



**D11.2**

# **Initial Report on Dissemination and Communication Activities**

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<b>Abstract:</b>	This deliverable describes the communication and dissemination activities achieved for CyberSANE in year one of the project. The various achievements obtained through the various dissemination and communication channels are presented and explained in relation to the Key Performance Indicator objectives defined and presented in D11.1.
<b>Keywords:</b>	Dissemination, Communication, Website, Social Media, KPIs, Impact, Visibility, Objectives



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## Executive Summary

This deliverable provides a comprehensive insight into the dissemination and communication activities of the CyberSANE project. All activities are performed by the consortium and shared through the various communication channels belonging to the project. It expands upon the work presented in **D11.1 – Dissemination, Communication and Exploitation Plans**.

This report contains a description of the different means of dissemination and communication available to the project, defining the targeted public. Through these methods of sharing information, CyberSANE can increase its reach, creating networks between other projects and companies in Cyber-Security.

The elaborated strategies take advantage of the specifications of the dissemination methods available to allow the project to flourish outside of technical achievements by increasing CyberSANE's reach in relation to the corresponding public.

Furthermore, a complete listing of all dissemination activities during the first year of the project provides a significant insight into project activities. This facilitates the access to specific activities, classed by year of accomplishment.

Finally, to fully evaluate the achievements during this period, this document contains a complete comparison and evaluation relative to the analytical KPIs defined in **D11.1**. An analysis of the results and adaptation strategies allow the project to evolve, increasing its dissemination and communication efficiency.

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# 1. Introduction

This deliverable presents the status of **T11.2** during the first year of the project, from *1<sup>st</sup> September 2019* to *31<sup>st</sup> August 2020* as part of **WP11**. This task is devoted towards the execution of dissemination and communication activities focused on project related information through the different means of communication employed by CyberSANE and defined by T11.1 devoted to the strategy behind all these actions. The main objective is to give a detailed overview of dissemination activities in relation to the various KPIs posed in **D11.1 – Dissemination, Communication and Exploitation Plans**.

Being noticed and acknowledged is significantly important in many areas, even more so with important technical projects. Sharing their achievements with other projects or people in the same domain allows them to be acknowledged and gain credibility in their work. Furthermore, with the use of social media, the reach of the project is significantly increased, providing the possibility to interact directly with other people through a digital world.

To achieve such recognition, multiple methods of communication must be employed. CyberSANE uses multiple approaches to share information from its own website and social media accounts, to the publication of scientific reports and participation in events and workshops. However, it is important to understand what these methods entail and why they are necessary.

Furthermore, simple use of these methods isn't the most efficient way to achieve one's goal. To take full advantage and exploit these approaches to their full potential, individual strategies must be elaborated. This allows the information to be disseminated in the most efficient way, reaching the most targets possible, and more importantly, the correct type of audience.

Once the methods and strategies have been created, they can be implemented. Multiple dissemination activities have thus been performed during the first twelve-month period of the project. These activities must be categorised and enumerated so as to keep track of all which has been achieved across all communication methods.

However, when achievements are concerned, these activities must be evaluated against Key Performance Indicators (KPIs) allowing to quantitatively evaluate the achievements. These KPIs, defined in D11.1, pose guidelines which are to be achieved during the project. This allows to identify areas which need improvement, but also define the methods to achieve such improvements.

Unfortunately, the unprecedented global COVID-19 pandemic presented a large obstacle for the project. The implemented lockdown and confinement effective in many EU countries put a strain on the project advancement. This resulted in fewer information points to share due to smaller advances and steps being made in the technical area. Furthermore, the confinement resulted in many plans being cancelled or postponed, such as various events or workshops. Another consequence of the confinement was also felt on the efficiency of some of the communications methods due to the varying levels of psychological strain on the organisers.

## 1.1. Purpose and objectives

The purpose of this report is to present the communication and dissemination activities achieved during the first year of the project. Through their evaluation relative to the elaborated KPIs, their effectiveness can be determined, as well as their overall impact on project awareness.

The objectives of this deliverable are as follows:

- Define the methods for sharing information and their corresponding strategies
- Present all the activities performed during the first year of the project
- Analyse impact of these activities and determine areas which need to be improved upon

## **1.2. Deliverable Structure**

This deliverable is separated into three distinct sections:

- Section 2 presents the dissemination methods available to the CyberSANE project as well as their elaborated strategies
- Section 3 presents a comprehensive and complete list of all activities achieved during the first year of the project
- Section 4 presents the examination of the activities from Section 3 relative to the defined KPIs, providing an insight into the efficiency of activities, as well as methods of improvement.

## 2. Communication and Dissemination Methods and Strategy

In this section, we define and present the various different communication platforms and methods used by CyberSANE for communication and dissemination activities. We also describe the individual strategies for each method, increasing the efficiency of our activities as described in **D11.1**.

### 2.1. CyberSANE Website

#### 2.1.1. Presentation

The main communication channel for sharing project related information is the official CyberSANE Website [1]. Using a living WordPress based website to share this information facilitates the retrieval of project related information throughout the project's lifetime, through its static URL. Not only is sharing information crucial to the project's transparency but it also provides the capability of being discovered by other entities.

The topological structure of the website allows to categorise and enumerate all project information in specific areas, facilitating its retrieval. The sitemap is presented in Figure 1.

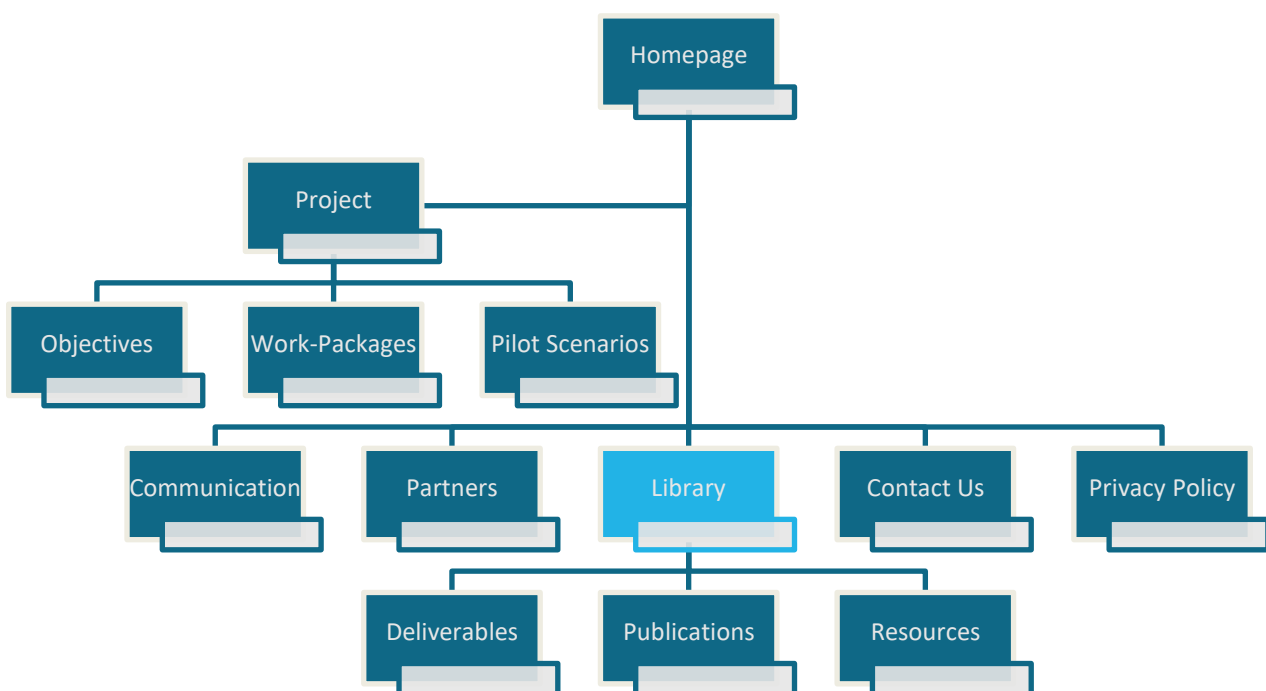


Figure 1: CyberSANE Website – Site Map

As we can see, there are thirteen distinct web pages available. They contain the following:

- **Homepage:** The welcoming page to the project website [1]. This page contains a comprehensive view of important project related information, including a timeline followed by a description of the project. On the right-hand side, the CyberSANE Twitter feed is visible above a shortcut to the last six blog posts from the “Communication” page. Finally, underneath there is a sign-up form for the CyberSANE Monthly Newsletter. The homepage can be seen on the left in Figure 2.

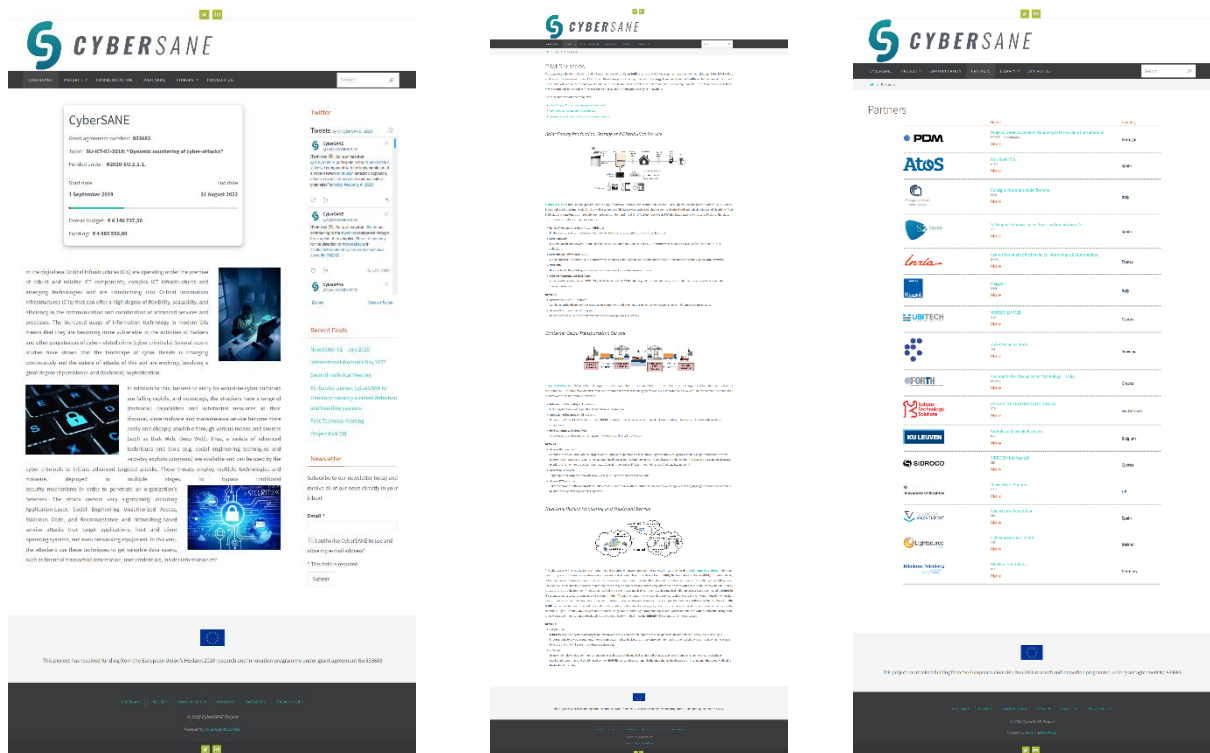


Figure 2: CyberSANE Website – Home Page / Communication Page / Partner Page

- **Project:** The first page regarding technical information presenting the five components of the CyberSANE system.
  - **Objectives:** This sub-menu presents the objectives of both the project and the resulting CyberSANE system.
  - **Work-Packages:** This second sub-menu presents the eleven Work-Packages (WPs) of the CyberSANE project. Each WPs objective are defined as well as linking to the description of partner in charge on the “*Partner*” page. In the cases where the WPs concern the elaboration of system components, these are linked to the corresponding description on the “*Project*” page.
  - **Pilot Scenarios:** This last sub-menu presents the three pilot scenarios of the CyberSANE projects. Each pilot is defined as well as some system specific information followed by the potential attacks against these systems. Each of the pilots are linked to their corresponding description on the “*Partner*” page. An overview of the page can be seen in the middle of Figure 2.
- **Communication:** The communication page corresponds to the CyberSANE blog [2]. It is here where all blog posts can be found. Each post possesses a distinct category providing the possibility of grouping certain types of posts, such as *Newsletters* or *Press Releases*.
- **Partners:** This page presents each of the CyberSANE partners with a brief description providing basic information as well as details of their expertise and involvement in the project. Each partner description contains links to their WPs on the “*Work-Packages*” page as well as components or pilot scenarios on the “*Project*” and “*Pilot Scenarios*” pages respectively. This page can be previewed on the right in Figure 2.
- **Library:** This parent category does not possess an associated web page, but simply serves as a parent category for the next three sub-menus.
  - **Deliverables:** The first sub-menu contains a list of all public project deliverables. Each deliverable contains a download button which allows to retrieve the deliverable when it is available. If a revision has been provided for a deliverable, then all versions are available.

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- **Publications:** The second sub-menu contains a list of all scientific publications which have been authored or co-authored by CyberSANE partners [3]. Each publication contains a list of authors with their affiliation as well as a publication date. It is also possible to visit the official website containing the publication to download a copy.
- **Resources:** The last sub-menu contains all digital project dissemination materials [4]. Each file can be downloaded whereas all videos can be viewed directly on the page.
- **Contact Us:** This page contains a Contact Us form, allowing someone to directly contact the project coordinator as well as the dissemination and communication manager.
- **Privacy Policy:** To respect European privacy regulations, a “*Privacy Policy*” page has been added informing the user of the various cookies and information recovery which occurs on the website, such as the Newsletter sign-up form, as well as activity tracking for visitation metrics [5]. Also, a GDPR conform cookie banner has been added, authorizing the user to deactivate the different tracking features and cookies employed. These can be previewed in Figure 3.

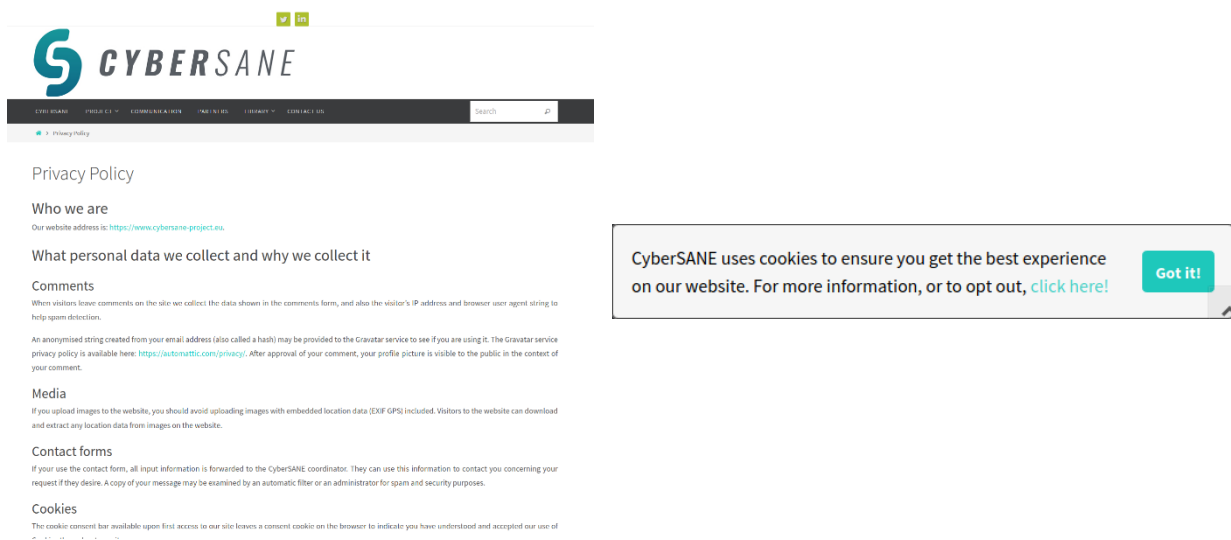


Figure 3: CyberSANE Website – Privacy Policy and Cookie Popup

### 2.1.2. Strategy

The Website possesses three main methods of dissemination: static pages, dynamic pages and the blog. The static pages, such as “*Partner*” and all “*Project*” subpages provide the ability to share important information concerning the project which will not evolve during the project. The dynamic pages however, like all “*Library*” pages contain static information which is not changed, but supplementary information can be appended at any time. The last method, using the “*Communication*” blog posts allows to share dynamic instantaneous standalone information. This page can be seen in Figure 4.

There are various different types of information which can be shared in blog posts. The main types are:

- Important results
- Large scale social media campaigns
- Bi-annual newsletter
- Press releases
- Event and Conference participation
- Technical progress



Figure 4: CyberSANE Website – Communication Page

Each blog post is subsequently shared on all CyberSANE Social Media accounts, thus amplifying the reach of the website.

## 2.2. CyberSANE Social Media

Social Media is the most successful way to convey a large amount of information quickly to a large audience. There are also multiple platforms upon which this data can be shared, each with their own target demographic and technical restrictions. The two platforms used by CyberSANE are Twitter and LinkedIn.

