The European IoT Hub

Growing a sustainable and comprehensive ecosystem
for Next Generation Internet of Things

D5.4 Dissemination and Communication Report
Version 2

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Abstract

The EU-IoT project has successfully achieved its goal of fostering a cohesive, dynamic, and sustainable Internet of Things (IoT) ecosystem in Europe. Through strategic coordination among Next Generation Internet of Things (NGIoT) projects and related initiatives, the project has accelerated the European IoT community's development and promoted IoT solution adoption. By actively participating in industry events, producing scientific publications, and employing a robust communication and dissemination strategy, the EU-IoT project has raised awareness, facilitated knowledge transfer, and positively impacted the scientific, technological, and business spheres. As the project concludes, the EUCloudEdgeIoT initiative will build on its foundation, ensuring continued growth and innovation in the IoT community.

Keywords: EU-IoT, NGIoT, Communication, Dissemination, Key Performance Indicators (KPIs), Scientific publications, Events, Social media

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Disclaimer

Project co-funded by the European Commission under H2020		
Nature of the deliverable:	R	
Dissemination Level		
PU	Public, fully open, e.g. web	√
CI	Classified, information as referred to in Commission Decision 2001/844/EC	
CO	Confidential to EU-IoT project and Commission Services	

* R: Document, report (excluding the periodic and final reports)
 DEM: Demonstrator, pilot, prototype, plan designs
 DEC: Websites, patents filing, press & media actions, videos, etc.
 OTHER: Software, technical diagram, etc

EXECUTIVE SUMMARY

The EU-IoT project, a two-year CSA, has successfully concluded, achieving its primary objectives of creating a more cohesive, dynamic, participatory, and sustainable Internet of Things (IoT) ecosystem in Europe. The project has played a pivotal role in accelerating the European IoT community by promoting synergies, fostering strategic coordination among Next Generation Internet of Things (NGIoT) projects and related initiatives, and encouraging the adoption of IoT solutions.

The project's various work packages have contributed to the dissemination of knowledge and results through keynote speeches, presentations, and dedicated sessions at industry events. This outreach has effectively raised awareness about EU-IoT, facilitated knowledge transfer, and positively impacted the scientific, technological, and business spheres. Furthermore, the EU-IoT partners have produced several scientific publications in journals and conferences, further contributing to the IoT research community.

To ensure the effectiveness of communication and dissemination efforts, the project employed a five-step measurement cycle model, which included identifying objectives, setting goals for promotional tactics, identifying Key Performance Indicators (KPIs), regularly measuring progress and impact, and adjusting the communication strategy for optimal outcomes. These efforts were closely monitored and evaluated to track ongoing activities and measure the success of promotional efforts.

As the EU-IoT project concludes, the EUCloudEdgeIoT initiative will build upon its foundation, continuing to support the development of synergies and coordination among NGIoT projects and related initiatives.

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ABBREVIATIONS

AB	Advisory Board
AI	Artificial Intelligence
AP	Access Point
CB	Coordination Board
CSA	Coordination and Support Action
CTF	Communication Task Force
IoT	Internet of Things
KPIs	Key Performance Indicators
ML	Machine Learning
NGIoT	Next Generation Internet of Things
WP	Work Package

1   INTRODUCTION

This deliverable "Dissemination and Communication Report'' is prepared in the context of Work Package 5 (WP5 - AMPLIFIER).

As EU-IoT is a Horizon 2020 (H2020) Coordination and Support Action (CSA) to support and coordinate research and innovation efforts led by several other H2020 projects focusing on Next Generation Internet of Things (IoT), dissemination and communication are integral both at the service of the EU-IoT CSA, but also at the service of the overall NGIoT initiative.

WP5 closely interacts with the other WPs within the EU-IoT project, with the EC and with the set of relevant H2020 projects. Coordination with these latter entities is ensured via regular meetings of the Communication Task Force (CTF) gathering dissemination and communication partners from all H2020 projects and the EC.

1.1   Purpose of this deliverable

This Dissemination and Communication Report outlines the extensive dissemination and communications activities to amplify IoT projects and community efforts, as well as giving an outline of the tools and actions for awareness creation and engagement of all target stakeholders.

This Deliverable builds on the strategic framework established in the Deliverable, 'D5.1 Marketing and Communication Strategy and Plan'' for the reporting period (October 2020 - March 2022) and aims to depict overall dissemination and communication activities:

- Describe communication and engagement activities that have been implemented, monitored and evaluated.

- Depict how the methods, tools and promotional materials have been used in the project's dissemination and communication.

- Provide a complete overview of the communication activities.

The EU-IoT project's communication and dissemination strategy has progressed through three phases. **In Phase I (months 1-6)**, the focus was on establishing the project's foundation, targeting key stakeholders, and defining liaisons within the IoT ecosystem. This involved creating a brand toolkit and guidelines, launching communication channels, circulating the first edition of the EU-IoT e-newsletter, and publishing a strategy White Paper. Several key actions took place, such as engaging with the Expert Group, mapping strategic areas, and initiating communications through participation in events. **Phase II (months 7-18)** emphasized amplified and coordinated outreach, aimed at active community engagement and raising interest in the project. Key aspects included knowledge-sharing, documentation of best practices, consultations, road mapping activities, and standardization efforts. This phase saw the organization of the first EU-IoT Forum, publication of success stories, and increased social media activity. Reports and recommendations on research priorities, community engagement, and best practices were also published. **Phase III (months 19-30)** focused on creating a long-lasting impact by engaging stakeholders broadly and fostering early adoption of products and innovative concepts. The goal was to establish an inclusive and sustainable collaborative framework for a human-centric IoT made in Europe. Activities in this phase included producing promotional materials, scientific publications, strategic white papers, and maintaining liaisons with relevant research and innovation projects. Increased social media presence, webinars, and participation in and organization of events, such as IoT Week and EU-IoT Hackathon, further supported this effort.

In the reporting period, the EU-IoT project has implemented a phased approach to communication and dissemination, starting with foundational work, followed by amplified outreach, and finally focusing on creating a lasting impact. The project has successfully engaged stakeholders, fostered collaboration, and promoted the human-centric IoT vision throughout its lifecycle.

Figure 1: EU-IoT high-level dissemination and communication timeline

1.2 Structure of the Dissemination and Communication Report

This report is structured as follows:

- Section 1 gives the Introduction and overview.

- Section 2 Dissemination, Communication at the service of the NGIoT Community outlines the objectives of communication and dissemination as well as the audience and stakeholders.

- Section 3 Dissemination & Coordination in action outlines the main communications actions of the initiative.

- Section 4 outlines the main achievements of the communication and dissemination measures.

- Section 4 Conclusions and next steps gives an indication of the work that will be carried out by the EUCloudEdgeIoT initiative.

2   DISSEMINATION, COMMUNICATION AT THE SERVICE OF THE NGIOT COMMUNITY

2.1   Objectives of dissemination & communication: communication as an Amplifier

EU-IoT aimed to support The Next Generation Internet of Things (NGIoT) Initiative by utilizing it as a consistent brand in all communication efforts. This helped to maintain continuity from the recently closed CSA with the same name, and to establish a recognizable identity for the ICT56 RIAs. The marketing and communications activities of EU-IoT were carried out internally by WP5, known as EU-IoT AMPLIFIER. This team combined impact amplification with coordination and cost-effectiveness.

To ensure effective dissemination and communication, Tasks 5.1 and 5.2 worked together closely with all other EU-IoT tasks and work packages as needed. The branding and visual identity of the NGIoT Initiative was refined, including animation of the web portal, social media channels, promotional materials, and other main communication tools.

EU-IoT had identified three key factors for their approach to marketing and communications:

- Creating awareness and recognition;
- Fostering engagement and interaction, and
- Facilitating knowledge transfer.

In order to achieve these objectives, EU-IoT offered a motif with a common identity and brand for all NGIoT projects. This included consistent branding and communication of key events, the use of common hashtags and keywords across online channels, and a NGIoT branded newsletter that gathered input from all projects. Additionally, harmonized slides, white papers, reports, templates, and promotional materials were developed to ensure a unified approach across all communication channels.

2.2   Target Audience

D5.1 Marketing and Communication Strategy and Plan (available here: https://www.ngiot.eu/download/d5-1/?wpdmdl=1562&masterkey=60a4d1db8f542) positioned EU-IoT at the hub of the overall NGIoT initiative, enabling proper support and coordination among the various relevant projects. The organization aimed to develop synergies and exchange with other relevant initiatives within the broader community, working as a network of networks.

According to D5.1, EU-IoT targeted engagement partners such as EU researchers, developers, integrators, and users as part of a European IoT core building block in the EU Digital Single Market. EU-IoT strategic stakeholders included Liaised Projects, European Security and Privacy (ESP) projects, Standardisation Bodies (SDOs), including IIC, EETF, ETSI, 3GPPP, and the ITU. EU-IoT's key stakeholders were the 6GIA SNS, the Alliance for IoT Innovation (AIOTI), the Big Data Value Association (BDVA/DAIRO), major IoT key players in Europe and beyond, open-source communities, and tech communities where open-source software is a thematic priority. Technology providers in areas where IoT may be applied, such as agriculture, manufacturing, automotive, logistics, and smart cities were also a target audience of EU-IoT.

EU-IoT guided the relevant collection, dissemination, and amplification of content to identified audiences, with input from 'multipliers' such as the Expert Group (EG), Advisory Board (AG), Coordination Board (CB), Communication Task Force (CTF), and ultimately the European Commission. Key content topics were identified and fed to projects, results were reported, and the content was positioned for the relevant audience.

