The European IoT Hub

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

D5.3: Dissemination and Communication Report

Version 1

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Abstract

This deliverable describes the Dissemination and Communication activities and results at M18. These activities are guided by the Marketing and Communication Strategy and Plan at the service of the entire EC-driven Next Generation Internet of Things initiative. The activities described in this deliverable focus on communication activities designed to generate interest in NGIoT and IoT project activities and outcomes ensuring awareness about various initiatives, news, content, policies, standards, events, encouraging knowledge-transfer, and promoting activities related to open calls, best practices, and any other asset produced.

Keywords:

IoT, Dissemination, Communication, Marketing, Online Communication, Communications Task Force, Events, Content, Visual Identity, Web Portal, Social Media, Promotional Material, Newsletter, Reports, Scientific Papers, Position Papers, White Papers, Presentations, Conferences, Workshops.

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Disclaimer

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Nature of the deliverable:	Report	
Dissemination Level		
PU	Public, fully open	√
CI	Classified, information as referred to in Commission Decision 2001/844/EC	
CO	Confidential to EU-IoT project and Commission Services	

EXECUTIVE SUMMARY

The Internet of Things (IoT) Research and Innovation strategy promoted by the European Commission (EC) has centred on a thriving ecosystem, a human-centred IoT approach and a single market. The EU-IoT project is designed to facilitate dialogue among all stakeholders, to build trust and confidence among users, to create awareness, particularly of funding opportunities, and to promote knowledge and technology transfer.

The EU-IoT mandate is to conduct marketing and communications activities to support the Next Generation Internet of Things (NGIoT) initiative intended as the plethora of ongoing projects and efforts at work for a human-centric and sustainable digital transition.

This document - Dissemination and Communication Report - explains how the project implemented key communication activities during the first 18 months of the project, based on the guidelines and means defined the Marketing and Communication Strategy and Plan (D5.1).

Through these means, the EU-IoT consortium promotes the concept and activities of the project towards a broad range of stakeholders and multipliers, as well as to outreach to the target audiences so they enrol in the ideation and acceleration activities organised or promoted by the consortium.

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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.

In communication and dissemination activities, EU-IoT joined forces with the H2020 NGIoT CSA which ended in October, 2021 as well as with the H2020 OPEN DEI CSA. As explained in more detail later in this deliverable, EU-IoT has taken over the already established NGIoT communication channels and is advocating NGIoT as the common brand and initiative under which next generation IoT efforts (both H2020 and Horizon Europe, HEP) are promoted.

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

This report contains the key actions carried out in the second communication phase the project. Whereas **phase 1 - Dissemination and communication foundation (M01-06)** focussed on the design of the Marketing and Communications Strategy and Plan as well as selection of communications tools as well as revision of the website. **Phase 2 - Amplified and coordinated outreach (M07-M18)** pertains to the active outreach out to the main target stakeholders to generate interest in NGIoT Initiative ICT 56 projects' activities and outcomes, with dissemination and impact creation work. The various active players within the ecosystem were involved to provide support for the knowledge sharing, best-practices documentation, consultations, road mapping activities, standardisation and pre-normative activities, as well as IoT skills development framework and acceleration support led by WP2, WP3 and WP4. Events participation was ensured, despite restrictions around COVID and organisation of the Flagship IoT Next Generation IoT and Edge Strategy Forum (22 April 2021, more information in the 'events' section below).

This deliverable is related to the deliverable D3.1 Community Engagement Report as the activities described therein form the basis of several communication and dissemination actions for EU-IoT.

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 Ngi 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 and key channels of the initiative

- Section 4 Impact creation monitoring gives reporting on the methodology for impact assessment and on KPIs

- Section 5 Conclusions and next steps gives an indication of the upcoming activities of the initiative.

2 DISSEMINATION, COMMUNICATION AT THE SERVICE OF THE NGI COMMUNITY

2.1 Objectives of Dissemination & Communication: Communications as an Amplifier

EU-IoT conducts activities to support The Next Generation Internet of Things (NGIoT) Initiative, an umbrella brand that is deployed in all communications to give identity to the ICT56 RIAs and ensure continuity from the activities of the recently closed CSA with the same name. EU-IoT marketing and communications are implemented internally by WP5, EU-IoT AMPLIFIER to combine impact amplification with coordination and cost effectiveness.

Dissemination and communication activities are managed under the combined lead of Tasks 5.1 and 5.2, by closely coordinating with all other EU-IoT tasks and work packages as relevant. It comprises the branding and visual identity refining the animation of the web portal, social media channels, promotional materials, and main communications tools.

The key factors for EU-IoT's approach to marketing and communications are:

- Creating awareness and recognition.
- Engagement and interaction.
- Knowledge transfer.

EU-IoT offers a motif with a common identity/brand for all NGIoT projects:

- Common Identity.
- Common branding and communication of key events.
- Common hashtags and keywords across online channels.
- NGIOT branded newsletter that gather input from all projects. harmonised slides / white papers / reports, templates and promotional materials, among others.

2.2 Target Audience

- EU-IoT is positioned at the hub of the overall NGIoT initiative to properly support and coordinate activities among the various relevant projects, develop synergies and exchange with other relevant initiatives within the broader community, working as a network of networks.
- The EU-IoT targeted engagement partners include EU researchers, developers, integrators, and users, as part of a European IoT core building block in the EU Digital Single Market, as describes in D5.1:
- EU-IoT **strategic stakeholders:** Liaised Projects, European Security and Privacy (ESP) projects, Standardisation Bodies (SDOs), including IIC, EETF, ETSI, 3GPPP and the ITU, and Security and Privacy Initiatives.
- EU-IoT **key stakeholders:** 6GIA SNS, the Alliance for IoT Innovation (AIOTI), the Big Data Value Association (BDVA/DAIRO).
- **Major IoT key players**, particularly the ICT-56 RIAs and RIAs from other relevant calls, 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.

EU-IoT guides the relevant collection, dissemination, and amplification of content to relevant identified audiences. This is achieved with input from 'multipliers' who give strategic guidance on content i.e.. the Expert Group (EG), Advisory Board (AG), Coordination Board (CB), Communication Task Force (CTF), and ultimately the EC. In this way, key content topics are identified, fed to projects, results are reported, and the content is positioned for the relevant audience.

News items, blogs, press releases and other curated stories and white/position papers are published and selectively shared across specialised channels (e.g., NGI portal, IoT LSP social media, NGIoT social media, etc.). Calls for papers and new publications are 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	See Annex 1
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 EC for details see Annex 2
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 meetings (which took place on 6 July 2021, 8 October 2021 and 1 March 2022), the consortium shared with the AB members the lates information on publications, events, Skills Surveys and other dissemination activities. Advisory Board members have a bidirectional role with regards to dissemination and communication.

2.3.2 Communications Task Force

At the time of writing the Communications Task force convened at a total of 12 monthly meetings. The Agenda of the CTF is circulated prior to the meeting and the minutes are communicated prior to the subsequent meeting. The CTF has a shared documents repository, easy access to the NGIoT Branding Guidelines. A dedicated events tracker is maintained in order that projects may organise meetings without clashes. The NGIoT portal is at the service of the entire community and CTF participants are encouraged to share their latest news on the website.

In 2021, the CTF convened on 23 February, 24 March, 16 April, 28 May, 24 June, 23 August, 1 October, 26 October, 23 November. In 2022 the CTF convened 25 January, 24 February, 24 March, with the next meeting scheduled for 27 April 2022.

The CTF is is a forum where the participants share the latest news of each project/initiative, such as the IoT Open Source Ecosystem or the NGIoT Skills surveys. They communicate and share lessons learned in terms of communication and dissemination regarding the Open Calls.

2.3.3 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 is to ensure consultation and dialogue with experts by establishing and coordinating the Advisory Board and Expert Group to elaborate on key strategic areas of actions 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 brings together representatives from the EC, the NGIoT CSA, the OPEN DEI CSA and the ICT-56 RIAs.

2.3.4 EU-IoT Expert Group

The Expert Group (EG) brings together leading members of the European and International IoT community to provide inputs on specific aspects of relevance to the NGIoT community. This group focuses initially on set topics of interest as defined by the EU-IoT consortium together with the ICT-56 coordinators and the European Commission. Each of the Experts are collected around a horizontal dimension of IoT such as enabling technologies, applications, policy and skills. The Expert Group meets in sessions, each of which focus on a topic along the human-device-cloud continuum of IoT.

