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## Executive Summary

*Deliverable “Outreach and Impact Creation Activity Report (interim)” gives an insight into the implemented activities that have been carried out during the first half of the project M1-M18, based on the guidelines and means defined in the deliverable “Outreach and Impact Creation Strategy and Plan” and will be concluded in the deliverable “Outreach and Impact Creation Activity Report (final)” that covers the second half of the project M19-M36.*

*The purpose of this deliverable is thereby to:*

- *Present dissemination and communication results*
- *Show communication and engagement activities that have been implemented, monitored and evaluated by following the defined rules and procedures*
- *Depict how the methods, tools and promotional material (e.g. project logo, website, printable dissemination material, events, publications) have been used in the project’s dissemination and communication*
- *Provide a complete overview of the communication activities*

*Through these means, the NGIoT consortium foresees to promote 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.*

*The Communication Plan constitutes an internal instrument that aims to provide a consistent framework for all activities needed to disseminate and sustain the concepts, achievements, as well as the knowledge and results developed within the project. It will be constantly evaluated and revised in the course of the project duration.*



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## 1 INTRODUCTION

### 1.1 Purpose of the document

This deliverable “*Outreach and Impact Creation Activity Report (interim)*” is prepared in the context of Work Package 4 (WP4) and is associated with all the three tasks. However, WP4 is a horizontal component within the project work plan that interacts with all the WPs of the workplan.

The document aims to depict overall dissemination and communication activities for NGIoT for outreach and impact creation that followed guidelines defined in the document D4.1 “Outreach and Impact Creation Strategy and Plan”.

The main focuses of WP4 are contact with the relevant stakeholders, as well as the preparation of the promotional materials and organising dissemination activities to create an open, secured, decentralised, user-oriented and highly engaging NGIoT community.

The purpose of this deliverable is to illustrate the activities based on the outlined communication plan:

- Present dissemination and communication of knowledge and results
- Show communication and engagement activities that have been implemented, monitored and evaluated by following the defined rules and procedures
- 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

### 1.2 Structure of the document

The sections of the deliverable at hand are organised in the following manner.

After the introductory **Section 1**, **Section 2** depicts the vision of NGIoT and the fundamental aspects of the outreach and impact creation strategy, including the main objectives, the description of the target audiences and the strategic planning of the envisioned activities.

**Section 3** presents the various types of dissemination activities and tools that have been used in order to support the project’s dissemination and communication activities.

**Section 4** presents a detailed Communication Activities Plan.

**Section 5** depicts the metrics for the evaluation of the dissemination and communication activities.

**Section 6** is the conclusion.

## 2 THE FUNDAMENTALS OF OUTREACH AND IMPACT CREATION STRATEGY

### 2.1 NGIoT vision and objectives

The vision of NGIoT is to create a robust and agile research and innovation agenda that will close the gap to implementation and lead to unlocking the growth potential of the Internet of Things (IoT) while respecting core European values, supporting key EU policies, leveraging industry associations and establishing a Strategy Board.

NGIoT will achieve this by growing and interconnecting the ecosystems of existing and upcoming European IoT initiatives and stakeholders from the quadruple helix: industry, service providers, policy makers, and knowledge institutions working in the IoT field. This group will contribute input to one of NGIoT's key expected outputs: the creation of an iterative research and innovation roadmap with clear directions for implementation.

In terms of outreach and impact creation, by connecting the various IoT players in Europe and providing an authoritative voice for the industry, NGIoT aims to maximise outreach, harmonise the message and increase the impact of the European IoT industry as a whole.

In order to realise its ambitious vision, NGIoT has devised four high-level objectives. A definition of the high-level project objectives and how they map on to the detailed WP objectives are provided below:

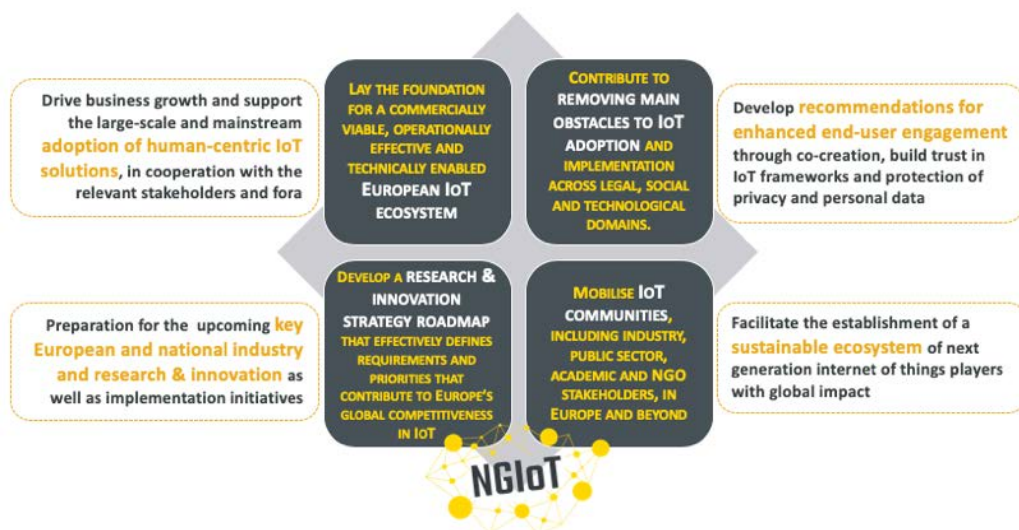


Figure 1: NGIoT main objectives and expected outcomes

### 2.2 Objectives of the outreach and impact creation strategy

In terms of communication and dissemination, the main objective of NGIoT is to leverage the networks and connections already made to engage current players, reach further stakeholders who may be currently on the edges or outside of the established European IoT ecosystems. The outreach and impact creation strategy will also assist in the development of a well-researched, market-oriented roadmap for the years to come. The roadmap's focus is a human-centred IoT strategy in the EU that will benefit society as a whole.

It is important that NGIoT's dissemination, communication and community building activities are overarching throughout the whole duration of the project and serving the entire IoT/IoT Large Scale Pilot (LSP) programme vision of ensuring a human-centred IoT evolution. NGIoT has taken leadership of the AG08 group and IoT LSPs communication channels as a first measure towards achieving this.

To establish and maintain the NGIoT brand for the IoT/IoT LSP initiative, NGIoT has designed, launched and maintains a dedicated web portal at the service of the project and of the community. NGIoT has also put in place and is animating dedicated communication channels and dissemination tools to effectively promote the project's concepts and results. These channels also serve various relevant programmes that are part of the European Commission's IoT initiative, ensuring participation in - and organisation of - dedicated events, as a means to engage the stakeholders, as well as to gather the thematic working groups and provide them with appropriate fora for discussion and interaction.

Given the restrictions on people gathering at events due to Coronavirus, NGIoT has adapted the strategy. NGIoT has adopted a flexible and agile approach to the organisation of virtual events to ensure continued participation by all stakeholders in the NGIoT initiative. The main objectives of the NGIoT dissemination and communication strategy and plan are to:

- Ensure broad visibility of the European human-centred IoT vision gathering all top researchers and innovators, as well as promoting the IoT roadmap, to effectively foster the growth of a human-centred IoT, fitting in the broader NGI initiative and in line with the Horizon Europe ambition for Framework Programme 9
- Connect, stimulate and engage a critical mass of relevant stakeholders (with a strong focus on industry and associations) in a dynamic, sustainable and active ecosystem, able to address technical, business and social challenges related to end-users faced by the communities
- Facilitate the promotion of European research and technology excellence in the field of IoT and enhance its leading position
- Foster contribution to support IoT policies under the Digitising European Industry strategy, defining the roadmap for future IoT, especially human-centred IoT activities
- Actively create synergies with ongoing IoT initiatives at European and national levels, including the current IoT-LSP programme, as well as liaising with the industrial associations and players (especially those who are in the advisory entity – Digitising European IoT Strategy Board)

## 2.3 Target audiences

Given the wide range of areas the NGIoT project will have impact on, different dissemination approaches will be followed, paying attention to classifying these audiences as indicated below.

- Industrial players (including SMEs) in the fields of security, privacy, IoT and NGI, among others prioritising those specialised in sensors and smart objects, mobile operators including IoT device manufactures and cybersecurity companies. Direct reach and direct participation of several partners in activities such as AIOTI, BDVA, IoT Forum will amplify outreach to small and medium business players, but also to larger enterprises. Partner organisations involved in the IoT LSP programme projects.
- Innovators and researchers both in the academic and corporate R&D domains working on, e.g. IoT, NGI, Big Data, security and privacy field.
- Standardisation bodies, including the Internet Engineering Task Force (IETF), the Internet Research Task Force (IRTF), World Wide Web Consortium (W3C), ITU (International Communication Union), as well as newer bodies focusing on IoT such as Alliance for Internet of Things Innovation (AIOTI) and the IoT Acceleration Consortium. NGIoT will collaborate with several standardisation bodies to identify where and how standards should evolve. These bodies will be informed of any relevant project outcome that can be of interest for their activities and stakeholder contributions will also be encouraged, so as to amplify the outreach and impact of the project.



- Security and privacy experts and groups, including Digital Europe, European Digital Rights (EDRI), European Union Agency for Network and Information Security (ENISA), Internet Privacy Engineering Network (IPEN), European Cyber Security Organisation (ECSO), national data protection authorities, the European Data Protection Supervisor (EDPS), European security clusters in different countries, among which some have groups specialised in the IoT setting where the specific techniques and solutions proposed by NGIoT can contribute to address many organisational, security and societal challenges.
- The environment and society as a whole including citizens, students, public authorities, etc. that could benefit from an enhanced and human-centred IoT ecosystem.
- A number of key and relevant associations connected through the Strategy Board and Experts Group established by the project consortium, which will further expand after the project moves forward. These Associations are: OASC / Synchronicity, IoT Forum, IoT Forum / IoT EPI, TM Forum, FIWARE Foundation, Online Testing Association, IPSO Alliance / Ericsson, ENOLL / U4IoT, Finnish Chamber of Commerce, EIP-AHA / ActivAge, EIP-SCC, IoF 2020, Gartner, oneM2M, Atos, Ideas for Change, ATB Bremen, c\*Funds, IoT Tribe, IoT NEXT (Club of SMEs), University of Cantabria and University of Sorbonne

## 2.4 Outreach and impact: phases

NGIoT will follow a phased approach to defining, planning, organising and exploiting a rich set of activities and instruments in the most effective way towards building a strong and vibrant IoT community in the EU that will make a difference in the future development of the field and NGI scene at large. Accordingly, the project follows a three-phase approach to outreach and impact creation, as follows:

### Phase 1: NGIoT Sowing phase - awareness creation, communication foundation (M1-M06)

During this phase, NGIoT defined the dissemination strategy and plan, with target groups, planned activities and tools, in close coordination with the European Commission and the crosscutting IoT LSP Activity Group (AG08), that is leading communication of the IoT LSP programme.