### 2.2.1. Twitter

#### 2.2.1.1. Presentation

One of the most commonly used platforms for both personal and professional use is Twitter. Twitter grants the ability to share short messages along with images and videos with other users. These tweets can be exchanged amongst these users, increasing the projects footprint with each new interaction. Through CyberSANE's official profile [6], presented in Figure 5, other users can see all previous tweets and keep up to date with project related information, such as various activities organised and held by CyberSANE.

Out of all of the dissemination methods available, Twitter is the most active. Due to its highly active user base, frequent messages regarding the project keep people up to date with what's going on, whilst also interacting with the project itself. This user base is mainly private people, but many companies and other project also possess accounts. It is, therefore, the most reliable place to share information quickly as well as granting the opportunity to interact with other projects.



Figure 5: CyberSANE Twitter – Profile



### 2.2.1.2. Strategy

CyberSANE's Twitter account provides an ideal environment to share regular project updates as well as various other Cyber-Security related information. Accessible to the general public, it allows us to make the project known, not only to potential clients of partners, but also the private user behind the client's services. This interaction with various other entities increases our social media footprint through retweets and mentions.

Another means to increase our presence, is by following and retweeting cyber related information from other projects or official Cyber-Security accounts, such as ENISA, increasing our interactions with other users. These interactions not only make us known but can also lead to partnerships or participation in events.

Other than the use of the platform to meet other entities, the main use is the sharing of project related information, such as the afore mentioned sharing of blog posts. However, it was important to structure the tweets, so that users can differentiate for example project results from generic Cyber-Security knowledge sharing. Due to the limit of 280 characters, the choice of both the contents and the tweet structure needed to be direct allowing the share the most amount of information in the least amount of characters. Thus, multiple tweet types were designed, each for various types of information, from project announcements to Cyber-Security news facts. In Table 1 we can see all thirteen of these types, here called tags.












Tags	Contents	Emojis
<b>Cyber News</b>	Share historical facts regarding IT and Cyber-Security	
<b>Partners</b>	Present partners with their Twitter accounts and websites	
<b>Meeting</b>	Share project meeting updates with photos	
<b>Calendar Event</b>	Festive messages for calendar events such as Christmas, New Year, Valentine's Day etc.	
<b>Event</b>	Promote project events, both participation and organisation	
<b>Announcement</b>	Share important project related announcements	
<b>Results</b>	Present and promote project advancements and results	
<b>Information</b>	Any information related tweet destined to inform the reader about anything project related	
<b>Presentation Woman</b>	Present female figures who are part of the project	
<b>Presentation Man</b>	Present male figures who are part of the project	
<b>Publication</b>	Share publication information regarding papers and articles authored/co-authored by partners	
<b>Technical</b>	Promote technical information regarding the project components	
<b>Untagged</b>	Generic messages such as retweets with associated comments	

Table 1: CyberSANE Twitter – Tweet Tags

These tags allow not only to categorise the different tweets, but also to differentiate different tweet types through the use of an official tweet tag included at the head of all tweets. Each tag is comprised of the official Tag name, followed by an emoji associated with the keyword. Furthermore, each type of tweet is accompanied with a specific hashtag, generally composed of the tag name, or in the case of Cyber News is replaced with #DidYouKnow. All tweets are appended with two supplementary hashtags: #security #H2020.

In Figure 6, we can see examples of three tweets: Information, Cyber News and Technical, each with their specific tag, emojis and hashtags. To render tweets more appealing, it is possible to mix emojis and hashtags directly into the text itself. For example, in Figure 6 the word "CyberSANE" is replaced with a hashtag equivalent and multiple emojis are included. This breaks up the monotonous text, making them more pleasant



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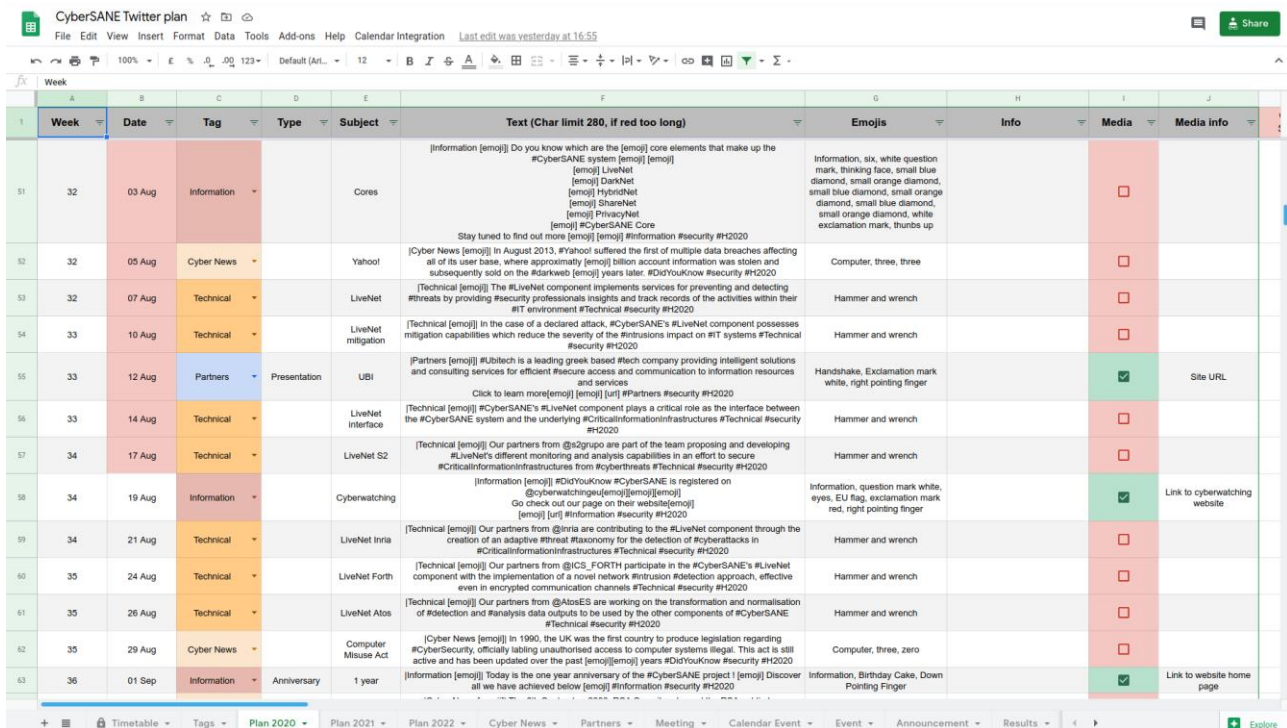
to read. Furthermore, with the use of hashtags, we can take advantage of Twitter retweet bots which keep an eye on certain key hashtag words, such as #security. This increases the reach of our tweets inciting more people to look at CyberSANE more closely.



Figure 6: CyberSANE Twitter – Tweet Examples: Information / Cyber News / Technical

To be able to share more information and become active members of Twitter's user base, it is important to tweet on a regular basis. As such, a restriction of a minimum of a single tweet per week was defined. This would allow the project to spread out its initial repertoire of content as long as possible, until more information was available. When a larger selection of tweets was to become available, the average would be increased to three tweets per week.

To be able to tweet regularly, a plan was created containing all tweets as well as timetable for their submission. Figure 7 shows an extract of this plan. Here we can see multiple tweet types as well as their defined days. The contents as well as a list of emojis and attached media are also included. Using this plan, it is possible to schedule tweets for any time during the project. It also contains a list of all past tweets, meaning we can keep accurate records of every tweet made during the entirety of the project.



Week	Date	Tag	Type	Subject	Text (Char limit 280, if red too long)	Emojis	Info	Media	Media info
31	32	03 Aug	Information	Cores	[Information [emoji]] Do you know which are the [emoji] core elements that make up the #CyberSANE system [emoji] [emoji] [emoji] LiveNet [emoji] DarkNet [emoji] HybridNet [emoji] ShareNet [emoji] PrivacyNet [emoji] #CyberSANE Core Stay tuned to find out more ! [emoji]	Information, six, white question mark, thinking face, small blue diamond, small orange diamond, small blue diamond, small orange diamond, small blue diamond, small orange diamond, white exclamation mark, thumbs up			
32	32	05 Aug	Cyber News	Yahoo!	[Cyber News [emoji]] In August 2013, #Yahoo! suffered the first of multiple data breaches affecting all of its user base, where approximately [emoji] billion account information was stolen and subsequently sold on the #darkweb [emoji] years later. #DidYouKnow #security #H2020	Computer, three, three			
33	32	07 Aug	Technical	LiveNet	[Technical [emoji]] The #LiveNet component implements services for preventing and detecting #threats by providing #security professionals insights and track records of the activities within their #IT environment #Technical #security #H2020	Hammer and wrench			
34	33	10 Aug	Technical	LiveNet mitigation	[Technical [emoji]] In the case of a declared attack, #CyberSANE's #LiveNet component possesses mitigation capabilities which reduce the severity of the #intrusions impact on #IT systems #Technical #security #H2020	Hammer and wrench			
35	33	12 Aug	Partners	Presentation	[Partners [emoji]] #Ubitch is a leading greek based #tech company providing intelligent solutions and consulting services for efficient #secure access and communication to information resources and services Click to learn more[emoji] [emoji] [url] #Partners #security #H2020	Handshake, Exclamation mark white, right pointing finger			Site URL
36	33	14 Aug	Technical	LiveNet interface	[Technical [emoji]] #CyberSANE's #LiveNet component plays a critical role as the interface between the #CyberSANE system and the underlying #CriticalInformationInfrastructures #Technical #security #H2020	Hammer and wrench			
37	34	17 Aug	Technical	LiveNet S2	[Technical [emoji]] Our partners from @s2groups are part of the team proposing and developing #LiveNet's different monitoring and analysis capabilities in an effort to secure #CriticalInformationInfrastructures from #cyberthreats #Technical #security #H2020	Hammer and wrench			
38	34	19 Aug	Information	Cyberwatching	[Information [emoji]] #DidYouKnow #CyberSANE is registered on @cyberwatching[emoji] [emoji] [emoji] Go check out our page on their website[emoji] [emoji] [url] #Information #security #H2020	Information, question mark white, eyes, EU flag, exclamation mark red, right pointing finger			Link to cyberwatching website
39	34	21 Aug	Technical	LiveNet Inria	[Technical [emoji]] Our partners from @inria are contributing to the #LiveNet component through the creation of an adaptive #threat #economy for the detection of #cyberattacks in #CriticalInformationInfrastructures #Technical #security #H2020	Hammer and wrench			
40	35	24 Aug	Technical	LiveNet Forth	[Technical [emoji]] Our partners from @ics_forth participate in the #CyberSANE's #LiveNet component with the implementation of a novel network #intrusion #detection approach, effective even in encrypted communication channels #Technical #security #H2020	Hammer and wrench			
41	35	26 Aug	Technical	LiveNet Atos	[Technical [emoji]] Our partners from @atoses are working on the transformation and normalisation of #detection and #analysis data outputs to be used by the other components of #CyberSANE #Technical #security #H2020	Hammer and wrench			
42	35	29 Aug	Cyber News	Computer Misuse Act	[Cyber News [emoji]] In 1990, the UK was the first country to produce legislation regarding #CyberSecurity, officially labelling unauthorised access to computer systems illegal. This act is still active and has been updated over the past [emoji] [emoji] years #DidYouKnow #security #H2020	Computer, three, zero			
43	36	01 Sep	Information	Anniversary	[Information [emoji]] Today is the one year anniversary of the #CyberSANE project ! [emoji] Discover all we have achieved below [emoji] #Information #security #H2020	Information, Birthday Cake, Down Pointing Finger			Link to website home page

Figure 7: CyberSANE Twitter – Tweet Calendar

From this plan, we can use third party platforms to schedule tweets for automatic publication. In our case, we use Hootsuite [7] to manage our tweets. With the ability to schedule up to 30 submissions at a time, Hootsuite

grants the freedom of automatic submission with the added protection of limited submissions, causing us to check periodically and update the queued tweets.

As for the content of the tweets, the various tweets are generated from information provided by the various partners, such as their presentations. All partners provide data which is then organised into the Twitter plan and is also the main reason for the increase to three tweets a week thanks to the increase of information available. These contributions allow to flesh out the tweet potential, increasing our presence on social media.

On a side note, CyberSANE can also take advantage of the partners various Twitter profiles to allow the sharing of tweets to their audiences, increasing CyberSANE's reach once more. Further to this, they can tweet project information and tag CyberSANE's account, bringing more attention towards the projects official account. Retweeting these partner tweets also increases our interaction with them on a dissemination basis. A full list of partner social media accounts can be found in **D11.1**.

## 2.2.2. LinkedIn

### 2.2.2.1. Presentation

Whereas Twitter is widely used for various different activities both personal and professional, LinkedIn is more oriented towards the professional audience. Here, we can engage on a more professional level with potential partners or clients, increasing the project footprint in the professional world. In a similar fashion to Twitter, a project page will allow visitors to view project related posts as well as a brief description of the project. Furthermore, creating this page as a company page [8], presented in Figure 8, grants the ability for users to list CyberSANE as their work place, thus bringing together the different partners personal profiles.

Contrary to Twitter, this page is less active to its more professional target audience. However, the posts which are submitted contain more relevant information for such users.

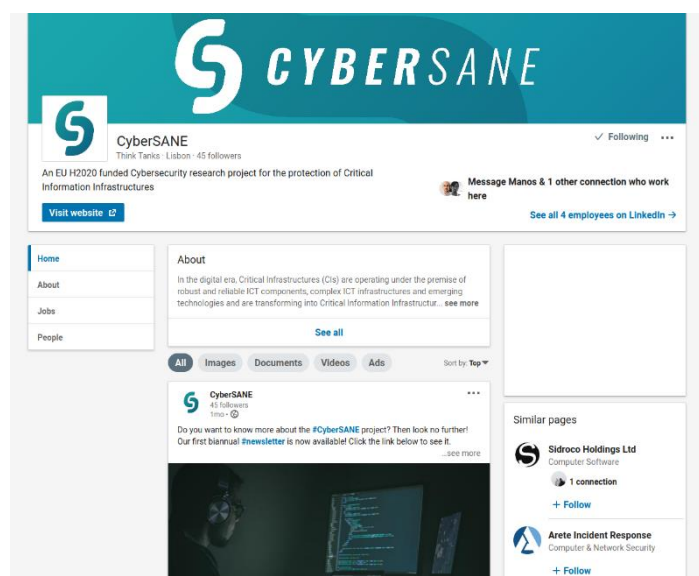


Figure 8: CyberSANE LinkedIn – Page

### 2.2.2.2. Strategy

With access to the professional community, this provides a perfect opportunity for CyberSANE to interact with other projects as well as various other people. These interactions can also extend towards the project through the ability to list CyberSANE as your workplace, as mentioned previously. This allows firstly for individual contributors to CyberSANE to indicate their affiliation with the project, which in turn can incite interactions concerning CyberSANE itself. Secondly, it can allow more precise ideas of what each individual does towards the project, but also their partner affiliation, also indicating a slither of their contributions as a whole.

Similar to Twitter, it is possible to share updates to followers and make them public. However, contrary to Twitter, the character limit is much larger at 700 characters for company pages, with a larger selection of attachment options. This means that not only more information can be shared with users, allowing for more freedom during the redaction of posts, but it is also possible to share different media attachments in the post itself. Figure 9 shows two posts about the project leaflet and the first bi-annual newsletter. Coupled with the similar ability of tagging third parties, it is possible to contact other projects directly by name, or reference a single person participating in an event as well as the organising company.

In addition, no post plan or timetable have been developed and a more relaxed posting policy has been defined. As such, at least one post per month was suggested, containing any information from website blog posts to important project related information such as participation in events and their main outcomes and/or experiences, or sharing the newest newsletter publication. One aspect which is similar to Twitter is the acceptance of suggestions and contributions from partners. This increases our rate of publications allowing to decrease the intervals between posts. Furthermore, the media attachments can also be more relaxed, for example the including videos which can be longer than those shared on Twitter due to both the target audience and the possible interactions with users.

The use of emojis and hashtags is also possible, however, the former is used less frequently than with the previous platform due to the professional nature of the public reached. The incorporation of hashtags, however, allows our posts to be discovered by other users or projects, expanding once again our reach. Also, there is the ability to list events which we organise, allowing other users who visit our page to see what events we are planning, when they will take place as well as where and what the event is about. Furthermore, LinkedIn have evolved with the current climate and allowed the integration of stream or webinar links directly making virtual events easier to share.