- As part of the Marketing and Communication Strategy and Plan, we engaged the EU-IoT Expert Group members in producing articles that feature on the website and were promoted on social media:

- 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 DISSEMINATION & COORDINATION RESULTS AT M18

3.1 Active Communication and Dissemination of Key Content

To reach its target audience and stakeholders, EU-IoT uses a mix of communication and dissemination tools. This includes the NGIoT webpage (the entry point with all the information for the community), social media channels, newly established Resources page, newsletter and newsflashes. News items, blogs and other curated stories and white/position papers are published and selectively shared across specialised channels. Calls for papers and new publications are circulated broadly within the community.

In addition, in the last year, Open Calls got a prominent position on the website, to promote and engage as many participants as possible.

Figure 2: Communications activities

3.2 Web Portal

The fully functional NGIoT website (www.ngiot.eu) represents the entry point that enables the EU-IoT to gather knowledge, resources and activities to reach to all stakeholders involved in the deployment of a human-centred IoT ecosystem. All relevant information about projects, outcomes, events, milestones, developments, etc., are exposed and accessible via the dedicated areas the portal has been structured around.

The new NGIoT web portal has taken over the work done by the NGIoT CSA and uses the same URL https://ngiot.eu. Martel Media, which is the Martel department specialised in communication services, created the web portal and technically maintains it throughout the whole duration of the project, with active collaboration from all project's partners.

This NGIoT website is the main communication tool for the dissemination and communication of information related to the project and the NGIoT community. A full description of the website is presented in Deliverable D5.1.

Through EU-IoT an enhanced and upgraded version was delivered in 2021. This new edition of the website focuses more on the promotion of the NGIoT as an initiative, promoting the outreach

activities of both CSAs (NGIoT and EU-ioT) and the RIAs (ICT-56 RIAs) as well as the liaised initiatives, ecosystems, projects and broader IoT community.
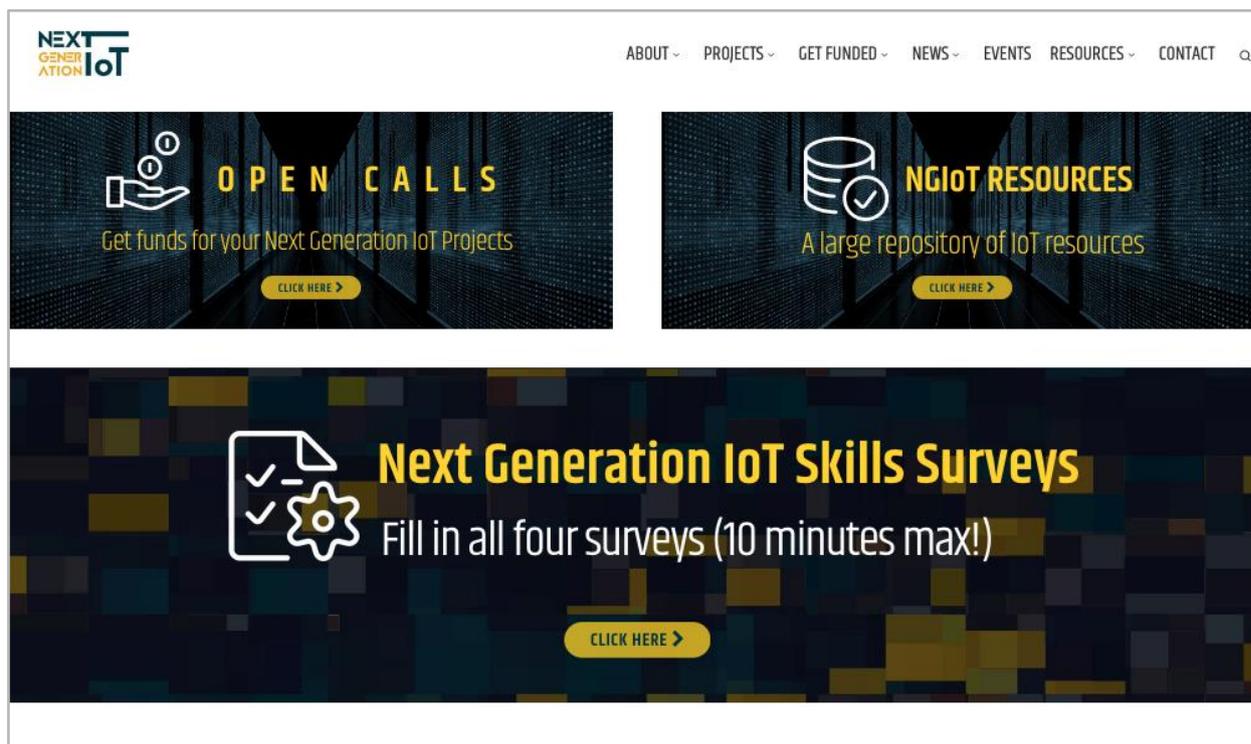

Figure 3: The new structure of the website (homepage)

The NGIoT website has become a single gateway to access information on the NGIoT ecosystem providing reports, activities, events, databases and catalogues.

A special focus was put on the promotion of the Open Calls published by RIAs (ICT-56 RIAs). This section features at the top of the main page, offering clear information about the funding opportunities proposed by the Next Generation Internet on Things projects.

The website also offers direct access to the most relevant documents (white papers, policy papers, scientific papers) produced by the consortium. A slider on the homepage displays these relevant documents.

In addition, the media team also created seven 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. **Standardistion 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.

NGIoT website analytics

In the reporting period (October 2020 - March 2022), the NGIoT website had 15,489 unique visitors and 49,562 page views. The website had an average of more than 750 unique visitors per month. This is considered a strong performance.
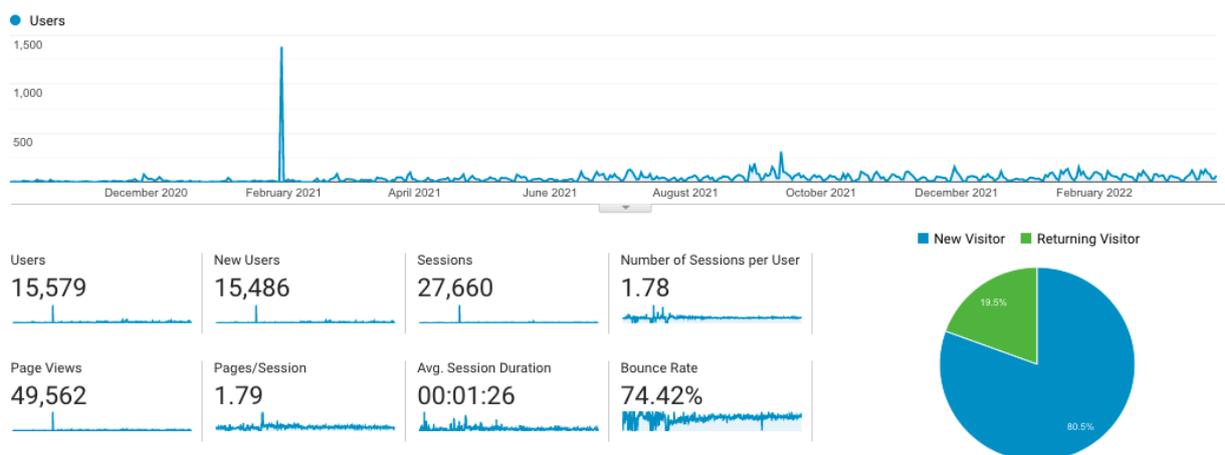
Figure 4: Snapshot of the website analytics

The most visited pages of the website are:

Page	Page Views ↓	Unique Page Views
	49,562 % of Total: 100.00% (49,562)	**42,491** % of Total: 100.00% (42,491)
/	**5,664** (11.43%)	4,788 (11.27%)
/events/	**2,394** (4.83%)	1,755 (4.13%)
/open-calls/	**2,022** (4.08%)	1,254 (2.95%)
/about/	**1,601** (3.23%)	1,341 (3.16%)
/research-innovation/	**1,001** (2.02%)	672 (1.58%)
/event/workshop-on-iot-and-edge-computing-research-and-standardisation-convergence/?instance_id=167	**881** (1.78%)	769 (1.81%)
/standardization-bodies/	**857** (1.73%)	727 (1.71%)
/news/	**691** (1.39%)	509 (1.20%)
/horizon-europe-calls/	**648** (1.31%)	554 (1.30%)

Figure 5: Most visited pages on the website

3.3 Social Media

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

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

3.3.1 Twitter

As a rapid and professional communication tool, Twitter allows real-time interactions and very high potential outreach towards EU-IoT's target audience, using hashtags and thematic tweets.