To achieve this, EU-IoT published news items, blogs, press releases, and other curated stories and white/position papers, which were selectively shared across specialized channels such as the NGI portal, IoT LSP social media, NGIoT social media, etc. Calls for papers and new publications were circulated broadly within the community.

2.3 Vehicles for communication and dissemination

Below find an overview of the key structures providing access to the networks and supporting the dissemination of the NGIoT Initiative:

Structure	Relevance	Members
EU-IoT Advisory Board	Advisory Board members have a bidirectional role with regards to dissemination and communication. They are enlisted to act as communication ambassadors, leveraging their networks to promote the activities of the project and support directed dissemination of project outputs to the relevant and specific communities within which they have a particular role	https://www.ngiot.eu/advisory-board/
Communication Task Force (CTF)	The Communication Task Force (CTF) has been set up by WP5 to address specific plans and activities around communication and dissemination. It is formed by representatives of the various NGIoT projects to align on why, what, where, when and how to brand, communicate and disseminate next generation human-centric IoT efforts.	• EU-IoT • NGIoT RIAs • OPEN DEI (until October 2022) • European Commission
Coordination Board	Forum for engaging with the coordinators across all NGIoT RIAs for sharing priorities and collaborations	• EU- IoT WP Leaders • NGIOT RIA Coordinators • OPEN DEI Coordinator • EC • HADEA

2.3.1 EU-IoT Advisory Board

During the EU-IoT sessions held on 6 July 2021, 8 October 2021, and 1 March 2022, the consortium shared with the Advisory Board (AB) members the latest information on publications, events, Skills Surveys, and other dissemination activities. The AB members had a bidirectional role with regards to dissemination and communication.

On 26th September 2022, EU-IoT held an in-person session at Thon Brussels City Centre to kick off the next phase of activity for the NGIoT Initiative. The collective group of projects aimed to

shift gear with a focus on sustainability of the significant results achieved while the community progresses towards the Cloud-Edge-IoT paradigm. The session was also an important reflection point as investments, both public and private, were being taken and shaped for the next 5-8 years to come.

The session brought together leading members of the NGIoT community, including the NGIoT Coordination Board (CB), Coordinators of the ICT56 projects, EC Policy Officers, HADEA Project Officers, EU-IoT Advisory Board (AB), EU-IoT Expert Group (EG), and others related to H2020 and HEU projects in progress or recently awarded. This provided an opportunity to establish new relationships and provide inputs on key areas and topics that would impact the development of European Cloud-Edge-IoT technologies.

2.3.2 EU-IoT Communication Task Force

The Communication Task Force (CTF) played a crucial role in the EU-IoT project by ensuring coordinated communication and marketing efforts across various work packages (WPs) and NGIoT projects. Task 5.1, led by Martel, defined and orchestrated a comprehensive communication and marketing strategy to maximize the impact of the project in a broad and sustainable way. The CTF was set up as part of this task and involved communication and dissemination representatives from various NGIoT projects to align on how to best promote major achievements and calls to action at various levels, including the Open Calls.

The CTF organized and supported monthly conference calls (22 meetings by March 2023), maintained common plans and actions, and ensured proper synchronisation of presentations and promo efforts to advertise exchange programmes, open calls, and other initiatives. It also coordinated with the EC and other relevant initiatives and bodies within the IoT ecosystem and in the broader NGIoT context.

The CTF held a yearly face-to-face meeting for participants, which also involved Coordination Board (CB), members and representatives of the EC, in June 2022, during IoT Week in Dublin.

The CTF was responsible for coordinating the creation of curated content and stories, with input from NGIoT and LSPs projects and with the support of EU-IoT expert storytellers/editors. This was critical in increasing the reputation, credibility, and visibility of IoT efforts in the transition from H2020 to Horizon Europe, reaching out beyond the scientific and industrial community to policy makers, media/press, as well as civil society as a whole. The CTF's efforts helped to promote the overall ambition Europe had in leading the processes of IoT uptake across public and private sectors, highlighting the importance of the NGIoT Initiative in achieving these goals. By providing guidelines for branding, communicating, and disseminating NGIoT efforts, the CTF helped to ensure that the project's impact was maximized and sustained over the long term.

The CTF was instrumental in promoting the Open Calls of the ICT56 RIAs by promoting the workshops and sharing information about the calls on all the NGIoT channels, ensuring that the broader community was aware of these opportunities and encouraging participation.

Several meetings of the CTF were dedicated to introducing the projects to the EUCloudEdgeIoT initiative and encouraging them to join after the EU-IoT finishes, emphasizing the importance of continued collaboration and knowledge-sharing within the broader IoT community.

2.3.3 EU-IoT Coordination Board

The establishment of the Coordination Board (CB) was carried out by EU-IoT WP2 during 2021 to facilitate collaboration and synergies within the NGIoT ecosystem. The main purpose of the EU-IoT CB was to ensure consultation and dialogue with experts by establishing and coordinating the Advisory Board and Expert Group to elaborate on key strategic areas of action across the NGIoT initiative, map various relevant efforts and initiatives, and develop a guidance framework for capturing inputs from other WPs/IoT projects. The CB brought together representatives from the EC, the NGIoT CSA, the OPEN DEI CSA, and the ICT-56 RIAs.

During the EU-IoT Sessions on September 26, 2022, a dedicated meeting/workshop was held for the NGIoT Coordination Board (CB), which brought together coordinators of the ICT56 projects, EC Policy Officers, and HADEA Project Officers. This provided a valuable opportunity for members of the CB to collaborate and share insights on key strategic areas of action across the NGIoT initiative, as well as to map various relevant efforts and initiatives and develop a guidance framework for capturing inputs from other WPs/IoT projects. The meeting was held in-person for the first time and was part of a larger event aimed at bringing together leading members of the NGIoT community to establish new relationships and provide inputs on key areas and topics that will impact the development of European Cloud-Edge-IoT technologies.

2.3.4   EU-IoT Expert Group

The EU-IoT Expert Group is comprised of leading members of the European and International IoT community who provide inputs on specific aspects of relevance to the NGIoT initiative. Initially, the group focuses on topics of interest that are defined by the EU-IoT consortium in collaboration with the ICT-56 coordinators and the European Commission.

As part of the Marketing and Communication Strategy and Plan, the EU-IoT consortium engaged with the Expert Group members to produce articles that were featured on the website and promoted on social media. These articles included contributions from prominent experts in the field:

- Alexander Willner, Director of the Industrial Internet of Things (IIoT) Center, Fraunhofer Fokus: https://www.ngiot.eu/eu-iot-expert-group-dr-alexander-willner/
- Wael Elrifai, Global VP of Solution Engineering: https://www.ngiot.eu/eu-iot-expert-group-wael-elrifai/
- Christian Winkler, Senior Principal Expert IoT, Corporate Technology, Siemens AG: https://www.ngiot.eu/eu-iot-expert-group-dr-christian-winkler/
- Tiziana Ferrari, Director, EGI Foundation: https://www.ngiot.eu/eu-iot-expert-group-tiziana-ferrari/
- Rob Van Kranenburg, Director, IoT Council: https://www.ngiot.eu/eu-iot-expert-group-rob-van-kranenburg/
- Ladid Latif, Founder & President, IPv6 Forum: https://www.ngiot.eu/eu-iot-expert-group-latif-ladid/
- Jonathan Fürst, Research Scientist, NEC Laboratories Europe GmbH: https://www.ngiot.eu/eu-iot-expert-group-jonathan-furst/

3   COMMUNICATION AND DISSEMINATION IN ACTION – RESULTS AT THE END OF THE PROJECT

3.1   Active communication and dissemination of key content

To have reached its target audience and stakeholders, EU-IoT employed a combination of communication and dissemination tools. These tools comprised the NGIoT webpage, social media channels, a newly established Resources page, newsletter, and newsflashes. Curated stories, news items, white/position papers, and blogs were published and shared selectively across specialized channels. Calls for papers and new publications were also disseminated widely within the community. Furthermore, Open Calls were given a prominent position on the website during the last year to attract and engage more participants.

ACTIVITY	PULL	INTERACTIVE	PUSH
Dissemination tools: Workshops, Events, Hackathons, Publications, Video-tutorials/training	■	■	■
Social Media			■
Reports under WP3			■
Coordination Board	■		
EC policy priority	■		

Figure 2: Communications activities

3.2   Web Portal

The NGIoT website (www.ngiot.eu) served as the primary access point for the EU-IoT to gather knowledge, resources, and activities to engage with all stakeholders involved in the deployment of a human-centered IoT ecosystem. The portal was structured around dedicated areas that provided all relevant information about projects, outcomes, events, milestones, and developments.