NGIoT prioritised creating a set of communication tools and mechanisms to maximise outreach and engage target stakeholders. This involved strengthening the overall content strategy in relation to the planned project outcomes, also by aligning with the overall IoT LSP programme objectives, as well as the overarching Next Generation Internet vision and plans, in close coordination with relevant European industrial associations.

**Outcomes/measures:** NGIoT web portal created and launched, including a calendar of relevant events. Dedicated social media channels animated – NGIoT on Twitter, Facebook, LinkedIn and YouTube as well as animating the IoT LSPs twitter feed. NGIoT survey launched. The first NGIoT newsletter was published in April 2019. The design of a first flyer about the human-centred IoT initiative. A slide-based project presentation. The first video as introduction to the NGIoT concepts and main objectives.

### Phase 2: NGIoT Flowing phase - targeted outreach and engagement bootstrap (M7- M24)

The scope of Phase 2 (current phase of the project) of the NGIoT outreach strategy is to actively reach out to targeted stakeholders and the public to generate interest and demand for the NGIoT activities and outcomes. This will create further synergies and collaboration opportunities for the EU IoT/IoT LSP research and innovation community for stronger industrial liaison, security ecosystems, NGI and related initiatives. Initial versions of the roadmap and market studies are available.

**Measures:** Feedback from the NGIoT survey provided input to the roadmapping activities. During this phase, partners of the consortium attended the annual flagship event, IoT Week 2019, alongside other

key events (e.g. NGI Forum, Digital Assembly, EuCNC, CSCC, among others). Promotional activities, including continuous population and animation of the portal and media channels continue. Quarterly editions of the newsletter have been produced and disseminated; videos and live sessions from events and thematic workshops have been launched and produced. Other NGIoT materials produced to highlight the human-centric IoT initiative include flyers, posters, presentations, publications and thematic videos.

### Phase 3: Harvesting phase - broad outreach and experimenters' support (M25-M36):

Phase 3 of the NGIoT outreach and impact strategy will provide further dissemination in the final “full bloom” phase of the road-mapping and ecosystem creating activities of the NGIoT project and other relevant projects within the community. This phase will actively engage and support all stakeholders in the network of European IoT and NGI, built by NGIoT through its dedicated promotional activities. Broad outreach in Europe and beyond, will also be the key to ensure a sustainable ecosystem that will continue beyond project duration, paving the way for Horizon Europe.

**Measures:** Results of the NGIoT project will be presented to key communities in IoT and NGI. The project will support the organisation of the flagship event, IoT Week 2021, on behalf of the IoT LSP community, including promotional activities. This phase will see the final development of the roadmap. Other outreach activities, continuous population and animation of the web site and media channels and developing promotional materials. The Last 4 editions of the newsletter will be produced and disseminated; Videos and live sessions of the events and thematic workshops will be launched and produced. Active participation at external events and presentations are expected. The roadmap will be presented and promoted widely in and beyond the IoT communities. D4.3 “Outreach and impact creation activity report (final)” will be produced, as a summary of the project’s effort in impact creation.

The following Figure 2 demonstrates the three phases.

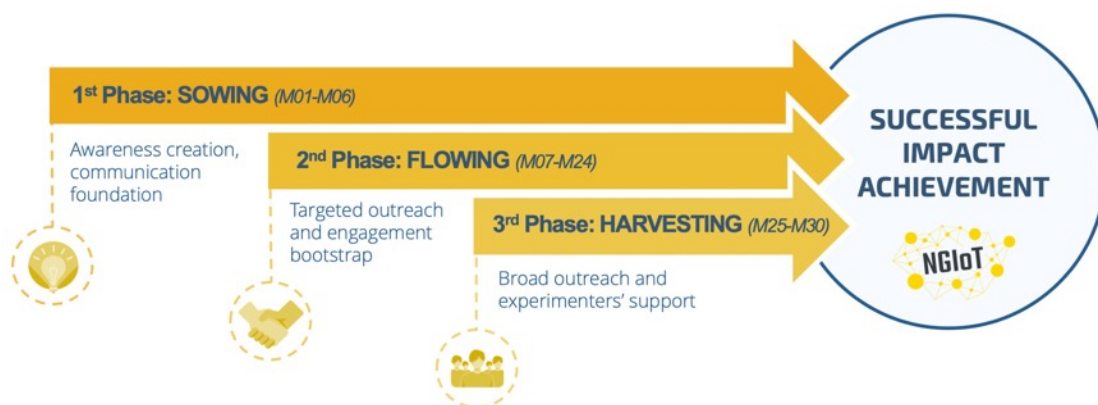


Figure 2: NGIoT Phases of the dissemination plan

## 2.5 Envisaged activities: the pillars of the strategy

The NGIoT communication and dissemination strategy will be led by the pillars introduced below.

**Strong engagement of industrial players and IoT related associations:** A key feature of NGIoT is to actively engage industrial and association-based stakeholders to maximise impact and gather hands-on market-related feedback and to integrate them into the road-mapping and ecosystem-building activities. This will follow closely not only the existing IoT policy documents from the EC, but will also create synergy with and build on the members’ latest activities and initiatives (e.g. AIOTI, IoT Forum, among others). Key industrial partners from each of the IoT LSP programme / NGI related projects will

be invited to join the Strategy Board and actively participate in the thematic working groups, dedicated project events and activities and co-create the analyses and recommendations to be integrated in the roadmap. As mentioned, NGIoT has taken leadership of the AG08 group and IoT LSPs communication channels as a first measure towards achieving this.

**Participation in and organisation of events:** This area of activity has been severely impacted by restrictions on travel due to the Coronavirus outbreak. The initial objectives remain to ensuring visibility of NGIoT's work and results and to promote them broadly to attract and engage all target stakeholders, fostering major participation to the project activities (e.g. the roadmap and ecosystem development), large-scale awareness creation for human-centred IoT deployment and network building for the IoT ecosystem.

In 2019, the consortium supported the organisation of IoT Week, as well as participating in relevant events, such as the annual NGI Forum, Digital Assembly, EuCNC, Connected Smart Cities Conference, Smart City Expo, among others. This has contributed overall to the building of an active IoT network of stakeholders and the ecosystem and will continue to do so, albeit in a virtual format for the foreseeable future.

At project level, NGIoT has taken, and will continue to take advantage of its direct link to IoT Forum and Open & Agile Smart Cities (OASC) and to organise impactful, dedicated sessions at the annual Connected Smart Cities Conference, IoT Week and the Smart City Expo – and from March 2020, their 'virtual event' equivalents to actively promote its concepts, invite distinguished AG members for insightful presentations on various aspects concerning deployment of the IoT technologies, to collect feedback from thematic working group discussions, workshops on IoT policy and funding opportunities. In live events it has been possible to showcase actively via exhibition booths with industrial and R&I partners, but since March, 2020 it is necessary to showcase online. Live event and online sessions have a strong innovation and industry focus, aiming to bring real opportunities to stakeholders.

**Relevant initiatives in the IoT field.** The NGIoT consortium benefits from its deep involvement in the IoT, standardisation, privacy and security, NGI related initiatives, including managing the dissemination and communication aspects of similar types of CSA projects. Active seeking of synergy through joint events, promoting materials, online activities, among others will be explored, building on and aggregating results, lessons learned and networks of these projects. On the other hand, the project will cooperate with key IoT initiatives with strong technical focus (details in Section 3.4).

The consortium also has direct contacts with other IoT LSP programme projects and leads the strategic communications (AG08) of the LSP Cluster (details in Section 3.5).

## 2.6 COVID-19 and outreach and impact creation strategy

### 2.6.1 Outreach and impact creation strategy update

The original vision of NGIoT has been brought into sharp focus by the international travel bans imposed by containment measures by governments due to the COVID-19 outbreak. Certain elements of the objectives of NGIoT will have to adapt to the post-Coronavirus circumstances.

In this context, NGIoT consortium has adapted the current outreach and impact creation strategy based on the following:

- We are participating / contributing in the online events that "replace" the physical ones, taking part in the ongoing discussion and presenting the project main outcomes and activities as planned.

- We are implementing an intense programme of webinars in collaboration with all WPs, in conjunction with a communication plan aiming for a broad engagement of the community and attracting a large number of stakeholders from various domains of the NGIoT ecosystem.
- We strengthen our online communication activities to reach and echo the relevant activities around the community.
- We plan a series of activities related to the role of IoT and the currently discussed, running and planned activities throughout the NGIoT community.

These activities and the special circumstances that the containment measures have an effect on some of the dissemination and communication KPIs as described in the table below:

Table 1: Dissemination and communication KPIs impact

Measure	Indicator	Target Values	Source and methodology	Effect and update
Human-centred IoT Flyers	Number of brochures distributed (one update per year at least on the flyer)	1000/year	Through online and offline distribution	It is possible that the consortium will not reach this number, due to the limited physical events
Roll-up Banner	Number of roll-ups produced	3 by the end of the project (1 per year)	Through the dissemination reporting	No effect
Newsletters (published quarterly)	Number of subscribers	>500 (by the end of the project)	In-built website statistics tool	No effect
Project website	Number of unique visitors to website/page-hits	350 visitors/month (by the end of year 1)	In-built website statistics tool	No effect
Social networks	Number of followers in LinkedIn, Twitter, YouTube, Facebook	At least 500 overall (average number of followers in Twitter, YouTube, Facebook + Members in LinkedIn)	In-built statistics from different social media platforms	The consortium will join either physically or online the events that will take place, contributing to their organisation as planned in the workplan
Events	Number of events organised/participated, number of participants	3 annual flagship events, with at least 250 participants per edition	Attendance proofs (e.g., photos), events' report	No effect
Videos	Number of videos published on YouTube and average number of views	5 videos per year and 150 views per video	In-built website statistics tool	No effect

## 2.6.2 IoT and COVID-19 outreach plan

NGIoT is set to produce a series of pieces of content on COVID-19 following a set of actions on the subject of “IoT and COVID-19”. These actions are organised in three subsequent phases, which are the following:

**Search and report:** The main objective of this phase is to collect and promote the activities and initiatives that are taking place or are planned for the next months from the various entities, organisations, projects, clusters, associations or relevant working groups in the domain of IoT and also from the vertical ones. Apart from the activities initiated or planned by the EC, also the ones planned by the IoT LSPs (the running ones), the ESPs, the newly started Large Scale Pilot projects on the domains of the DEI Focus Area in the Smart Health & Care, Smart Farming, Smart Energy, the initiatives indicated in the NGIoT Roadmap and additional ones, like the Living-in.eu, OpenDEI, OASC and others will be taken into account.