The Twitter account at @NGIoT4eu https://twitter.com/NGIoT4eu – currently has more than 966 followers. The editorial team publishes at least one Tweet per day (usually more) on relevant NGIoT content, upcoming events or sharing/curating relevant news stories. Moreover, re-tweets are made of relevant and interesting content from disparate sources. Last but not least, by following relevant users, EU-IoT not only gains access to more relevant content and updates, but also acquires more followers.

During the reporting period, the @NGIoT4eu tweets earned 540,000 impressions at an average of 35 tweets per month.

The top tweets from @NGIoT4eu are listed below:

Figure 6: A snapshot of the most top tweets on NGioT Twitter channel

3.3.2 Linkedin

Linkedin is a business-oriented professional networking tool that is used by many as a source of information and inspiration, therefore, it serves as a solid tool to amplify the news shared on the website. It is an important platform for discussions relevant to NGIoT, among experts in the area and various stakeholders in general.

The NGIoT LinkedIn Group is named 'Next Generation Internet of Things' https://www.linkedin.com/groups/8774065/ and has over 222 members and allows the publication (and moderation) of contents of multiple players. It is very active and allows multiple voices and contributions.

During the reporting period, the NGIoT LinkedIn Group had over 130 post.
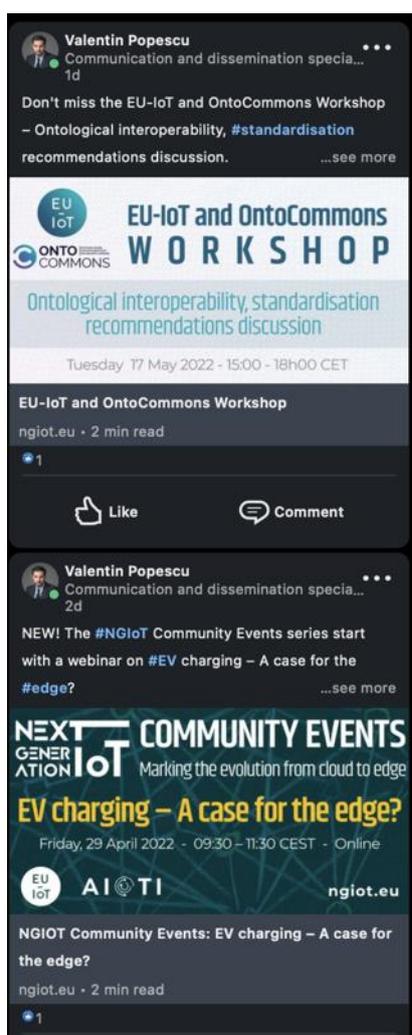
Figure 7: Latest post from the the NGIoT LinkedIn Group

3.3.3   YouTube

The YouTube channel is named 'NGIoT Next Generation Internet':

https://www.youtube.com/channel/UCoybrBS6vzvKnkAsCXK9R1Q/featured.

It is currently organised with several playlists dedicated to the events organised during the reporting period, as well as video presentations and interviews with relevant stakeholders. In M18 of the project, the Youtube channel has 60 videos with more than 3,146 total views.

All videos are also posted in the resource area of the NGIoT web portal.
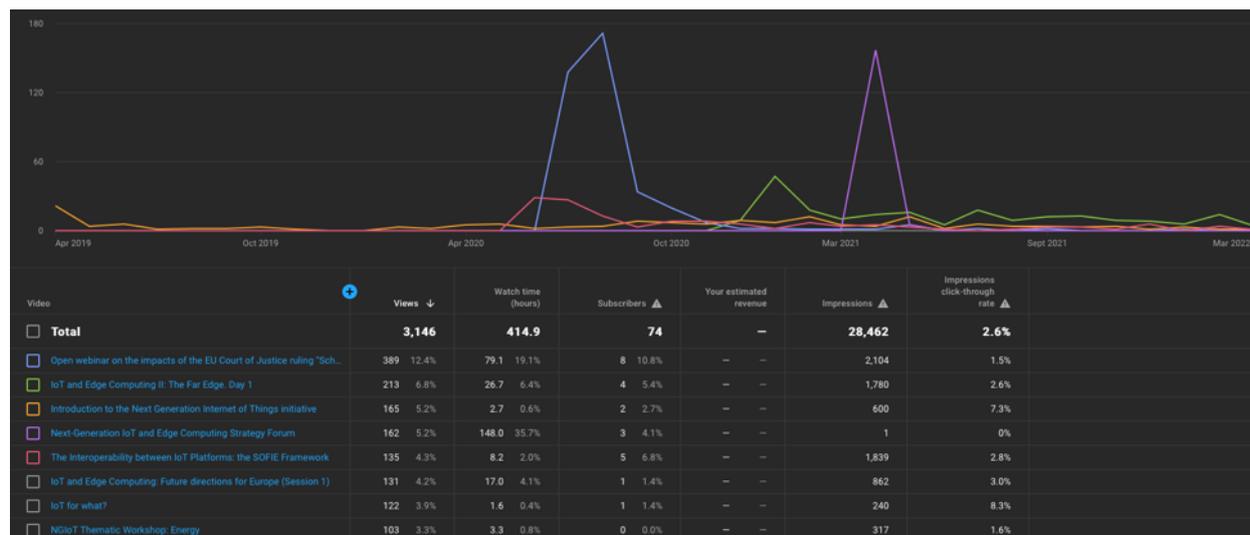

Figure 8: Overview of the stats of the Youtube channel

3.4   Resources

Within the context of the Marketing and Communications Strategy, EU-IoT has established and is maintaining and/or moderating a protected document repository partitioned to share information, documents and resources among project partners. This includes but is not limited to the Advisory Board, the Expert Group, the Expert Groups, the Communications Task Force members and others. Mailing lists for various bodies and groups within the community are also provided and curated.

For communication and dissemination purposes, EU-IoT selected dedicated spaces in prominent EU OA repositories, such as the Zenodo general-purpose repository developed under the OpenAIRE program.

Several white paper produced by the consortium feature now on Zenodo:

- 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)

3.5   Promotional Material

At the beginning of the project, EU-IoT aimed at designing and producing promotional material such as brochures, slides, posters, roll-ups, and videos, to be used and distributed in accordance with the EU-IoT activities and NGIoT programme needs.

Taking into account the shift from in-person events to online events, the communication toolkit was adapted and all the partners were provided with presentation templates which took into account the brand guidelines.

3.6   Newsletter and Newsflash

News articles are pushed out via e-newsletters and newsflashes to gather highlights and announcements of interest to all target stakeholders. Input is collected from all ongoing NGIoT RIAs. Regular updates about work within the community, open calls, events, success stories etc. are shared in this newsletter, while shorter and more frequent newsflashes were issued to promote highlights and broadcast announcements.

The newsletter and newsflash were branded according to the new branding guidelines. The channel is the same as NGIoT. There are currently 658 subscribers to the newsletter. All newsletters and newsflashes are stored on the NGIoT web portal (https://www.ngiot.eu/newsletter/) and are echoed on the social channels to enhance their impact and dissemination.

In the reporting period, four newsletters and seven newsflashes were sent.
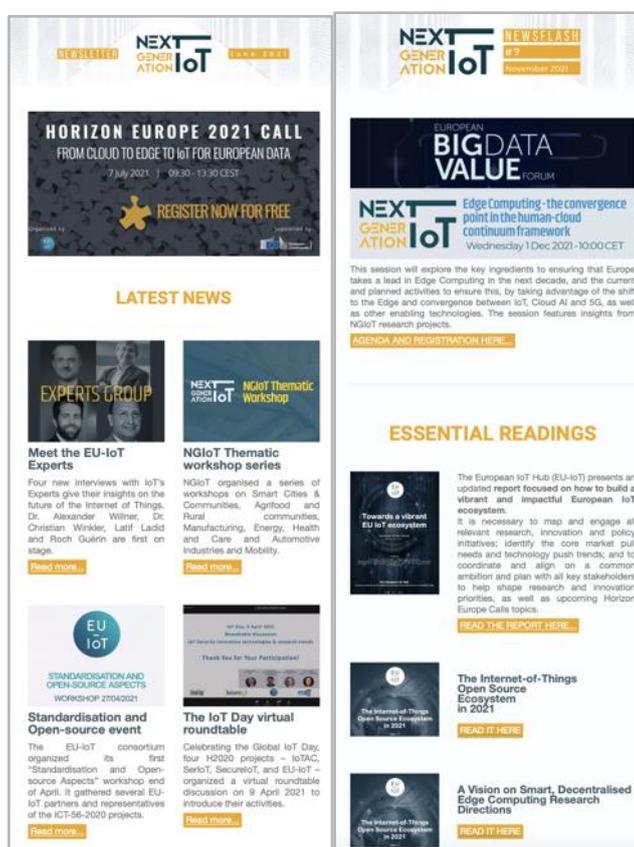
Figure 9: Examples of the NGIoT newsletter (left) and newsflash (right)

