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IMPETUS Project Deliverable: D8.2

Communication and dissemination report 1

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About IMPETUS

IMPETUS (Intelligent Management of Processes, Ethics and Technology for Urban Safety) is a Horizon 2020 Research and Innovation project that provides city authorities with new means to improve the security of public spaces in smart cities, and so help protect citizens. It delivers an advanced, technology-based solution that helps operational personnel, based on data gathered from multiple sources, to work closely with each other and with state-of-the-art tools to detect threats and make well-informed decisions about how to deal with them.

IMPETUS provides a solution that brings together:

- *Technology*: leverage the power of Internet of Things, Artificial Intelligence and Big Data to provide powerful tools that help operational personnel manage physical and cyber security in smart cities.
- *Ethics*: Balance potentially conflicting needs to collect, transform and share large amounts of data with the imperative of ensuring protection of data privacy and respect for other ethical concerns - all in the context of ensuring benefits to society.
- *Processes*: Define the steps that operational personnel must take, and the assessments they need to make, for effective decision making and coordination - fully aligned with their individual context and the powerful support offered by the technology.

Technological results are complemented by a set of practitioner's guides providing guidelines, documentation and training materials in the areas of operations, ethical/legal issues and cybersecurity.

IMPETUS places great emphasis on taking full and proper account of ethical and legal issues. This is reflected in the way project work is carried out, the nature of the project's results and the restrictions imposed on their use, and the inclusion of external advisors on these issues in project management.

The cities of Oslo (Norway) and Padova (Italy) have been selected as the site of practical trials of the IMPETUS solution during the project lifetime, but the longer-term goal is to achieve adoption much more widely.

The work is carried out by a consortium of 17 partners from 11 different EU Member States and Associated Countries. It brings together 5 research institutions, 7 specialist industrial and SME companies, 3 NGOs and 2 local government authorities (the trial sites). The consortium is complemented by the Community of Safe and Secure Cities (COSSEC) – a group established by the project to provide feedback on the IMPETUS solution as it is being developed and tested.

The project started in September 2020 with a planned duration of 30 months.

For more information

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Executive Summary

This deliverable reports about the progress in implementing communication and dissemination plan describing actions, reached target audiences, dissemination activities as well as usage of planned communication channels to communicate project activities like website, Twitter, LinkedIn and YouTube accounts, newsletters, brochures, press releases, flyers, videos, COSSEC and other networks and forms of cooperation.

The first aim of this report is to assess the usage of communication channels and possible feedback form target audiences. It provides comprehensive analytics of social media and reports in detail activities included in other communication channels. The intention is also to provide forthcoming communication activities of IMPETUS action.

The other aim is to assess dissemination of project results. Therefore, the report also includes dissemination activities and outlines current short-term plans for publication of project results.



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List of Abbreviations

Table 1: List of Abbreviations

Abbreviation	Explanation
COSSEC	COmmunity of Safe and SEcure cities
DoA	Decription of the Action
KER	Key Exploitable Result
P2P	Project to Policy

1 About this deliverable

1.1 Why would I want to read this deliverable?

This document provides the first report of the IMPETUS communication activities, audiences, messages, feedback and procedures. It provides detailed information on the project partners' activities in the first reporting period. Where applicable, the report also includes the notification about addressed target audiences.

In order to successfully communicate and disseminate project results the deliverable provides insight and analysis into what has already been done and what is expected in forthcoming actions. In conclusion, it also points out to shortcomings, giving suggestions on which activities have to be improved.

The updated, final version of the communication and dissemination report will be delivered at the end of the project.

1.2 Intended readership/users

This deliverable is for the public use. The intention of this document is to get both partners and wider audience acquainted with communication and dissemination achievements in the first project's reporting period.

Members of the Consortium must use this report to actively contribute to communication and dissemination activities and, if necessary, to improve their efforts.

1.3 Other deliverables that may be of interest

See section "Relationship with other deliverables" in the introductory header part of the deliverable.

2 Communication report

This chapter covers communication actions performed during the project's first reporting period following Communication strategy and plan (Deliverable 8.1). It also provides analytics of project's website and social media, as well as assessment of communication's key performance indicators. The last sub-chapter brings next steps in project's communication plan.