These activities will be reported and echoed in the community through a (series of) news item / press release, in the project website.

**Collect and analyse:** Based on the ongoing activities, discussions and aspects around IoT in the COVID-19 period (and beyond), a webinar will be then organised that will include also live polls, to examine basic dimensions and challenges of the current and planned actions, with the participation of experts from the IoT international domain.

**Discuss and plan:** The research results of the first phase in conjunction with the results of the webinar and the short live polls of the second one, will be used in the third phase to structure a preliminary version of a white paper that will be discussed within the NGIoT Strategy Board. The result of all the three phases will be the publication of a whitepaper.



Figure 3: IoT and COVID-19 outreach plan

As post planned activities, are considered:

- Addendum to be added to the NGIoT Roadmap (by September)
- Three of the top content themes would feature in a series of short videos, recorded by video conference (Sept – Jan 2021)
- One additional webinar to be organised by the end of 2020

### 3 MEANS AND ACTIVITIES

This section presents the dissemination material created and activities undertaken by NGIoT partners from the beginning of the project in November 2018 until May 2020.

#### 3.1 NGIoT brand identity

As an EC co-funded Coordination and Support Action project, a clear project brand identity has been implemented since the early stages, in order to have an impact with the dissemination of respective work and achievements. Effective visual brand identity is achieved by the consistent use of particular visual elements to create distinction, such as the NGIoT logo, specific fonts, colours, and graphic elements including templates. All dissemination materials refer to the project name, the project's website and Horizon 2020 with associated graphic elements in line with the European Commission's guidelines [1] including the EU flag and declaration including the grant agreement number. The NGIoT visual identity, created by Martel, is incorporated in all promotional and dissemination materials and is used by all project partners in their communication activities according to the guidelines NGIoT has provided. More information is provided in document D4.1.

#### 3.2 Online presence

##### 3.2.1 Project website

A website dedicated to the IoT/IoT LSP vision was designed and developed from M2 of the project. The **fully functional NGIoT website** represents the supportive actions and the community of the programme and enables the initiative to outreach to all stakeholders involved in the deployment of a human-centred IoT ecosystem. This NGIoT website is the main communication tool for the dissemination and communication of information related to the project and the NGIoT community was created and is maintained by Martel, as communications lead of NGIoT. A full description of the website is presented in document D4.1.

##### NGIoT website analytics

The NGIoT website had 8,216 sessions – which means the total number of users accessing the website. This comprises of more than 6,029 unique users up to May 2020. Unique users are defined as visiting the website once. There were also more than 6,015 users – defined as people visiting the website more than once who made 2,187 unique sessions. This is considered a strong performance.

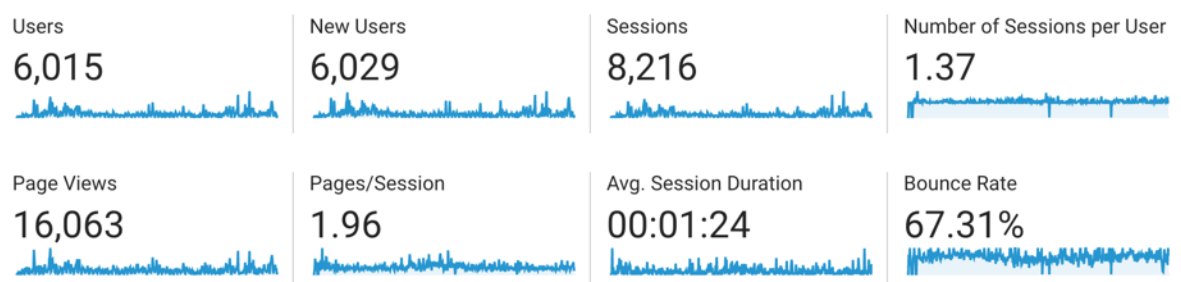


Figure 4: Users and sessions of visitors of the NGIoT website

The website had an average of 457 unique visitors per month and in total the website has had more than 16,000 page views during the reporting period.

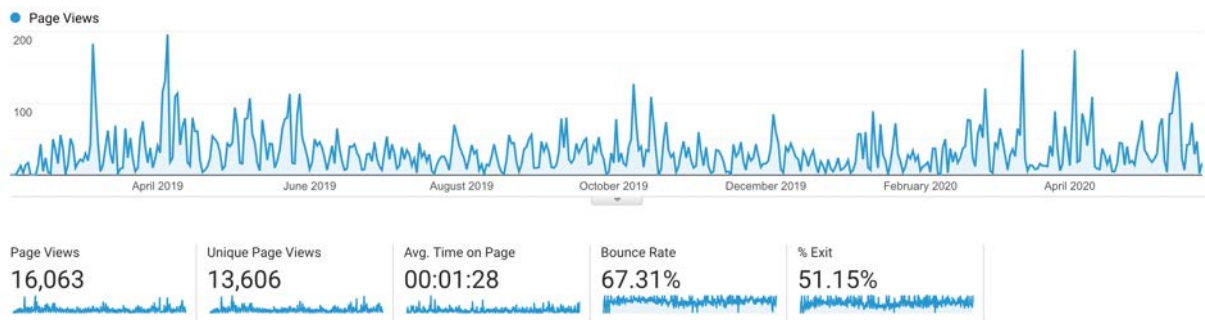


Figure 5: Page views of the NGIoT website

The main sections of the project website include the following:

- **Home:** Intro page that, using a slideshow, presents the main concept and message of the project and the accesspoint to the upcoming events, the NGIoT community, registration to the project newsletter and social media
- **Community:** This page is the entrypoint to the relevant ecosystem, including the main stakeholders and liaised initiatives offering information and access.
- **News:** This part announces all the project news and important items from the NGIoT community, such as events, workshops, webinars, relevant documentation, etc.
- **Events:** This section of the website includes all the key events that the partners and the LSP projects organise and participate in along with other relevant events of the NGIoT community. Besides that, the overview of the most relevant events attended by the NGIoT partners is available.
- **Resources:** This area provides all dissemination, promotion and communication materials that are available to the public, including Media, outcomes (public deliverables), published (research) papers, presentations/talks, press releases, videos and presentations.
- **Contact:** This includes the form and contact points for the visitors to communicate with the dissemination and coordination team of the project
- **Social media pages:** This information is placed at the top and bottom of all pages allowing people to follow to the social media pages (Facebook, Twitter, LinkedIn and YouTube) of the project.
- **Newsletter:** This page includes the list of published newsletters that can be accessed and a subscription area, where visitors/partners could subscribe for receiving newsletters.

The website is based on a **Content Management System (CMS)** allowing easy way of creation and management of the website content, including news, events and other relevant articles and their relevant images.

Martel as communication lead keeps the authority to upload content, mainly for the sake of consistency and editorial quality. All partners contribute to drafting content, according to their role in the project and their knowledge, using the relevant templates and tracking online documents.

### 3.2.2 Social media

Various social networks are used as **marketing tools** in order to promote activities and outputs of the project on a regular basis, while also encouraging a wider discussion on the topics related to NGIoT activities. Thus, NGIoT has an active presence on the most popular social media channels, such as **Twitter, Facebook, LinkedIn** and **YouTube**, which are linked to the project's website and the NGIoT Google account. Below we present a brief overview of the Social Media channels created for NGIoT.

**Twitter** (<https://twitter.com/NGIoT4eu>) total number of followers: 543

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

NGIoT already has an active Twitter account ([@NGIoT4eu](https://twitter.com/NGIoT4eu)) and has chosen the basic hashtags [#IoT](https://twitter.com/NGIoT4eu) [#NGIoT](https://twitter.com/NGIoT4eu) for its tweets. The twitter account is used for promoting and disseminating the development of NGIoT, including news, events, outcomes, etc. Moreover, re-tweets are made of relevant and interesting content from disparate sources. Last but not least, by following relevant users, NGIoT not only gains access to more relevant content and updates, but also acquires more followers.

As a Horizon 2020 project, NGIoT follows the official Twitter account of the Horizon 2020 programme [@EU\\_H2020](https://twitter.com/EU_H2020) thus becoming a part of the community of H2020 projects on social media. Following the guidelines received from the EC[2], we pursue to use a hashtag [#ResearchImpactEU](https://twitter.com/EU_H2020) and tag [@EU\\_H2020](https://twitter.com/EU_H2020) whenever announcing important news which clearly show the real impact of our research. Other hashtags and accounts that are frequently used according to the content of the posts, are: [#innovation](https://twitter.com/EU_H2020) [#H2020](https://twitter.com/EU_H2020) [#EUfunding](https://twitter.com/EU_H2020) [#IoTWeek2019](https://twitter.com/EU_H2020) [@IoTForum](https://twitter.com/EU_H2020) [@NGIEXP](https://twitter.com/EU_H2020) [@NGI4eu](https://twitter.com/EU_H2020) [@5GPPP](https://twitter.com/EU_H2020) [@FIWARE](https://twitter.com/EU_H2020) [#SmartCities](https://twitter.com/EU_H2020) [@IoTeuLSP](https://twitter.com/EU_H2020) [@oascities](https://twitter.com/EU_H2020) [@U4IoT](https://twitter.com/EU_H2020) [#SmartCities](https://twitter.com/EU_H2020) [#digitaleurope](https://twitter.com/EU_H2020) together with hashtags relevant to the project partners' organisations and representatives, hashtags of initiatives and events related to the project and the content, accounts of important participants of these events, accounts of the Project Officer of the EC, and more.

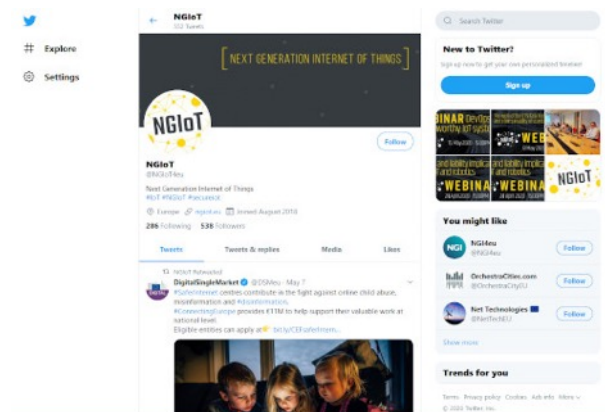


Figure 6: NGIoT Twitter account

**LinkedIn** (<https://www.linkedin.com/groups/8774065/>) Total number of members on LinkedIn = 57

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.

NGIoT maintains a LinkedIn profile page, making it possible to connect to relevant professionals and share news and developments with them, while making it possible to subscribe to and connect with relevant groups.