The number of views of the electronic newsletter is over 1,000.
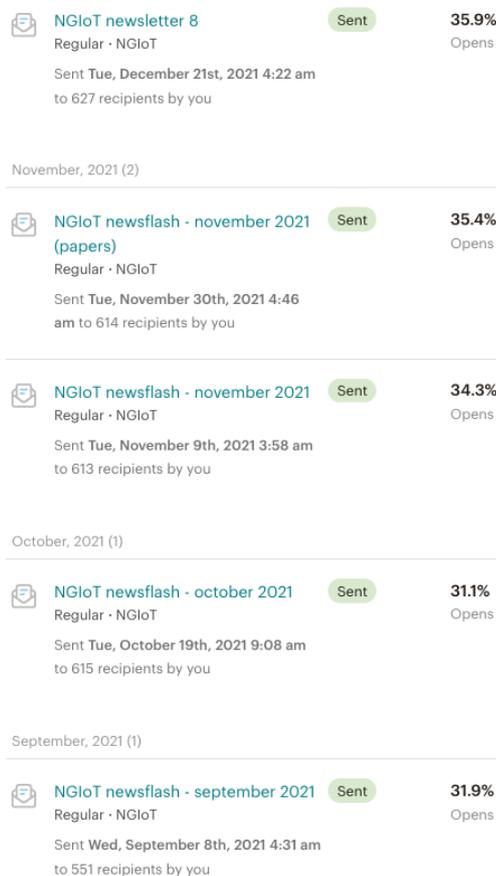
Figure 10: The open rate of the NGIoT newsletter – a high rate compared to averages of 20% for this type of activity highlighting the relevance of the audience.

3.7 Media Relations and Engagement

Media relations are an important element of the communication and dissemination activities. This includes but not be limited to European tradition and online general media as well as specialised press related to the Internet of Things specifically and technology in general.

During the reporting period, the ICT-56 Projects sent two press releases.

- IntelIIoT – Press Release / Open Call (1 September 2021) (https://intelliot.eu/wp-content/uploads/2021/09/PressRelease_IntelIIoT_OpenCall2021.pdf?utm_source=news&utm_medium=in-text-link&utm_campaign=OC2021&utm_content=PressRelease)

- VEDLIOT - Press Release Teaching the Internet of Things to Learn (19 November 2020 (https://vedliot.eu/press-release-vedliot-announces-project-start/)

3.8 Events

EU-IoT coordinated the organisation of events within the NGIoT ecosystem in collaboration with

WP3. EU-IoT adopted dynamic, interactive, and participatory techniques fostering creativity and engagement. These events provide opportunities to voice prominent experts, animate thematic panels, showcase demos, and foster hands-on sessions for collaborative exchange of experiences among the represented groups of stakeholders.

EU-IoT also organised trainings and dedicated expert workshops to foster consultation of experts and discussions on specific strategic aspects to provide proper guidance to the community.

3.8.1   Events organised by EU-IoT

Together with WP2, WP3 and WP4 partners a series of webinars and workshops have been delivered, both for general audiences and for targeted groups. They were announced and communicated through NGIoT social media channels, the news section of the NGIoT website and the NGIoT newsletter.

A shared Excel sheet template on Google Drive, listing all webinars and workshops has been created in order for the project consortium to be able to keep track of the partners' webinar schedule and provided reports. WP leaders responsible for webinars and workshops are following the common process before and after the webinar takes place.

All webinars are posted on the Events page of the NGIoT website (https://www.ngiot.eu/events/) and in the Resources menu (https://www.ngiot.eu/archive-ngiot-resource/) and were widely disseminated through social media before and after.

A list of webinars and workshops held in the reporting period, with more details in Annex 4:

1. IoT Day Roundtable Discussion on IoT Security Innovative Technologies & Research Trends (9 April 2021)

2. Next Generation IoT and Edge Strategy Forum (22 April 2021)

3. EU-IoT Training Workshops Series: AIoT and Edge Machine Learning (21 May 2021)

4. IARIA ICNS2021: EdgeIntelli: Intelligence on the Edge Track (30 May 2021)

5. Wireless Industrial IoT: the next generation of industrial networking (31 May 2021)

6. WF-IoT 2021 Forum (14 June 2021)

7. 7-in-1-symposium (21 -22 June 2021)

8. EU-IoT Training Workshops Series: Enabling the Tactile Internet with IoT (8 July 2021)

9. NGIoT Open Calls at IoT Week (30 August 2021)

10. EU-IoT Hackathon Kick-off Session at IoT Week (30 August 2021)

11. EU-IoT Training Workshops Series: Machine Learning at the Edge and the FarEdge (30 August 2021)

12. Global IoT Summit (31 August 2021)

13. IoT Week 2021 (31 August 2021)

14. Workshop on IoT and Edge Computing Research and Standardisation Convergence (13 – 14 September 2021)

15. Workshop Open Source and Standardisation (15 September 2021)

16. CONASENSE2021 (4 – 5 October 2021)

17. Webinar: Introduction to IIoT (18 October 2021)

18. NDN community event (28-29 October 2021)

19. EU-IoT Training Workshop Series: Next Generation IoT Architectures (9 November 2021)

20. Session at EBDVF 2021 Conference (29 November – 3 December 2021)

21. IEEE Access Special Issue on "Internet of Space: Communication Systems for Future Space-based Internet Services" (30 November 2021)

22. EU-IoT Training Workshops Series: Distributed Ledger Technologies for IoT Decentralization (07 February 2022)

23. ASSIST IoT Open Call webinar (11 February 2022)

Annual NGIoT Event: Next Generation IoT and Edge Strategy Forum

On 22 April 2021, the European Commission, in collaboration with EU-IoT, organised the Next-Generation IoT and Edge Computing Strategy Forum. Aim of the event was to gather top technology experts from across several digital and vertical domains, as well as corporate-strategy level representatives to exchange views on priorities, challenges and opportunities, and establish a commonly shared strategic European vision for the next-generation IoT and (far) edge computing.

Figure 11: Poster of the Next Generation IoT and Edge Strategy Forum

The Strategy Forum counted more than 500 registered participants, 36 speakers, and sparked insightful discussions in 14 different sessions.

The event, which was moderated by Martel Innovate CEO Dr Monique Calisti, kicked-off with a keynote speech by Pearse O'Donohue, Director for the Future Networks Directorate of DG CONNECT, European Commission. Hereafter, Dr Max Lemke, Head of Internet of Things Unit, European Commission, continued setting the scene.

The event then continued with a series of Plenary Sessions on the topics of System Integration

Platforms, Ecosystems and Alliances, Trust and Trustworthiness, and Visionary Concepts. In the second half of the day, these topics were discussed in more detail in a series of round table sessions.

The session presentations and recordings are available online.

