDS approach	
COREnect Newsletters	16
4th Newsletter	16
5 <sup>th</sup> Newsletter (*)	-
COREnect press releases	459 (*)
3rd Press release	399
4th Press release	60 (*)

<sup>(\*)</sup> the number of downloads of those items is temporary, as they were posted in the last 30 to 45 days of the project. Latest figures are from June, 21<sup>st</sup>, 2022.





## 4.4 Conclusions and next steps

WP4 significantly contributed in engaging and bringing together the most relevant stakeholders from both the ECS and SNS communities that are interested in forming the "COREnect community", i.e., organisations interested to contribute to the future development of components for future connectivity, and to use such components in application domains. This happened thanks to a high participation in Expert Groups, and in the workshops. The level of participation in workshops organised by COREnect was successful, both in terms of speakers and panellists, and in participants in the audience.

From the point of view of communication, much emphasis was placed in this second part of the project on disseminating COREnect's workshops and roadmap-related documents, from the White Paper to the final COREnect roadmap. The project successfully promoted and presented the results achieved and the key documents.

The release of the COREnect roadmap documents, especially the COREnect White Paper, and of course the final COREnect roadmap including Deliverable 3.6 and the accompanying Deliverable 2.2 and 3.7, were certainly milestones in the constitution of a "COREnect community".

The signature of a MoU between 6G-IA and AENEAS is another key milestone for a strengthened cooperation between industry stakeholders. An important next step shall be the launch of an additional RIA project, involving both ECS and SNS stakeholders, from the Horizon Europe call dedicated to Digital and emerging technologies for competitiveness and fit for the green deal, to further develop components for future connectivity. It would also be important to see projects from other initiatives (EUREKA, IPCEI...) addressing this domain.

As stated in the COREnect roadmap, public and private support, as well as public-private cooperation, are essential to develop a leading sustainable microelectronics and connectivity ecosystem in Europe in the next 10 years. The COREnect Policy Workshop, which gathered high-level representatives from industry and public authorities, is a first step in this direction, hopefully leading to the future support of the COREnect roadmap at EU and Member States level, and the implementation of the recommendations.