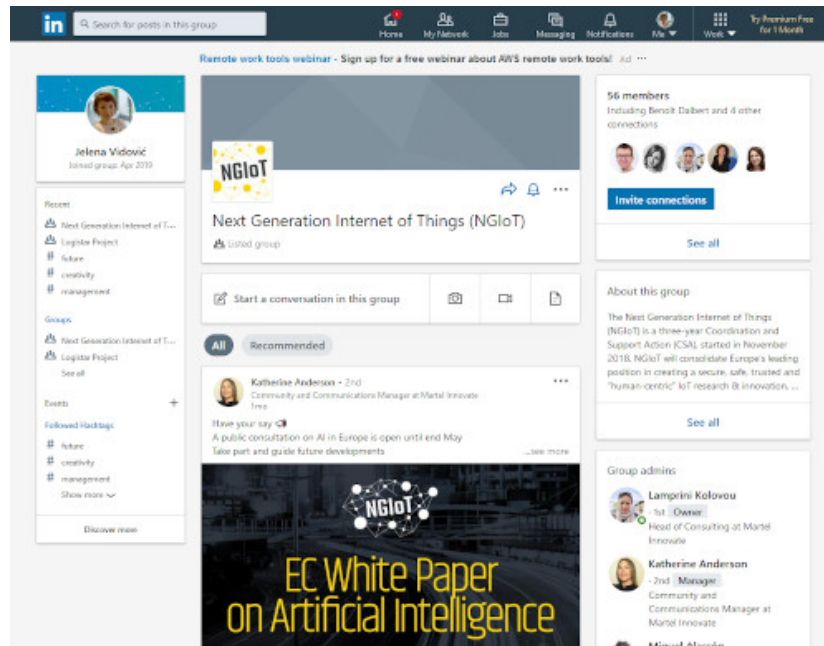


Figure 7: NGIoT LinkedIn page

**YouTube** (<https://www.youtube.com/channel/UCoybrBS6vzvKnkAsCXK9R1Q>)

There are nine videos on the NGIoT YouTube channel, with a total of 210 views. Video production is described in the Video and Multimedia section of this document, 3.2.5.

There are three corporate videos:

- Introduction to the Next Generation Internet of Things (52 views)
- IoT for what? (93 views)
- NGIoT & Smart Cities (32 views)

There is a series of videos of webinars, which are discussed in the webinar section of this document 3.2.6.

There is also a series of videos featuring presentations about NGIoT at IoT Week, 2019, referenced in the section on Videos and Multimedia in 3.2.5.

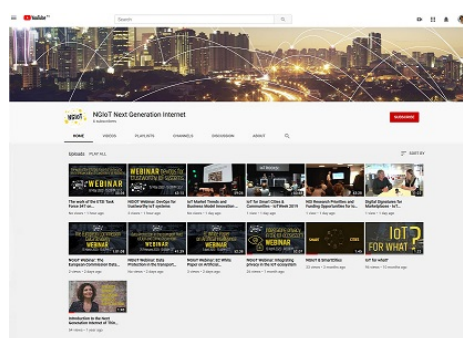


Figure 8: NGIoT YouTube channel

**Facebook** (<https://www.facebook.com/ngiot/>) Total number of page 'likes' = 32

NGIoT maintains a Facebook page, in order to be reachable by a broader and probably less specialised audience. The project's Facebook page includes news, photos and information about the NGIoT project, its developments and activities. We also pursue to re-post relevant and interesting information from other accounts in order to enrich the page content and attract more fans.

### 3.2.3 e-Newsletter

A total of three quarterly newsletters have been produced in the reporting period with a total number of 126 subscribers. A registration functionality (encourages users to subscribe to the newsletter) is included on each website page. In accordance with GDPR guidelines, the newsletter is sent to registered subscribers of the newsletter portal and the mailing list of the project. In addition to being circulated by e-mail, the newsletter is also promoted on social media via Twitter, Facebook and LinkedIn and is made available on the NGIoT website.




<input type="checkbox"/>		<b>NGIoT newsletter 3</b> Regular · NGIoT Sent jeu., février 27th 4:16 AM	Sent	<b>48.6%</b> Opens	<b>23.4%</b> Clicks
<input type="checkbox"/>		<b>NGIoT newsletter 2</b> Regular · NGIoT Sent mer., octobre 9th, 2019 4:00 AM	Sent	<b>49.4%</b> Opens	<b>19.5%</b> Clicks
<input type="checkbox"/>		<b>NGIoT newsletter 1</b> Regular · NGIoT Sent mar., mai 28th, 2019 5:30 AM	Sent	<b>60.4%</b> Opens	<b>16.7%</b> Clicks

Figure 9: Number of people who have opened the NGIoT newsletter email (opens) and number of clicks on content within the newsletter (clicks)

The NGIoT e-Newsletter is produced by the NGIoT consortium on a quarterly basis. A typical e-Newsletter contains highlights (major outcomes, links, contacts, and dissemination activities), the most important news, announcements and a schedule of the major upcoming webinars/events. Project partners regularly provide information for the e-Newsletter and ensure that the content is accurate.

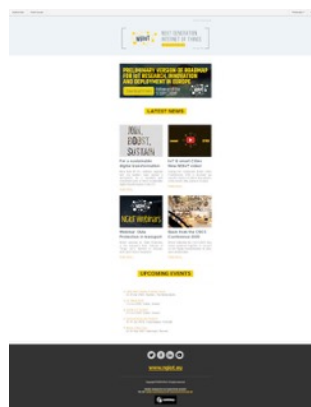


Figure 10: NGIoT newsletter

### 3.2.4 e-Publications

All documents produced by the project are published on the NGIoT website (<https://www.ngiot.eu/resources/publications/>):

Below is a list of documents produced by the project that are available on the website:

- Preliminary version of Roadmap for IoT Research, Innovation and Deployment in Europe: [https://www.ngiot.eu/download/ngiot-draft-roadmap-for-iot\\_research-innovation-deployment-in-europe/?wpdmdl=688&masterkey=5e5fdc5573311](https://www.ngiot.eu/download/ngiot-draft-roadmap-for-iot_research-innovation-deployment-in-europe/?wpdmdl=688&masterkey=5e5fdc5573311)  
Number of downloads from NGIoT website = 186
- IoT and 5G City: <https://ngiot.eu/wp-content/uploads/sites/26/2019/07/IoT-5G-smartcity-report-NGIoT.pdf>  
Number of downloads from NGIoT website = 95
- Building a roadmap for the Next Generation Internet. Research, innovation and implementation 2021 – 2027: [https://ngiot.eu/wp-content/uploads/sites/26/2019/09/NGIoT\\_scoping-paper.pdf](https://ngiot.eu/wp-content/uploads/sites/26/2019/09/NGIoT_scoping-paper.pdf)  
Number of downloads from NGIoT website = 152

A chapter of a book/monograph has been produced by NGIoT, entitled “*Security Risk Management for the Internet of Things: Technologies and Techniques for IoT Security, Privacy and Data Protection, chapter 9: Data Protection Compliance Requirements for the Internet of Things*”, published by Boston-Delft: now publishers: <https://www.nowpublishers.com/Article/BookDetails/9781680836820>

In addition, significant project developments, news and announcements, press releases and articles introducing NGIoT are published on third-party portals, including professional and specialised platforms, Cordis, relevant thematic blogs and collaboration platforms, partners’ web portals, as well as through several freely accessible tools.

A preliminary list of the freely accessible portals includes:

- Cordis projects & results: <http://cordis.europa.eu/projects/homeen.html>
- TRIMIS: <https://trimis.ec.europa.eu/>
- ELTIS: <http://www.eltis.org/>
- Horizon Magazine <http://horizon-magazine.eu/https://ec.europa.eu/programmes/horizon2020/en/newsroom/551/>
- research\*eu results magazine <http://cordis.europa.eu/research-eu/homeen.html>
- Headlines on the Commission’s Research & Innovation website [www.ec.europa.eu/research/infocentre/allheadlinesen.cfm](http://www.ec.europa.eu/research/infocentre/allheadlinesen.cfm)
- CORDIS Wire <http://cordis.europa.eu/wire/>

### 3.2.5 Videos and multimedia

A suite of videos are being produced to better communicate the project concepts to the target groups as audiovisual content performs well on social media channels and video interviews add a human dimension to the ‘human-centered IoT’ community.



Figure 11: NGIoT thematic videos

There are three corporate/thematic videos:

- Introduction to the Next Generation Internet of Things (52 views)
- IoT for what? (93 views)
- NGIoT & Smart Cities (32 views)

Additional videos are planned for thematic working group discussions and events.



Figure 12: NGIoT & Smart Cities video

A video series from presentations and interviews conducted during IoT week 2019 has been produced. It features the following:

- Digital synergies for marketplaces
- NGI research and funding
- IoT for smart cities and countries
- IoT market trends and business model innovation.

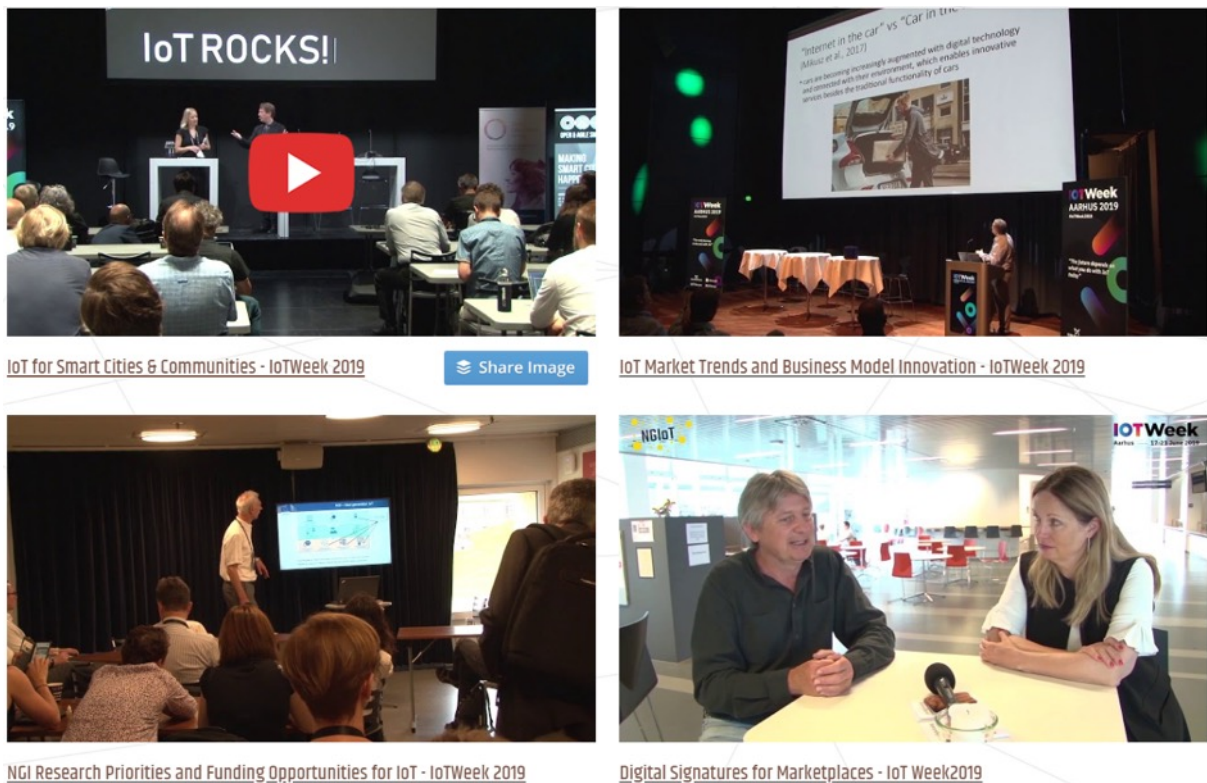


Figure 13: Video series from IoT week 2019

Additional short videos and interviews with leading experts and policy makers explaining the main challenges and policies will be created and published on the project website and on YouTube. The interviews will mostly take place during the events that the project partners will organise and participate in, engaging key stakeholders, policy makers and representatives from all the domains of the NGI & IoT ecosystems.