IoT Week 2021

Eu-IoT and ICT-56 Projects participated in the European IoT event of the annual calendar, IoTWeek 2021 with session related to latest policy, research, funding and training. Below is a list of the session organised during IoT Week 2021:

1. Training Session by EU-IoT: Machine Learning at the Edge and FarEdge (30 August 2021)
   https://iotweek.blob.core.windows.net/iotweek2021/2-%20Training%20Session%20on%20Machine%20Learning%20at%20the%20Edge%20and%20the%20FarEdge.mp4

2. EU-IoT Hackathon/IDEAthn – Mobile Sustainable IoT Solutions (30 August 2021)
   https://iotweek.blob.core.windows.net/iotweek2021/3-%20EU-IoT%20Hackathon.mp4

3. Join the Next Generation IoT; upcoming Open Calls (30 August 2021)
   https://iotweek.blob.core.windows.net/iotweek2021/4-%20Join%20the%20Next%20Generation%20IoT%3B%20upcoming%20Open%20Calls%20(Part%201).mp4 and https://iotweek.blob.core.windows.net/iotweek2021/5-%20Join%20the%20Next%20Generation%20IoT%3B%20upcoming%20Open%20Calls%20(Part%202).mp4

4. Opening: Next-Generation IoT For a Sustainable Future (31 August 2021)
   https://iotweek.blob.core.windows.net/iotweek2021tuesday/1-%20OPENING-%20NEXT-GENERATION%20IoT.mp4

5. From Cloud to Edge to IoT for European Data by European Commission (31 August 2021)
   https://iotweek.blob.core.windows.net/iotweek2021tuesday/4-%20From%20Cloud%20to%20Edge.mp4

6. IoT Business Model Innovation at The Edge by EU-IoT/NGIoT (31 August 2021)
   https://iotweek.blob.core.windows.net/iotweek2021tuesday/6-%20IoT%20BUSINESS%20MODEL%20INNOVATION.mp4

7. Building an ecosystem for IoT and Edge Computing towards a European Strategy Forum: EU-IoT – The European IoT Hub, Growing a sustainable and comprehensive ecosystem for the Next Generation Internet of Things (1 September 2021)
   https://iotweek.blob.core.windows.net/iotweek2021wednesday/Building%20an%20ecosystem%20for%20IoT%20and%20Edge%20Computing%20towards%20a%20European%20Strategy%20Forum.mp4

EU-IoT Hackathon

Event page: https://eu-iot-hackathon.devpost.com/

During the IoT Week 2021, EU-IoT kicked-off its six-month offline Hackathon/IDEAthon, focused on Mobile Sustainable Solutions and addressing as domain challenges the EU-IoT scope areas: IoT interfaces; Near/Far Edge; Infrastructure; Data Spaces. During this section, we shall explain the Hackathon challenges, project types, awards, rules, and how you will be able to interact with

the EU-IoT experts, the different Next Generation IoT projects supported by EU-IoT, and the EU-IoT mentors.

Figure 12: Virtual poster for IDEAthon/Hackathon

After an internal assessment, taking into consideration the small number of teams participating in the Hackathon, EU-IoT decided that the current format will not be effective, Therefore, EU-IoT decided to organise the Hackathon as a regular face-to-face event in June 27th-29th 2022. The Hackathon takes place in Munich, Highlight Towers, IBM Watson Research Center, organised by fortiss, with a hybrid pole in Brazil supported by UNIVESP.The EU-IoT Hackathon is co-located to the IEEE and MDPI technically co-sponsored CONASENSE2022 (Munich, Highlight Towers, 27th-29th June 2022).

3.8.2   EU-IoT participation in IoT-related events

EU-IoT, through different WPs, featured as part of other events of the IoT community. Participation in these events included keynote speeches, presentations and/or dedicated sessions, exhibitions, etc.). Event participation promoted EU-IoT results and efforts in the community (also at policy level), and created awareness about EU-IoT fostering knowledge transfer and increasing positive impact at a scientific, technological, and business level.

For some of the events, such as NGIoT Thematic Workshops, EU-IoT was also involved in communication activities.

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

1. CityxCity festival (13 January 2021)
2. IoT Tribe: Space Endeavour Tech Games (9 February 2021)
3. Data Science and Digital Transformation Skills challenges for SMEs (5 March 2021)
4. NGIoT Thematic Workshop: Smart Cities & Communities (30 March 2021)
5. NGIoT Thematic Workshop: Agrifood and Rural communities (30 March 2021)
6. Monitoring Advanced Technologies: European countries in the global competitive landscape (31 March 2021)
7. Edge Computing and Next Generation IoT Fireside Chat (31 March 2021)
8. Digitalisation of manufacturing: pathways, key enablers and skills (22 April 2021)

9. NGIoT Thematic Workshop: Manufacturing (27 April 2021)

10. Next Generation ICT Research Infrastructures (4 May 2021)

11. Scaling up in Advanced Technologies (6 May 2021)

12. Web Seminar "Speeding up Industrial AI and Trustworthiness" (12 May 2021)

13. NGIoT Thematic workshop series on IoT and Edge Computing (18 May 2021)

14. Digital around the world 2021: IoT Ecosystem Building and NGIoT Roadmap for IoT Research Innovation Deployment in Europe (20 October 2021)

15. Digital around the world 2021: Tech to inspire for a post-COVID world (20th October 2021)

16. NDN Community Event (28 October 2021)

17. OpenDEI Digital Transformation Business Impact Kick-off Meeting and Interactive Workshop (25 November 2021)

18. EBDVF 21: AI and society: New Challenges Ahead

19. Galactic Futures: Bringing Space Tech Down to Earth (14th December 2021)

20. OpenDEI TF4 Digital transformation workshop (14 December 2021)

21. CITYxCITY Festival (13 January 2022)

22. Horizon Europe Information and Virtual Brokerage Session (2 February 2022)

23. Workshop on Business Impact of IoT in Manufacturing Industries, prepared by AIOTI WG Manufacturing (8February 2022)

24. NGIoT Webinar: Presentation of the NGIoT Roadmap (23 February 2022)

In the reporting period to date, EU-IoT partners organised and participated in a total of 47 events. Analysis has been performed on the types of stakeholders at the events.
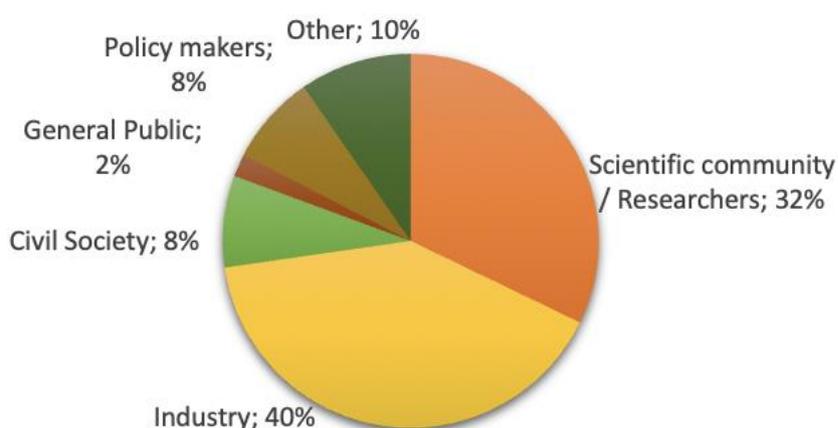
Figure 13: Engaged group of stakeholders

4 IMPACT CREATION MONITORING

The complete set of communication and dissemination activities have been closely monitored and evaluated by the WP5 lead in order to keep track of all ongoing activities. Qualitative and quantitative indicators were defined in the Marketing and Communication Strategy and Plan and can be evaluated. They cover the progress of the strategy's implementation and refer to an outreach activity that is quantifiable through the attendance (in person or virtual) of persons present from the audiences, quantity of material distributed, number of events (live or virtual) participated in, the development and dissemination of messages and materials, media presence and traffic created in social media.

The proposed analysis framework aims to measure various quantitative figures, as well as the impact of promotional efforts.

In full accordance with the EU-IoT needs, a five-step measurement cycle model has been implemented, spanning from objective identification to data driven optimisation:

1. We identify our core objectives (e.g. raise awareness, increase engagement – i.e. acquire more contacts, acquire more participants to our events).

2. We set goals for our promotional tactics. We concentrate on how to accomplish our objectives (e.g. inform visitors through the content of our website, intensify events promotion, etc.).

3. We identify our Key Performance Indicators (KPIs) – the metrics that play a crucial role in the success of the aforementioned utilised tactics and set the expected achievable qualitative and quantitative targets.

4. We measure the progress and impact of the conducted activities based on these metrics on a regular basis. Monitoring of such metrics will allow having a constant view of the amount and the effectiveness of the dissemination activities conducted.

5. We adjust and optimise the communication strategy towards achieving the expected outcomes and maximising visibility.

The tools, products and activities outlined in the strategy are monitored, measured, evaluated and realigned on an ongoing basis.

4.1 Dissemination and Communication KPIs

The following metrics are used to monitor and assess the progress of the dissemination and communication activities and provide some measurable outcomes related to their impact created (as far as this is feasible from a quantitative point of view).