The NGIoT website served as the main communication tool for the dissemination and communication of information related to the project and the NGIoT community. Deliverable D5.1 and D5.2 presented a full description of the website. An enhanced and upgraded version was delivered in 2021 through EU-IoT, with a focus on promoting the NGIoT initiative, outreach activities of both CSAs (NGIoT and EU-IoT) and RIAs (ICT-56 RIAs), as well as liaised initiatives, ecosystems, projects, and the broader IoT community. Further enhancements were delivered in 2022.
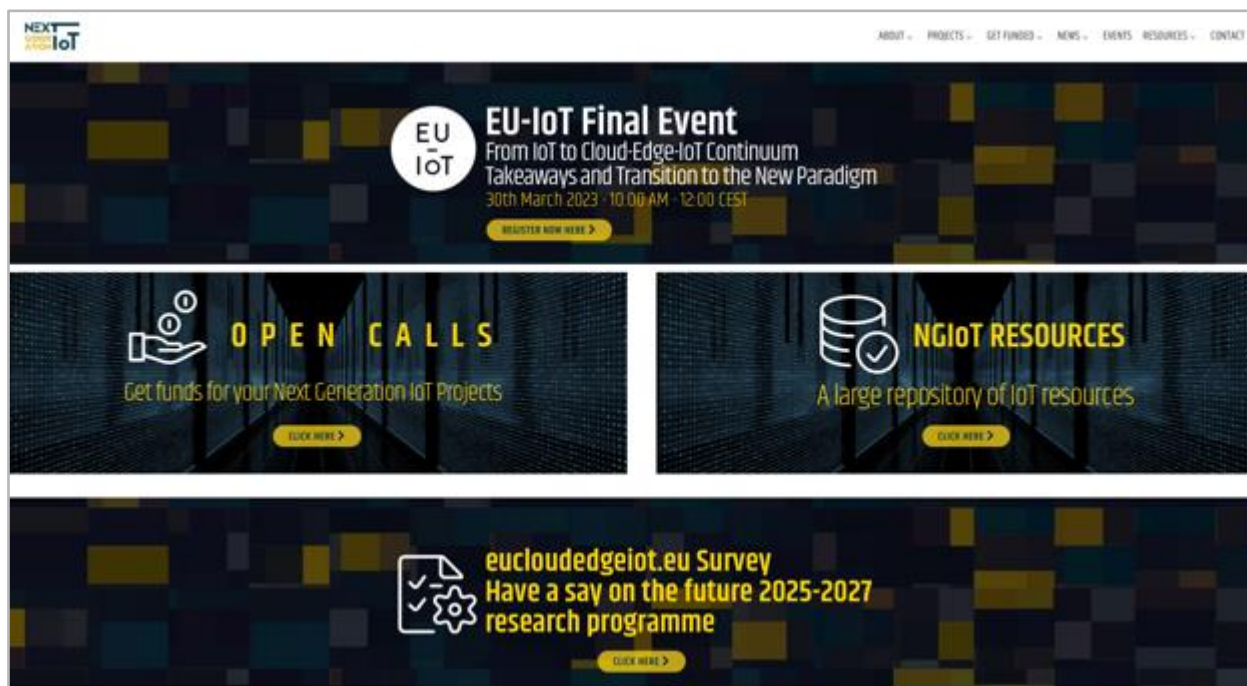
Figure 3: The homepage of the website in March 2023

The NGIoT website served as the primary point of entry for stakeholders to access a wealth of information on the NGIoT ecosystem, including reports, activities, events, databases, and catalogues. Special attention was given to promoting the Open Calls from the RIAs (ICT-56 RIAs), which are prominently displayed at the top of the main page, providing clear information about funding opportunities offered by the Next Generation Internet on Things projects. In addition, the website provides easy access to the most relevant documents produced by the consortium, such as white papers, policy papers, and scientific papers, which are displayed on a slider on the homepage.

Since the start of the EUCloudEdgeIoT initiative, parts of the content from the NGIoT website have been shared and fed onto the EUCloudEdgeIoT portal. This includes papers, events, news, and other relevant information that helps to promote the NGIoT ecosystem and its outcomes. The NGIoT website remains an important resource for accessing information on the NGIoT community, but its content is also leveraged by the EUCloudEdgeIoT initiative to ensure that stakeholders have access to the most up-to-date information and resources.

The EU-IoT media team also created eight special sections in the Resources menu where visitors can find the most relevant information:

1. **NGIoT Resources** (https://www.ngiot.eu/archive-ngiot-resource/): to avoid duplicates, this page gatherers all the information produced during the project. The information is structured on categories, projects and types of resources. Furthermore, a search function is available to find information based on the desired keywords.

2. **White Papers** (https://www.ngiot.eu/white-papers/): this page gathers all the white papers produce by EU-IoT.

3. **Use Cases Catalogue** (https://www.ngiot.eu/use-cases/): this page show-cases novel IoT solutions and the products and services which underpin those solutions. The EU-IoT use case catalogue highlights best practices from IoT developments and deployments around the world. The catalogue of use cases will help IoT specialists to navigate and learn how novel technological solutions, disruptive business models and ambitious stakeholders contribute to growing a vibrant European IoT ecosystem.

4. **Trainings** (https://www.ngiot.eu/archive-ngiot-training/): on this page, the visitors can search and filter a set of training related to the topics of the Next Generation Internet of

Things programme. There is also a form where people can submit trainings related to Next Generation IoT.

5. **Standardisation bodies** (https://www.ngiot.eu/archive-standardisation-bodies/): in this page, visitors can search and filter standardisation bodies related to the topics of the Next Generation Internet of Things programme.

6. **Open Source Projects** (https://www.ngiot.eu/archive-for-open-source-projects/): in this page, visitors can search and filter a set of Open Source projects related to the topics of the Next Generation Internet of Things programme.

7. **Expert group page** (https://www.ngiot.eu/expert-group/)**:** Another novelty on the website is the creation of a dedicated Expert group page. This page gathers the profiles of the EU-IoT Expert Group which consists of top international experts in relevant technical/technological, research, business, policy, standardisation and legal aspects. Some of the experts published guest posts on relevant topics on the NGIoT portal.

8. **E-learning platform for digital business development** (https://www.ngiot.eu/business-development/)**.** The platform offers a range of learning modules that help innovators to understand how digital opportunities can help solve current challenges.

3.2.1 NGIoT website analytics

In the reporting period (April 2022 - March 2023), the NGIoT website had 15,720 unique visitors and 34,872 page views. The website had an average of more than 1,300 unique visitors per month. This is considered a strong performance.

Figure 4: Snapshot of the website analytics

The most visited pages of the website are:

Page		Page Views		Unique Page Views		Avg. Time on Page
		34,872 % of Total: 100.00% (34,872)		30,627 % of Total: 100.00% (30,627)		00:01:45 Avg for View: 00:01:45 (0.00%)
1. /		4,199	(12.04%)	3,608	(11.78%)	00:01:01
2. /event/horizon-europe-info-day/		1,326	(3.80%)	1,128	(3.68%)	00:05:10
3. /about/		1,267	(3.63%)	1,104	(3.60%)	00:01:51
4. /open-calls/		1,050	(3.01%)	751	(2.45%)	00:00:42
5. /standardization-bodies/		979	(2.81%)	853	(2.79%)	00:04:49
6. /ngiot-report-a-roadmap-for-iot-in-europe/		745	(2.14%)	679	(2.22%)	00:04:15
7. /event/eu-iot-final-event-from-iot-to-cloud-edge-iot-continuum-takeaways-and-transition-to-the-new-paradigm/		642	(1.84%)	577	(1.88%)	00:04:26
8. /veoneer/		637	(1.83%)	556	(1.82%)	00:02:46
9. /news/		609	(1.75%)	545	(1.78%)	00:01:11
10. /research-innovation/		596	(1.71%)	444	(1.45%)	00:00:53

Figure 5: Most visited pages on the website

According to available analytics, the website traffic shows how visitors arrived at the NGIoT portal: organic search, direct traffic, social media and email.

Default Channel Grouping	Acquisition		
	Users	New Users	Sessions
	15,720 % of Total: 100.00% (15,720)	15,664 % of Total: 100.01% (15,662)	21,147 % of Total: 100.00% (21,147)
1. Direct	7,516 (46.18%)	7,478 (47.74%)	8,954 (42.34%)
2. Organic Search	6,306 (38.74%)	6,016 (38.41%)	8,482 (40.11%)
3. Referral	1,598 (9.82%)	1,393 (8.89%)	2,387 (11.29%)
4. Social	833 (5.12%)	755 (4.82%)	1,297 (6.13%)
5. Email	22 (0.14%)	21 (0.13%)	25 (0.12%)
6. (Other)	2 (0.01%)	1 (0.01%)	2 (0.01%)

Figure 6: The website traffic shows how visitors arrived at the NGIoT portal

According to the data, the NGIoT website received a total of 15,720 unique visitors during the given period:

- Out of these visitors, 7,516 (approximately 48%) accessed the website directly by typing the URL or using a bookmark. This could mean that these visitors were already familiar with the website and actively sought it out.

- 6,306 visitors (approximately 40%) came to the website through organic search, which means they found the website by searching for keywords related to the NGIoT ecosystem on search engines like Google. This indicates that the website has a good search engine optimization (SEO) strategy in place.

- 1,598 visitors (approximately 10%) came to the website through referrals, meaning they clicked on a link from another website that directed them to the NGIoT website. This could mean that the website is being shared and recommended by other relevant websites, indicating good collaboration and partnerships within the NGIoT community.

- 833 visitors (approximately 5%) came to the website through social media channels, indicating that the NGIoT team is actively promoting the website and its content on social media platforms.

- Finally, only 22 visitors (less than 1%) came to the website through email campaigns, indicating that email may not be the most effective way to drive traffic to the website.

Overall, the data suggests that the NGIoT website is performing well in terms of direct traffic and organic search, indicating that the website is easily accessible and discoverable by those actively seeking information on the NGIoT ecosystem.

3.3 Social Media

EU-IoT animated the well-established social media channels already in place through the existing NGIoT project. This was used to funnel the NGIoT initiative activities, news, and events. As such, EU-IoT was the 'invisible hand' behind the social media channels. The branding of the NGIoT was revamped by the new visual identity as described in document D5.2: Brand toolkit and guidelines.

As such, EU-IoT was well represented on social media via a strong Twitter account, a LinkedIn profile, and a YouTube channel, which were exploited to build a growing community and were linked to the project's website.

The media team it has determined that Facebook was not an effective platform to reach its target audience and the resources and time needed to maintain a presence on the platform were not justified by the potential benefits. As such, the project team may have chosen to focus on other social media channels that proved to be effective in engaging with the NGIoT community.