2.1 Website

The IMPETUS website (<https://impetus-project.eu/index.php>) regularly communicates with site visitors on the latest external/public news about the IMPETUS project. Regular updates are through the news page on the IMPETUS website and panel on the homepage informing them about all new events and achievements of the project.

The latest news is updated as new news items become available and the text approved by the Project Officer. The detailed news items are added to the News page (<https://impetus-project.eu/index.php/news-and-events/news>) and a shorter excerpt to the home page (<https://impetus-project.eu>) approximately every 3 months, with a total of 4 news articles since September 2020.

Based on the number of hits each page on the website reaches (refer to Table 2), the "News" articles page are the most popular item on the website with the most number of hits (2055 hits), The "About IMPETUS" page ranks at second most popular with 1411 hits, followed by the "IMPETUS Consortium" page with 1200 hits and the "About COSSEC" page with 1067 hits.

The website also provides answers to the expected frequently asked questions (FAQ) about the project and expected results (https://impetus-project.eu/images/News_pdfs/IMPETUS_FAQ.pdf). The FAQ sheet/document appears on the home page of the IMPETUS website ensuring that it is easily accessible for persons outside the project. The FAQs were posted on the website on 25 May 2021 and the document is a relatively new addition to the website with 12 hits (Table 2).

Table 2: Number of hit on each article on the IMPETUS website (as at 10 September 2021)

Category	Article	Number of hits
About IMPETUS		
	Project	1411
	Consortium	1200
	FAQs	12
Pilot Cities		
	Oslo	730
	Padova	741
COSSEC		
	About	1068
	Workshops	647
Outputs		
	Deliverables	785
	Publications	614
	Newsletters	598

Category	Article	Number of hits
	Press releases	619
	Videos	558
News & Events		
	News	2059
	Events	589
Survey		
English	Written consent form	120
	Information letter	134
Norwegian	Written consent form	126
	Information letter	101
Italian	Written consent form	136
	Information letter	114
Contacts		796

Note: Deliverable 8.1 Communication & Dissemination Plan, Chapter 6 (released in June 2021) indicated that *“The measurements of website indicators will be performed by Google analytics. Moreover, the possibilities of data about geographical distribution of the website visits and/or hits per page as well as distribution in time will be explored and included in the reports”*.

Using Google Analytics to monitor geographical distribution and hits over time is not a viable option because it geographically tracks and gains access to the data of visitors to the IMPETUS website. This data is used by third parties that use Google Analytics for advertising and marketing purposes and to build reporting tools. If Google Analytics was used to gain geographical information on IMPETUS website users, this information gathering would contravene our compliance to EU e-privacy and GDPR regulations.

As an EU-funded project, it is pertinent that we abide by our privacy policy regarding data usage as stipulated by the EU. Owing to the privacy concerns in using Google Analytics, we have decided against using such geographical/location tracking programs, specifically Google Analytics, on the IMPETUS website.

2.2 Social media

2.2.1 LinkedIn

LinkedIn is a professional network, so when members sign-up, their job profile and place of work are made available, particularly to people, projects, companies and other LinkedIn pages that they follow. This is dependent on whether or not their privacy settings allow for sharing of this information. This information is only available to the person administering the page (if the LinkedIn member chooses to disclose such information in their account privacy settings). This geographical and professional information allows admins to view the analytics of its members to draw valuable insight into the people who are interested in the page, perhaps to tailor the content more towards those interested parties.

The IMEPTUS LinkedIn page was activated on 1 October 2020 (refer to Figure 1). The profile presents the IMPETUS logo as the profile picture and the key images of the two pilot cities in the Twitter banner. The Twitter banners also include the Oslo and Padova city logos, the IMPETUS logo and the EU logo.

The H2020 IMPETUS Project LinkedIn page is <https://www.linkedin.com/company/h2020-impetus>.