### 3.2.6 Webinars

Together with WP2 and WP3 partners a series of webinars have been delivered, both for general audiences and for targeted groups. They are announced and communicated through NGIoT social media channels, the news section of the NGIoT website and the NGIoT newsletter. Participation in the series of webinars with topics addressing targeted groups is invitation-based.

Important IoT/NGI topics are defined and selected experts (both internal and external) have been invited to speak.

Future webinars are posted on the 'Events' page of the NGIoT website and widely disseminated through social media.

Webinar recordings are made available on a webinar portal created under the resources tab of the NGIoT website: <https://www.ngiot.eu/resources/presentations-talks/>

A list of webinars held to date:

- Data Protection by design in IoT deployment for smart cities
- Human centred IoT, a multidisciplinary approach
- Data protection in the transport field
- European Commission Data Strategy
- EC White Paper on Artificial Intelligence
- Integrating privacy in the IoT ecosystem

- Safety and liability implications of AI, IoT and robotics
- The work of the ETSI Task Force 547 on security/privacy and interoperability of standardised IoT platforms

A shared Excel sheet template on Google Drive, listing all webinars (upcoming/past) 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 are following the common process before and after the webinar takes place.

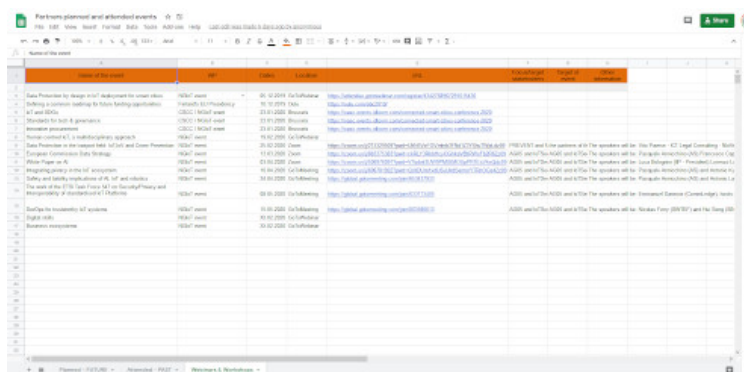


Figure 14: List of NGIoT webinars and workshops

Selected experts (both internal and external) are also invited to present material on relevant IoT/NGI topics in the form of presentations or lectures. Presentations are available on the project website (<https://www.ngiot.eu/resources/presentations-talks/>).

For the lectures, the main approach was to identify the experts and policy makers who will participate in the annual edition of IoT Week as major event (or any equivalent one to be discussed and agreed upon with the EC) for the next generation IoT efforts in Europe. The most relevant sessions have been selected from the event’s programme and recorded. The experts and policy makers have been asked for permission to record their sessions on site.

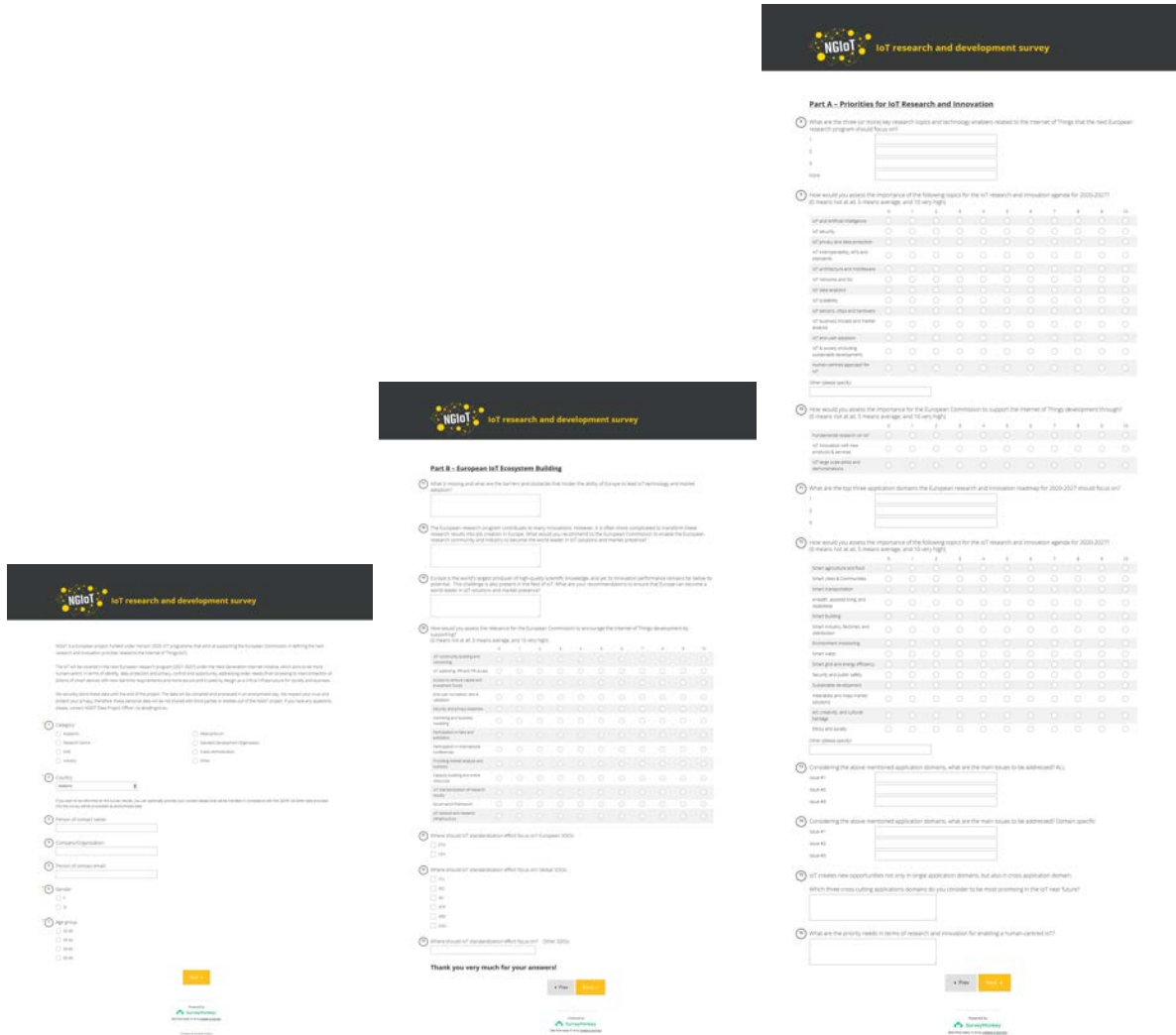
Lecture sessions are available on the project website in an ongoing process: <https://www.ngiot.eu/resources/videos/>.

3.2.7 Online tools

**Interactive tools** such as surveys, a repository of relevant IoT initiatives in Europe and a portable demonstration package have been created and maintained integrating the main outcomes of relevant IoT projects to be used at community engagement events and demonstrations.

**Surveys:** The project’s first survey, the IoT research and development survey, was launched at the beginning of March 2019. The survey gauged the views and collect suggestions from the European IoT community, seeking input on the top priorities to be addressed by the next phase of European research & innovation funding and the Horizon Europe deployment programme for 2021-2027.





(a) Introduction page

(b) Part A - Priorities for IoT Research and Innovation

(c) Part B - European IoT Ecosystem Building

Figure 15: NGIoT online survey

An **online repository** is available on the project website. It provides insight into all relevant IoT initiatives/pilot installations in Europe. Each IoT initiative/pilot installation item on the list contains the relevant information related to selected POI (Point of Interest). The list has various categories that enable users to narrow down the search among the:

- NGI & IoT initiatives
- LSP projects
- IoT ESP projects
- Liaised projects
- Standardisation bodies
- Security and privacy initiatives

The **demonstration package** was planned to be delivered as a set of related videos giving the answer to the relevant questions that explain main projects results, lessons learned, what impact those result have on future projects in certain project area and other LSPs in other domains. So far, material has only been collected from: U4IoT, ACTIVAGE, MONICA and IoF2020. Since most of the projects already ended, it is difficult to collect all the necessary information from this point and beyond. Instead of providing the demonstration package, the consortium plans to organise a series of interviews / videos for the new projects funded as Large Scale Pilots, using the same format of questionnaire.





### 3.3 Events-based dissemination

Events-based dissemination is an essential part of the NGIoT strategy and activities. It targets to liaise with IoT stakeholders via organisation of dedicated events, as well as coordinating participation in major EC/Non-EC conferences and events. These activities contribute to better utilise and reinforce the research and innovation excellence of Europe in the field of IoT, to advocate a strategy that focuses on human-centred IoT through security, privacy and user trust, as well as to build and sustain an IoT network involving various stakeholders, as defined in the project community (Sections 2.3 and 3.2.1).

The events will help the partners while implementing the relevant tasks of the project workplan to identify emerging business models, discuss and contribute to the development of the roadmap, liaise with a broad range of stakeholders from both the supply and the demand side.

The main focus is to contribute to the annual editions of IoT Week, as major event (or any equivalent one to be discussed and agreed upon with the EC) for the next generation IoT efforts in Europe. Participation with presentations, workshops and dedicated sessions to other events will take place according to specific opportunities and needs to promote the overall next generation IoT vision.

#### 3.3.1 Events participation

NGIoT presented at a number of events aiming to promote and communicate, by all relevant means and tools, all relevant information that will increase the project’s visibility in terms of the NGI and IoT aspects. Participation in events is also an opportunity to increase and strengthen the network of relevant parties interested in becoming part of the audience of the project and intermediaries becoming multipliers of NGIoT.