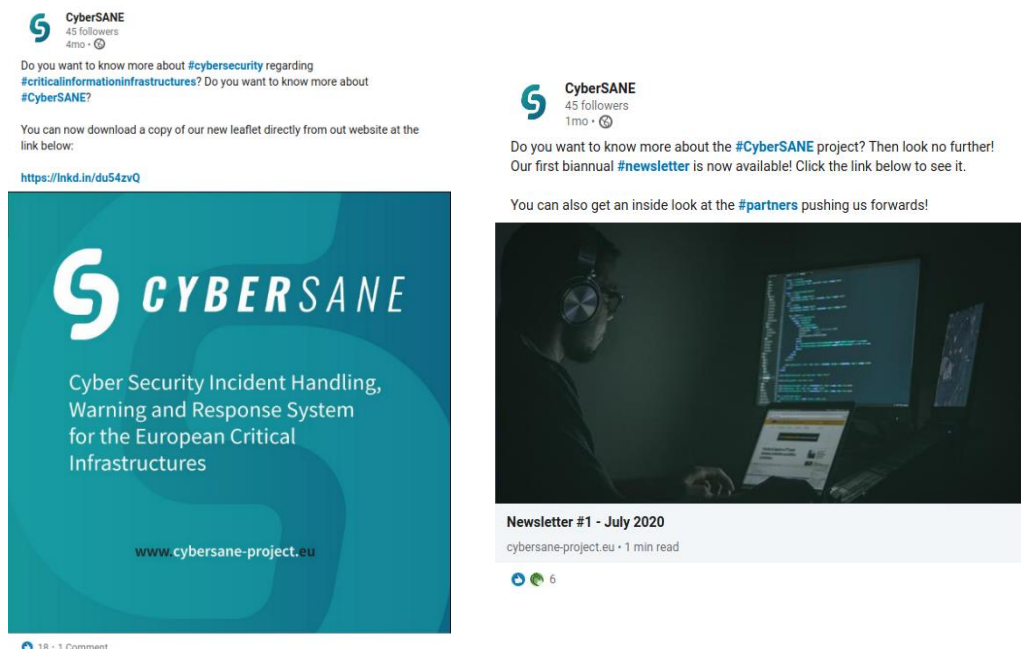


Figure 9: CyberSANE LinkedIn – Post Examples: Leaflet and Newsletter

As it is with Twitter, we can also take advantage of the various partner accounts available. This means that they can share important project related information, but it is also possible in the other direction. CyberSANE's account can interact with the partners through partner posts, publicly solidifying the interactions between partners, projects and potential customers of the CyberSANE system.

## 2.3. Communication Materials

### 2.3.1. Presentation

Besides our electronic based communication methods there are different communication materials. These are used for project related communications where the visual aspect is important. As such, their main purpose is to be able to visually identify the provenance of the information, such as a poster at an event proves CyberSANE's presence in said event. This also means that throughout the project, all communications will possess the same format, which is important for project records or public presence.

Some of these materials which have been developed are two templates, one for deliverables and one for presentations which can be seen in **D11.1**. These are used for project related activities, such as this public deliverable, or for project presentations during events. Other materials exist, such as afore mentioned posters, but also brochures or even project presentation videos. In addition, a presentation PowerPoint has been created with the most important and relevant information available on the project so far, in order to provide partners with useful slides to present the project in different situations. Of course, depending on the partners' interest and focus, the slides can be left as they are, or new ones can be included. This master presentation will be updated in accordance with the evolution of the project

All of these, with exception of the videos, have the ability of being in both digital and/or paper format. This means that they can be distributed to visitors for example in the case of leaflets or stood up next to a table such as a poster would.

Regarding this, other types of materials, such as visuals for Social Media, banners and infographics have been and will be produced. This will strengthen CyberSANE's positioning in a visual manner, as well as generate more engagement with the digital ecosystem and also attract more people during events.

### 2.3.2. Strategy

When it comes to producing these materials, there are few restrictions besides following the brand and identity elements defined in terms of, among others, colours, imagery, fonts and icons. The templates for example were created during the first few months, but once created there is no need to change them. The same goes for the use of posters or roll-ups for events. Once these have been created, they will last the entirety of the project. The only objective is their production before the participation in any events or workshops so they can be used to promote the project.

On the other hand, the other materials have more objectives. Sharing project related information in paper format is useful for attracting visitors at a certain event while informing the public of the current status as well as important elements of the project, such as the various core components. Since such information can evolve with new additions arriving during the project, multiple versions need to be created. With that in mind, these brochures were to be generated on a yearly basis, thus allowing the incorporation of updating project information on a regular basis.

Furthermore, the generation of aforementioned videos is more restricted. These videos need to convey information visually in a manner where viewers will stay until the end. This also puts a restriction on the length of the video, as too short will not grant the ability to fit the necessary information, whereas too long may cause the viewer to lose interest. Thus, the elaboration of these presentation videos will follow an "if-needed" basis. In essence, if a video can be useful to convey a certain project related element, one can be generated, otherwise it is not necessary.

## 2.4. Publications and Papers

### 2.4.1. Presentation

Some of CyberSANE's partners are from the scientific or academic areas. Since the project can lead to novel ideas or the exploration of new systems, these can lead to the redaction and publication of scientific papers in various Journals, Conferences or magazines. This will allow the project to contribute towards novel research, whilst attracting the interest of the scientific community towards the project itself.

Sharing both scientific advances as well as project results in various Journal or Conference levels, increases the scientific footprint of the project. The resulting work can contribute towards the advancement of various methodologies along the line of CyberSANE's objectives, allowing the project to contribute towards future work.



### 2.4.2. Strategy

To increase the reach of the project, it is best to target Conferences and Journals with higher prestige, which result in better public interactions. A list of Journals and Conferences which could be targeted are available in **D11.1**. The contents of the papers for submission are at the leisure of the partners, but multiple publications in both Journals and Conferences are expected.

Further to these publications, the participation of the partner in the case of Conferences also grants the ability of making the project known to the scientific community. This presentation solidifies the presence of CyberSANE not only in Cyber-Security but in the area of scientific research and development.

Once published, the papers are made available in the corresponding section on the project website as well as on the ZENODO Community created for the project. Following the publication, specific social media campaigns are made to bring traffic to the website and share CyberSANE results to a wider audience.

## 2.5. Media and Press Release

### 2.5.1. Presentation

The most common method for information dissemination is through the use of media outlets. Both on the internet and in paper form, media presence is important to the acknowledgment and success of CyberSANE. Sharing project related information on relevant media platforms increases the projects visibility and also sensitize the public to our line of work.

When compared to our own channels of communication such as individual private accounts or partner media platforms, public media can reach further due to the large number of interested people. Since media outlets don't always share the same information, this means they publish a large variety of content meaning, therefore, multiple demographics of readers.

However, publishing on such a platform means that the information must first be prepared so as to keep confidential information safe. The publication of press releases grants this protection, but also the ability to share the same information across multiple platforms.

### 2.5.2. Strategy

The public image of the project is important for collaboration with other projects or stakeholders. Thus, similar to the brochures presented previously with the evolution of project related information and results, there will be two official project related press releases per year, shared through various media channels which will contribute towards our public image. The sharing of this information can be achieved through two channels: media outlets and partners.

When it comes to media outlets, sharing information through their various channels greatly increases the overall footprint as various demographics can be reached through news outlets. In this case, the collaboration and commitment of partners and their respective communication and press departments is essential in order to reach different types of media outlets (mainstream, technology, innovation, cyber-security, industry, etc) from different countries.

Sharing the release through official partner channels can be beneficial on various levels. Firstly, internal dissemination allows other members of the partner company to gain knowledge on their participating in the project, as well as the various technical results. Secondly, the same can be achieved externally towards the various followers who are interested in the partners activities. Furthermore, partners can use their own channels to share what project related information they like, all the while tagging either of CyberSANE's social media accounts or including a link to the website.

## 2.6. Newsletter

One means of direct communication is the use of a project newsletter. The goal of a newsletter is to inform subscribers about project-related information in a single place. Generally sent via email, it can be created in various formats such as an electronic booklet.

CyberSANE provides two newsletters each with their own objectives and communication method.

### 2.6.1. Monthly Newsletter

#### 2.6.1.1. Presentation

The first product is the monthly newsletter. This version is present in email form and is sent to subscribers once a month. Its objective is to update people on what has happened on the website during the previous month. It therefore contains information such as blog posts, publications or available communication materials. It also contains a list of the four previous blog posts, so people can easily access them directly.

To sign-up to the monthly newsletter, a sign-up sheet is integrated directly into the “*Home Page*” as seen in the bottom right of Figure 2 and more closely in Figure 10. After accepting the confirmation email, the subscriber’s address is added to the database and integrated into the mailing list immediately. When un-subscribing, the address is removed systematically from the database without delay. More information relative to the procedure is available for visitors to see on the “*Privacy Policy*” page, conform to GDPR standards.

In Figure 11 we can see August’s newsletter. The colour scheme was derived from the project colours and adapted to contain a readable format which is soft on the eyes of the reader. Generated and sent from the WordPress plugin Knews, it integrates user related tools such as the ability for the receiver to unsubscribe, or if they are unable to view the newsletter in the email client, it can be opened in the client’s browser directly via the URL at the top.

The format of the newsletter is designed to provide the best possible reading experience. This layout follows a consistent pattern, making each new version quick and easy to understand. At the top of the newsletter, the main news elements from that month are presented with a short description, an image and a link to the corresponding page on the website. This includes blog posts, publications or any project related information added since the last newsletter edition, during the previous month. Each element contains a short description, an image and a link to the page on the website. Just below, the four previous newsletter stories are linked, making it possible to see and quickly access previous achievements. At the bottom, a list of available resources can be found, allowing the receiver to access these elements directly on the website.

#### 2.6.1.2. Strategy

The purpose of the monthly newsletter is to inform subscribers of new additions to the website. As such, each newsletter will put forward all new

### Newsletter

Subscribe to our newsletter today and receive all of our news directly in your inbox!

Email \*

☐ I authorise CyberSANE to use and store my e-mail address\*

\* This field is required

Figure 10: CyberSANE Website - Newsletter Sign-Up

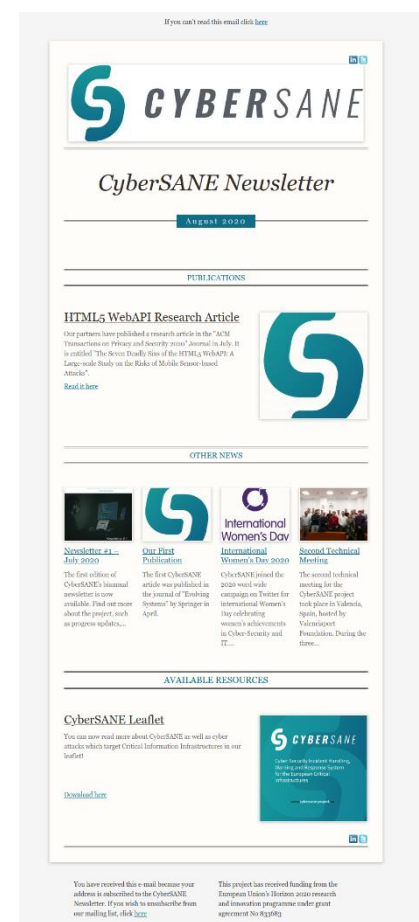


Figure 11: CyberSANE Monthly Newsletter – August

additions such as new publications or blog posts. This will allow subscribers who don't constantly visit the website to be informed of new things, which they can then see in more detail.

Using key words and reduced descriptions, reading the newsletter is insufficient to know exactly what is contained in the blog post for example. Thus, we can entice the reader to visit the website to find out more, at which time they might look at other project related information or visit the Twitter feed which is contained on the "*Home Page*".

## 2.6.2. Biannual Newsletter

### 2.6.2.1. Presentation

The second newsletter is a bi-annual version containing large amounts of project related information. Similar to its monthly cousin, its goal is to inform the reader about the project and what has been happening. However, contrary to its monthly counterpart, this newsletter is sufficient in presenting the project as it contains everything directly in its pages, not needing for the user to visit any other webpage to read the rest of the contents.

As such, and due to its large nature containing various project related information, it is only created twice a year in booklet form using Flipsnack [9]. Using this digital flipbook magazine design, the user can have the experience of reading a magazine, but in a digital format, meaning it can never be lost. Also, contrary to other formats, there is the possibility to include various quantities of information, concerning different project related elements grouped by progress and achievements made by WPs and their upcoming plans.

### 2.6.2.2. Strategy

To be able to convey the most information possible, it was decided that this newsletter will be produced at a rate of two per year. Similar to the choice for press releases, this allows the generation of significant project related data which could be published in the newsletter booklet. This approach allows the newsletter to contain different information from publication to publication, thus not giving the reader the impression of *Deja-vu*.

The contents of this newsletter vary from version to version due to the advances in the project. However, its goal is to promote project achievements, such as progress updates, technical advancements and results. A secondary objective of this newsletter is the inclusion of news such as events, meetings and information dissemination through media outlets or scientific publications. The final section presents the various partner institutions as well as a few faces hiding behind their various company logos. Presenting three organisations at a time, this grants an insight into the specialities and contributions as well as humanise the people behind who are associates with the project itself.

The choice of publishing it to the website as a blog post means that contrary to its monthly cousin, any visitor can access it and read up about the project. Naturally, like previous methods, it is subsequently shared across both social media platforms to increase its reach as well as referenced on third party websites such as CyberWatching.eu [10]. Furthermore, due to its publication directly into the blog section on the website, it is included in the monthly newsletter sent to the various subscribers.

## 2.7. Events

### 2.7.1. Presentation

The participation in various Cyber-Security events allows the project to be recognised amongst its peers as well as by different specialists in various areas. These events, therefore, are significantly important not only to the public image of the project, but also for its active presence in the Cyber-Community. This can also give way to potential partnerships with event organisers or with other participants working towards a similar goal.

Another area of participation where CyberSANE can increase its physical social networks is workshops. Similar to events, workshops are important for project reconnaissance, but they put a strong factor on

encounters and face to face discussions whilst staying on a specific topic. Participation in these events not only increases project acknowledgement, but also can bring new ideas back to the project workload.

Further to participating in these events or workshops, we also have the potential to organise and orchestrate our own. This will grant the same advantages as just participating, but it can also increase our standing with the various participants. These visitors will be able to know more about the project, as well as different themes along the same lines, but also interact with other projects.

### 2.7.2. Strategy

Due to the opportunities what participation in events and workshops grant towards the project, these participations are a must. Furthermore, with the wide variety of choices in IT and Cyber-Security, it is possible to target specific high-level events and important workshops to increase the impact. Participation in EU events grants the possibility to encounter other EU financed projects as well as show our achievements. Stakeholder workshops also grant the possibility to spread the word about the project in a prosperous environment. Moreover, we can use various demonstrations to present our achieved results, solidifying our achievements and overall work in the eyes of interested parties. A list of potential events in which we can participate is presented in **D11.1**.

Once our influence has increased sufficiently through our various activities and participations, we can then begin to organise our own events and workshops. We can, therefore, invite industry specialists as well as researchers and other projects to attend, present their work and increase inter-social networking. These events will bring more attention to the project through participants as well as visitors, who would be interested in Cyber-Security and the various achievements therein.

Due to the COVID-19 pandemic, many events have either been cancelled or postponed until the sanitary situation is resolved. Others, however, have taken to the internet becoming virtual versions of themselves. This grants the advantage of remote participation, rendering our presence easier due to not needing to physically locate to the event location. That being said, the organisation and planning for such a significant change made in many cases on short notice, meant temporarily postponing the event until the organisation quirks could be ironed out.



## 3. Communication and Dissemination Activities

During the first year of the project, various activities concerning communication or dissemination of information have taken place. This section presents all activities during the period between *1<sup>st</sup> September 2019* and *31<sup>st</sup> August 2020*. Since this concerns the first year, activities which took place before the official starting date of *1<sup>st</sup> September 2019* have been included for reference.

These activities will be presented relative to their different methods and platforms.

### 3.1. CyberSANE Website

During this first year, the activities surrounding the website were quite significant. Indeed, the tasks included the elaboration and conception of the website structure, as well as the various different pages it contains. Some of these pages, such as those contained in the “*Library*” section, are periodically updated with new contents. However, since these pages concern other dissemination activities which are defined separately in this document, they will not be explored here.

The main method of communication through the website is the use of the blog. As such, all activities specifically related to the website concern different blog posts which took place during the previous year. Table 2 presents a listing of the blog posts which have been published on the “*Communication*” page [2].

Title	Contents	Category	Date
<b>Project Kick Off</b>	Present photos from project kick-off event in September 2019	Meetings	13 <sup>th</sup> September 2019
<b>First Technical Meeting</b>	Presentation of the first meeting in Athens in December 2019	Meetings	11 <sup>th</sup> December 2019
<b>Eu-funded project CyberSANE to transform security incident detection and handling systems</b>	First project press release	Press Release	20 <sup>th</sup> January 2020
<b>Second Technical Meeting</b>	Presentation of the second meeting which took place in Valencia in February 2020	Meetings	19 <sup>th</sup> February 2020
<b>International Women’s Day 2020</b>	Presentation of CyberSANE’s IWD Twitter campaign	Presentations	15 <sup>th</sup> March 2020
<b>Newsletter #1 – July 2020</b>	Publication of the first biannual newsletter	Newsletter	17 <sup>th</sup> July 2020
<b>CyberSANE at the CS4CA European Summit</b>	Presentation of the CS4CA Europe Summit and CyberSANE’s case study presentation	Events	31 <sup>st</sup> August 2020

Table 2: CyberSANE Website – Activities

As we can see, the seven blog posts have been published at a rate of approximately one per month as of *December 2019*. Before this date, the website was still under construction and due to the project being in its infancy, there wasn’t much data to report. However, since then more and more information has become available for publication. That being said, due to the apparition and expansion of COVID-19, certain aspects of the blog posts were limited due to lack of data available. This means that no new content was posted to the blog during the months of *April to June*.

The use of Categories attributed to each post allows the association of multiple posts around the same theme together. This also eases the access for visitors who want to see only the available newsletters, but don’t want to know what events in which we have participated or organised. Figure 12 shows the short summary of the

last blog post published to the website, dated the 31<sup>st</sup> August, as seen in the last row of Table 2. Here we can see the author, the publication date as well as the category in which it is published. It is also possible to post comments to the various posts, however as of yet only spam comments have been received.