3.3.1 Twitter

Twitter is a fast and effective communication tool that allows real-time interactions and has high potential outreach towards EU-IoT's target audience through the use of hashtags and thematic tweets.

The Twitter account @NGIoT4eu (https://twitter.com/NGIoT4eu) has over 1,166 followers. The editorial team posted at least one tweet per day, often more, regarding relevant NGIoT content, upcoming events, or curated news stories. In addition, they retweeted relevant and interesting content from diverse sources. By following relevant users, EU-IoT gained access to more relevant

content and updates and acquired more followers. During the reporting period, @NGIoT4eu tweets earned 567,800 impressions, with 297 tweets, an average of 24 tweets per month.

The top tweets for January, February and March 2023 from @NGIoT4eu are listed below:

Figure 7: Snapshots of the NGIoT Twitter channels

3.4 LinkedIn

LinkedIn, a professional networking platform, is a valuable tool for amplifying news shared on the NGIoT website and facilitating discussions among NGIoT experts and stakeholders. The NGIoT LinkedIn Group, named 'Next Generation Internet of Things', has over 281 members and allows the publication and moderation of content from various players. It provides an active space for multiple voices and contributions relevant to NGIoT.

Figure 8: Snapshot of the NGIoT LinkedIn group

In the reporting period, the NGIoT LinkedIn Group had over 100 posts.

Engagement highlights ⊘

101
Posts
▲1% past 7 days

3,523
Post views
▲4% past 7 days
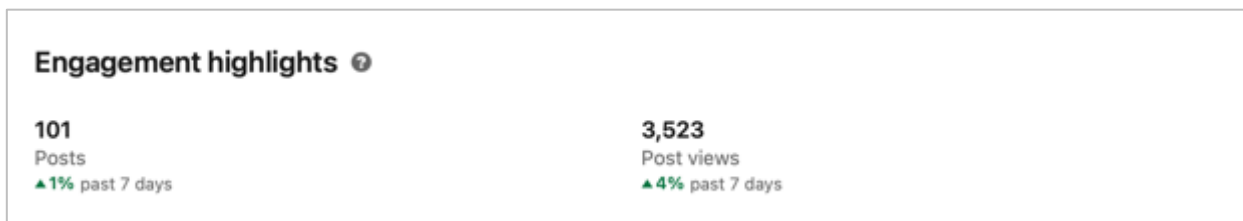
Figure 9: Engagement highlights from the NGIoT LinkedIn Group

The analytics on LinkedIn provided also insights into industry from which the group members come from. This information was used to better understand the audience and tailor content and communication strategies to effectively reach and engage with them.

IT Services and IT Consulting · 26.6%

Research Services · 11.9%

Software Development · 8.3%

Telecommunications · 7.2%

Higher Education · 5%

Business Consulting and Services · 3.2%

Computer Networking Products · 2.5%

Computer and Network Security · 2.2%

Government Administration · 2.2%
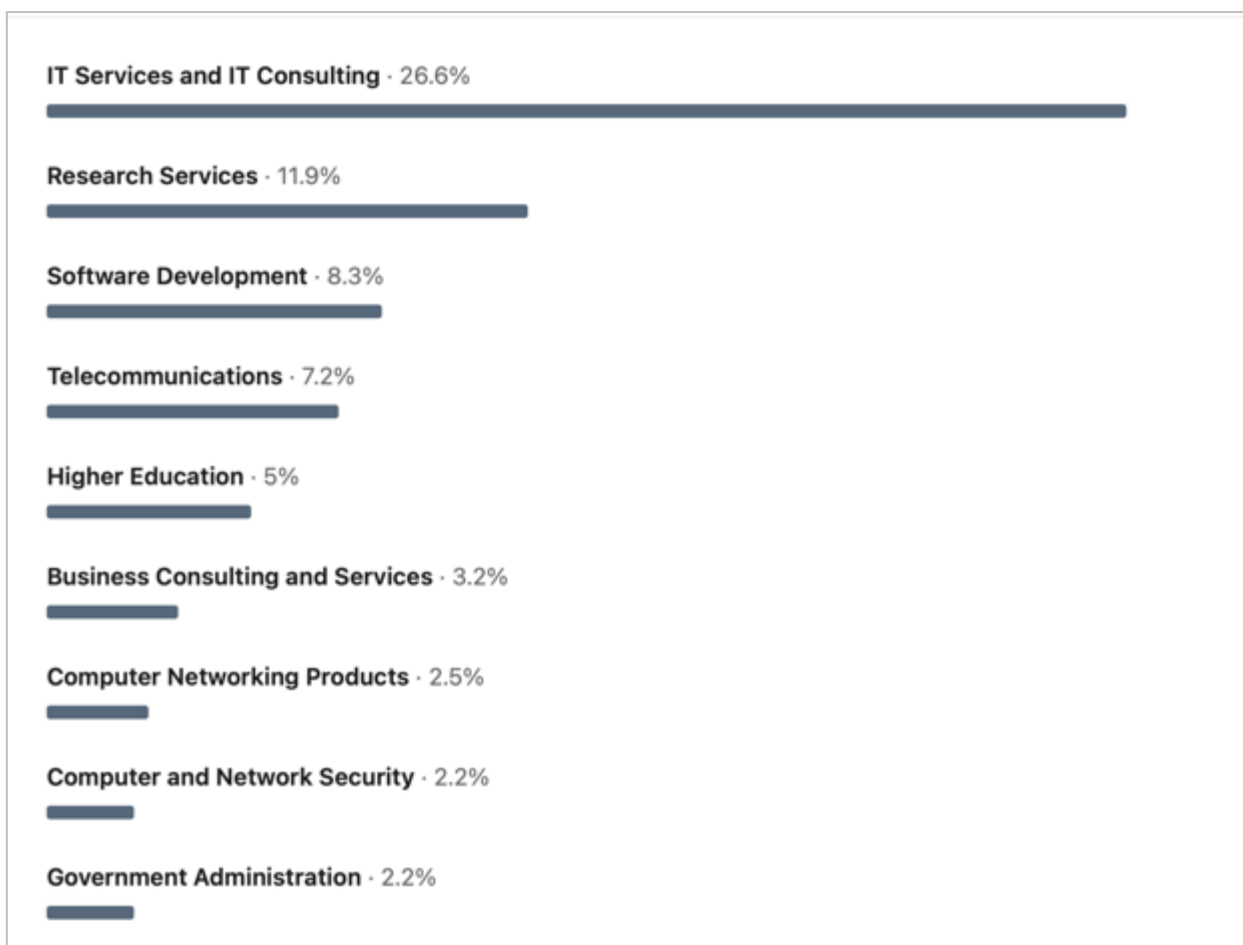
Figure 10: Insights from LinkedIn analytics

As will be mentioned further below, It is worth to mention here that the latest EU-IoT White Paper "The EU-IoT Framework for Internet of Things Skills: Closing the Talent Gap", had has over 15.500 views on the LinkedIn page of John Soldatos.

3.4.1 YouTube

The NGIoT YouTube channel, titled 'NGIoT Next Generation Internet' (https://www.youtube.com/@ngiotnextgenerationinterne5708), features playlists dedicated to events, video presentations, and interviews with relevant stakeholders.
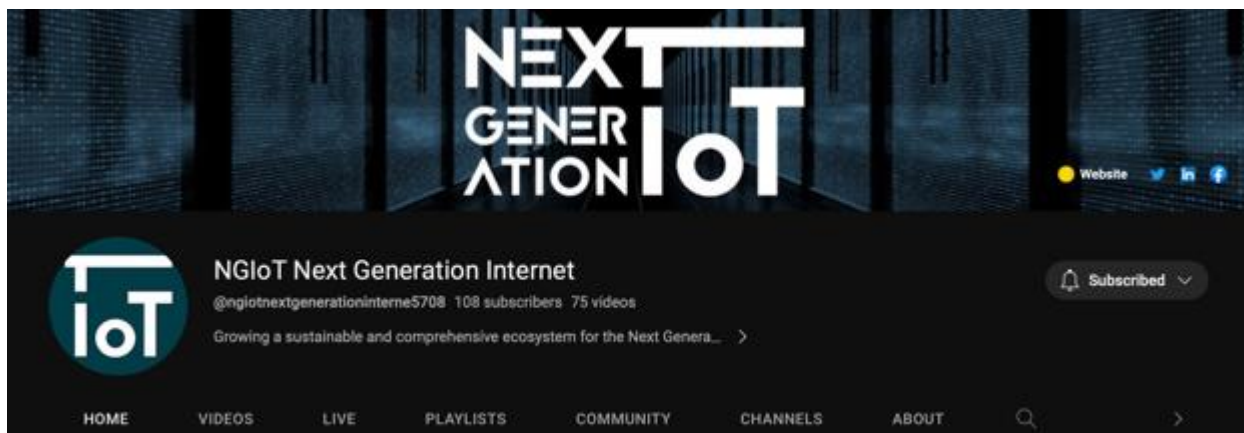
Figure11: NGIoT Youtube channel