In particular, the flagship event and selected key events are planned, closely in line with the iterative process around the roadmap development and policy recommendation activities proposed by NGIoT.

The NGIoT representation at the events can take place in different ways, including paper or project presentations, poster presentations, simple participation for liaising or networking purposes, workshops organisation or general support of the LSP projects. Promotional materials such as brochures, a poster or a roll-up (where relevant) will be also used for dissemination purposes.

A shared Excel sheet template on Google Drive, listing relevant events based on importance and participation has been created in order for the project consortium to be able to keep track of the partners’ participation and to report about these activities and their impact in the dissemination deliverables as well as on the project website.

Name of the event	Type	Dates	Location	URL	Description	NGIoT representation	Impact/Status
1. IoT Week 2019	To attend (to attend)	10-12 October 2019	Brussels, Belgium	https://www.itsolutions.eu/2019/	IoT industry, policy makers, academia, etc.	NGIoT representation: presentation, poster, workshop	High
2. IoT Week 2019	To attend (to attend)	10-12 October 2019	Brussels, Belgium	https://www.itsolutions.eu/2019/	IoT industry, policy makers, academia, etc.	NGIoT representation: presentation, poster, workshop	High
3. IoT Week 2019	To attend (to attend)	10-12 October 2019	Brussels, Belgium	https://www.itsolutions.eu/2019/	IoT industry, policy makers, academia, etc.	NGIoT representation: presentation, poster, workshop	High
4. IoT Week 2019	To attend (to attend)	10-12 October 2019	Brussels, Belgium	https://www.itsolutions.eu/2019/	IoT industry, policy makers, academia, etc.	NGIoT representation: presentation, poster, workshop	High
5. IoT Week 2019	To attend (to attend)	10-12 October 2019	Brussels, Belgium	https://www.itsolutions.eu/2019/	IoT industry, policy makers, academia, etc.	NGIoT representation: presentation, poster, workshop	High

Figure 16: Google Drive sheet listing the events for potential/confirmed NGIoT representation





An indicative (yet non-exhaustive) list of relevant events, which are considered useful for dissemination purposes throughout the first year of the project and beyond, is presented in Annex A. These events, to be selected and prioritised during the project, are proposed as an indication of the types of events being held mainly in the EU in 2019 and in 2020 prior to COVID-19 restrictions and thereafter as virtual events that NGIoT has considered participating in.

The list will be regularly updated in the shared sheet in Google Drive during the whole project duration.

The events included in this shared file are divided into three categories: 1. Key event (to attend), 2. NGIoT event (organised by the project), 3. Of interest (events that might be of interest of the NGIoT community). This file also feeds into the events section of the project website (Annex A).

After every event, the NGIoT partner(s) who joint the event is requested to update the shared events list with all the relevant information to capture the experience and updated the “News” section of the website with the relevant information and visual materials.

In the reporting period to date, NGIoT participated in a total of 27 events. Analysis has been performed on the types of stakeholders at the events and the percentage of events per country:

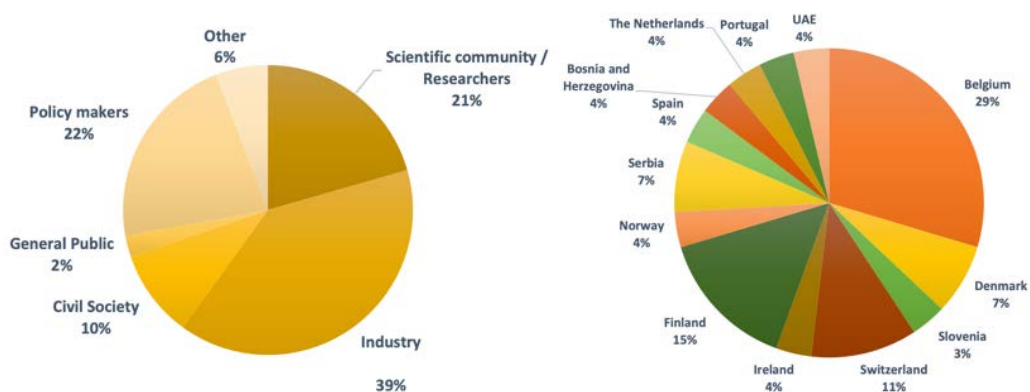


Figure 17: Types of stakeholders at all events and the percentage of events per country

### 3.3.2 Events organisation

NGIoT event planning is undergoing a thorough reevaluation due to travel restrictions encountered during the COVID-19 pandemic. The initial plans to contribute to the annual editions of IoT Week as a flagship event among others, and equivalent ones, had been agreed upon with the EC for the next generation IoT efforts in Europe, contributing to the agenda by making sure focused workshops and sessions take place allowing the European IoT stakeholders, including the IoT LSP and Security clusters, to showcase their work. This was achieved for IoT week 2019, but will be revised for upcoming IoT week edition.

- **Session/workshop on Security, Privacy and Trust in cooperation with WP2 (lead IIP).** The session looked at the main challenges for user acceptance in the IoT as well as providing a platform for idea exchanges, and to offer solutions. It featured key players in the field of security and privacy from academia, policy makers and the industry. It also featured linkages with ongoing initiatives, such as the Privacy Flag.
- **Session/workshop on IoT Research and Innovation Excellence in Europe and roadmap towards a vibrant IoT platform and technology cluster in cooperation with WP1 and WP3 (lead AS).** It focused on selected topics such as, key research topics, technology strength on IoT, technology capacities on the backends, key challenges for connecting research communities with the market, etc. A number of partners are actively involved in various ongoing IoT initiatives, such as the IoT Large-Scale Pilots Programme, which will provide strong

inter-project synergies. Points of recommendations for a future funding strategy were presented and widely discussed.

- **Session/workshop on the IoT LSP programme (lead MI).** It focused on supporting specific needs of the IoT LSP programme projects, organising dedicated sessions for different projects (such as thematic workshop sessions, open call promotion and result sharing, among others), creating synergies with the overall human-centred IoT vision, as well as the NGI initiatives.
- **Exhibition and brokerage (lead DNET).** As a key feature of NGIoT, industrial presence gets a strong focus, with active liaison with IoT related associations. They were invited to the NGIoT sessions not only as presenters or panelists, but also as exhibitors, as well as participants in brokerage events to identify and materialise real business opportunities.
- **IoT Week.** NGIoT sessions at IoT week 2019 are outlined in the video and multimedia section, 3.2.5.

### 3.3.3 Events toolkit

An event toolkit can be used for both self-organised and third-party events. The key here was to make as many “dual use” products as possible – communications tools which can be used at events and via other channels (e.g. multipliers).

The event toolkit includes a roll-up, posters, brochures (a lighter and a more result-oriented version is foreseen), identification material, NGIoT wheel of fortune and the NGIoT photo booth.

#### Roll-up and posters

Different versions of the roll-up will be created during the project lifetime, matching the look and feel of the website and the overall project design concept to meet the needs of the project.

Posters of a smaller size (A0) was produced. NGIoT will also consider producing event focused posters of smaller size, if considered necessary, where the content of the poster will be replaced to fit the needs (theme) of the event.

Both the roll-up and the posters are prepared in English (local languages to be considered if appropriate or necessary) to raise awareness of the stakeholders and a variety of relevant audiences about the project with succinct textual and graphical information.

The project logo, the EU flag along with the NGIoT website and the social media links are clearly displayed on the poster.

Printable versions of the posters are created and provided to partners to be printed and used at the events they participate in.

The design is easily adjustable to the requirements individual partners have, in case an additional or a more specific version is required.

The first version of the roll-up was made available in the early stages of the project, to support participation and promotion of NGIoT at the ICT2018 event.



Figure 18: NGIoT poster



Figure 19: NGIoT 1<sup>st</sup> version of roll-up

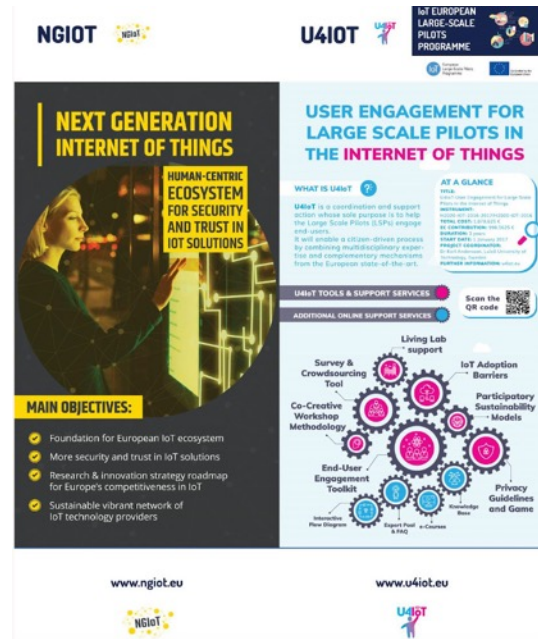


Figure 20: NGIoT 2<sup>nd</sup> version of roll-up as established in the structure of the LSP projects booth in the IoT Week 2019

### Identification material

Small materials showcasing the project logo, or a small slogan are produced. We designed, printed and produced material typically required for professional events. For the events that have taken place, we used branded laptop camera covers. For the upcoming events potential identification material can be one of the following objects: notepads, pens, USB sticks, bags, etc.

The consortium analyses the possibilities in terms of relevance and cost efficiency and decides on the selection of the identification materials.

All communication and promotional materials are produced according to the NGIoT specifications and visual identity.



Figure 21: NGIoT laptop camera cover

### NGIoT wheel of fortune

The NGIoT wheel of fortune is designed and produced to attract more people to the areas where NGIoT will be present during the events, and especially targeting the general public and the citizens. Its first demonstration was at IoT Week 2019.

In this context, the wheel of fortune was NGIoT branded, including two main sectors identified with two different colours. The questions of the wheel are designed to engage our visitors and help them get the main ideas/philosophy/concepts related to the different NGIoT wheel keyword sectors: Values,



Domains, Ecosystem, Data, Technologies, and Tools. By spinning the NGIoT wheel visitors can reach a yellow or a black section.

**Yellow sector** – Visitor wins a gadget without answering a question and subscription to NGIoT newsletter.

**Black sector** – Visitor answers the question related to the selected keyword sector and wins a gadget.



Figure 22: NGIoT wheel of fortune

### NGIoT photo booth

Our idea to engage general public and citizens was additionally supported by an NGIoT photo booth. Based on the application it allows visitors to take pictures of themselves inside a branded NGIoT frame and create nice memories. All visitors get their image via email, while accepting the project policy compatible with the GDPR framework they also register to the project newsletter mailing list.