Figure 12: CyberSANE Website – Blog Post Resumé

In order to generate more relevant content related to the project purpose and its progress, a schedule for bi-monthly posts has been created in collaboration with the consortium. Some of the topics defined are:

- CyberSANE Architecture (MAG)
- Critical Infrastructure Requirements (Inria)
- Legal and ethical requirements on the protection of CIIs (KUL)
- Encrypted network traffic analysis, transformation and normalisation techniques (ATOS)
- CyberSANE Reference Scenarios (VPF)
- Among many others ...

The website also contains a “Contact Us” page containing a form to contact us directly. This form has been used a total of 15 times since the website has been made public. The majority of the contents concern graphical design or URL backlinking proposition; however, two instances have been spam phishing attempts.

## 3.2. CyberSANE Social Media

### 3.2.1. Twitter

Out of all of our available methods for sharing information, Twitter is possibly the most used. From our strategy of minimum one tweet a week, increasing to an average of three, we were able to tweet a large amount of information during this first year. Table 3 shows an overview of the various tweets made.

As we can see, a total of 57 tweets were published throughout the different categories. It is important to note that all posts made through the official account have been included in the statistics. This means that retweets which contained an added message to them have been noted, however, simple retweets without comment have been excluded. It is also visible that certain categories possess no tweets, this includes “*Events*”, “*Results*” and “*Presentation Man*”. The first two are due to the lack of participation of publishable results during this first year. The third, however, was created as a response to the creation of “*Presentation Woman*” and currently hasn’t been used.

Indeed, “*Presentation Woman*” was created to allow CyberSANE to participate in a Twitter campaign for International Women’s Day [11] 2020. During this campaign and for six days, six tweets were created to

present both historical female figures in IT and Cyber-Security as well as three females from our Partners. The overview of this campaign is available on the CyberSANE Website [12].

Tags	Number of Tweets
Cyber News	11
Partners	7
Meeting	4
Calendar Event	2
Event	0
Announcement	8
Results	0
Information	8
Presentation Woman	6
Presentation Man	0
Publication	2
Technical	7
Untagged	2
<b>Total</b>	<b>57</b>

Table 3: CyberSANE Twitter – Activities

### 3.2.2. LinkedIn

Compared to Twitter activities, LinkedIn posts are significantly subdued. As shown in Table 4, nine posts took place between *December 2019* and *August 2020*. As defined in the dissemination strategy and similar to Twitter, the vast majority of these posts are website-based content, shared across social media. We can see that the majority of the content originates from blog posts themselves, however, occasionally other information from website appears, such as library content presenting publications and the leaflet.

Post	Date
1 <sup>st</sup> technical meeting	December 2019
First press release	January 2020
2 <sup>nd</sup> technical meeting	February 2020
International women's Day 2020	March 2020
1 <sup>st</sup> publication	April 2020
Leaflet	April 2020
CISA quote	May 2020
1 <sup>st</sup> Biannual newsletter	July 2020
2 <sup>nd</sup> publication	August 2020

Table 4: CyberSANE LinkedIn – Activities

We can also notice that certain campaigns that are run on Twitter, here the International Women's Day, are also published here. Contrary to Twitter's daily weeklong campaign, only a single publication was made, linking to the summary published on the blog. Furthermore, in *May* we can see a post generated from a

contribution made by a CyberSANE partner, showing the involvement in the dissemination activities on behalf of the consortium.

It is also noticeable that two posts were made during *April*, due to the apparition of another addition to the library content. However, countering this double post, no new content was published during the month of *June* similar to the website due to the lack of new project information and contributions as a result of COVID-19 post-confinement complications.

### 3.3. Communication Materials

During this first year, a total of five communication materials have been created. They are presented in Table 5. The first of these is the creation of the project templates, such as the one used in this deliverable. As stated previously, this is a onetime creation as it will persist for the duration of the project. It also includes the definition of the presentation PowerPoint for use in various situations. Figure 13 shows some screenshots of the produced slides.

Type	Description	Date
<b>Project Templates</b>	Dissemination templates used by the consortium for deliverables and presentations	January 2020 August 2020
<b>Leaflet</b>	Hand out printable project leaflet, presentation of project, components and pilots	April 2020
<b>Infographics</b>	Digital version of the printable leaflet	April 2020
<b>Twitter Cards</b>	Multiple cards presenting various information to be shared on Social Media	March 2020
<b>Roll-Up</b>	Physical project presentation vertical banner for use in events and workshops	August 2020

Table 5: CyberSANE Communication Materials – Activities

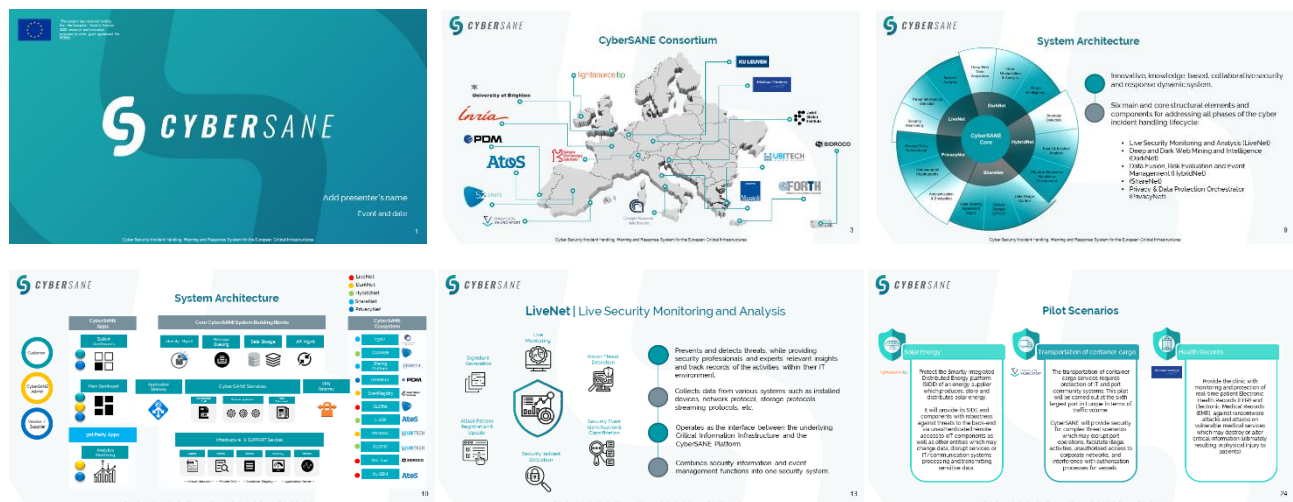


Figure 13: CyberSANE Communication Materials – Presentation PowerPoint Slide Examples

Two of the other creations concern the first project leaflet. Both versions contain the same information, simply in a different format. The first version was created to be printed and used as a physical leaflet, distributed during events, workshops, or any project presentations made by partners. However, to facilitate the access to such information, another digital version was also created, this time in a format which is easy to read on a computer screen or smartphone. Contrary to the other version, this one is not adapted for printing, simply digital dissemination instead of physical sharing. Figure 14 shows both leaflet versions side by side, the printable version top left and the digital on the right. We can clearly see the leaflet layout on the left, whereas



## D11.2 – Initial Report on Dissemination and Communication Activities

on the right the format is a single long column, more adapted to scrolling on a screen. Both of these versions are available on the “Resources” webpage in the “Library” [4].

The fourth material type concerns the production of visual images for use with Social Media called Twitter Cards. These cards allow to share specific information in a visual manner, increasing the chance of interactions. These advantages extend beyond Twitter, since these images can be shared on other platforms, such as the Website blog. Two examples of Twitter Cards are also visible in Figure 14, both of which were produced as part of the International Women’s Day 2020 Twitter campaign, and subsequently available on the Website blog post [12].

The final material produced is a project Roll-up. This self-standing poster is to be used during events and presentations, detailing the project with a mix of images and text to attract visitors. Currently, two versions of the Roll-up exist and are being finalised for creation. They are presented in Figure 15.



Figure 14: CyberSANE Communication Materials – Leaflet: Printable / Digital Version & Social Media Cards IWD 2020 : Ada Lovelace / Ana Maria Morales Perez

## D11.2 – Initial Report on Dissemination and Communication Activities



**CYBERSANE**  
Cyber Security Incident Handling, Warning and Response System  
for the European Critical Infrastructures

**CyberSANE** presents an innovative and novel approach for the development of a **dynamic security incident handling, warning and response system** based on knowledge and collaboration to **protect European Critical Information Infrastructures against different types of cyberattacks and intrusions** while allowing continuous learning during the whole lifecycle of an incident.

CyberSANE is composed by five main **components**:

- LiveNet**  
Live Security Monitoring and Analysis interface platform component for preventing and detecting threats, and capable of mitigating the effects of an intrusion by monitoring, analysing, and visualising internal live networks traffic in real time.
- DarkNet**  
Deep and Dark Web Mining and Intelligence allowing the exploitation and analysis of risks and threats by analysing textual and meta-data content from various electronic streams.
- HybridNet**  
Data Fusion, Risk Evaluation and Event Management providing intelligence to perform effective and efficient analysis of security events coming from both information derived from other system components, and on information and data produced by the incident to evaluate the security situation inside CILs.
- PrivacyNet**  
Privacy and Data Protection Orchestrator for the application and compliance of privacy mechanisms, confidentiality and data protection for sensitive incident-related information.
- ShareNet**  
Intelligence and Information Sharing and Dissemination providing necessary threat intelligence and information sharing capabilities within CILs to enhance trustworthiness and identify incidents in a faster way.

**CyberSANE Pilot Scenarios**

- Solar energy production, storage and distribution service** (Lightsource Labs)  
Protection of the Smartly Integrated Distributed Energy platform (SIDE) and its components against threats to the back-end through unauthenticated remote access to IoT components or other entities to disrupt or change services and data, and to the IT and communication systems processing and transmitting sensitive data.
- Container cargo transportation service** (FUNDACIÓN VALENCIAPORT)  
Protection of IT, OT and Port Community Systems of one of the sixth largest ports in Europe in terms of volume of traffic against complex threat scenarios disrupting port operations or facilitating illegal activities, unauthorised access to corporate network of SCADA, interference with the authorisation processes for vessels, among others.
- Real-time patient monitoring and treatment services** (Klinikum Nürnberg)  
Protection of Electronic Health Record (HER) and Electronic Medical Record (EMR) IT and file systems targeted for ransomware attacks, and against vulnerable wireless communications attacking the medical service and even physical damage to a patient.

Partners: PDM, AtoS, Google Nazionale della Ricerca, SIDROCO, UBITECH, FORTH, KU LEUVEN, Klinikum Nürnberg, University of Brighton, FUNDACIÓN VALENCIAPORT, Lightsource Labs.

www.cybersane-project.eu

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**System Architecture**



**CyberSANE Pilot Scenarios**

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- Container cargo transportation service** (FUNDACIÓN VALENCIAPORT)  
Protection of IT, OT and Port Community Systems of one of the sixth largest ports in Europe in terms of volume of traffic against complex threat scenarios disrupting port operations or facilitating illegal activities, unauthorised access to corporate network of SCADA, interference with the authorisation processes for vessels, among others.
- Real-time patient monitoring and treatment services** (Klinikum Nürnberg)  
Protection of Electronic Health Record (HER) and Electronic Medical Record (EMR) IT and file systems targeted for ransomware attacks, and against vulnerable wireless communications attacking the medical service and even physical damage to a patient.

Partners: PDM, AtoS, Google Nazionale della Ricerca, SIDROCO, UBITECH, FORTH, KU LEUVEN, Klinikum Nürnberg, University of Brighton, FUNDACIÓN VALENCIAPORT, Lightsource Labs.

www.cybersane-project.eu

This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 833683.

Figure 15: CyberSANE Communication Materials – Roll-Ups

### 3.4. Publications and Papers

When it comes to scientific or academic publications and papers, a total of three have been done to date and are presented in Table 6. Immediately, it is apparent that the first Journal publication was made prior to the official start date of the project.

Title	Authors	Published	Proceedings
<b>Cyber Security Incident Handling, Warning and Response System for the European Critical Information Infrastructures (CyberSANE)</b>	Spyridon Papastergiou, Haralambos Mouratidis & Eleni-Maria Kalogeraki	May 2019	Engineering Applications of Neural Networks, 2019, Springer International Publishing
<b>Handling of advanced persistent threats and complex incidents in healthcare, transportation and energy ICT infrastructures</b>	Spyridon Papastergiou, Haralambos Mouratidis & Eleni-Maria Kalogeraki	April 2020	Journal of Evolving Systems, 2020
<b>The Seven Deadly Sins of the HTML5 WebAPI: A Large-scale Study on the Risks of Mobile Sensor-based Attacks</b>	Michalis Diamantaris, Francesco Marcantoni, Sotiris Ioannidis, Jason Polakis	June 2020	ACM Transactions on Privacy and Security, 2020, Association for Computing Machinery

Table 6: CyberSANE Publications and Papers – Activities

Other than the first publication, the succeeding two were submitted during the project itself. These two publications are accessible through the website [3], linking back to the journals in which they were published. Both were published by CyberSANE partners as well as, in the case of the third entry, by international collaborators with the project partner.

### 3.5. Media and Press Release

When it comes to media presence and press releases, there are different factors to take into account. Firstly, we enumerate the press releases which were generated by CyberSANE. Secondly, we list the different internal dissemination activities performed by partners as well as the contents of each activity. Finally, we present the various activities achieved by third parties sharing official CyberSANE information through their own diverse channels.

#### 3.5.1. Project Press Release

During the past 12 months, one official press release has been created. Its title and date of publication can be seen in Table 7. Since this was the first year, this release contained primarily basic project information, presenting the interests as well as the overall project objectives. Furthermore, it took the opportunity to present a brief description of the CyberSANE system, defining the various components before talking briefly about the three pilots participating in the project. Finally, following on from this it ended with an enumeration of all the partners who participate and contribute towards the success of project. This initial release was posted onto the CyberSANE website blog [13] and subsequently shared through both social media communication channels to promote the publication.

Title	Date
<b>EU-funded project CyberSANE to transform security incident detection and handling systems</b>	20 <sup>th</sup> January 2020

Table 7: CyberSANE Media and Press Release – Activities

### 3.5.2. Internal Dissemination

The afore mentioned press release wasn't just shared through official project channels. One other means of information dissemination available to us is the use of internal methods. In this case, internal methods represent the different means of communication possessed by the different partners, such as websites and official social media accounts. In Table 8 we can see a complete list of all publications of project related information through various partner channels.

Title	Publisher	Date	Type
<b>A Cybersecurity Incident Handling, Warning and Response System for the European Critical Infrastructures</b>	Maggioli Website [14]	<b>UNKNOWN</b>	Project Information
<b>CYBERSANE</b>	KU Leuven Website [15]	1 <sup>st</sup> April 2019	Project Information
<b>UBITECH kicks off the CyberSANE Innovation Action on cybersecurity incident handling, warning and response</b>	Ubitech Website [16]	10 <sup>th</sup> September 2019	Blog Post
<b>Brighton joins a European fight against cyber attacks</b>	University of Brighton Website [17]	1 <sup>st</sup> November 2019	Project Information
<b>Cyber-Resilience and Critical Infrastructures: All the more reasons for a CyberSANE solution</b>	KU Leuven Website [18]	26 <sup>th</sup> November 2019	Blog Post
<b>A CYBERSECURITY INCIDENT HANDLING, WARNING AND RESPONSE SYSTEM</b>	Jožef Stefan Institute Website [19]	16 <sup>th</sup> January 2020	Project Information
<b>EU-funded project CyberSANE to transform security incident detection and handling systems</b>	Atos Research and Innovation Booklet [20]	20 <sup>th</sup> January 2020	Press Release
	Sidroco Website [21]	20 <sup>th</sup> January 2020	Press Release
	FORTH-ICS Facebook [22]	20 <sup>th</sup> January 2020	Press Release
	FORTH-ICS LinkedIn [23]	20 <sup>th</sup> January 2020	Press Release
	Fundación Valenciaport Website [24]	21 <sup>st</sup> January 2020	Press Release
<b>CyberSANE to transform security incident detection and handling systems</b>	Jožef Stefan Institute Website [25]	21 <sup>st</sup> January 2020	Press Release
<b>CyberSANE, un proyecto europeo en favor de la ciberseguridad</b>	S2 Website [26]	24 <sup>th</sup> January 2020	Press Release
<b>CyberSANE Biannual Newsletter #1</b>	Sidroco Facebook [27]	1 <sup>st</sup> August 2020	Biannual Newsletter

Table 8: CyberSANE Media and Press Release – Internal Dissemination Activities

As we can see, three types of dissemination are listed in this table, each corresponding to a specific type of communiqué. The first, “*Project Information*” simply defines any publication which conveys the basic information regarding the project. This includes information such as funding, start and end dates, partners or a basic description of the CyberSANE system. The second, “*Blog Post*” is probably the most transparent, as it represents any post to a partner own blog written by themselves. The third and final type, “*Press Release*” is



the public dissemination of the official CyberSANE press release. With these three categories, all communication information can be categorised.