Table 1: Communication KPIs and target values

Measure	Indicators	Target (M30)	Source and methodology	M18 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.	no physical events took place
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.	15,489
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	966 222
e-Newsletter *(every 3 months)*	N. of views *(by the end of the project)*	> 2000	Views of the electronic newsletter	1018
e-Newsflashes *(~every 1-2 months)*	N. of issues	>15	e-Newsflashes will also be published on the website	7
News/curated contents/blogs/reports	At least 2-4 items per month	~80	Items published on the website and echoed across social media	94
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	60 videos with more than 3,146 total views

Measure	Indicators	Target (M30)	Source and methodology	M18 value
EU-IoT Forum *(2 editions in total)* * in case of travel restrictions/distancing measures a full day online event will be organized. Target values remain the same	Average number of participants per edition	At least 250 participants per edition	Attendance proof, presented material, photos, animation of social media channels, event's reports	500
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	21
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	2
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	5
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	2
EU-IoT Hackathon	Average number of participants	At least 50 participants	Attendance proof, material presented, photos, event report, software developed	To be 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	Dissemination and Communication Report	M18, M30	Martel
D5.5	Impact assessment - Methodological framewok	M12	Fortiss
D5.6	Guidelines for IoT collaboration sustainability	M24, M30	Fortiss
D5.7	Progress monitoring and quality assurance	M01, M30	Martel

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

4.3 Impact Assessment

The activities developed in regards to impact assessment relate with WP5, T5.3. During the period being reported, the task has been focused in defining and documenting the methodological framework to assess impact and exploitation opportunities of assets generated   within Next Generation IoT projects supported by EU-IoT, in particular ICT-56 projects. The proposed impact assessment methodological framework has been made public in Deliverable D5.5.

The impact assessment methodological framework, available via D5.5, defines and establishes

the goals, processes, stakeholders, and impact categories of the impact assessment procedure, thus setting up the underlying structure and concepts to perform the impact assessment analysis. In summary, the goal of the impact assessment is to identify and characterize the impact and the implication a set of project's actions have on a specific area or a set of areas considered to be relevant. The developed methodology involves three main steps: (i) identifying impact assessment categories, (ii) collecting the required information, and (iii) analysing the data and proposing recommendations and potential relevant impact areas to target.

A preliminary analysis has been developed with the support of the ICT-56 projects, based on individual interviews, and surveys to ICT-56 RIAs. The analysis can be summarised as:

- **Knowledge areas:** All ICT-56 RIA projects focus on the next generation Internet of Things vision; nonetheless, each focuses on a specific set of objectives and research lines. All projects seem to focus on security, privacy, and trust when developing their solutions and reference architectures. Moreover, distributed AI/ML and Edge and Cloud computing are also a common theme among all projects.

- **EU impact categories**: All projects focus on the impact category "Digital, industry, and space", which aligns with the call descriptions while none of the projects selected the impact categories "Culture, Creativity and Inclusive Society" and "Civil Security of Society". Terminet and IntelIoT selected the impact category "Health". Terminet, IoTNGIN, and VEDLIoT selected the impact category "Climate and Energy and Mobility". Finally, Terminet, IoTNGIN, and IntelIoT choose the impact category "Food, Bioeconomy, Natural Resources, Agriculture, and Environment". Based on this high-level view of the impact areas, potential synergies can be detected among projects; however, it is important to look deeper into the specific impact variables and how they align among the projects.

- **EU-IoT scope areas:** the "Human/IoT interface" topic has the highest ranking followed closely by the "Far Edge" topic. It seems from this high-level view that all six projects focus on topics related to the IoT Edge-Cloud continuum with different degrees of relevance; however, the Human/IoT interface seems to be the most relevant topic among all participating projects.

Out of the proposed analysis, D5.5 summarises the following proposals for recommendations which are the basis for the work developed in 2022:

- **Boost cooperation across RIAs**. All 6 projects seem to focus on security, privacy, and trust when developing their solutions and reference architectures as well as distributed AI/ML and Edge and Cloud computing; therefore, we foresee and recommend working together on these common themes to align the developed work, share experience and expertise, and/or complement each other work whenever possible.

- **Quantitative analysis and qualitative analysis of contributions to the EU-IoT scope areas**. Through the preliminary analysis, we noticed that some projects have selected similar impact categories. Thus, we will further look into the specific targeted impact in each impact category and analyse how they align or differ. The aim is to pinpoint how each project's impact is similar to highlight potential synergies.

  - Quantitatively, we will analyse the number of success indicators, e.g., scientific publications, open-source software impact (e.g., git downloads/forks); contributions towards standardisation; Web page views, training.

  - Qualitatively, we shall analyse the impact, e.g., publication venue rank; type of SDO contribution.

- **Organization of events dedicated to specific topics**. Most projects ranked the "Human/IoT interface" topic as highly relevant for them; thus organizing workshops and training related to the topic would be beneficial.

The next steps are analysing the data in more details and providing insights about the relationship between planned actions and desired impact, potential missed impact areas, and recommendations about potential synergies between the projects or outside entities such as SDOs. Additionally, the intention is to include additional projects and perform similar analysis while considering lessons learned.

5   CONCLUSIONS AND NEXT STEPS

The dissemination and communication activities described in this deliverable focused on active community engagement to reach target stakeholders and generate interest in NGIoT and IoT project activities and outcomes, setting a solid foundation for the planned dissemination, community building and impact-creation. Key aspects included knowledge-sharing, best-practices documentation, consultations, road mapping activities, standardisation and pre-normative activities, as well as an IoT skills development framework and acceleration support led by WP2, WP3 and WP4.

Participation in key events was also ensured and the first edition of the NGIoT Forum was organised as a major community event. Other dissemination and communication measures included animation of social media channels, the production of several news items pushed out via the website and media, newsletters, webinars and participation in selected events to facilitate networking, outreach and community building.

The next phase of the Marketing and Communications Strategy is focused on the engagement of target stakeholders on a broad scale in Europe and beyond, ensuring the establishment of an inclusive and sustainable collaborative framework for human-centric IoT made in Europe to achieve the H2020 goals.

Activities focus on ensuring strategic and extensive dissemination and communication in combination with targeted community building actions, a stronger engagement of stakeholders and fostering early adoption of products and innovative concepts and assisting a better interconnection to SDOs.

Future activities include production of promotional material in various forms (presentations, interviews, videos, flyers, etc.), scientific publications and strategic white papers, established liaisons with relevant research and innovation projects, news/newsletters, social media presence, dedicated webinars, participation in events, including Hackathon (taking place in June 2022).

EU-IoT will also provide guidelines which will ground the creation of an action plan for exploitation of valuable assets within the NGIoT ecosystem and the development of sustainable collaborations.

ANNEXES

Annex 1: EU-IoT Advisory Board Members:

- **Martin** Brynskov is the coordinator of the CSA, NGIoT and Chair of the global Open & Agile Smart Cities initiative (OASC), which encompasses more than 150 cities from 31 countries. Dr Brynskov is an associate professor, in Interaction Technologies at Aarhus University in Denmark, director of AU Smart Cities (AUSC) and the Centre for Digital Transformation of Cities and Communities (DITCOM), founder and co-director of the Digital Living Research Commons (DLRC), Director of the Digital Design Lab, and Fellow at the Centre for Advanced Visualization and Interaction (CAVI).

- Gabriella Cattaneo is Associate Vice President of the IDC European Government Consulting unit, which she founded in 2005 to provide research and consulting services to governments and policy makers on ICT market trends and scenarios, leveraging IDC's global research. Mrs Cattaneo has more than 30 years' experience in socio-economic research, impact assessment and benchmarking of ICT policies on behalf of the European Commission. She represents IDC in the Big Data Value Association (BDVA).

- Nuria de Lama is European Programs Manager, Atos Research and Innovation and a Member of the Board of Directors, BDVA of which she is a founding member. She has worked more than 20 years in Research, Development and Innovation in different IT environments. She has managed or contributed to more than 40 innovation projects in areas like Digital Platforms, Digital Transformation, IoT and Big data applied to different sectors, notably Smart Cities and Agriculture. She was one of the founders of the Future Internet Partnership, (FIWARE).

- Ulrich Ahle is CEO of the FIWARE Foundation. He is a reputed executive in the industrial sector, formerly Vice President and leader of Manufacturing, Retail & Transportation business and responsible for Industrie 4.0 at Atos in Germany. He is also founder and member of the Board of the International Data Spaces Association in Germany and served 16 years in the Board of the prostep ivip organization until April 2018.

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.