During the reporting period, the channel had 108 subscribers, 75 videos with over 3,100 total views. All videos are also available in the resources section of the NGIoT website.
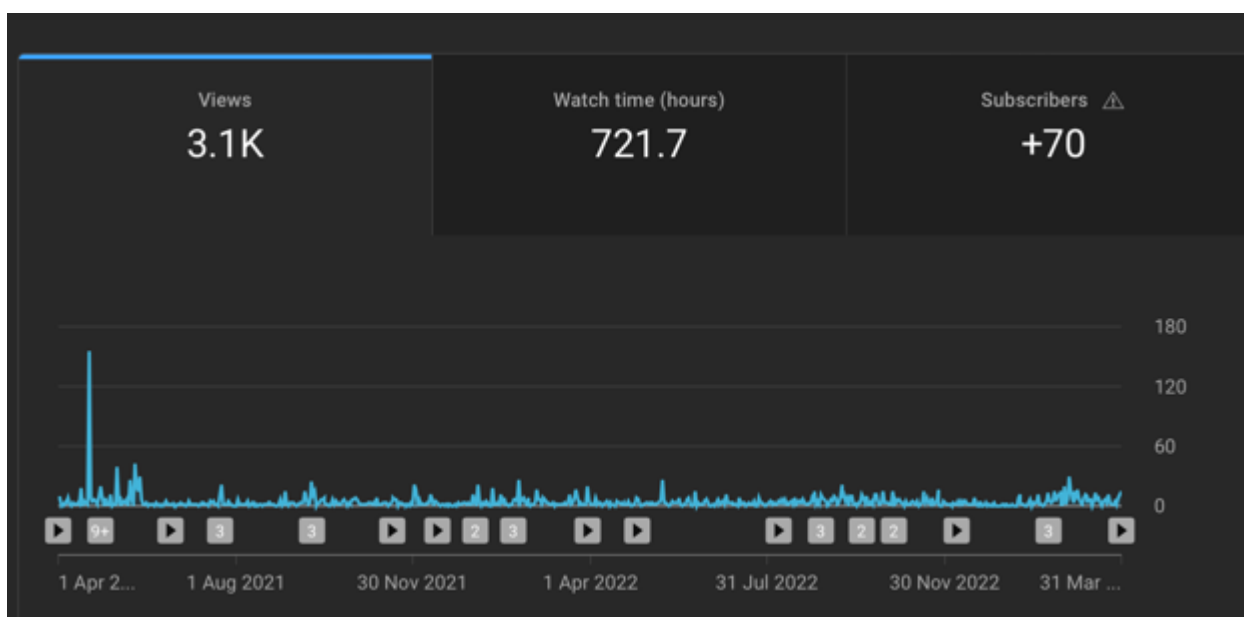
Figure 12: NGIoT Youtube channel analytics

3.5 Resources

EU-IoT set up a secure document repository for sharing information, resources, and documents among project partners. The repository is accessible to the Advisory Board, Expert Group, Communications Task Force members, and other relevant groups within the community, with curated mailing lists provided.

3.5.1 White Papers

Additionally, EU-IoT chose specific areas in well-known EU OA repositories, including Zenodo, to disseminate and communicate project-related information. Various white papers created by the consortium can now be found on Zenodo:

- The EU-IoT Framework for Internet of Things Skills: Closing the Talent Gap: https://zenodo.org/record/7544732#.ZCrlly9BwlI (DOI: 10.5281/zenodo.7544732)

- Towards a vibrant EU IoT ecosystem: https://zenodo.org/record/5837139 (DOI: 10.5281/zenodo.5837139)

- A Vision on Smart, Decentralised Edge Computing Research Directions: https://zenodo.org/record/5837299#.Yd2W9BPMLC0 (DOI: 10.5281/zenodo.5837299)

- The Internet-of-Things Open Source Ecosystem in 2021: https://zenodo.org/record/5838130#.Yd2cLBPMLC0 (DOI: 10.5281/zenodo.5838130)

Analytics data reveals that the White Papers hosted on Zenodo and on the NGIoT website have been downloaded a significant number of times. In the reporting period, these papers had more than **2,500 downloads**. This demonstrates the relevance and interest in the NGIoT initiative's work and its contribution to the development of the human-centred IoT ecosystem.

It is worth to mention here that the latest EU-IoT White Paper "The EU-IoT Framework for Internet of Things Skills: Closing the Talent Gap", had has over **15.500 views on the LinkedIn page** of John Soldatos (https://www.linkedin.com/posts/johnsoldatos_eu-iot-skills-survey-activity-7022163109817520128-BPDG?utm_source=share&utm_medium=member_desktop), while secondary reposts over 6500 views (e.g., https://www.linkedin.com/posts/johnsoldatos_iot-skills-framework-activity-7026567336388083712-jIjt?utm_source=share&utm_medium=member_desktop)

The White Paper has been reposted to various communities gaining many additional 1000s of the views e.g., >2.600 views in the LinkedIn group for IoT: https://www.linkedin.com/feed/update/urn:li:activity:7034127571055255552/. The paper has been repost by several other IoT experts e.g., Dr. Spiliopoulos, IoT Strategist at Amazon (https://www.linkedin.com/posts/spiliopoulosdimitrios_iot-sills-framework-eu-iot-activity-7034778943643623426-wGQt?utm_source=share&utm_medium=member_desktop) leading to 100s of interactions.

3.5.2 NGIoT Use Cases Catalogue

The NGIoT Use Case Catalogue offers a comprehensive collection of innovative IoT solutions, highlighting best practices from around the world. This unique resource showcases disruptive business models and ambitious stakeholders contributing to a vibrant European IoT ecosystem. Professionals, researchers, developers, end-users, and anyone interested in the potential of IoT can browse solutions by sector, technology domain, or geographical origin, and connect directly with the stakeholders involved.
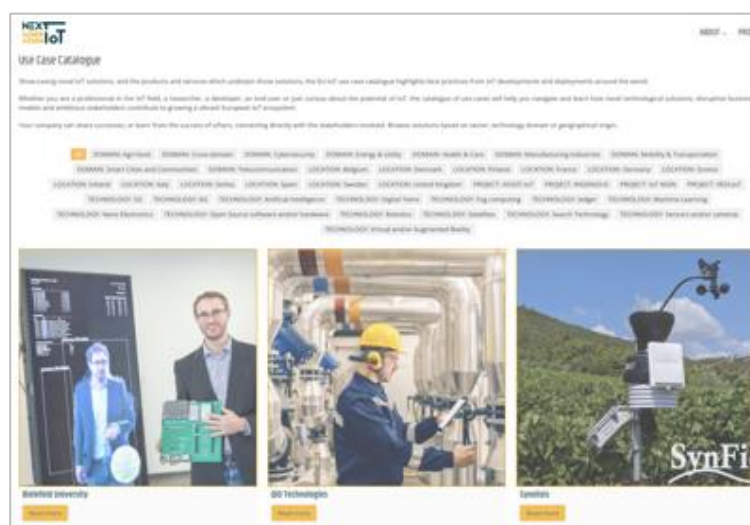
Figure 13: Snapshot of the NGIoT Use Case Catalogue on the NGIoT website

During the reporting period, the EU-IoT Use Case Catalogue was promoted on social media, with a dedicated use case being featured every day, resulting in 1200 impressions on Twitter. The page on the website received 565 unique visitors, indicating the high interest and engagement of the NGIoT community. Additionally, visitors were able to fill out a feedback survey on their plans for using the showcased use cases, providing valuable insights for the consortium.

Feedback	Use case
Yes, I will use and quote the case	https://www.ngiot.eu/veoneer/
Yes, I will use and quote the case	https://www.ngiot.eu/veoneer/
Yes, I will use and quote the case, Yes, I will use the case for teaching	https://www.ngiot.eu/asti-mobile-robotics/
Yes, I will use and quote the case	https://www.ngiot.eu/bielefeld-university/

Table 1: Results from the feedback survey for the NGIoT Use Cases Catalogue

3.5.3   E-learning platform for digital business development

The EU-IoT e-learning platform for digital business development provides a range of learning modules that offer guidance and tools for working with new business models leveraging digital technologies. The platform supports a complete business model innovation process and targets European industry stakeholders with untapped potential to exploit digital opportunities. The 12 learning modules offer resources to progress in digital transformation and build the related skills. The platform aims to disseminate new knowledge, systematic methods, and concrete tools to strengthen the European industry in today's digital world and the future.
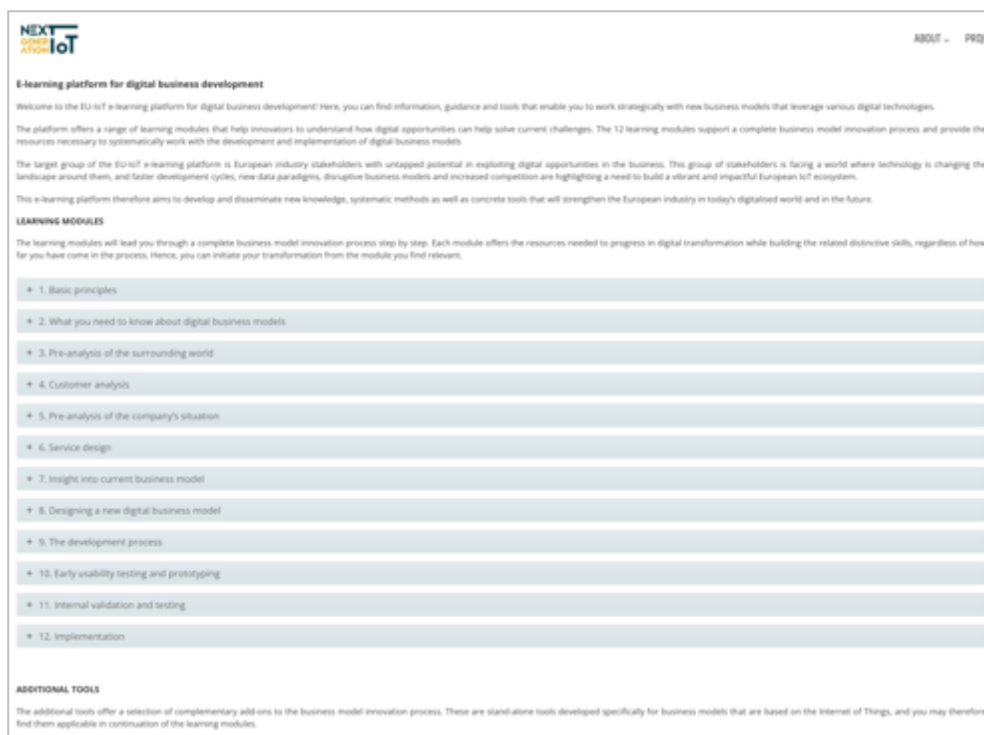
Figure 13: Snapshot of the E-learning platform on the NGIoT website

In the reporting period, this page had around 130 visitors and the social media post gathered 260 impressions. The lower number of impressions on Twitter and visit to the website can be attributed to the smaller and more specialized target audience of the e-learning platform.