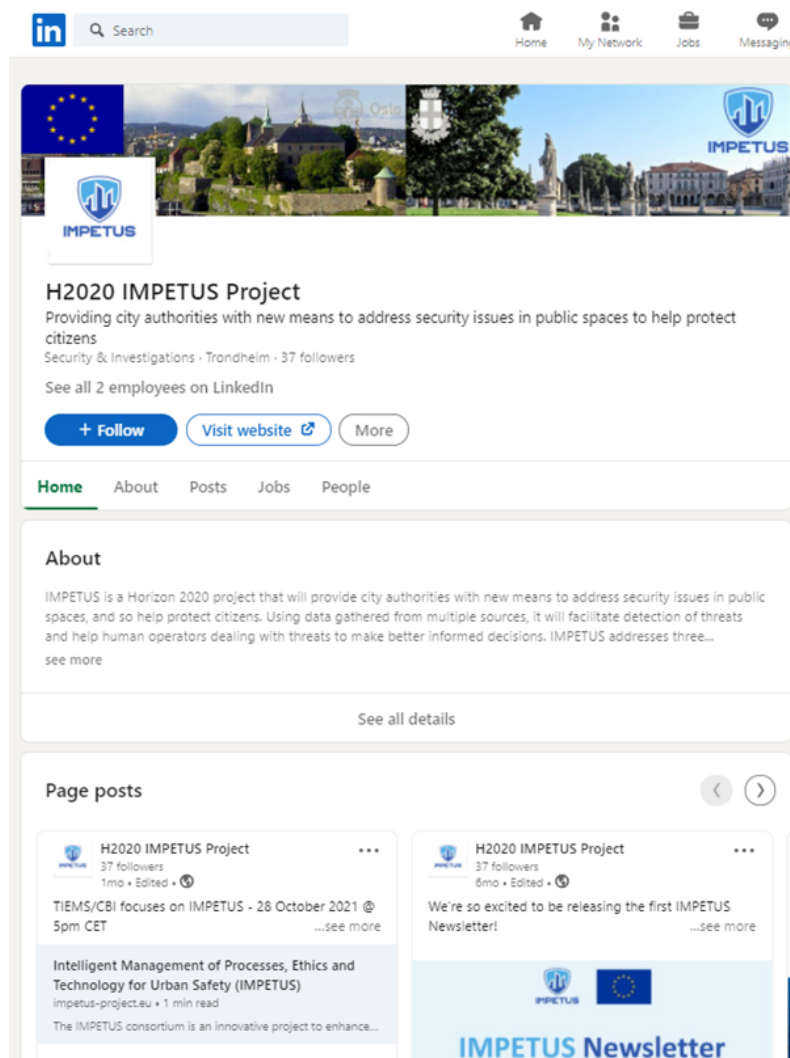


Figure 1: Regularly updated H2020 IMPETUS Project LinkedIn page

Here we look at the IMPETUS LinkedIn “visitor” and “follower” metrics. A visitor is someone who only looks at the profile page on LinkedIn and a follower clicks on the “+Follow” button to sign up to receive updates posted on the IMPETUS LinkedIn page.

a) Followers to the IMPETUS LinkedIn page

The IMPETUS LinkedIn page has 37 followers. The figure below shows the new followers per day over the first year of the project.

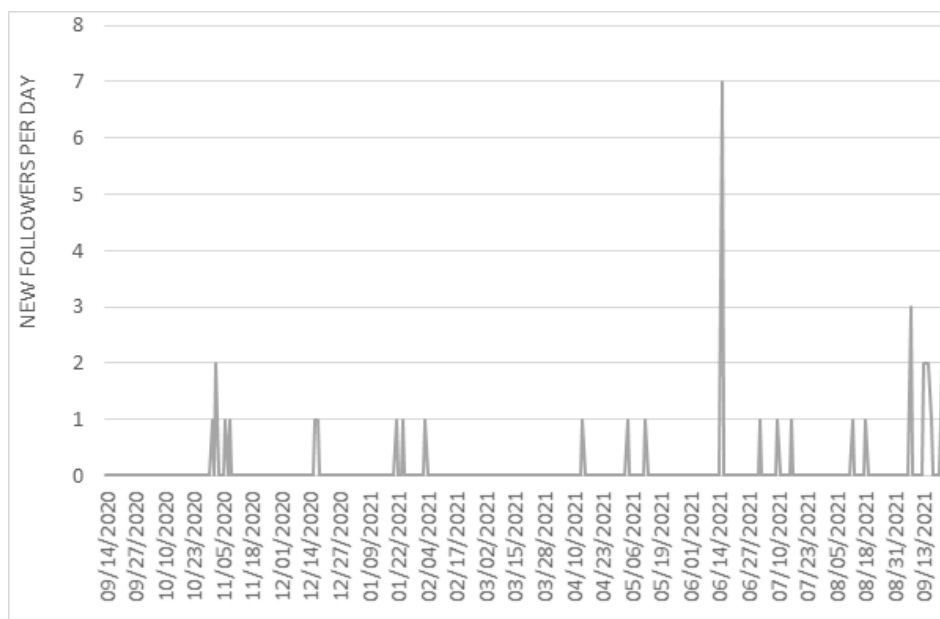


Figure 2: The number of new followers to the IMPETUS LinkedIn page for the first year of the project (September 2020-September 2021)