Annex 2

Table 4: Key projects and organisations participating in the regular CTF meetings

Project	Organisation
EU-IoT	Martel
https://www.linkedin.com/groups/8774065/	Aarhus University
https://twitter.com/NGIoT4eu	BluSpecs
https://www.facebook.com/ngiot/	fortiss
Newsletter link: https://www.ngiot.eu/newsletter/	Intrasoft International

Project	Organisation
IoT-NGIN https://iot-ngin.eu [Newsletter link on homepage] https://www.linkedin.com/company/iot-ngin/ https://twitter.com/IotNgin	Capgemini Synelixis Solutions
TERMINET https://terminet-h2020.eu/ [Newsletter link on news page: https://terminet-h2020.eu/news-and-events/ LinkedIn: https://www.linkedin.com/company/terminet/ Twitter: https://twitter.com/Terminet_H2020	University of Western Macedonia (UOWM)
iNGENIOUS **Newsletter:** **Twitter:** **https://twitter.com/ingenious_iot** **LinkedIn:** **https://www.linkedin.com/groups/8982350/**	Nextworks
IntelIot **Twitter:** **https://twitter.com/Intelliot_eu** **LinkedIn:** **https://www.linkedin.com/company/intellioteu/** **Newsletter:** **https://bit.ly/IntelIIoT_news** **Website:** **https://www.intelliot.eu**	Startup Colors
VEDLIoT https://twitter.com/vedliot https://www.linkedin.com/company/vedliot/	BIelefeld University (UNIBI), University of Lisbon (FCUL), University of Osnabrueck (FCUL)

Project	Organisation
ASSIST-IOT **https://assist-iot.eu/newsletters/** https://assist-iot.eu https://www.facebook.com/assistiot https://twitter.com/AssistIot https://www.linkedin.com/in/assist-iot-project/ https://www.instagram.com/assistiot/ https://www.youtube.com/channel/UC8Sedd5UyB8R61d9YDkkeGg/videos	Universitat Politècnica de València (UPV) -- INFOLYSIS (INF) -- ORANGE POLAND
OPEN DEI https://twitter.com/opendei_eu https://www.linkedin.com/company/opendei-eu	IDSA IDC
EC Twitter channels for EC DG-CNECT: @NetTechEU & @DigitalEU	DG CNECT

Annex 3

Gallery of the new pages on the NGIoT Portal

Figure 14: The new NGIoT Resources page on the NGIoT website

Figure 15: The Use Cases catalogue page on the NGIoT website

Figure 16: The new Trainings page on the NGIoT website

Figure 17: The new Standardisation Bodies page on the NGIoT website

Figure 18: The new Open Source Catalogue page on the NGIoT website

Figure 19: The new Expert Group page on the NGIoT website

Annex 4: Events organised by EU-IoT

1. IoT Day Roundtable Discussion on IoT Security Innovative Technologies & Research Trends (9 April 2021)

Event page: https://iotac.eu/iot-day-roundtable/

On Global IoT Day, four H2020 projects – IoTAC, SerIoT, SecureIoT, and Eu-IoT – organized a virtual roundtable discussion on 9 April 2021 to introduce their activities, and talk about the role of research in enhancing cybersecurity and its potential contribution to industrial and societal development.

Recording: https://www.youtube.com/watch?v=H6Otzup1Suo

2. Next Generation IoT and Edge Strategy Forum (22 April 2021)

Event page: https://iotedgestrategyforum.app.swapcard.com/event/next-generation-iot-and-edge-computing-strategy-forum/plannings/RXZlbnRWaWV3XzE2NjAxNA%3D%3D

The European Commission, in collaboration with EU-IoT, organised the Next-Generation IoT and Edge Computing Strategy Forum. Aim of the event was to gather top technology experts from across several digital and vertical domains, as well as corporate-strategy level representatives to exchange views on priorities, challenges and opportunities, and establish a commonly shared strategic European vision for the next-generation IoT and (far) edge computing.

Number of participants: 500 registered participants, 36 speakers

Recordings: https://iotedgestrategyforum.app.swapcard.com/event/next-generation-iot-and-edge-computing-strategy-forum/plannings/RXZlbnRWaWV3XzE4Mjc5Nw%3D%3D

3. EU-IoT Training Workshops Series: AIoT and Edge Machine Learning (21 May 2021)

Event page: https://www.ngiot.eu/event/eu-iot-training-workshops-series-aiot-and-edge-machine-learning/

This was the 1st Training Workshop of the H2020 EU-IoT Project on AIoT and Edge Machine Learning

Number of participants: 175

Recording: https://www.youtube.com/watch?v=iRS5L4TOC-M&t=2s

4. IARIA ICNS2021: EdgeIntelli: Intelligence on the Edge Track (30 May 2021)

Event page: https://www.iaria.org/conferences2021/filesICNS21/EdgeIntelli.pdf

This event focused on the main theme of intelligent at the Edge, on bringing together the latest advancements concerning integration of Artificial Intelligence (AI) on the Edge, in particular for industrial environments.

5. Wireless Industrial IoT: the next generation of industrial networking (31 May 2021)

Event page: https://www.iaria.org/conferences2021/ICNS21.html

This event was part of the part of the Seventeenth International Conference on Networking and Services.

Keynote presentation:
https://www.iaria.org/conferences2021/filesICNS21/RuteCSofia_Keynote_WirelessIndustrial.pdf

6. WF-IoT 2021 Forum (14 June 2021)

Event page: https://wfiot2021.iot.ieee.org

Session: Hurdles, Challenges, and Opportunities of IoT Moving Towards 6G

The scope of this Industrial Forum session was to address and discuss how to leverage on some recent results coming out of collaborative research funded projects (5GENESIS, CHARIOT, EFPF, ERATHOSTHENES, EU-IoT, InSecTT, Safety4Rails, SecureIoT, SHAPES, SymbIoTe, TSNWiFi) and participating companies, as well as having an open conversation on how to remove some important hurdles that slow-down, and even sometimes stop, an effective deployment of innovative IoT systems, moving towards 6G.

Session page: https://wfiot2021.iot.ieee.org/industry3/

7. 7-in-1-symposium (21 -22 June 2021)

Event page: https://ctifglobalcapsule.org/events/6-in-1-seminar/

The Overall Objective of the Symposium 7 -In- 1 was to open discussions on innovation and its commercialization through a strong partnership between industries and academia as well as on modern practices and methodologies in cross-/multi-/inter- disciplinary areas such as social science, technology, Business Canvas and so on.

Keynote presentation - The role of context-aware Edge computing on supporting large-scale people-centric IoT environments:
https://www.fortiss.org/fileadmin/user_upload/05_Veroeffentlichungen/Mediathek/TheRoleofcontentawareedgecomputing.pdf

7-IN-1 SYMPOSIUM PROCEEDINGS: https://ctifglobalcapsule.org/wp/wp-content/uploads/docs/events/Final-Proceedings-Symposium-7-IN-1.pdf

8. EU-IoT Training Workshops Series: Enabling the Tactile Internet with IoT (8 July 2021)

Event page: https://www.ngiot.eu/event/enabling-the-tactile-internet-with-iot/

EU-IoT in collaboration with H2020 ICT-56 IoT projects organised its second training workshops on IoT and the Tactile Internet titled: "Enabling the Tactile Internet with IoT". The workshop presented IoT's potential in enabling tactile internet applications that break time & space boundaries, leveraging on technologies like Augmented Reality and Mixed Reality.

Number of participants: 56

Recording:
https://www.youtube.com/watch?v=n9RwoSLCyjI&list=PLBrivHE6_rsd3BxGyWoFJZ42y1aKygP63&index=3

9. NGIoT Open Calls at IoT Week (30 August 2021)

Recording: https://iotweek.blob.core.windows.net/iotweek2021/4-%20Join%20the%20Next%20Generation%20IoT%3B%20upcoming%20Open%20Calls%20(Part%201).mp4

https://iotweek.blob.core.windows.net/iotweek2021/5-%20Join%20the%20Next%20Generation%20IoT%3B%20upcoming%20Open%20Calls%20(Part%202).mp4

10. EU-IoT Hackathon Kick-off Session at IoT Week (30 August 2021)

Event page: https://www.ngiot.eu/event/iot-week-2021-2/?instance_id=157

The EU-IoT project kicked-off its six-month offline Hackathon/IDEAthon, focused on Mobile Sustainable Solutions and addressing as domain challenges the EU-IoT scope areas: IoT interfaces; Near/Far Edge; Infrastructure; Data Spaces.

11. EU-IoT Training Workshops Series: Machine Learning at the Edge and the FarEdge (30 August 2021)

Event page: https://www.ngiot.eu/event/iot-week-2021-2/?instance_id=157

Recording: https://iotweek.blob.core.windows.net/iotweek2021/2-%20Training%20Session%20on%20Machine%20Learning%20at%20the%20Edge%20and%20the%20FarEdge.mp4

12. Global IoT Summit (31 August 2021)

Event page: https://www.ngiot.eu/event/global-iot-summit-2/?instance_id=116

The Global IoT Summit (GIoTS) is an international conference established to attract and present the latest research results in IoT. It is endorsed by IEEE and intends to select the best papers through a systematic peer review process. It is co-located with IoT Week 2021 in Dublin.