3.6 Promotional Material

As part of its Marketing and Communications Strategy, EU-IoT created various promotional materials to increase visibility and awareness of the NGIoT initiative. These include visually appealing designs for virtual events (during the COVID-19 pandemic). When the in-person events were resumed, NGIoT produces a backdrop and flyers for the IoT Week 2022 in Dublin. These materials were used to showcase the NGIoT initiative, attract new stakeholders, and increase engagement with the community.

Figure 14: NGIoT flyers and booth at IoT Week 2022 in Dublin

3.6.1 Interviews with the Open Calls winners

As part of the communication and dissemination strategy, the media team place focused on the Open Calls winners of the ICT56 RIAs. In this regard, several interviews were produced and distributed on the social media channels.

- Interview with Project FLAIR: Project FLAIR– Federated Learning Extension for Very Efficient Deep Learning in IoT was selected in the VEDLIoT project Open Call (https://youtu.be/9GAKako8YFY).

- Interview with Honey.AI: Project Honey.AI – The Evolved and Optimized AI-related IoT solution for the honey industry was selected in the VEDLIoT project Open Call (https://youtu.be/NkXiQnlqD8I).

- Interview with Project DUNE: Project DUNE RCO – Deep Learning for Multi-Technology Fusion in Industrial Indoor Asset Localization and Tracking was selected in the VEDLIoT project Open Call (https://youtu.be/ykx4kMiCtuE).

- Interview Project Smart Sonia: Project SMART SONIA: occupational Safety mONitoring and Interventions for heAlth, from DotSoft (Greece) was selected in the first ASSIST-IoT Open Call (https://youtu.be/UXYZTL-2L-c).

3.7 Newsletter and Newsflash

To keep all the target stakeholders informed, e-newsletters and newsflashes were regularly sent out, which include highlights, updates, and announcements about ongoing NGIoT RIAs, events, open calls, success stories, and more. Shorter and more frequent newsflashes are issued to promote highlights and broadcast announcements, while the newsletters were sent out at regular intervals. The newsletters and newsflashes are stored on the NGIoT web portal, and also shared on social media channels to increase their impact and reach.

In the reporting period, NGIoT sent 2 newsletter and 8 newsflashes. The number of views of the electronic newsletter is over 1,500.
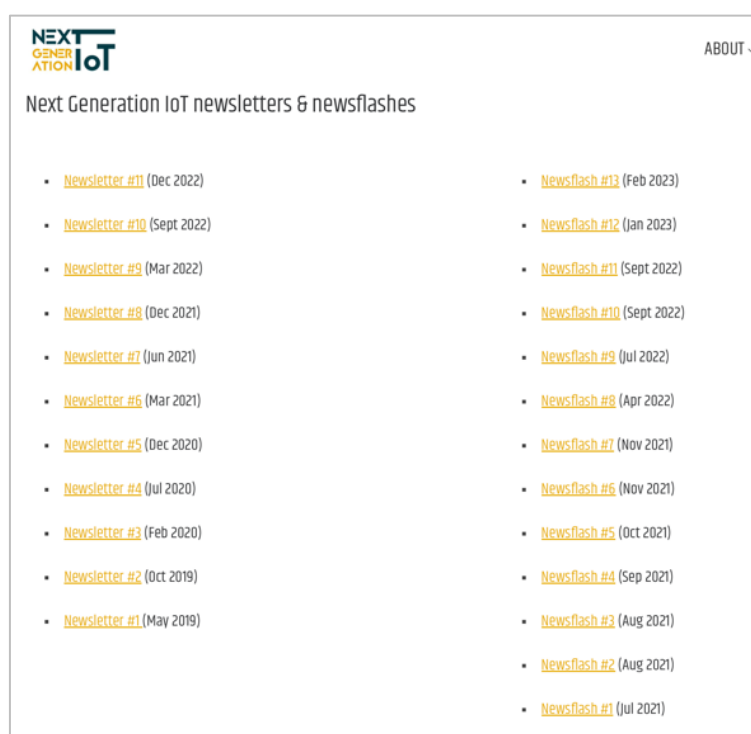
Figure 15: NGIoT e-newsletters and newsflashes

One final newsletter is scheduled for April 2023, to encourage the NGIoT community to join the EUCloudEdgeIoT initiative.

3.8 Events

In the reporting period, WP5 worked with WP3 to organize events in the NGIoT ecosystem. The events used dynamic, interactive, and participatory techniques to engage attendees and foster creativity. Prominent experts were invited to speak, thematic panels were animated, demos were showcased, and hands-on sessions were provided for collaborative exchange of experiences. EU-IoT also organized trainings and expert workshops to foster consultation and discussions on specific strategic aspects to provide proper guidance to the community.

3.8.1 Events organised by EU-IoT

EU-IoT partners collaborated to deliver a series of webinars and workshops for both general audiences and targeted groups. These events were promoted through NGIoT social media channels, the news section of the NGIoT website and the NGIoT newsletter. To ensure smooth coordination, a shared Excel sheet template on Google Drive was created to list all webinars and workshops, allowing the consortium to keep track of the partners' schedule and reports. WP leaders followed a common process before and after the webinar. All webinars were posted on the NGIoT website's Events and Resources pages and were widely disseminated through social media.

A list of webinars and workshops held in the reporting period:

1. NGIOT Community Events: EV charging – A case for the edge?

On 29 April 2021, the NGIoT initiative hosted an event that focused on the ever-growing electric vehicle market and how it will bring changes to energy grids. The event highlighted the technical differences between edge and cloud approaches, featuring the Smart Energy Grid Active Monitoring/Control Living Lab from the IoT-NGIN project as a specific application. Industry experts debated the opportunities and barriers that will arise, ultimately questioning if investing in a federated and novel edge is worth it. More info here: https://www.ngiot.eu/event/ngiot-community-events-ev-charging-a-case-for-the-edge/

Figure 16: Visual of the NGIOT Community Events: EV charging – A case for the edge?

2. Business model for Digital Platforms: A co-design workshop for digital platforms in Energy, Manufacturing, Agrifood and Healthcare

On 18 May 2022, this workshop was organised by OPEN DEI in collaboration with EU-IoT and aimed at supporting the projects in designing the business model for their digital platforms. The event was organized in three main parts. In the first part, an overview and introduction of the business modelling methodology were presented to the participants. In the second part, participants were divided into 4 groups (Energy, Manufacturing, Agrifood and Healthcare) and based on the presented methodology in part 1 worked together to co-design a domain-based business model. Finally, in part 3, each group moderator presented the designed business model for the domain to all the participants. More info here: https://www.ngiot.eu/event/business-model-for-digital-platforms-a-co-design-workshop-for-digital-platforms-in-energy-manufacturing-agrifood-and-healthcare/

3. NGIoT at IoT week 2022

At IoT Week 2022 in Dublin (20-23 June 2022), the NGIoT Initiative presented the future European roadmap for research and innovation, covering key themes, trends, and drivers of adoption in IoT. The event featured a half-day session with speakers like Monique Calisti, Rolf Riemenschneider, and Tanya Suárez, discussing strategic directions and exploring the drivers of adoption. Additionally, there was a workshop highlighting IoT projects and demonstrating use cases in the domains of Energy, Manufacturing, Agriculture, Automotive and Small Ports, featuring the results and upcoming opportunities of the projects' open calls. The NGIoT session had over 100 attendees, and the Advancing at the Edge of Convergence session had 70 attendees. More info here: https://www.ngiot.eu/event/iot-week-2022/

4. EU-IoT IDEAthon/Hackathon 2022

On 27-29 June 2022, EU-IoT organised the EU-IoT/EFPF Hackathon, co-located with the 12th CONASENSE symposium. The Hackathon focused on mobile sustainable IoT solutions and brought together more than 140 registered participants from all across the world. As a result of the two-day hackathon, 15 teams were selected for pitching, with the presentation of innovative ideas for mobile sustainable IoT solutions in several domains: IoT Interfaces (Augmented Reality Interfaces based on the Smart Mirror concept), Far Edge (Sustainable IoT via TinyML), Near Edge (Sustainable MEC applications), Infrastructure (Simulating Time-sensitive and Deterministic networking IoT applications), Data Spaces (Sustainable, user-centric smart mobility), and European Factory Platform (IoT services for Manufacturing). More information here: https://www.ngiot.eu/eu-iot-hackathon-winners-announced-three-solutions-for-mobile-sustainable-iot/

Figure 17: Visual of the EU-IoT IDEAthon/Hackathon 2022

5. EU-IoT and OntoCommons Workshop - Ontological interoperability, standardisation recommendations discussion

On 7 July 2022, EU-IoT and OntoCommons organised this online meeting focused on the theme of semantic interoperability and the role of ontologies in providing it. The meeting was jointly organized by the EU-IoT and OntoCommons and aimed to discuss the current status of ontological interoperability, providing feedback on recommendations and addressing the coordination of standardization efforts. More info here: https://www.ngiot.eu/eu-iot-and-ontocommons-workshop-report/