From this information, we can identify a total of 14 different communications having taken place from various partners. We can also identify that different types of methods have been exploited with the majority being the partners' own website, whereas others also have used their social media accounts, such as *FORTH* and *Sidroco*. We can, therefore, gladly see that these partners have greatly assisted in sharing awareness about CyberSANE.

However, one element that draws the eye is the various publication dates. Firstly, the first entry in the table, corresponding to *Maggioli's* project presentation contains no publication date, due to technical difficulties resulting in an incapacity to retrieve the exact date. Furthermore, we can also see that the second entry, *KU Leuven's* website publication took place before the official start of the project, similar to the previous presentation of papers and publications. As such these elements have been included to maintain a complete overview of all activities which took place until month 12, similar to previous methods already explored.

### 3.5.3. Media Presence

Other than internal communication channels, it is also possible to use external third-party media channels to promote project information. This includes a wide variety of platforms, from websites to physical printed newspapers. Table 9 presents an overview of these external dissemination activities, following the same format as the previous section.

Title	Publisher	Date	Type
<b>Cosco Shipping Lines Spain se incorpora al Patronato de la Fundación Valenciaport</b>	Empresa Exterior [28]	18 <sup>th</sup> June 2019	Media Presence
<b>Cosco Shipping Lines se incorpora al Patronato de la Fundación Valenciaport</b>	La Vanguardia [29]	18 <sup>th</sup> June 2019	Media Presence
<b>Ciberseguridad española para la sanidad europea</b>	Diario Médico [30]	25 <sup>th</sup> September 2019	Media Presence
<b>EU-funded project CyberSANE to transform security incident detection and handling systems</b>	Cordis [31]	14 <sup>th</sup> January 2020	Press Release
<b>1st Official Press Release: EU-funded project CyberSANE to transform security incident detection and handling systems</b>	Cyberwatching.eu [32]	20 <sup>th</sup> January 2020	Press Release
<b>CyberSANE</b>	Cyberwatching.eu [33]	21 <sup>st</sup> January 2020	Project Information
<b>El proyecto CyberSANE transformará los sistemas de detección y gestión de incidentes de seguridad</b>	Diario del Puerto [34]	21 <sup>st</sup> January 2020	Media Presence
<b>El proyecto CyberSANE, financiado por la UE, transformará los sistemas de detección y gestión de incidentes de seguridad</b>	InfoSeguridad [35]	21 <sup>st</sup> January 2020	Press Release
	Spanish Ports [36]	21 <sup>st</sup> January 2020	Press Release
<b>CyberSANE, un proyecto europeo en favor de la ciberseguridad</b>	Automática e Instrumentación [37]	22 <sup>nd</sup> January 2020	Press Release

Title	Publisher	Date	Type
Proyecto CyberSane para el desarrollo de soluciones de ciberseguridad	Cadena de Suministro [38]	22 <sup>nd</sup> January 2020	Media Presence
CyberSANE, un proyecto europeo en favor de la ciberseguridad	Capa8 [39]	23 <sup>rd</sup> January 2020	Press Release
El proyecto CyberSANE de la Fundación Valenciaport transformará la seguridad	Veinte Pies [40]	23 <sup>rd</sup> January 2020	Press Release
	Diario Valencia Maritima – Printed Edition [Figure 16]	23 <sup>rd</sup> January 2020	Press Release
El proyecto CyberSANE, financiado por la UE, transformará los sistemas de detección y gestión de incidentes de seguridad	Naucher [41]	23 <sup>rd</sup> January 2020	Press Release
CyberSANE - 1st Technical Newsletter	Cyberwatching.eu [42]	9 <sup>th</sup> August 2020	Biannual Newsletter

Table 9: CyberSANE Media and Press Release – Media Presence

Once again, we can see that a total of 16 different publications have taken place, the majority of them being from news outlets sharing and promoting the official press release. However, in this case we see a new type called “Media Presence”, which replaces the “Blog Post” used previously. This category defines news articles which have not been written officially by CyberSANE, but still present the project relative to a single partner or an industry. We can identify two more activities dated before the start of the project. These publications present the objectives of CyberSANE as well as the Fundación Valenciaport joining the consortium. The final publication in the list contains a clipping of the biannual newsletter, which is presented in section 3.6.2 below.

Another element which jumps out is the variety of languages used in the publications. This is a significant point, as it proves that our project is being shared throughout multiple countries in the EU, through their own media platforms or the use of EU wide systems. The latter is made possible by the publication of information on *CORDIS – Community Research and Development Information Service* [43], as well as the registration through the EU’s observatory of research and innovation in Cyber-Security and privacy, *Cyberwatching.eu* [44]. Furthermore, it is interesting to note that, although the majority of communications were made digitally, one of the publications was through a printed newspaper, *Diario Valencia Maritima*. Figure 16 shows an image of this newspaper article.

One important thing to remember is that although the majority of communications have been listed in the table above, it is possible that some publications took place without our knowledge. If this is the case, however, they will be included into the next deliverable **D11.4** which will present the activities during the second year of the project.



Figure 16: CyberSANE Media Presence – Diario Valencia Maritima Newspaper

## 3.6. Newsletter

The CyberSANE newsletter comes in two forms; a monthly version, keeping the subscribers up to date with website updates; and a biannual version, which is published directly onto the website blog. However, there is also another newsletter channel that needs to be considered: partner newsletters. The activities on these three mediums are explained below.

### 3.6.1. Monthly Newsletter

The monthly newsletter's goal is to update subscribers with a list of website updates. These updates generally evolve around new additions to the blog, but they also concern other dynamic elements such as publications or the addition of new digital communication materials. Furthermore, it can be used to share other information, such as various publications from media outlets as well as the main topic from previous newsletters. Table 10 shows an overview of the activities achieved through the monthly newsletter.

Month	Contents
<b>January 2020</b>	Press release
<b>February 2020</b>	2 <sup>nd</sup> Technical Meeting News publications
<b>March 2020</b>	International Women's Day
<b>April 2020</b>	1 <sup>st</sup> publication Leaflet
<b>July 2020</b>	Newsletter #1
<b>August 2020</b>	2 <sup>nd</sup> Publication

Table 10: CyberSANE Monthly Newsletter – Activities

Created in *January*, the newsletter has generally followed the activities of the website blog at a rate of one edition per month. However, similar to the blog no new editions were published in *May* or *June* due to the lack of new blog content. That being said, in *April* the newsletter was able to contain two major updates: the first project publication and the upload of the leaflet to the “*Library*” [4]. Another double version took place earlier in *February* where the second technical meeting took centre stage, but an incomplete list of news publications from the previous section were also included.

### 3.6.2. Biannual Newsletter

In *July*, as shown in the previous table, the main contents of the monthly newsletter evolved around the publication of CyberSANE's first edition of its biannual newsletter. As presented previously, the biannual newsletter contains an overview of the project including presentation, achievements as well as information on the partners. Table 11 shows the list of biannual newsletters published to date.

Issue	Month	Contents
<b>#1</b>	July 2020 [45]	Progress updates, news and events, partner presentations

Table 11: CyberSANE Biannual Newsletter – Activities

As we can see, only a single biannual edition has been conceived. This is explained by the lack of sufficient information earlier in CyberSANE's lifecycle to warrant the publication of such a newsletter. This first version forms an introduction to the project itself, paving way for more technical editions at a later date. Firstly, it presents the project in its entirety including talking about the various work-packages which have a direct

impact on the project status, such as the various system components and pilot scenarios. It then turns its attention towards various project meetings and communication activities, presenting every achievement made during this first year as presented in this document: press releases, scientific publications and the leaflet. Finally, a running theme in these newsletters is the presentation of three partner organisations. These portraits present the organisations work, but also includes a brief insight into the faces of the people who contribute directly to CyberSANE. In this edition, the first three partners are *PDMFC*, *ATOS* and *CNR*. Figure 17 presents the front cover of the first edition as well as an extract of the work-package progress pages.



Figure 17: CyberSANE Biannual Newsletter – #1: Front Cover / Inside

### 3.6.3. Partner Newsletter

Other than official CyberSANE newsletter publications, there is also the potential to use partner newsletters to promote the project amongst their subscribers. The contents of these editions are up to the partner who wishes to publish one. However, the contents generally reside around similar information as the biannual edition: presenting project progress, news and significant results or publications. Table 12 presents a list of partners who have created and sent newsletters presenting or concerning the project.

Partner	Month
Atos Research and Innovation Internal Newsletter	March 2020

Table 12: CyberSANE Partner Newsletter – Activities

As we can see, here only one newsletter has been published by Atos Research and Innovation (ARI) department. This newsletter is listed as internal, meaning it is specific to ARI's mailing lists and cannot be accessed from outside.

## 3.7. Events

The final method for dissemination is the various participation and organisation of events and workshops. However, due to the extraordinary situation brought on by the COVID-19 pandemic, the majority of events were either cancelled or postponed. Furthermore, this decreased certain aspects of project advancement, meaning that less information was available for sharing and promoting during events. That being said, the consortium has confirmed its participation in upcoming events and are actively looking forward to participating in online events organised by other projects or recognised organisations from the Cyber-Security area.

## 4. Communication and Dissemination KPIs

To be able to compare and analyse all activities achieved during this year, a list of KPIs has been defined. These KPIs present target objectives to be achieved during each project year, as well as a total after the three-year period. These KPIs are available in Table 13 and their definition is available in **D11.1**. Section 4.8 below “Overall Results” presents a table comparing our achievements so far with those expected for the first year.

Platform		Activity	Year 1	Year 2	Year 3	Total
Website		Development	1	0	0	1
		Blog Content	6	6	6	18
		Unique Visitors	500	800	1000	2300
		Page Views	1000	1200	1500	3700
		User Sessions	300	500	700	1500
Social Media	Twitter	Tweets	180	180	180	540
		Followers	80	150	250	250
		Retweets / Likes	150	200	250	600
		Impressions	6000	7000	8000	21000
	LinkedIn	Followers	20	50	70	70
		Impressions	1000	1200	1500	3700
Communication Materials		Leaflet	1	1	1	3
		Roll-Up	1	0	0	1
		Video	1	3	1	5
Publications and Papers		Journals	1	3	3	7
		Conferences	2	5	5	12
Media and Press Release		Press Releases	2	2	2	6
		Audience Reached	1000	2000	2500	5500
Newsletters		Biannual Newsletters	2	2	2	6
		Subscribers	40	60	100	100
Events		Participation External Events	1	1	2	4
		Organisation of Events / Workshops with stakeholders	1	1	2	4
		Audience reached	100	200	500	800
		Participants per workshop	0	20	50	70

Table 13: CyberSANE KPIs

As we can see, there are eight distinct dissemination categories, separating of course Twitter and LinkedIn from the social media category. Their main objective is to evaluate the overall productivity of the various dissemination methods on a yearly basis and propose improvement strategies to increase their efficiency. Each value per year corresponds to the target evolution value between the *1<sup>st</sup> September* and the *31<sup>st</sup> August* the



following year. This emphasises the evaluation on a yearly basis, not looking at the reached quantity but the strict gain during the previous 365 days.

That being said, there are certain activities where the yearly values don't represent the target yearly gain, but the baseline global evolution since *1<sup>st</sup> September 2019*. These activities generally concern values which can fluctuate both upwards and downwards, such as in this case social media followers and newsletter subscribers.

Each individual KPI will be explored per platform, comparing the reached values with those expected and analysing the variations compared to the goals set. Each comparison table contains a colour code, allowing to easily identify which activities have reached or surpassed expectations (**green** cell) as well as those which are in need of further improvement (**red** cell). Furthermore, the analysis of this comparison will grant insight into areas which are in need of improvement, leading to the elaboration of various improvement strategies to reach for the following year. The overall objective is to adapt our strategies to increase productivity, so as to reach the total objectives after the three-year period, increasing steadily as each year progresses.

## 4.1. CyberSANE Website

The analysis of the various activities on the website such as visits and views, we used a WordPress plugin previously called Piwik, now by the name of Matomo [46]. This system includes a script call directly into the website DOM architecture, which pings home on each visit. This allows the system to collect various types of analytical information from each visitor's data. As such, we are able to identify unique visitors from returning ones, as well as the operating system used as well as the browser and even the geographical location based upon their HTTP header and IP information. Naturally, this collection is subject to GRPD law and is presented on the "*Privacy Policy*" page, along with the possibility to refuse collection and exploitation of user data [5].

### 4.1.1. KPIs

The KPIs specific to the website are defined in Table 14 with the current year being highlighted in **light blue**. The key factors to determine website efficiency are the number of unique visitors, page views as well as user sessions or total visits. These values of course depend on the contents of the website throughout all available pages but also the number of blog posts available on the "*Communication*" page. Finally, the last KPI only impacts the first year of the project as it concerns the development and deployment of the website itself.

Activity	Year 1	Year 2	Year 3	Total
Development	1	0	0	1
Blog Content	6	6	6	18
Unique Visitors	500	800	1000	2300
Page Views	1000	1200	1500	3700
User Sessions	300	500	700	1500

Table 14: CyberSANE Website – KPIs

### 4.1.2. KPIs Reached

Thanks to Matomo, we can extract various quantities of information for analysis. Firstly, as shown in Figure 18, we can analyse the various visitation metrics available. These values are the total number of visitors as well as the number of unique visitors, as well as the quantity of bounced visits. This last category represents the number of visitors who accessed the website then "bounced" away after viewing a single page and not navigating to any others.

Firstly, it is important to note that no values exist prior to *January 2020*. This is due to the website still being under construction until then, as well as various difficulties in the attribution of the official project URL. Furthermore, the graphs possess an evolutionary percentage, representing the variations between the current year and the previous. In this case, being the first year, these values represent a significant increase due to no

date for the previous year. Concerning the graphs themselves, they present a steady increase in values for both visitor's counters, with the total number (**blue**) slightly higher than the unique counter (**orange**). The number of bounced visits (**grey**) is also on the increase but at a slightly lower rate. All three graphs possess variations and large drops in values, but overall, the values are increasing. This shows that the website is frequented on average more and more throughout the year with a total number of visits reaching 975, with 832 of them being unique sessions making over 85% of all visits. The number of bounced visits on the other hand sits at 502, corresponding to approximately 51% of all visits.

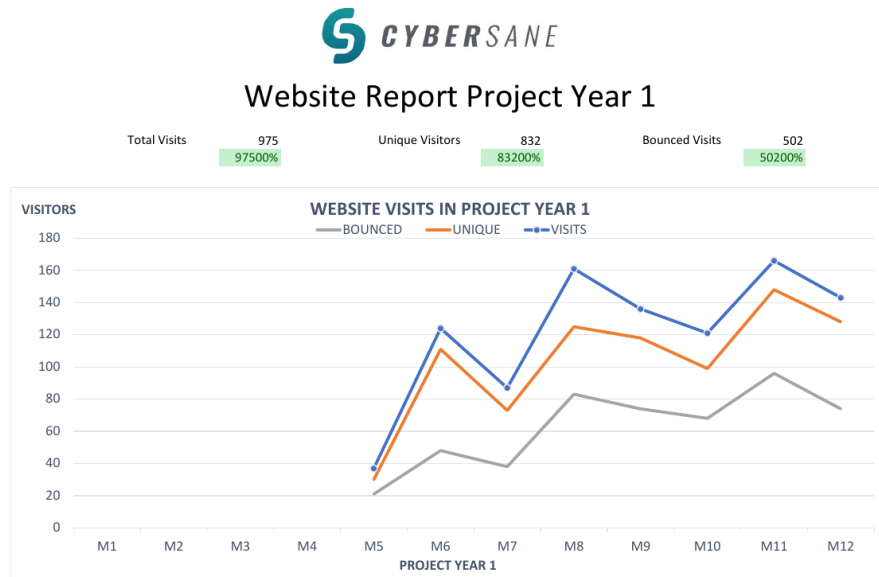


Figure 18: CyberSANE Website Metrics – Visits

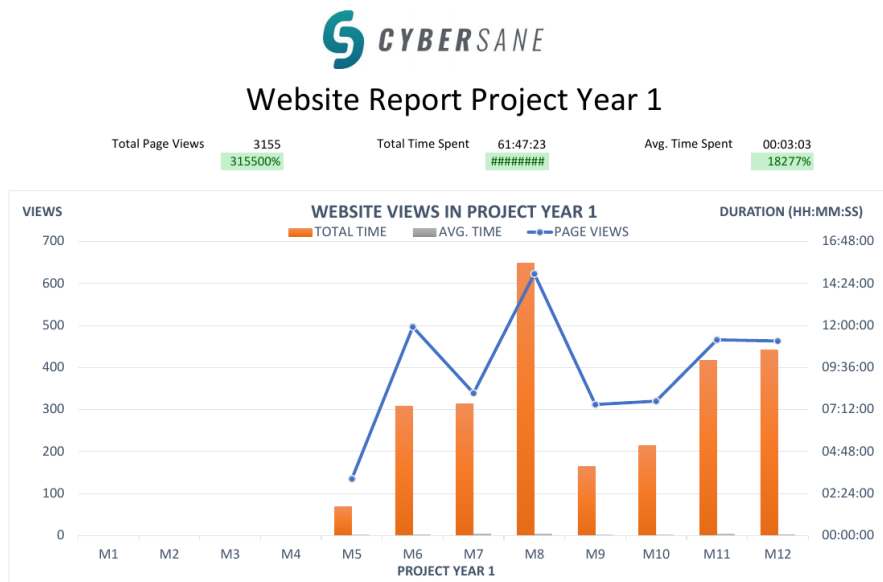


Figure 19: CyberSANE Website Metrics – Views

Another metric for analysis is the amount of page views as well as the time spent on the site itself. This analysis is performed in Figure 19. Firstly, we can see the graph representing page views (**blue** line), similar to those in the previous figure, possesses strong fluctuations and even a stagnation over the last two months. We can also notice that the drops in views are also represented in the total time spend on the website (**orange** bar) which is unsurprising. The average time spend (**grey** bar) it not visible in this figure due to its miniscule value when compared to the total time spent per month. When comparing with the previous figure, the drops in views

and time spent are reflected in the number of visitors to the website. Overall, the various webpages were viewed a total of 3155 times with a total of almost 62 hours total spent. This number, however, dwarfs massively the average time spent per visit which is 3 minutes and 3 seconds.