13. IoT Week 2021 (31 August 2021)

Eu-IoT and ICT-56 Projects participated in the European IoT event of the annual calendar, IoTWeek 2021 with session related to latest policy, research, funding and training. Below is a list of the session organised during IoT Week 2021:

- Training Session by EU-IoT: Machine Learning at the Edge and FarEdge (30 August 2021) https://iotweek.blob.core.windows.net/iotweek2021/2-%20Training%20Session%20on%20Machine%20Learning%20at%20the%20Edge%20and%20the%20FarEdge.mp4

- EU-IoT Hackathon/IDEAthn – Mobile Sustainable IoT Solutions (30 August 2021) https://iotweek.blob.core.windows.net/iotweek2021/3-%20EU-IoT%20Hackathon.mp4

- Join the Next Generation IoT; upcoming Open Calls (30 August 2021) https://iotweek.blob.core.windows.net/iotweek2021/4-%20Join%20the%20Next%20Generation%20IoT%3B%20upcoming%20Open%20Calls%20(Part%201).mp4 and https://iotweek.blob.core.windows.net/iotweek2021/5-%20Join%20the%20Next%20Generation%20IoT%3B%20upcoming%20Open%20Calls%20(Part%202).mp4

- Opening: Next-Generation IoT For a Sustainable Future (31 August 2021) https://iotweek.blob.core.windows.net/iotweek2021tuesday/1-%20OPENING-%20NEXT-GENERATION%20IoT.mp4

- From Cloud to Edge to IoT for European Data by European Commission (31 August 2021) https://iotweek.blob.core.windows.net/iotweek2021tuesday/4-%20From%20Cloud%20to%20Edge.mp4

- IoT Business Model Innovation at The Edge by EU-IoT/NGIoT (31 August 2021) https://iotweek.blob.core.windows.net/iotweek2021tuesday/6-%20IoT%20BUSINESS%20MODEL%20INNOVATION.mp4

- Building an ecosystem for IoT and Edge Computing towards a European Strategy Forum: EU-IoT – The European IoT Hub, Growing a sustainable and comprehensive ecosystem for the Next Generation Internet of Things (1 September 2021) https://iotweek.blob.core.windows.net/iotweek2021wednesday/Building%20an%20ecosystem%20for%20IoT%20and%20Edge%20Computing%20towards%20a%20European%20Strategy%20Forum.mp4

14. Workshop on IoT and Edge Computing Research and Standardisation Convergence (13 – 14 September 2021)

Event page: https://www.ngiot.eu/event/workshop-on-iot-and-edge-computing-research-and-standardisation-convergence/?instance_id=167

This workshop was composed of three online webinars. It started by identifying and discussing the latest developments and priorities in the domain of Internet of Things (IoT) and Edge computing standardisation. It identifed and discussed priority needs from the industry with regards to IoT and Edge Computing standardisation. The webinar discussed how these various efforts can converge to support globally interoperable IoT and edge computing technologies and how can upcoming research support this development, including in specific verticals such as industrial IoT, telecommunication services, health, home, energy and mobility.

Number of participants: 203

Recording: https://www.youtube.com/watch?v=eIMLDRT1-Po

15. Workshop Open Source and Standardisation (15 September 2021)

This was a second meeting organized by EU-IoT and focused on open source and standardization aspects. WP3 Catalyst is focused on supporting the growth and strengthening of the IoT ecosystem, by supporting aspects such as early adoption of products and innovative concepts; assist in technology and know how transfer; providing mapping of Next Generation IoT efforts into open source, pre-standardizationand standardization activities.

16. CONASENSE2021 (4 – 5 October 2021)

Event page:http://www.conasense.org/CONASENSE_International_Symposium_2021.php

Report of the event: http://www.conasense.org/Talks/CONASENSE2021_Reportv1.0.docx.pdf

The 2021 CONASENSE (COmmunications, NAvigation, SENsing, SErvices) International workshop was organised by fortiss together with CTIF, Aarhus University in hybrid mode (physical presence in Munich, Germany), from October 4th to 5th, 2021. The focus was on 6G challenges, based on the CONASENSE interdisciplinary vision. For that purpose, the symposium counted with 25 invited talks and multiple panel discussions. A total of 50 international experts have participated in the workshop, covering topics such as Teraherz communications, IoT remote services; satellite IoT-based sensing; sustainability aspects.

17. Webinar: Introduction to IIoT (18 October 2021)

Event page: https://www.region-a3.com/calendar/webinar-einfuehrung-in-industrial-iot/

Optimized business processes, reduced costs and fine-tuned products and services are among the most common advantages of the Internet of Things (IoT). Its implementation in the industrial

sectors enables the realization of various use cases such as condition monitoring and autonomous systems. In this webinar, fortiss provided a general understanding of the industrial IoT to SMEs in Bayern, Germany.

Number of SMEs participating: 15

18. NDN community event (28-29 October 2021)

Event page: https://www.nist.gov/news-events/events/2021/10/ndn-community-meeting-2021

The Named Data Networking Community Meeting 2021 was hosted by the National Institute of Standards and Technology (NIST) as a virtual meeting on October 28 and 29, 2021. NDNComm is an annual event that brings together a large community of researchers from academia, industry, and government, as well as users and other parties interested in the development of the Named Data Networking (NDN) technology. In this event, fortiss provided an overview on the relevancy and challenges of named-data networking for Industrial IoT.

19. EU-IoT Training Workshop Series: Next Generation IoT Architectures (9 November 2021)

Event page: https://www.ngiot.eu/event/eu-iot-training-workshops-series-next-generation-iot-architectures/

This event presented the "Next Generation IoT Architectures" – Taking Full Advantage of Emerging IoT Technologies.

Number of participants: 87

Recording: https://www.youtube.com/watch?v=AQiTwr4NdC4&t=12s

20. Session at EBDVF 2021 Conference (29 November – 3 December 2021)

Event page: https://www.ngiot.eu/event/the-european-big-data-value-forum/?instance_id=182

Session: Edge Computing - the convergence point in the human-cloud continuum framework

This session explored the key ingredients to ensuring that Europe takes a lead in Edge Computing in the next decade, and the current and planned activities to ensure this, by taking advantage of the shift to the Edge and convergence between IoT, Cloud AI and 5G, as well as other enabling technologies.

Number of participants: 219 participants

Recording: https://european-big-data-value-forum.b2match.io/agenda?session=c2Vzc2lvbjoxMDMxMjY%3D

21. IEEE Access Special Issue on "Internet of Space: Communication Systems for Future Space-based Internet Services" (30 November 2021)

Even page: https://ieeeaccess.ieee.org/closed-special-sections/internet-of-space-networking-architectures-and-protocols-to-support-space-based-internet-services/

This IEEE Access Special Section is focused on the most recent scientific research and insights on the evolution of communication architectures and protocols for an *Internet of Space,* able to boost the creation of a truly global Internet by means of the integration of the current Internet with a new *Internet of Space*. Such evolution is expected to have a significant impact on several markets such as IoT/Industrial IoT, Mobile services, Industry 4.0, Government enterprise, and Connected mobility. The IEEE special section counted with a total of 29 submitted papers, 8 of which have been accepted. At the current date, the final editorial note is being prepared.

22. EU-IoT Training Workshops Series: Distributed Ledger Technologies for IoT Decentralization (07 February 2022)

Event page: https://www.ngiot.eu/event/ngiot-training-decentralizing-iot-intelligence-using-distributed-ledger-technologies/

This seminar presented applications of distributed ledger technologies in IoT including how blockchains enable massive decentralized IoT apps

Number of participants: 90

Recording: https://www.youtube.com/watch?time_continue=1264&v=IyQLtG0G0t8&feature=emb_logo

23. ASSIST IoT Open Call webinar (11 February 2022)

Event page: https://www.ngiot.eu/event/assist-iot-open-call-1st-round/?instance_id=213

Webinar conducted by ASSIST-IoT team for presenting their upcoming funding opportunity through ASSIST-IoT Open Call. 420,000€ reserved for SMEs, RTOs and Universities willing to provide added value to the pilots of the project while validating its technical outcomes. Eligibility criteria, evaluation details and submission procedure were explained.

Number of participants: 37

Recording: https://www.youtube.com/watch?v=7BcpL2jCuVs&t=5s