Figure 18: Visual of the EU-IoT and OntoCommons Workshop

6. ASSIST-IoT Open Call Webinar #1 – Overview

This webinar was organised on 6 September 2022 by EU-IoT and conducted by the ASSIST-IoT team for presenting their upcoming funding opportunity through ASSIST-IoT Open Call. More info here: https://www.ngiot.eu/event/assist-iot-open-call-webinar-1-overview/

Figure 19: Visual of the ASSIST-IoT Open Call Webinar #1

7. ASSIST-IoT Open Call Webinar #2 – Eligibility criteria and challenges' analysis

On 13 September 2022 EU-IoT organised and promoted this webinar conducted by the ASSIST-IoT team for presenting their upcoming funding opportunity through ASSIST-IoT Open Call. More info here: https://www.ngiot.eu/event/assist-iot-open-call-webinar-2-eligibility-criteria-and-challenges-analysis/

Figure 20: Visual of the ASSIST-IoT Open Call Webinar #2

8. Funding opportunities from NGIoT

On 15 September 2022, EU-IoT organised this session aimed to facilitate the open call process by sharing experiences from previous participants in IoT projects, informing attendees about ongoing and future opportunities, and providing an understanding of the procedure. Open call coordinators, EU-IoT representatives, and successful participants from previous open calls were present, along with individuals and organizations interested in funding their IoT ideas. More info here: https://www.ngiot.eu/event/funding-opportunities-from-ngiot/

Figure 21: Visual of the Funding opportunities from NGIoT workshop

9. ASSIST-IoT Open Call Webinar #3 – Overview and Q&As

On 4 October 2022 EU-IoT organised and promoted the third webinar conducted by the ASSIST-IoT team for presenting their upcoming funding opportunity through ASSIST-IoT Open Call. More info here: https://www.ngiot.eu/event/assist-iot-open-call-webinar-3-overview-and-qas/

Figure 22: Visual of the ASSIST-IoT Open Call Webinar #3

10. TERMINET Open Call Webinar

On 12 October 2022, EU-IoT organised and promoted the TERMINET project webinar for presenting their funding opportunity through the TERMINET Open Call. More info here: https://www.ngiot.eu/event/terminet-open-call-webinar/

Figure 23: Visual of the TERMINET Open Call Webinar

11. Horizon Europe Info Day & Pitch Session

The European Commission invited stakeholders from industry, academia and innovators to participate in the Horizon Europe Info Day on 30 January 2023. The event was an Information Session on the Horizon Europe Work Programme 2023-2024 on "World leading data and computing technologies" and offered participants a unique opportunity to pitch concrete ideas in front of leading research organisations and cutting-edge innovators from across industry. More info here: https://www.ngiot.eu/horizon-europe-info-day-recording-and-presentations/

Figure 24: Visual of the Horizon Europe Info Day & Pitch Session event

12. NGIoT Community Events: Evolving manufacturing in Europe – the role of Edge Computing

On 16 February, the NGIoT initiative, coordinated by EU-IoT, organized a community event to explore the role of Edge Computing in evolving the manufacturing sector in Europe. The event focused on the challenges and opportunities in moving from a Cloud-centric manufacturing approach to an Edge-Cloud based one. The event presented recent manufacturing use-cases from two flagship projects: iNGENIOUS, focusing on IoT and Edge computing, and the KnowlEdge project, focusing on platform design and implementation based on AI for supporting the manufacturing sector. The event also hosted a panel session with representatives of the flagship projects, a large-scale manufacturer, a manufacturing SME, and a manufacturing association. The panel discussed the challenges and opportunities for Edge-based services in Manufacturing. More info here: https://www.ngiot.eu/ngiot-community-events-evolving-manufacturing-in-europe-with-edge-computing/

Figure 25: Visual of the NGIoT Community Events: Evolving manufacturing in Europe

13. NGIoT Reusability Workshop on Call for Abstracts

On 22 February 2023, this closed workshop aimed to compile valuable insights on the market challenges regarding reusability plans for developed components of use cases within the ICT-56 RIAs. The topic of reusability included an array of reusability possibilities, such as interoperability and openness. More info here: https://www.ngiot.eu/event/ngiot-reusability-workshop-on-call-for-abstracts/

Figure 26: Visual of the NGIoT Reusability Workshop on Call for Abstracts webinar

14. EU-IoT Final Event: From IoT to Cloud-Edge-IoT Continuum – Takeaways and Transition to the New Paradigm

On 30 March 2023, the EU-IoT consortium invited the wider community to attend the Showcase Event, which marked the end of the 2-year project. The project aimed to transform the current IoT community of researchers and innovators in Europe into a cohesive, dynamic, participatory and sustainable ecosystem as part of a Next Generation Internet. The event featured presentations from key stakeholders, reflecting on achievements and lessons learned, exploring the future of IoT in Europe, and showcasing some of the most important outcomes of the project. The EUCloudEdgeIoT initiative was also introduced as a follow-up to the work done on EU-IoT. More info here: https://www.ngiot.eu/event/eu-iot-final-event-from-iot-to-cloud-edge-iot-continuum-takeaways-and-transition-to-the-new-paradigm/

Figure 27: Visual of the EU-IoT Final Event: From IoT to Cloud-Edge-IoT Continuum

3.8.2 EU-IoT participation in IoT-related events

EU-IoT contributed to various IoT community events through different Work Packages (WPs). Their participation included keynote speeches, presentations, dedicated sessions, exhibitions, and more. By participating in these events, EU-IoT aimed to showcase their results and efforts within the community, and also raise awareness of their mission to foster knowledge transfer and create a positive impact at the scientific, technological, and business level. This helped to promote EU-IoT's efforts not only within the community but also at the policy level.

A list of IoT-related events participation in the reporting period:

1. Mobile World Congress Barcelona 2022 (28 February – 3 March 2022)
2. OPEN DEI Digital maturity of key domains in Europe for uptake of Digital Transformation (3 March 2022)
3. European Factory Platform (EFPF) Hands on Event (11 March 2023)
4. VEDLIoT Open Call Webinar (25 March 2022)
5. Privacy Symposium 2022 (5 April 2022 – 7 April 2022)
6. The Need for IoT Security Standards & Certification. Global IoT Day Roundtable (8 April 2022)
7. Knowledge Sharing on Business models for Digital Platforms in Energy domain: Best Practices by PLATOON project (21 April 2022)
8. OPEN DEI Knowledge Sharing on Business support methodology and business modelling for Digital Platforms in Agrifood domain: Best Practices and Lessons Learnt by IoF2020 project (5 May 2022)
9. ASSIST-IoT workshop at IoT Week 2022 (21 June 2022)
10. AIOTI Signature Event 2022 (27 September 2022)
11. European Research and Innovation Days 2022 (28 September - 29 September 2022)
12. IECON 2022 Conference (17 October – 20 October 2022)
13. Virtual info day for second Connecting Europe Facility (CEF) Digital calls (25 October 2022)

14. OPEN DEI Final Event (27 October 2022)

15. IntelIIoT Open Call: Ask Us Anything Session (8 November 2022)

16. Info session on Horizon Results Booster – steering research towards a strong societal impact (17 November 2022)

17. European Big Data Value Forum (21 November – 23 November 2022)

18. NGI High-level expert webinar: Internet Commons and Digital Sovereignty (31 January 2023)

EU-IoT project will participate in the **Concertation and Consultation on Computing Continuum: From Cloud to Edge to IoT on May 10-11 in Brussels**. The event will discuss the technical and business convergence of Cloud, Edge, and IoT domains towards an open computing continuum, promoting efficiency, security, and open standards.
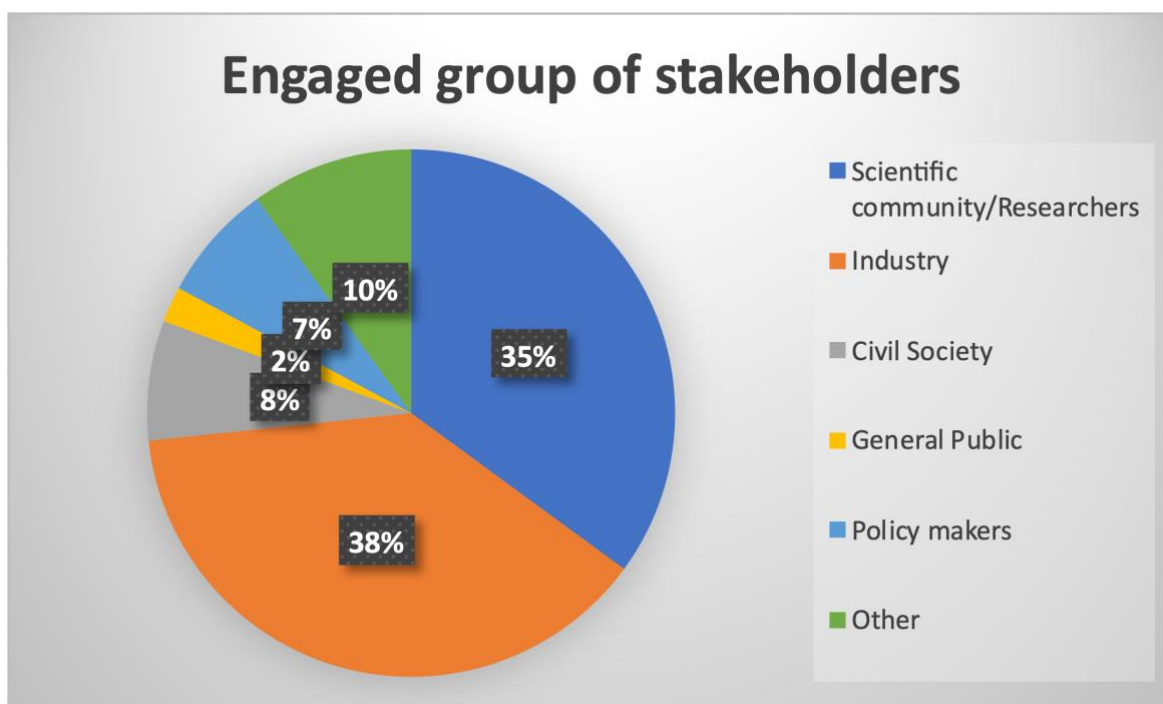

Figure 28: Engaged group of stakeholders

3.9 Publications

In the reporting period, the EU-IoT partners have produced several scientific publications that have been published in journals and conferences, effectively disseminating the results and findings of the project to the wider research community.