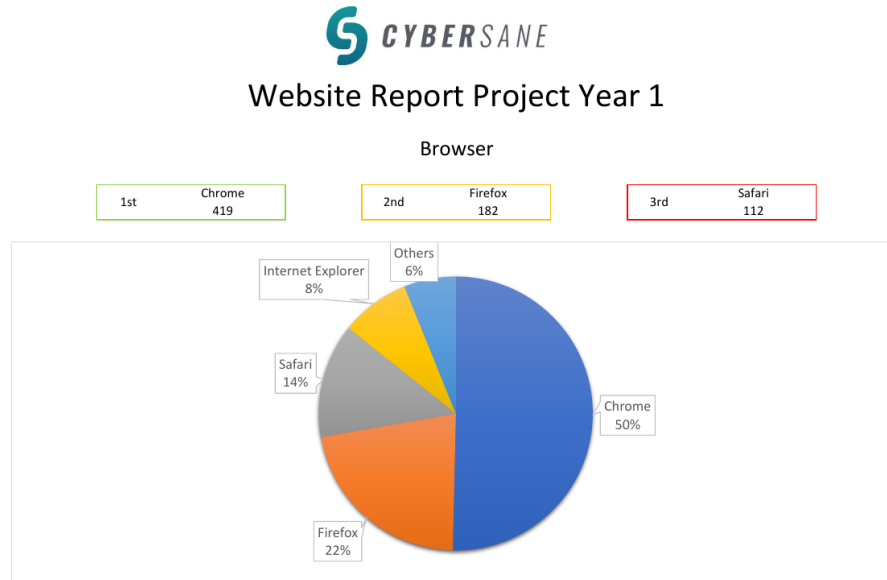


Figure 20: CyberSANE Website Metrics – Browsers

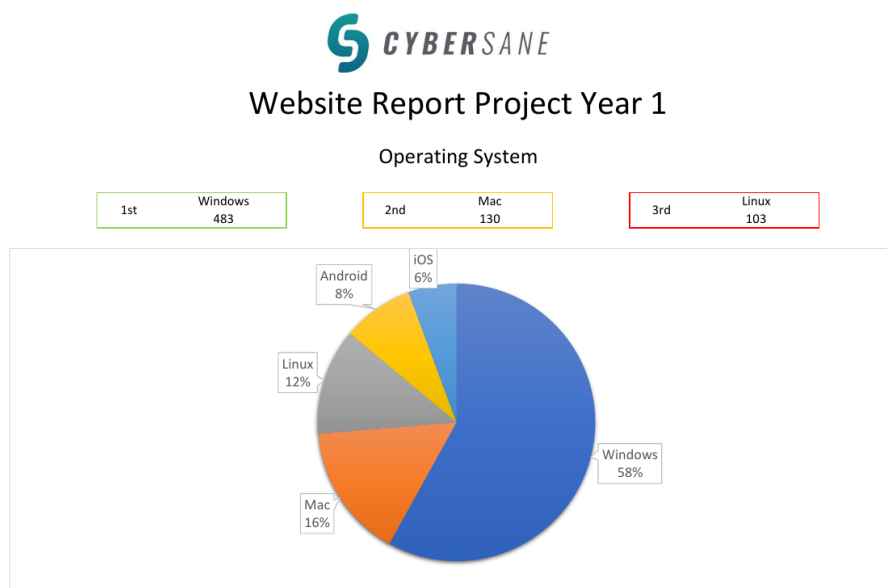


Figure 21: CyberSANE Website Metrics – OSs

Moving on from these metrics, thanks to Matomo's analysis of the HTTP request headers, we can extract information concerning the user's browser and operating system. Figure 20 presents an overview of the various browsers used. We can see that the three most used are *Chrome* (blue) being used in 50% of visits, followed by *Firefox* (orange) at 22% and then *Safari* (grey) at 14%. These values are also reflected in Figure 21 with the different operating systems used, with *Windows* (blue) being the most common at 58% followed by *Mac* (orange) at 16%, *Linux* (grey) at 12% and mobile devices with *Android* (yellow) and *iOS* (light blue) with 8% and 6% respectively. This shows that the majority of visitors prefer to use their PC rather than a smartphone or tablet when viewing content on the website, and that they also prefer using third party browsers than those



preinstalled, the exception of course being the use of Safari which is probably the base choice for the visitors using Macs.

Finishing off the analysis, Matomo can determine the geographical location of each visitor based on their IP address. In Figure 22, we can see a list of the most common countries to have visited the website, organised alphabetically. It is important to notice that not all countries could fit onto the graph, so the less frequent origins have been compressed into the “Others” category. We can immediately notice that the top three countries are both from the EU but they are also countries in which partners reside. The first place being *France* with 146 visits can be explained simply by the fact that Inria, who maintains the website, are based there, meaning that updates to the website contents are included in the visitation metrics. However, we can also notice that in fourth place is the *Netherlands* with about 64 visits and also the *US* taking up fifth with approximately 60 visits during the first year. It is also interesting to notice that other countries have also visited the website, such as *Russia*, *India*, *Israel* as well as *Hong Kong*, the *United Arab Emirates* and many others both from the EU and elsewhere.

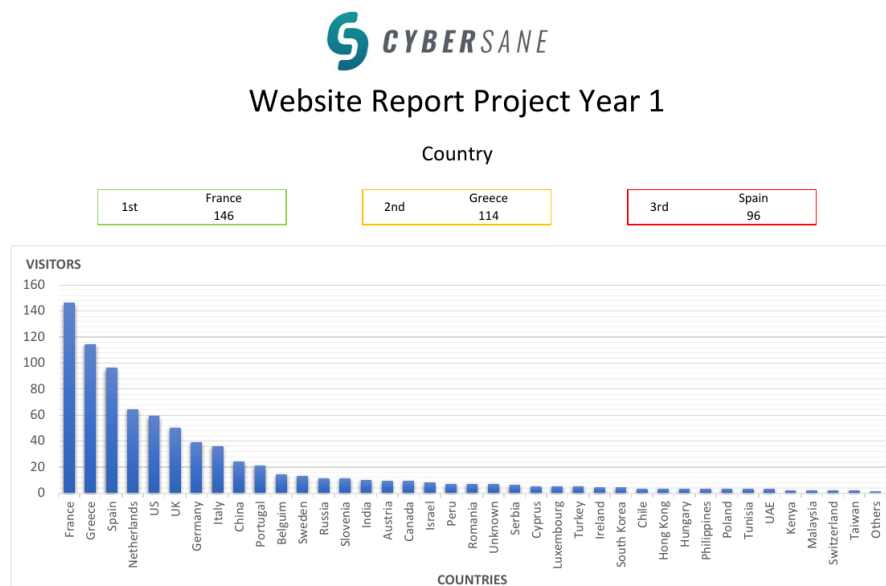


Figure 22: CyberSANE Website Metrics – Countries

From this extensive analysis of the website visitation statistics, we were able to extract the values corresponding to the various KPI activities. These values have been categorised into Table 15 with the current year highlighted in **light blue**. Firstly, we can see that the deployment value has been set to one, since the website has been deployed and we are receiving telemetry to analyse. Secondly, the number of blog posts as presented in Section 3.1 above has been added to the table also. Finally, we can see that the values for the unique visitors and user sessions, otherwise known as number of visits, have been extracted from the analysis in Figure 18 and the number of page views has been taken from Figure 19.

Activity	Year 1	Year 2	Year 3	Total
Development	1			1
Blog Content	7			7
Unique Visitors	832			832
Page Views	3155			3155
User Sessions	975			975

Table 15: CyberSANE Website – KPIs Reached

### 4.1.3. KPI Comparison

With the numerical data extracted from the statistical analysis, we can compare the achievements made with the target values for this year. Table 16 contains this comparison with the colour code as mentioned previously.

Activity	Reached Year 1	Year 1
Development	1	1
Blog Content	7	6
Unique Visitors	832	500
Page Views	3155	1000
User Sessions	975	300

Table 16: CyberSANE Website – KPI Comparison

Immediately, we can see that all KPIs have been reached. Naturally, the website deployment was a necessity, however, we managed to produce one more blog post that expected. Furthermore, we have exploded the visitation metrics, with a significantly higher number of unique visitors that hoped and even triple the expected values in number of page views and user sessions.

### 4.1.4. Improvement Strategies

Even though the KPI comparison shows that the website is on the right track efficiency wise, there is always room for improvement. In this case, the potential areas for improvement evolve around the CyberSANE blog due to its dynamic nature and constant addition of new information. One route for improvement would be to increase the technical nature of the blog posts. As such, a blog calendar has been devised to provide technical information for use in the blog on a regular basis, on top of the current policy of sharing information such as meetings, press releases or the biannual newsletter.

On top of the increase in blog content, another strategy would be to increase the amount of contents contained in each blog posts. Certain posts contain only small amounts of text, which may not attract readers or entice them to read another entry. Thus, increasing the quality of the posts by lengthening the posts themselves is a good start. This also includes two possibilities of adding more graphical data directly to the posts, making them softer on the eyes than large blocks of black text, all the while accompanying them with a text description of the contents of the blog post.

## 4.2. CyberSANE Social Media

### 4.2.1. Twitter

The analysis regarding the various Twitter activities were achieved using Twitters own analytical service [47]. This information used Twitters own API to extract large quantities of statistical information, this includes the number of tweets and their associated statistics (impressions, interactions, retweets, likes, etc.), as well as profile visits and follower evolution. Furthermore, it can allow in-depth analysis of any video published to Twitter, such as views and percentage of viewers who watched the whole video.

#### 4.2.1.1. KPIs

For this analysis, the Twitter KPIs are presented in Table 17 with the current year highlighted in light blue to facilitate reading. We can clearly see target values for number of yearly tweets as well as yearly interaction goals for all publications, such as the various retweets and likes by other people. It also presents a target value for publication impressions, which represents the number of times the post has been seen by anyone on the platform. Furthermore, similar to the website statistics, the *Followers* activity does not present a year-by-year count, but rather the total value to be attained during each year. This value naturally leads up to the defined total expected by the end of the project lifecycle.

Activity	Year 1	Year 2	Year 3	Total
<b>Tweets</b>	180	180	180	540
<b>Followers</b>	80	150	250	250
<b>Retweets / Likes</b>	150	200	250	600
<b>Impressions</b>	6000	7000	8000	21000

Table 17: CyberSANE Twitter – KPIs

### 4.2.1.2. KPIs Reached

With the information extracted from Twitter’s Analytical platform, we can begin the analysis of achieved activities. For starters, we can evaluate the various metrics associated with the different tweet posts themselves, such as the number of tweets and the number of impressions received. Presented in Figure 23, we can see the number of tweets made per month, represented by the Twitter logo with the corresponding tweet count above. The **yellow** graph on the other hand represents the number of organic impressions, these are the number of interactions made directly with the tweet, not through paid or promoted content.

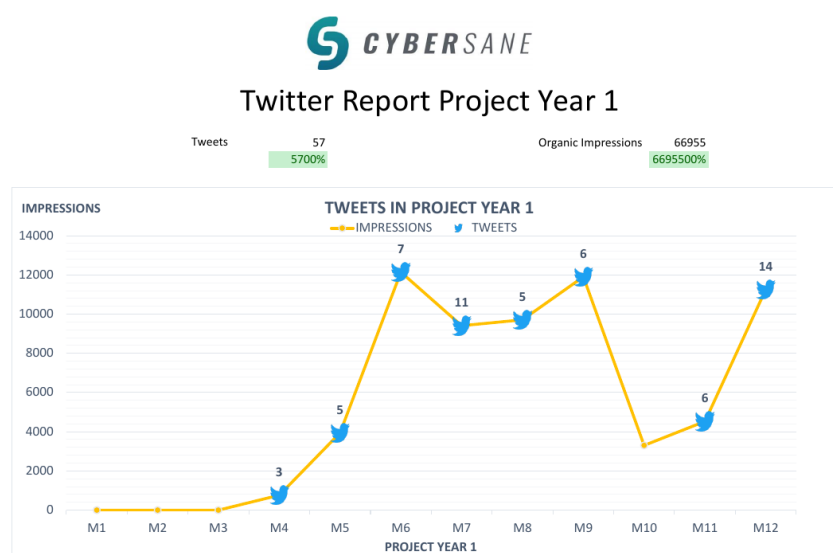


Figure 23: CyberSANE Twitter Metrics – Tweets

As we can see, CyberSANE’s Twitter account became officially active during month four. Since that moment the tweets steadily increased, remaining at a minimum of one tweet per week. Occasionally, as we can see in month seven, more tweets were published, corresponding to the International Women’s Day 2020 campaign. However, in month ten, there is a significant impression drop associated with the lack of tweets. This unfortunate circumstance is due once more to the fallout of the COVID-19 situation, with a lack of significant data to share as well as difficulties with maintaining the account active. However, the tweets returned during month 11, where they increased their frequency to on average around three per week, as we can see with 14 tweets during month 12. We can therefore note that during the previous year, a total of 57 tweets have been published, with a significant amount of almost 67000 impressions.

Another element to analyse from these tweets is the different interactions with the Twitter profile itself. Figure 24 presents these interactions by permitting the analysis of the quantity of profile visits (**blue** line), which represent the number of times our Twitter profile has been accessed by other people, as well as the number of profile mentions (**yellow** bar) where other people have tagged CyberSANE in various publications. Firstly, we notice a steady increase of profile visits during the first few months of the project, with a slight decrease in month nine, before the immense fall in month ten, corresponding to the period of no activity. It picks up again slightly in month 11 and stagnate slightly in month 12. When it comes to mentions on the other hand, we can

notice that a new project mentions happen throughout the months, however in months six and seven, a significant number of mentions took place, helping in the increase of profile views accordingly. In total, CyberSANE received 748 visits to the public Twitter profile and was mentioned 63 times on other parties' tweets.

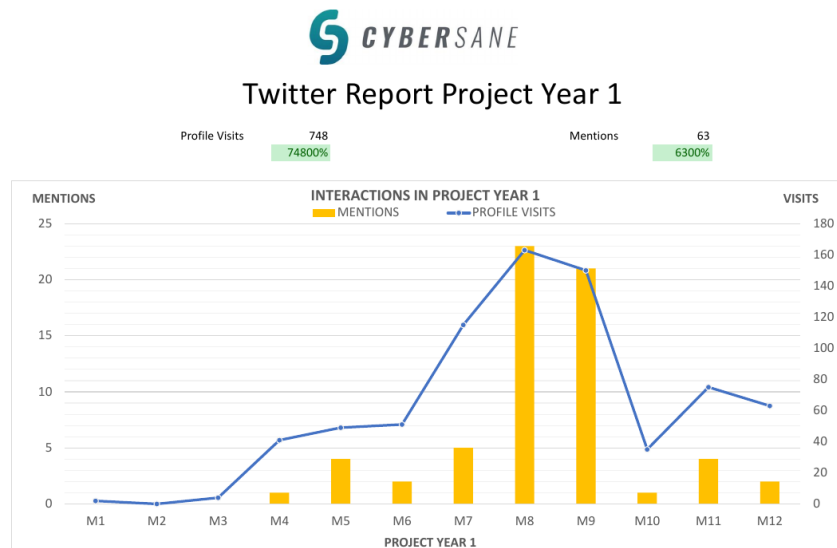


Figure 24: CyberSANE Twitter Metrics – Interactions

Moving on from the interactions, we can look at the different engagement metrics as presented in Figure 25. When it comes to Twitter, engagements correspond to interactions with a post itself, such as likes, retweets without comments, replies or link clicks if any are available. In our case, we decided to interest ourselves with only the first two possibilities: likes and comment-less retweets. Thus, these values were combined together into a bar chart with the green bar corresponding to retweets and the yellow to likes. Furthermore, the average engagement rate per month is superimposed on top of the engagement values (blue horizontal bar), corresponding to the percentage of interactions when compared to the impressions.