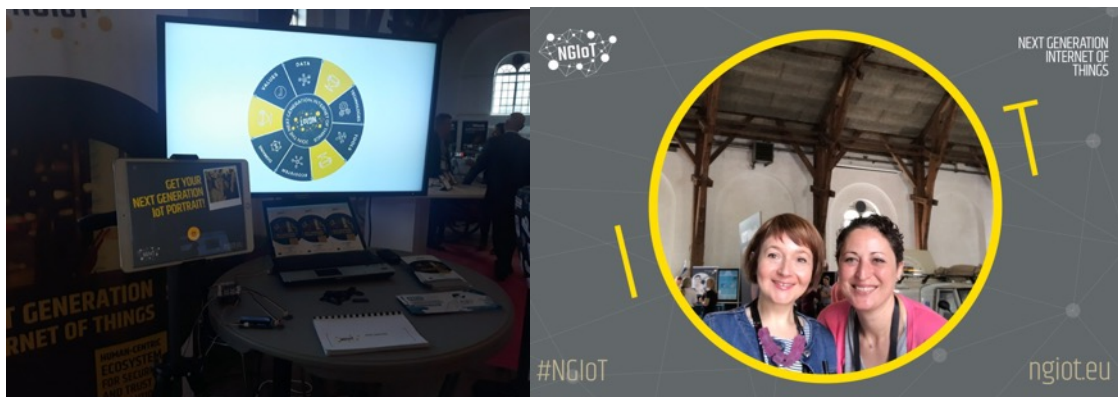


Figure 23: NGIoT photo booth at the NGIoT stand during IoT Week 2019

### Brochure

The **first project brochure**, a two-folded sheet, available in English, with a clean, modern and attractive design was produced, with a layout and content agreed by all the partners.

The initial plan is that the outside of the brochure presents the project logo and information on the project including the project’s website, contact information, the programme under which it has been

funded and the logo of the European Union. The inside of the brochure includes information about the project’s main message and overall scope.

The brochure is to be distributed for dissemination/communication and awareness-raising purposes to target stakeholders during the events.

As the project evolves, an **updated and more detailed version** of the brochure will be created.



Figure 24: The first version of the NGIoT brochure

### 3.4 Liaising with other initiatives

NGIoT will benefit from its partners’ involvement in several initiatives related to the NGI and IoT domains, building a strong collaboration with them. A first list of such initiatives is presented below.

Table 2: Directly involved initiatives

Initiatives where NGIoT partners are directly involved
SynchroniCity (IoT LSP programme)
CREATE-IoT (IoT LSP programme)
U4IoT (IoT LSP programme)
Open calls launched by the IoT LSP programme (ActivAge, SynchroniCity, IoF2020)
NGI4ALL
OrganiCity

IoT-EPI initiative
EXCITING (EU-China Study on IoT and 5G)
F-Interop
ANASTACIA
Orchestra Cities
FLAME
Privacy Flag
IoT Security Project Cluster
TagItSmart!
NGI4ALL

The collaboration with these initiatives will happen on several levels including, but not limited to:

- Co-organisation of events
- Exchange of information related to project achievements
- Engagement in the dissemination and communication activities especially using social media and online presence tools
- Interviews with key stakeholders
- Invitation to participate in NGIoT events
- Collaboration on white papers and other publications

### 3.5 Coordination and support of AG08 communication activities

The aim of the European IoT Large-Scale Pilots Programme is to ensure the positioning of IoT solutions in Europe. This will be achieved through the integration of cutting-edge IoT technologies across the value chain, the demonstration of multiple IoT applications at scale and in a usage context, and the transferability to operational conditions.

To foster European leadership in the field of Internet of Things the European IoT Large-Scale Pilots Programme, an innovation consortium cooperates on:

- The development of the most advanced technologies across the value chain which provides solutions to present needs of end-users;
- The confirmation of user acceptability by tackling issues such as security, privacy, trust and attention;
- The validation of viable business models fit to be used beyond the scope of the project.

The AG08 communication strategy contributes to objectives of the IoT LSP Programme by fostering the involvement of external target groups and communities.

NGIoT supported AG08 communication and dissemination activities, up to December 2019, undertaking the role of Communication Officer, while SynchroniCity chaired the group, in order to strengthen the collaboration between the LSP projects, advance the visibility and promotion of the cluster but also to better support the dissemination activities of NGIoT. More precisely, the goal of the AG08 communication activities was to strengthen the uptake of IoT in the fields of action of the LSPs. To reach this goal, AG08 has established four objectives:

1. **Enhance** the visibility of the LSPs and **amplify** their communication efforts;
2. **Raise awareness** of the benefits of IoT in different sectors;
3. **Unify the communication activities/messages** of the LSPs;
4. **Support** and serve as an example to the communication actions of all LSPs.

### 3.5.1 Joint communication activities

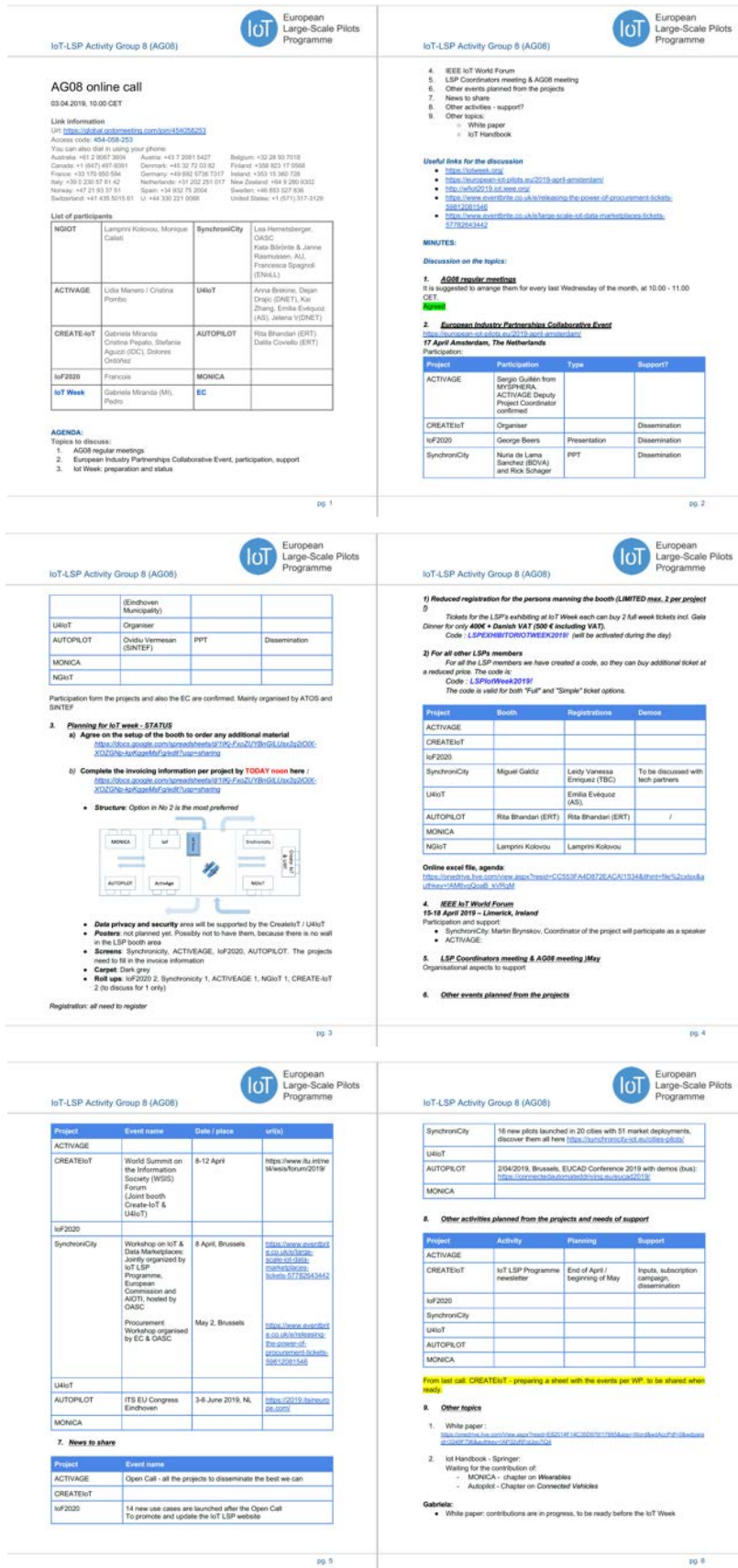
The support of AG08 in terms of Communication Officer activities focused on:

- Alignment of the interests of the different key stakeholders across the LSPs;
- Synchronised approach to communicate effectively about the LSPs' activities and achievements to a mapped audience;
- Unified stance during major communication actions such as publications, events, exhibitions, etc.;
- Promotion of 'best practices' using the available communication means by NGIoT and all LSP projects.

To ensure the overall coordination of the AG08 communication, teleconferences took place on a monthly basis with the participation of communication representatives of each LSP. The teleconferences were organised, animated and chaired by the NGIoT Communication Officer (Martel). After each session, a set of action points drafted and shared with the participants, occasionally inviting additional participants according to the ongoing activities and the upcoming events.

A typical agenda for such meetings included:

- Details for planning and accessing of the meeting
- Participants list
- Participation and planned activities of AG08 projects in important future events (e.g. IoT Week)
- List of events planned by the LSP project to be promoted by NGIoT and the IoT LSP Social Media accounts
- Important achievements and news to be shared by the LSP projects
- Other activities of the LSP projects that require further support
- Other topics / activities of collaboration between the LSP projects to be supported





### 3.5.2 Social media management

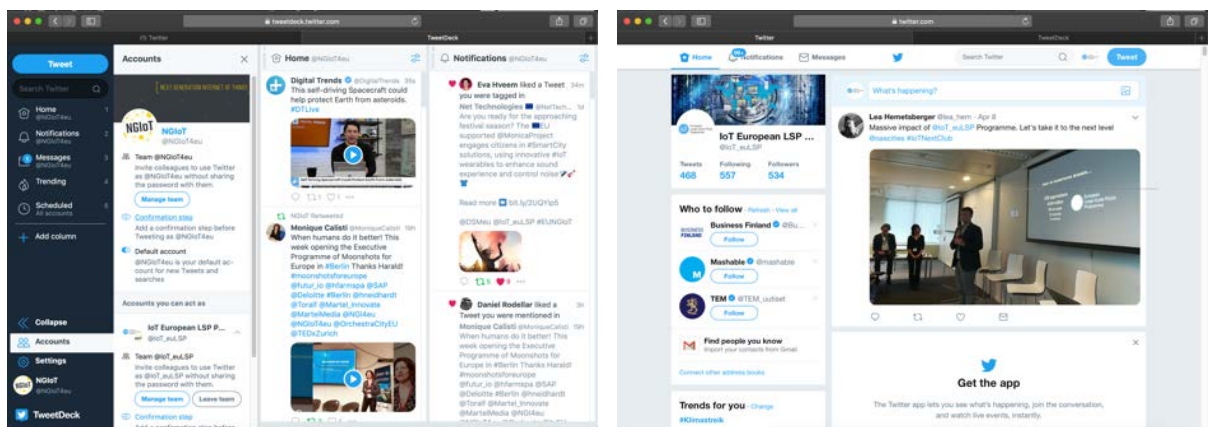
Social Media is one of the most important channels for communication and dissemination of information towards the general public. For this reason, it is quintessential for the European IoT Large-Scale Pilots Programme to use these tools to communicate effectively about project news and promote the outcomes to the different stakeholders.