2022 IEEE International Conference on Pervasive Computing and Communications Workshops and other Affiliated Events (PerCom Workshops), 2022, pp. 433-438	<u>An Evaluation of a Semantic Thing To Service Matching Approach in Industrial IoT Environments,</u>	N. Bnouhanna, E. Karabulut, R. C. Sofia, E. E. Seder, G. Scivoletto and G. Insolvibile	April 2022
IEEE/IFIP Networking 2022	<u>A Proposal for Time-Aware Scheduling in Wireless Industrial IoT Environments</u>	B. Schneider, R. C. Sofia. M. Kovatsch	Apr 2022
IEEE WPMC2022	<u>Fine Time Measurement Based Synchronisation for Industrial Wireless/Wired Networks</u>	S. Mohan, R. C. Sofia	Nov 2022
IEEE Access	Dynamic, Context-aware Cross-layer Orchestration of Containerized Applications: a Perspective	R. C. Sofia, D. Dykeman, P. Urbanetz, Akram Galal	expected to appear
River Publishers	6G CONASENSE 2023 Proceedings: advancements in 6G communications, sensing, services and sustainability	R. C. Sofia, R. Prasad, P. Rufino	expected to appear
IEEE Access	Designing Co-OFDMA Multi-AP Transmission Schemes for Industrial Wireless/Wired Environments	M. Khelifi, R. C. Sofia	expected to appear
Book	<u>6G visions for a sustainable and people-centric future – from communications to services, the CONASENSE perspective. Riverside Publishers, to appear, Jan 2023.</u>	R. C. Sofia, R. Prasad	Mar 2023
Book	Shaping the Future of IoT with Edge Intelligence	J. Soldatos, R. C. Sofia (Editors)	expected to appear
Book chapter	The EFPF Approach to Manufacturing Applications across Edge-Cloud	Rute C. Sofia, Carlos Coutinho, Gabrielle Scivolleto, Fernando Gigante	expected to appear
Book chapter	IoT Thing to Service ML-based semantic Matchmaking at the Edge	N. Bnouhanna, R. C. Sofia	expected to appear
fortiss white paper	The role of Edge AI in 6G services	R. C. Sofia (editors), multiple authors	expected to appear

4   IMPACT CREATION MONITORING

The WP5 lead closely monitored and evaluated all communication and dissemination activities to track progress using indicators defined in the Marketing and Communication Strategy and Plan. These indicators measured the outreach activity through attendance, material distributed, number of events, media presence, and social media traffic. The proposed analysis framework aimed to measure quantitative figures and the impact of promotional efforts. To meet EU-IoT needs, a five-step measurement cycle model was implemented, which included identifying objectives, setting goals for promotional tactics, identifying Key Performance Indicators (KPIs), measuring progress and impact regularly, and adjusting the communication strategy for optimal outcomes. The tools, products, and activities outlined in the strategy were monitored, evaluated, and realigned on an ongoing basis.

4.1   Dissemination and Communication KPIs

Table 2: Communication KPIs and target values

Measure	Indicators	Target (M30)	Source and methodology	M30 value
Flyers Posters/roll-ups	N. of flyers N. of posters/roll-ups *(by the end of the project)*	> 4 > 4	Distribution via participation to and organisation of dedicated events. Electronic distribution via the project website.	1 set of flyers for IoT Week 2022 1 printed all for IoT Week 2022
EU-IoT Portal	N. of unique visitors to the website *(average per year)*	> 2500	News, Publications, Open Calls corner, Videos, Newsletters, Deliverables, Success stories, etc.	15720
Social Networks *(~ new followers per year)*	N. of followers Twitter N. of followers LinkedIn	> 1000 > 300	Keeping EU-IoT profiles on such networks active via regular posting and monitoring	1166 278
e-Newsletter *(every 3 months)*	N. of views *(by the end of the project)*	> 2000	Views of the electronic newsletter	1515
e-Newsflashes *(~every 1-2 months)*	N. of issues	>15	e-Newsflashes will also be published on the website	14
News/curated contents/blogs/reports	At least 2-4 items per month	~80	Items published on the website and echoed across social media	120

Measure	Indicators	Target (M30)	Source and methodology	M30 value
Press Releases	No of press releases	At least 2 per year	Press releases will be published on the website and distributed to a list of media/journalists interested in technology/IoT topics	2
Videos	N. of videos published on the EU-IoT YouTube channel and average number of views	3 videos per year and 200 views per video	Introduction, informative and educational videos to support awareness creation and stakeholder engagement	76 with 4066 total views
Participation to physical or remote events *(as many major events are moving online)* and presentations	Number of external events partners attended to promote EU-IoT efforts	At least 20 events and presentations	Attendance proof, presented material, photos, animation of social media channels, events' reports	18
Webinars *(at least 4 by the end of the project)*	Average number of participants per webinar	~ 25-30 participants	Attendance proof, video-streaming, presented material, animation of social media channels	60
Educational workshops *(or e-workshops in case of travel restrictions/distancing measures)* involving industry and academia	Number of workshops engaging experts in support of WP5 activities	4 with at least 30-40 people at each event	Presentations, informative and promotional material, reports, photos, videos	50
Expert workshops involving invited experts	Number of workshops engaging invited experts on topics relevant to WP2 & WP3	4 workshops, 20-30 people per workshop	Presentations, informative and promotional material, reports, photos, videos	35
EU-IoT Hackathon	Average number of participants	At least 50 participants	Attendance proof, material presented, photos, event report, software developed	Organised on 27-29 June 2022

4.2 Dissemination and Communication Deliverables and Milestones

Dissemination and communication deliverables and milestones have the overall aim to support the objectives of the communication and dissemination activities of upcoming ICT-56 RIAs, while promoting the EU-IoT tools and actions at the service of the community; promote "Human-centred IoT"; communicate the overall NGIoT strategy and plans; support contributions to and adoption of open-source, pre-normative and standards and facilitate the creation of partnerships and liaisons.

Deliverables and milestones specific to this aim include the following tasks:

- **Task 5.1** Communication and marketing strategy for cross programme coordination *(Lead: Martel)*

- **Task 5.2** Dissemination and communication in action *(Lead Martel, Contributors: ALL*)*

- **Task 5.3** Impact assessment, exploitation and sustainability *(Lead fortiss, Contributors: ALL*)*

- **Task 6.2** Progress monitoring and quality assurance *(Lead Martel)*

Table 2: Dissemination and communication deliverables

#	Description	Month	Partner
D5.1	Marketing and Communication Strategy and Plan	M04 (Jan/Feb 2021)	Martel
D5.2	Brand Toolkit and Guidelines	M04 (Jan/Feb 2021)	Martel
D5.3, D5.4	Dissemination and Communication Report	M18, M30	Martel
D5.5	Impact assessment - Methodological framework	M12	fortiss
D5.6 D5.7	Guidelines for IoT collaboration sustainability - V1 & V2	M24, M30	fortiss

Table 3 : Dissemination and communication milestones

#	Milestones	Due Date
MS1	EU-IoT project kick off	M01
MS2	Outreach strategy & brand toolkit	M04
MS3	Exploitation action plan	M24

5   CONCLUSIONS AND NEXT STEPS

After two years of dedicated work and collaboration, the EU-IoT project has come to a close. The project has made significant strides towards creating a more cohesive, dynamic, participatory and sustainable IoT ecosystem in Europe. The project has been a vital accelerator for the European IoT community, supporting the development of synergies, fostering strategic coordination among Next Generation Internet of Things (NGIoT) projects and related initiatives, and promoting the adoption of IoT solutions.

Through different work packages, the EU-IoT project featured as part of other events in the IoT community, including keynote speeches, presentations, and dedicated sessions. Participation in these events helped to promote the EU-IoT project's results and efforts in the community, creating awareness about EU-IoT and fostering knowledge transfer and increasing positive impact at a scientific, technological, and business level. The project has also produced several scientific publications to disseminate the results of the project and further contribute to the IoT research community. These publications have been closely monitored and evaluated to track ongoing activities and measure the success of promotional efforts.

In conclusion, the EU-IoT project has achieved many significant milestones in creating a sustainable IoT ecosystem in Europe. The work performed will be continued by the EUCloudEdgeIoT initiative, which will build on the foundation laid by the EU-IoT project and continue to support the development of synergies and coordination among NGIoT projects and related initiatives. The IoT community can look forward to continued growth and innovation thanks to the contributions of the EU-IoT project and the ongoing efforts of the EUCloudEdgeIoT initiative.