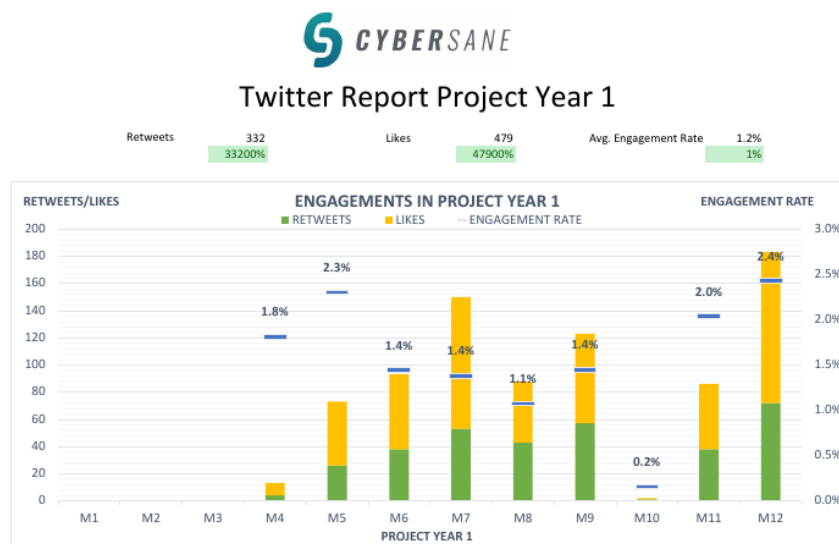


Figure 25: CyberSANE Twitter Metrics – Engagements

We can see, other than the evident lack of engagements during month ten following the other two analyses, a large amount of engagements concerns tweet likes. Although many retweets take place, more posts are liked with a total of 479 likes than are shared with other people, residing at 332 retweets. Furthermore, the average

engagement rate stayed relatively level until month ten at an average of 1.6%. However, after the return in month 11, the rate shot up to 2% and has since slowly increased to maintain a higher value of 2.4%. All in all, over the first year, the average engagement rate was approximately 1.2% across all 57 tweets.

The last and probably most publicly accessible metric is the study of followers, as shown in Figure 26. As we can immediately see, the number of followers (yellow) is on a constant steady incline. This means that our tweets are interesting to other people and they are keeping up to date with project information. The most significant increase is in month eight, when 24 new followers subscribed to our profile. Thanks to the continued support towards CyberSANE, at the end of month 12, we had a satisfying round overall follower count of 100.

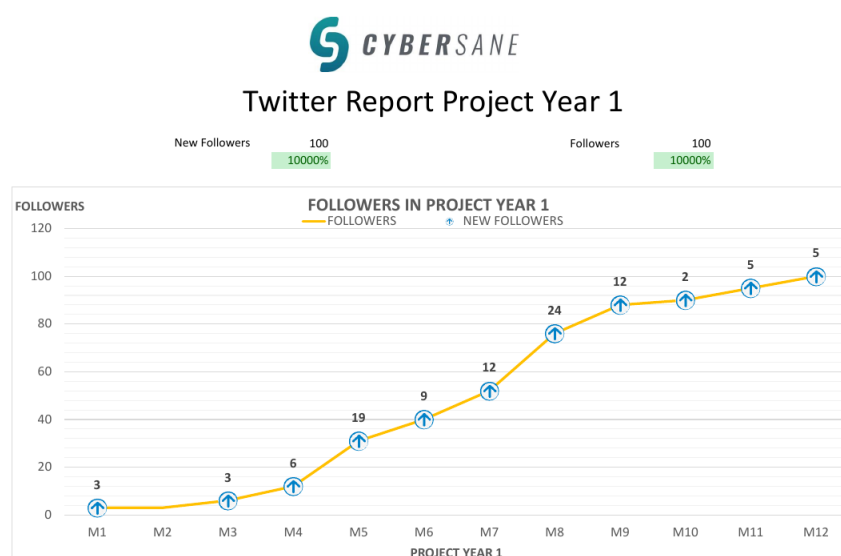


Figure 26: CyberSANE Twitter Metrics – Followers

From these analyses regarding the various activities on Twitter, we were able to extract the corresponding values for the KPIs, presented in Table 18. As we can see in the current year, highlighted also in light blue, the various information has been extracted from the previous figures. The tweet count as well as total impression has been extracted from Figure 23, whereas the number of retweets and likes have been taken from Figure 25. Finally, the current follower count has been copied from Figure 26, completing the KPIs reached table.

Activity	Year 1	Year 2	Year 3	Total
<b>Tweets</b>	57			57
<b>Followers</b>	100			100
<b>Retweets / Likes</b>	811			811
<b>Impressions</b>	66955			66955

Table 18: CyberSANE Twitter – KPIs Reached

### 4.2.1.3. KPI Comparison

From the previously obtained information we are able to perform a comparison between the values reached and those expected from the KPIs. This comparison is presented in Table 19.

Thanks to the colour code, it is immediately apparent that we didn't reach all objectives. Indeed, we fell short of a third of the expected number of tweets with only 57 compared to 180. This is in partly due to the late activation of the Twitter account, visible in all the previous figures with no data before month four. The bad news aside, we can, however, note that the other three KPIs have been reached and in some cases surpassed massively. In the case of followers, the overall value surpassed expectations by 25%. Furthermore, the number

of retweets/likes surpassed the objective of 150 by a factor of 5 and even the total impressions exploded expectations of 6000 by a massive factor of 11, completely overthrowing expectations.

Activity	Reached Year 1	Year 1
<b>Tweets</b>	57	180
<b>Followers</b>	100	80
<b>Retweets / Likes</b>	811	150
<b>Impressions</b>	66955	6000

Table 19: CyberSANE Twitter – KPI Comparison

#### 4.2.1.4. Improvement Strategies

From the previous comparison, the main interest for improvement is an increase in tweets. Currently, at a rate of three tweets per week, on a supposition of a 52-week year, we would only reach a total of 156 tweets, still inferior to expectations. A better method would be an increase to four tweets a week reaching 208 or one tweet every two days, which would reach a total of 182.5 tweets per year, on a basis of a 365-day year. This of course doesn't include Twitter campaigns which can replace normal tweets or be appended on top. The same goes for participation or organisation of events, workshops or meetings, where multiple tweets can be made during these events to promote the project.

Another means to increase efficiency, is to increase the use of emojis in tweets. In certain cases, some words or numbers can be replaced by emoji equivalents; in other cases, these emojis can complement the text in a graphical way. These additions make the tweets more interesting to read, as the use of such small images catch the eye of passers-by. Following this idea, it is also possible to increase the inclusion of images into tweets, which statistically increases the chance of viewer interaction. This can also be achieved by the inclusion of short videos to capture the viewer's attention and draw them in.

Other than modifications to tweets, it would be beneficial to increase the interactions with other users and projects on Twitter. Participating in discussions on Cyber-Security as well as various Twitter-based campaigns can not only increase the projects reputation, but also show our participation in the community to other users.

#### 4.2.2. LinkedIn

Similar to Twitter's analytical system, LinkedIn allows direct access to statistical analysis of visitor activity directly through the admin view. This allows to visualise multiple data tracks such as page views, impressions, various interactions and follower count.

##### 4.2.2.1. KPIs

To analyse LinkedIn activities and efficiency, we will evaluate the activities against the KPIs of the current year presented in Table 20, where the current year stands out due to its light blue highlight. We immediately notice that there are only two distinct activities defined for the analysis of LinkedIn operations. Similar to Twitter, the impressions are yearly target values which add up to a total objective to be obtained after the three years. Followers, however, present the overall total value to reach and not a year-by-year statistical increase.

Activity	Year 1	Year 2	Year 3	Total
<b>Followers</b>	20	50	70	70
<b>Impressions</b>	1000	1200	1500	3700

Table 20: CyberSANE LinkedIn – KPIs



#### 4.2.2.2. KPIs Reached

Thanks to LinkedIn's data analysis capabilities build into company pages, we are able to analyse multiple factors of our activities on the platform. We start the analysis in Figure 27 by evaluating the number of posts made as well as the different impressions perceived. Similar to the fashion presented in Twitters posts and impressions analysis, the frequency of posts is presented by LinkedIn's logo with the precise number overhead. The impressions, however, are presented on two graphs. The first graph represents the total number of impressions (**yellow**) perceived throughout the months, whereas the second (**green**) concerns only unique impressions due to the return of multiple users over time.

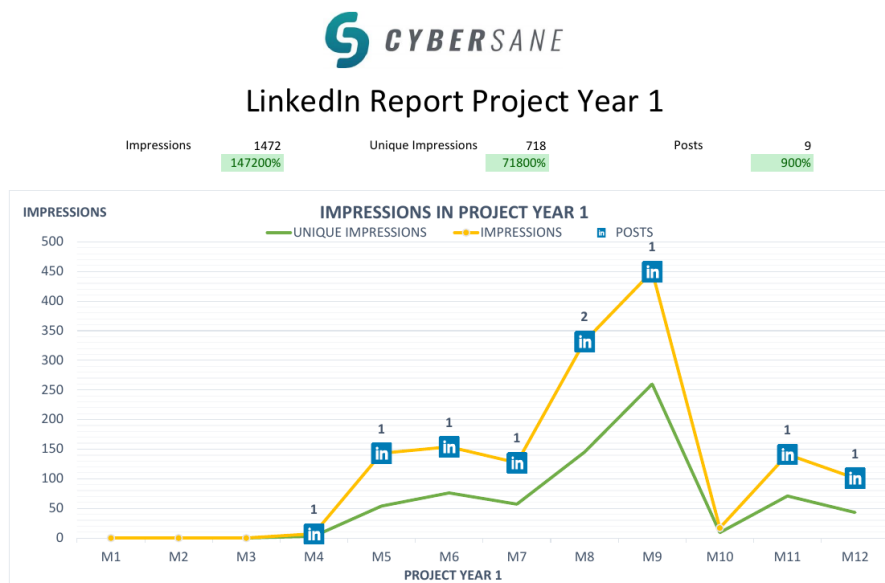


Figure 27: CyberSANE LinkedIn Metrics – Impressions

We can see that LinkedIn became operational during month four similar to Twitter, with a minimum of one post per month, with the exception of month eight with two posts. However, following on with the impacts from COVID-19, LinkedIn activities suffered also during month 10 from lack of posts, following on from Twitter and the website. This lack of posts is strongly felt in both the impressions and the unique impressions graphs, with a significant drop towards zero during this month. Other than that, these values were on a steady climb during the previous months, with a slight decrease during month seven which soon leapt back up. Following on from month ten, the impressions both rose again, with a slight drop during month 12. In total, during the first year a total of 9 posts were made, receiving almost 1500 total impressions, with just over 700 unique visitor impressions.

Another important aspect of social media is the various engagements with visitors. Similar to Twitter, this includes reactions, shares, comments and even clicks. In Figure 28, we turn our attention to the various engagement possibilities, however, we do not consider comments in any of our analyses. We can see here the concatenation of the three interaction possibilities into one bar chart, similar in fashion to Twitters analysis. This mix represents the total combined number of engagements with the **yellow** bar representing clicks on the post, the **green** showing the number of reactions and the **orange** representing the number of shares. We can therefore see that the majority of interactions which took place were post clicks with a total of 75, with reactions right behind at 68. The number of shares, however, is significantly lower residing at 18. From these interactions, we can also extrapolate the engagement rate relative to the number of impressions during the month. As shown, the values fluctuate considerably, with an interaction rate reaching 8.3% during month six, and even managing to reach 6.1% during month nine before the COVID-19 drop to 0.4 in month ten with no activity. This is due to the small amount of impressions relative to the number of total interactions, which manages to raise the percentage significantly when compared to Twitter for example. Overall, the monthly values were steadily increasing with unfortunate low values for months ten to 12. The overall average

engagement rate of each month throughout the year resides around the 2.5% mark. It is, however, not visible on this figure, but it can be viewed in Figure 29.

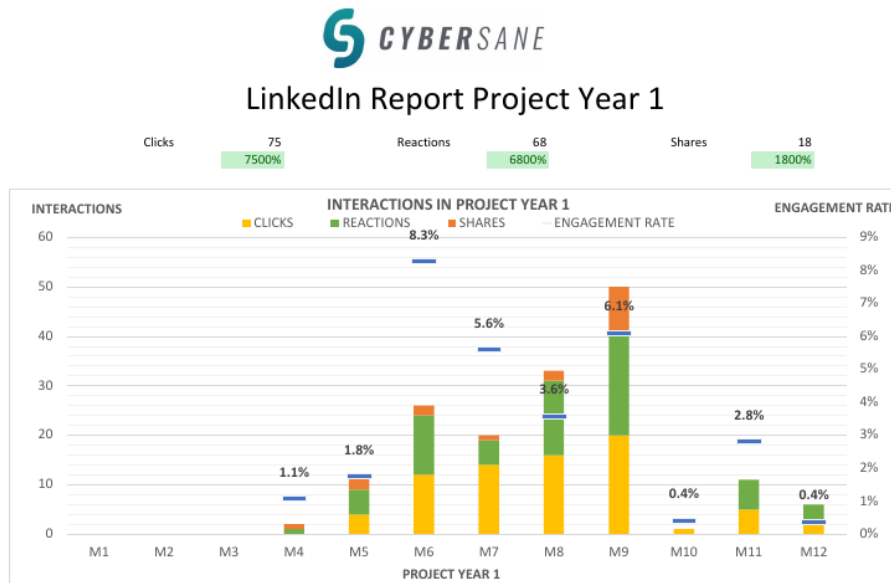


Figure 28: CyberSANE LinkedIn Metrics – Interactions

The next step in analysis is the observation of the evolution of visitors. Shown in Figure 29, the evolution of visitors (blue) is quite uneven. With a sharp incline during month five up to 45 visitors two months after the account began publishing information, it has since slowly dropped and resided around the 16 mark, although at the end of the year we can see the start of a slight increase in visits. Overall, during these 12 months over 160 visitors have passed through our company page. During their passage, our page was viewed a total of 380 times from various visitors, recurring or otherwise.



Figure 29: CyberSANE LinkedIn Metrics – Visits

The final aspect for social media is the study of the evolution of followers. In Figure 30 we can see this evolution (yellow) as well as the increase of followers on a monthly basis. As we can see, the number of followers is on a steady increase with the most significant being month five with the arrival of 17 new followers to our company page. There is a slight stagnation around month 11 when no new followers signed up to our

page, however, since then the increase has returned with one new follower in the last month. In total, over the last 12 months of the project we have gained a total of 46 followers to our LinkedIn page.

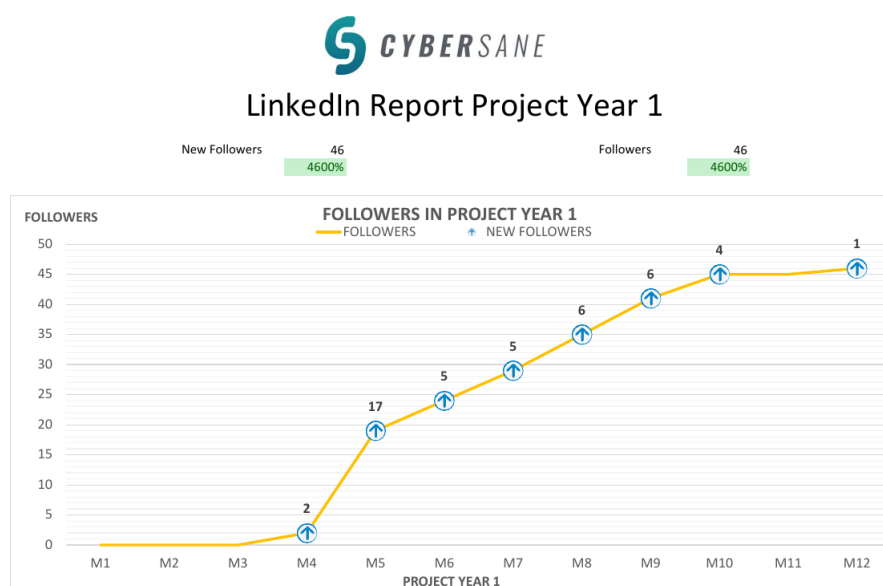


Figure 30: CyberSANE LinkedIn Metrics – Followers

From these various analytical graphs, we can extract the values corresponding to the different KPIs for evaluating LinkedIn. Table 21 presents the two only KPIs, with the current year once again highlighted in **light blue**. Since there are only two KPIs concerning LinkedIn, only two of the graphs provide the necessary information. As such, Figure 27 provides the number of impressions, from which we extract the total number of impressions and not the unique number to be on par with the same information from Twitter. Finally, Figure 30 provides the follower evolution.

Activity	Year 1	Year 2	Year 3	Total
Followers	46			46
Impressions	1432			1432

Table 21: CyberSANE LinkedIn – KPIs Reached

#### 4.2.2.3. KPI Comparison

Based on the obtained results, we can perform a KPI comparison to evaluate our achievements against the predefined KPIs. This comparison is presented in Table 22.

Activity	Reached Year 1	Year 1
Followers	46	20
Impressions	1432	1000

Table 22: CyberSANE LinkedIn – KPI Comparison

Due to the small number of KPIs for this communication method, the comparison is quite simple. We can immediately identify that both activities were achieved, surpassing their associated KPI objectives. The follower count is more than double of what was expected, proving that our page is attracting visitors. This is solidified with the number of page impressions which was 43% higher than expected.

#### 4.2.2.4. Improvement Strategies

Even having achieved our objectives for this year in regard to LinkedIn activities, there is always something that can evolve to provide more possibilities down the line. The first of these is to increase the amount of posts being shared to LinkedIn. This will allow more information to be shared through our professional channels, increasing project awareness and reputation. In line with this last remark, we can also share more technical oriented information in our posts, sparking interesting comments and debates regarding the CyberSANE system and objectives. This will also permit us to interact more with other entities on the platform, be them partners, other projects or independent organisms. These interactions will also increase our awareness as well as the reach of our information through both sharing on the platform, but also word of mouth between these organisations.