By maintaining already existing social media channels, the European IoT Large-Scale Pilots Programme was able to:

- Establish and widen the online reputation of the projects;
- Communicate the achievement of deliverables, project news and publications to a wider audience;
- Generate interest of new stakeholders;
- Actively engage stakeholders and partners;
- Build a community of stakeholders (e.g. ecosystem) for information sharing, collaboration and further partnerships;
- Synchronise joint messages of the pilots;
- Reinforce the common IoT identity shared between the LSPs.

To ensure this, NGIoT was responsible to maintain the Twitter account of AG08 / IoT LSP Programme, ensuring that all the important activities and results of the LSP projects are properly promoted while also ensuring that the followers are informed about the most recent and important trends, events, achievements in the IoT domain.

Martel is using the Buffer tool to manage both the NGIoT and IoT LSP accounts, planning future posts in an effective way and making sure that information flows in a smooth way on both channels.



(a) The TweetDeck dashboard

(b) The IoT LSP Twitter page

Figure 26: Twitter account management for the IoT LSP programme

### 3.5.3 Communication tools

**Documents repository:** For the organisation and hosting of the shared materials between the LSP projects, AG08 maintained its own space in Google Drive, that was regularly updated with new documents and files. This shared space was used to prepare and conduct the online meetings and to ensure the contribution of the LSP projects and guarantee direct access to the agenda and minutes, a Google Drive repository is maintained, including live documents and materials that are necessary to be shared in a dynamic way with the project partners.



**Mailing list:** To support the day-to-day communication among the members of AG08, NGIoT created and maintains a mailing list, including relevant project partners. Mailing list: [lsp-ag08.ditcom@maillist.au.dk](mailto:lsp-ag08.ditcom@maillist.au.dk).



## 4 MONITORING AND EVALUATION

The complete set of communication and dissemination activities have been closely monitored and evaluated by the WP4 lead in order to keep track of all ongoing activities. The deliverable “Outreach and Impact Creation Activity Report (interim)” documents all the related conducted activities inline with the first version D4.1(M4) in the period M1-M18 and will be concluded at the end of the project in D4.3(M36) “Outreach and impact creation activity report (final)”.

Qualitative and quantitative indicators were defined through the Communication Strategy and can be evaluated for M18. 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 NGIoT needs, we have been implementing a **five-step measurement cycle model**, 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.

The table below presents the Key Performance Indicators, the achievable targets set for each type of the communication activities and the current status:

Table 3: Key Performance Indicators (KPIs) for dissemination and communication activities

Measure	Indicator	Target Values	Source and methodology	Current status
Human-centred IoT Flyers	Number of brochures distributed (one update per year at least on the flyer)	1000/year	Through online and offline distribution	500
Roll-up Banner	Number of roll-ups produced	3 by the end of the project (1 per year)	Through the dissemination reporting	2
Newsletters (published quarterly)	Number of subscribers	>500 (by the end of the project)	In-built website statistics tool	126
Project website	Number of unique visitors to website/page-hits	350 visitors/month (by the end of year 1)	In-built website statistics tool	457
Social networks	Number of followers in LinkedIn, Twitter, YouTube, Facebook	At least 500 overall (average number of followers in Twitter, YouTube, Facebook + Members in LinkedIn)	In-built statistics from different social media platforms	LinkedIn 57 Twitter 543 YouTube 6 Facebook 32 Total 638
Events	Number of events organised/participated, number of participants	3 annual flagship events, with at least 250> participants per edition	Attendance proofs (e.g., photos), events' report	- CSCC 2019 - IEEE 5th World Forum on Internet of Things - IoT Week 2019" - CSCC 2020 4 in total
Videos	Number of videos published on YouTube and average number of views	5 videos per year and 150 views per video	In-built website statistics tool	3 videos Views: 53, 95, 33

## 5 CONCLUSIONS

This deliverable document presented the NGIoT outreach and impact creation activity. Inline with the framework described in the previous deliverable document D4.1 “Outreach and impact creation strategy and plan”, it presents all activities accomplished to disseminate and sustain the concepts, achievements, as well as knowledge results developed within the project in the period M1-M18 (interim report).

Since the consortium recognised dissemination, communication and engagement activities as essential throughout the project’s lifetime, they have integrated them within all the work packages.

This confirms that performed activities were there to support NGIoT’s purpose, through promotion of the project online and via participation in the events, organisation of workshops, writing of publications, producing high-quality promotional material as well as collaboration with other projects and initiatives.

In order to measure the achieved progresses and impacts, a monitoring and evaluation framework has been updated and a number of indicators have been reported.

This is a living document to accommodate any customisation required. The dissemination planning will thus be constantly evaluated and revised in the course of the project duration. This deliverable will be updated with contributions from the second period of the project M19-M36 and published as D4.3 “Outreach and impact creation activity report (final)”.

## 6 APPENDIX A – EVENTS

Table 4: Events attended by NGIoT partners

Title of event	Partner(s) involved	Date	Location
Connected Smart Cities Conference 2019	AU, Martel, MI	17 January 2019	Brussels, Belgium
Partnerships for a Sustainable Future, Conference at AU	AU	04 February 2019	Aarhus, Denmark
Vitel 2019	DNET	20 March 2019	Brdo pri Kranju, Slovenia
Large-Scale IoT & Data Marketplaces	AU	08 April 2019	Brussels, Belgium
IoT day	DNET	09 April 2019	Novi Sad, Serbia
World Summit on the Information Society (WSIS) 2019	MI	08-12 April 2019	Geneva, Switzerland
IEEE 5th World Forum on Internet of Things	AU	15-18 April 2019	Limerick, Ireland
Releasing the Power of Procurement	AS	02 May 2019	Brussels, Belgium
IoT week 2019	ALL	17-21 June 2019	Aarhus, Denmark
European Industry Partnerships for New Digital Age Event	Martel	12 September 2019	Brussels, Belgium
ICT proposers' day 2019	Martel	19-20 September 2019	Helsinki, Finland
Nordic Edge Expo	AU	24-26 September 2019	Stavanger, Norway
NGI Forum	Martel	25 September 2019	Helsinki, Finland
European Week of Regions and Cities	AU	07-10 October 2019	Brussels, Belgium
AIOTI signature event "IoT Through the Looking Glass"	Martel	08 October 2019	Brussels, Belgium
Smart and sustainable cities, Novi Sad	DNET	30-31 October 2019	Novi Sad, Serbia

Smart City Expo World Congress 2019	AU, Martel	19-21 November 2019	Barcellona, Spain
Forward 2019	DNET	4-5 December 2019	Banja Luka, Bosnia and Herzegovina
Finnish EU-Presidency	AU	10-12 December 2019	Different cities, Finland
Connected Smart Cities Conference 2020	All	22-23 January 2020	Brussels, Belgium
Policies to Support Open Data Marketplaces	MI	29 January 2020	The Hague, The Netherlands
Cities Forum	AU	30-31 January 2020	Porto, Portugal
Tampere Smart City Week	AU	27-29 January 2020	Tampere, Finland
World Urban Forum	AU	10-12 February 2020	Abu Dhabi, UAE
Create the next generation IoT eXperience for the Future	AU, MI, DNET, AS	19-21 February 2020	Brussels, Belgium
Workshop on European Research Support and Contribution to Global Standardisation, Internet of Things Perspectives	MI, AU, AS, DNET	03 March 2020	Geneva, Switzerland
NGIoT Strategy Board Meeting	AU, MI, DNET, AS	04-05 March 2020	Crans-Montana, Switzerland



Figure 27: Project participation at CSCC 2019



Figure 27: Project participation at IoT Week 2019

Participation in some of the events is presented in Figures 27 and 28.

The level of involvement in the events varies, according to the nature and scope of the event. A thorough procedure for deciding on our participation and dissemination activities has been followed to identify those events which are "tailored" to fit the project's dissemination goals with each specific group within the target audience, giving a clear priority to the events organised and suggested by the EC.

In addition, industrial and thematic workshops related to IoT have been utilised as dissemination channels to inform potential stakeholders and engage all relevant communities to the NGIoT technologies, initiatives and policy making activities. A few of these events are listed below:

- Annual editions of Big Data Value Alliance Conference
- GIOTS ([www.globaliotsummit.org](http://www.globaliotsummit.org))
- ACM CoNEXT
- ACM SOSP
- ACM Conference on Mobile Systems
- ACM/IEEE IPSN
- IEEE INFOCOM
- IETF/IRTF DIN WG
- IEEE International Conference on Smart Computing (SMARTCOMP)
- IEEE ICDE
- PAM
- ICML
- ISOC NDSS and NDSS workshops
- senZations summer school ([www.senzations.net](http://www.senzations.net))
- ACM SIGCOMM workshop on IoT Security and Privacy
- ACM SIGMOD
- ACM CCS
- ACM, IRTF & ISOC Applied Networking Research Workshop
- IEEE SDN Initiative newsletter
- IEEE NOMS
- IEEE GLOBECOM
- IEEE Symposium on Security and Privacy
- USENIX NSDI
- EDBT
- International Teletraffic Congress (ITC)
- Privacy Enhancing Technologies Symposium
- AIOTI Assemblies
- IoT meetups
- ACM Multimedia Systems Conference
- ACM/IEEE Symposium on Edge Computing
- ACM/IEEE International Conference on Internet-of-Things Design and Implementation (IoTDI)
- IEEE NetSoft
- IEEE World Forum on Internet of Things
- IEEE ICC
- IEEE WCNC
- USENIX OSDI
- NIPS
- Crypto Conference series and its workshops



## 7 REFERENCES

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- [1] <http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-commen.pdf>
- [2] EC communication sent on 23/02/2017 by the Participant Portal Grant Management Service on behalf of Mr Robert-Jan Smits, Director-General at Research and Innovation Directorate-General of the European Commission, titled "Information letter on Horizon 2020 project communication and acknowledgement of EU funding"