### 4.3. Communication Materials

No physical means of activity analysis exists for physical materials other than simply listing. Thus, all activities presented in in Section 3.3 above are summarised in this section.

#### 4.3.1. KPIs

The relative KPIs regarding the creation of the various communication materials is presented in Table 23, with the current year highlighted in **light blue**. Looking closer, we can see the expected rate of production for the different materials: Leaflets, Roll-up and Videos. As we can see, the values represented here correspond to the yearly production goals of new materials as well as a total production count to be achieved by the end of the project.

Activity	Year 1	Year 2	Year 3	Total
Leaflet	1	1	1	3
Roll-Up	1	0	0	1
Video	1	3	1	5

Table 23: Communication Material – KPIs

#### 4.3.2. KPIs Reached

Presented previously, the various activities achieved regarding the production of various communication materials have been recovered. Table 24 provides an overview of these activities, putting emphasis on the current year also coloured in **light blue**.

Activity	Year 1	Year 2	Year 3	Total
Leaflet	2			2
Roll-Up	1			1
Video	0			0

Table 24: Communication Material KPIs – Reached

As we can see, a total of two leaflets have been created during the first year, one printable foldable version as well as a digital version, both presented previously. We can also see that a Roll-Up has been produced but no videos have been created for dissemination purposes.

#### 4.3.3. KPI Comparison

From this summary of activities towards communication materials, we can perform a comparison between the achieved values and the target KPIs. Table 25 presents this comparison against the KPIs for the current year.

Activity	Reached Year 1	Year 1
Leaflet	2	1
Roll-Up	1	1
Video	0	1

Table 25: Communication Material – KPI Comparison

We can immediately identify that only one activity did not reach expectations. Indeed, one video was expected during this year, however, none were created. Other than this, the other two KPIs were reached, and in the case of the leaflet, even doubled. The leaflet, however, is a special case since a single set of contents were created but two indistinct versions were conceived.

#### 4.3.4. Improvement Strategies

The first strategy for improvement is to address the activity which did not reach the defined objectives. Therefore, the elaboration of project videos is a must to increase our exposure. This will allow dissemination through multiple platforms, capturing views attention and making them want to know more.

Regarding the other activities, since a single Roll-Up was to be created for the projects lifetime, no new versions are to be expected. However, the leaflets on the other hand still are a yearly occurrence. Thus, it is important to continue their publication, including technical information where applicable and various significant results also.

### 4.4. Publications and Papers

Similar to the previous section, the activities regarding scientific and academic publications and papers is recovered from Section 223.4 above and summarised here.

#### 4.4.1. KPIs

The different KPIs regarding publications and papers are presented in Table 26 with the current year highlighted in **light blue**. Here we can see that the main interests of this section are the submission destination of the various papers and publications. Thus, the objectives revolve around the number of Journal publications as well as Conference paper submissions on a yearly basis as well as the overall project total.

Activity	Year 1	Year 2	Year 3	Total
Journals	1	3	3	7
Conferences	2	5	5	12

Table 26: Publications and Papers – KPIs

#### 4.4.2. KPIs Reached

Taken from the previous section, the various activities have been included into Table 27 with the current year also highlighted in **light blue**.

Activity	Year 1	Year 2	Year 3	Total
Journals	2			2
Conferences	1			1

Table 27: Publications and Papers – KPIs Reached

As we can see, a total of three submissions have taken place during this year. Two of these submissions have been in two Journals whereas the other was in an International Conference. It should be noted, however, that

the Conference paper was submitted in *May 2019*, before the official start of the project. However, as stated earlier it is included here to provide a complete overview of all activities related to CyberSANE.

### 4.4.3. KPI Comparison

With this information, we can perform a comparison between what has been done and what was expected as part of the KPIs. Table 28 presents this comparison.

Activity	Reached Year 1	Year 1
Journals	2	1
Conferences	1	2

Table 28: Publications and Papers – KPI Comparison

Immediately we can see that we have achieved only 50% of the KPIs for Publications and Papers. Indeed, two Journal publications were accepted whereas only one was expected for this year. However, two Conference papers were expected, whereas only a single paper was submitted prior to the start of the project.

### 4.4.4. Improvement Strategies

The main improvement strategy would be to increase the submissions targeted towards Conferences on a national or an international scale. This would increase the project awareness as well as any work towards the system itself. That being said, it is also important to keep up the Journal submissions as they too will increase project awareness as well as provide contributions to the scientific community.

## 4.5. Media and Press Release

The information regarding the various activities towards Media and Press Releases necessary for the evaluation of the KPIs have been extracted from data provided in Section 3.5 above.

### 4.5.1. KPIs

The different target KPIs defined for evaluating Media and Press Releases have been extracted and summarised in Table 29, highlighting the current year in **light blue**. We can see that the main interests revolve around the publication of official press releases during the project's life cycle, as well as the target number of people reached by our publication.

Activity	Year 1	Year 2	Year 3	Total
Press Releases	2	2	2	6
Audience Reached	1000	2000	2500	5500

Table 29: Press Release – KPIs

### 4.5.2. KPIs Reached

Extracted from the information presented previously, we have been able to include the different KPI data for the activities achieved for the current year, once again highlighted in **light blue**.

Activity	Year 1	Year 2	Year 3	Total
Press Releases	1			1
Audience Reached	9 000 000			9 000 000

Table 30: Press Release – KPIs Reached

Firstly, we have created one official Press Release during this year. Containing basic entry level project information for our first edition, it was shared through multiple communication channels, including the website



but also partner and media channels. As such, the target audience reached is an approximation based upon the number of visitors and potential clients across all media. We have, thus, estimated that with this press release we have reached approximately 9 000 000 people across all media platforms.

### 4.5.3. KPI Comparison

From the extracted information, we can perform a comparison between the activities achieved and the expected KPIs. This comparison is presented in Table 31.

Activity	Reached Year 1	Year 1
Press Releases	1	2
Audience Reached	9 000 000	1000

Table 31: Press Release – KPI Comparison

The immediate element which jumps out is the difference between the expected number of people reached through the publications compared to the approximation provided. This increase of over 9000% was also achieved with only a single Press Release whereas two were expected during the first year. It is also important to notice that the value of Audience Reached also includes other official publications regarding CyberSANE, as presented previously.

### 4.5.4. Improvement Strategies

The first improvement to make is to increase the number of Press Releases. The expectation is two releases per year, with the first year being slightly difficult due to the start of the project but also the complications provided by COVID-19. However, the releases themselves could be adapted to contain more technical information as well as certain results when they become available. Furthermore, in correspondence with Table 9 in Section 3.5.3 above, it would be beneficial to widen the media presence to other partner countries as well as through official EU wide communication channels.

## 4.6. Newsletter

Here, we interest ourselves to the activities relative to the Newsletters presented in Section 3.6 above. The information has been extracted to be able to correctly analyse the activities taken place.

### 4.6.1. KPIs

Firstly, it is important to familiarise oneself with the KPIs applicable to this methodology. Table 32 presents an overview of these KPI values, putting emphasis on the current year by highlighting the corresponding cells in light blue. We can see that the interests of these KPIs reside around the number of Biannual Newsletter publications which is a year-by-year target value, adding together to calculate the project total. The Subscriber amount for the monthly newsletter on the other hand presents the overall total at the end of the year. Thus, the value at the end of the third year is the expected project total.

Activity	Year 1	Year 2	Year 3	Total
Biannual Newsletters	2	2	2	6
Subscribers	40	60	100	100

Table 32: Newsletter – KPIs

### 4.6.2. KPIs Reached

Extracted from previously presented information, we are able to recover and define the different values for the KPIs. Table 33 presents this activity overview, putting emphasis on the current project year, which in a similar fashion to previously, has been highlighted in light blue.

Here we can clearly see that *one* Biannual Newsletter has been created, containing multiple types of information in a booklet format. The other newsletter, published on a monthly basis, complements this biannual equivalent and shares project information to the different mailing list subscribers. At the end of this year, the subscriber counter was at 21 people.

Activity	Year 1	Year 2	Year 3	Total
Biannual Newsletters	1			1
Subscribers	21			21

Table 33: Newsletter – KPIs Reached

### 4.6.3. KPI Comparison

Mixing the achieved KPIs with the expected values, we can compare the activities relative to the two types of newsletters. This comparison is presented in Table 34.

Activity	Reached Year 1	Year 1
Biannual Newsletters	1	2
Subscribers	21	40

Table 34: Newsletter – KPI Comparison

Unfortunately, it is immediately apparent that our activities fell short of the expectations. Indeed, only a single Biannual Newsletter was created whereas two were expected. However, this is a particularity of the projects first year where not a lot of information was available to warrant the creation of an elaborate newsletter. Furthermore, the monthly subscriber count is unfortunately only 50% of the expected value, meaning we are not reaching as many people through the monthly newsletter as expected.

### 4.6.4. Improvement Strategies

To improve activities through the various newsletters, would primarily be continuing to create the Biannual Newsletter. Now that the project is entering its second year, more information is available, meaning more editions can be made containing more technical information and eventually even certain results.

As for the subscriber count, the main strategy would be to increase the promotion of the monthly newsletter on all social med platforms, enticing people to come a signup to our monthly emails. It could also be possible to run social media campaigns where the newsletter is references for the subscriber to know more about the project.

## 4.7. Events

The final communication method is the various Event participations as presented in Section 3.7 above. All information used for the KPI evaluation has been retrieved from therein.

### 4.7.1. KPIs

Activity	Year 1	Year 2	Year 3	Total
Participation External Events	1	1	2	4
Organisation of Events / Workshops with stakeholders	1	1	2	4
Audience reached	100	200	500	800
Participants per workshop	0	20	50	70

Table 35: Event and Workshop – KPIs

To evaluate the activities regarding events and workshops, the relative KPIs have been enumerated in Table 35, indicating the target values for the current year by highlighting the corresponding cells in **light blue**. The key activities for evaluation here regard the participation in external events and workshops. Furthermore, the various events and workshops organised by CyberSANE with various stakeholders are also to be evaluated, before turning our attention towards the size of the audience reached through these events. Finally, the number of participants per workshop will be observed and evaluated, giving us a through oversight into our activities and efficiency regarding various events.

### 4.7.2. KPIs Reached

From the definition of the various activities towards events and workshops, we are able to extract the KPI values for the current year. This information is summarised in Table 36, once again identifying the current project year with a **light blue** highlight. Here we see the various input data extracted directly from the presentation of the various activities.

Activity	Year 1	Year 2	Year 3	Total
Participation External Events	0			0
Organisation of Events / Workshops with stakeholders	0			0
Audience reached	0			0
Participants per workshop	0			0

Table 36: Event and Workshop – KPIs Reached

Unfortunately, it is immediately evident that, due to the lack of activities with which CyberSANE has been associated during the first year, there is no data to input into the table. As explained previously, this is due mainly to the special situation due to the COVID-19 pandemic, where many events were postponed, or in some cases even cancelled.

### 4.7.3. KPI Comparison

From the listing of the various KPI values which have been achieved, we can perform a comparison between the expected objectives and the physical results.

Activity	Reached Year 1	Year 1
Participation External Events	0	1
Organisation of Events / Workshops with stakeholders	0	1
Audience reached	0	100
Participants per workshop	0	0

Table 37: Event and Workshop – KPI Comparison

Coming at no surprise, due to the lack of any sort of activities during this year, all activity targets have not been achieved. The only exception, is the number of participants per workshop organised during this year, which was set at *zero* for the first year only.

### 4.7.4. Improvement Strategies

When it comes to improving the previous results, it is impossible to make things worse. However, it is possible to take advantage of the cause of our difficulties and use them to get back on track. Although many events were postponed or cancelled during the COVID-19 confinement which took place in many countries across the globe, many of these events are evolving and adapting to the situation. Many upcoming events and even workshops have been transferred from the physical world to the virtual one, allowing for their event to go on

through live video dissemination. This gives us the chance to participate in such events, all the while abiding by the travel limitations in place in some areas.

That being said, some events and workshops are still taking place in the physical world, albeit with significant sanitary limitations. However, once things start to return to a more or less normal situation, these events will increase. It will, therefore, be possible to begin organising events and workshops of our own to promote project awareness, activities and results. Through these events and workshops, we will be able to expand our network as well as prepare ties and partnerships with other partners or stakeholders. Currently, our participation in a few events during the second year have already been confirmed, such as CS4CA's EU Summit which will be held virtually.

Furthermore, to our participation, promoting these events is a big must. With proper promotion on all available dissemination channels, we can reach a wider audience meaning more potential participants in our events or workshops. Using planned Twitter campaigns, we can publicly share information on a large scale quickly, whereas direct targeted messages through our LinkedIn profile will allow us to interact with other partners or industry specialists who might be interested in joining in our events.

## 4.8. Overall Results

All of these various dissemination and communication methodologies have each performed various activities during the previous year. They have all been compared against the KPIs defined in D11.1 and presented in Table 13. Following that format, Table 38 contains a concatenation of the various activities achieved by each dissemination method. The colour code has been maintained, indicating which activities have achieved or surpassed the defined objectives (**green**) as well as those which are in need of improvement to potentially reach the minimum expectations (**red**). To view the overall achievements, the "**Expected**" column presents the expected values at the end of the current year. This provides a more complete comparison as the evolution from year to year can fluctuate, impacting more or less the total amount. With this table we are, therefore, able to keep an eye on both the overall status of dissemination activities, identifying where efforts are needed, as well as an in-depth yearly analysis.

Platform		Activity	Year 1	Year 2	Year 3	Total	Expected
<b>Website</b>		Development	1			1	1
		Blog Content	7			7	6
		Unique Visitors	832			832	500
		Page Views	3155			3155	1000
		User Sessions	975			975	300
<b>Social Media</b>	<b>Twitter</b>	Tweets	57			57	180
		Followers	100			100	80
		Retweets / Likes	811			811	150
		Impressions	66955			66955	6000
	<b>LinkedIn</b>	Followers	46			46	20
		Impressions	1432			1432	1000
<b>Communication Materials</b>		Leaflet	2			2	1
		Roll-Up	1			1	1
		Video	0			0	1
<b>Publications and Papers</b>		Journals	2			2	1
		Conferences	1			1	2

## D11.2 – Initial Report on Dissemination and Communication Activities

Platform	Activity	Year 1	Year 2	Year 3	Total	Expected
<b>Media and Press Release</b>	Press Releases	1			1	2
	Audience Reached	9 000 000			9 000 000	1000
<b>Newsletters</b>	Biannual Newsletters	1			1	2
	Subscribers	21			21	40
<b>Events</b>	Participation External Events	0			0	1
	Organisation of Events / Workshops with stakeholders	0			0	1
	Audience reached	0			0	100
	Participants per workshop	0			0	0

Table 38: CyberSANE KPIs Achieved

As we can see, the overall values are portrayed in **green**, meaning that they have exceeded expectations. Some other areas, except Events due to the exceptional nature of the disruption, have brought to light certain foggy areas of our dissemination activities which need some care and attention. Through the various improvement strategies defined herein, these values can be increased to reach, if not surpass the expected values during the next project year.

All in all, the various activities have generally performed well in their specific dissemination tasks. Certain other areas, however, need some adjustments to be able for them to join their colleagues in **green** during the next two years.

## 5. Conclusion

This deliverable presents the different activities achieved by CyberSANE's various dissemination and communication's methods during the first year of the project. It is undertaken within the context of **WP11** and **T11.2**. This document is the first in a subset of three deliverables presenting the dissemination activities throughout the three-year project lifespan. The subsequent versions, **D11.4** and **D11.6** will present the second and third years respectively.

CyberSANE provides a total of eight distinct dissemination methods, each with their own platforms and purposes. These methods include:

- Website
- Social Media – Twitter
- Social Media – LinkedIn
- Communication Materials
- Publications and Papers
- Media and Press Release
- Newsletters
- Events

These methods on occasion intermingle, where content shared through one is prompted on one or many others. As such, each platform can exploit its area of expertise to interact with different types of demographic, from general public to the scientific and academic community. In each case, the various dissemination strategies must adapt to the situation in which it is situation, meaning no two methods are the same.

This document provides an overview and a summary of all dissemination activities achieved across the eight platforms. Each activity is defined, presented and explained for each communication method as well as an in-depth explanation of their contents. Each of these activities relay various types of information and are therefore subject to the contents when it comes to the choice of dissemination available. Furthermore, other dissemination methods are available to CyberSANE other than the official project owned channels. By using partner channels as well as different media dissemination capabilities, more information sharing can take place.

Furthermore, these activities are evaluated through comparison against the various dissemination KPIs as defined in **D11.1**. These KPIs provide a baseline for all activity evaluations and when compared to the achieved activities, provide an understanding of dissemination efficiency. Through the various statistical means at hand for each dissemination method, each activity's achievement values have been calculated and associated with their KPI equivalent. In a nutshell, global dissemination activities exceeded expectations for the first year, with a total of 16 KPIs achieved out of 24, meaning an overall KPI achievement rate of 66.67%. However, certain methods, such as event participation were significantly impacted by the current COVID-19 sanitary situation. Other methods which didn't reach the target mark, will be adapted to resolve the issue and increase efficiency based on an in-depth evaluation of their activities and different improvement strategies.



## 6. List of Abbreviations

Abbreviation	Translation
<b>KPI</b>	Key Performance Indicator

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