LinkedIn is able to show where followers are based. Most are from Europe with a couple (2) people from Australia, USA and India (Figure 3). We can see that 26.9% of the LinkedIn IMPETUS followers are from Barcelona in Spain, while 23.1% are based in Padova, Italy. Bucharest and Trondheim each have 7.7% of LinkedIn followers, while St. Louis, Venice, Oslo, Adelaide, Alleppey, Apeldoorn, Boston and Portland each have 3.8% of LinkedIn followers.

This shows that the project is of most interest to those in Spain and Italy, particularly Padova, which is one of the pilot cities.

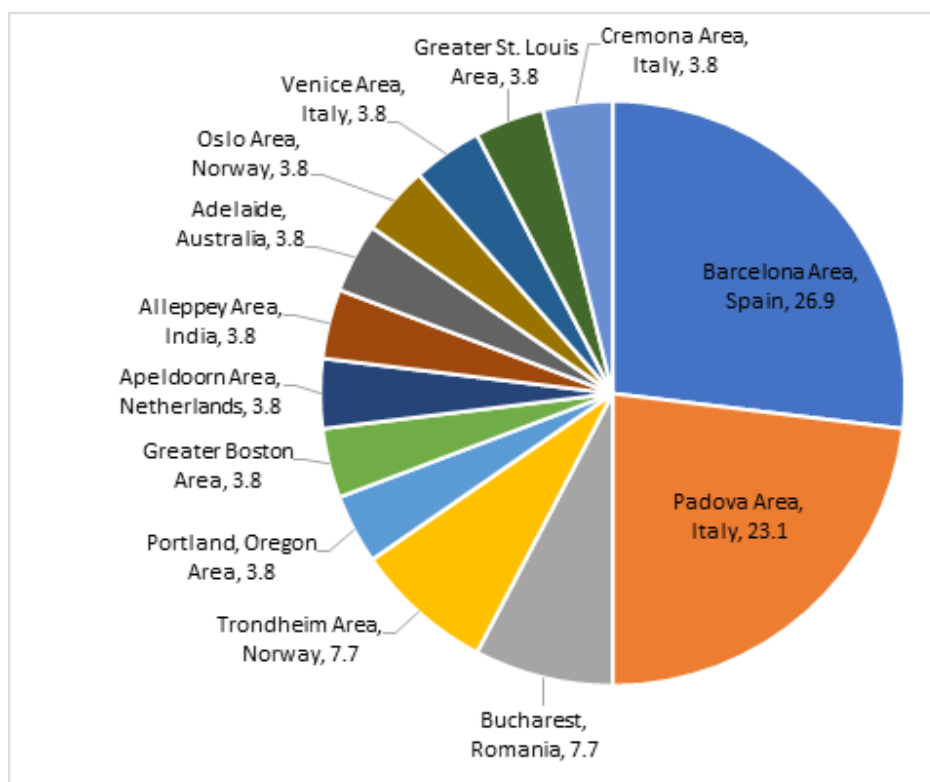


Figure 3: Geographical distribution (%) of IMPETUS LinkedIn followers

LinkedIn is able to show what the followers' job roles are at their place of employment. This information indicates whether or not we are reaching the target audiences. From the figure below (Figure 4), LinkedIn followers are mainly in research (22.2%), education (22.2%) and program and project management (22.2%). Those in business development (7.4%) and engineering (7.4%) make up the next contingent of LinkedIn followers. We have one person in each of the following job functions: administrative (3.7%), IT (3.7%), marketing (3.7%), media and communication (3.7%) and consulting (3.7%).

The analytics from LinkedIn show that the IMPETUS project is of most interest to those followers who are in the fields of research, education and program and project management (Figure 4). These individuals are likely the most actively involved in IMPETUS at this point in the project's lifetime.

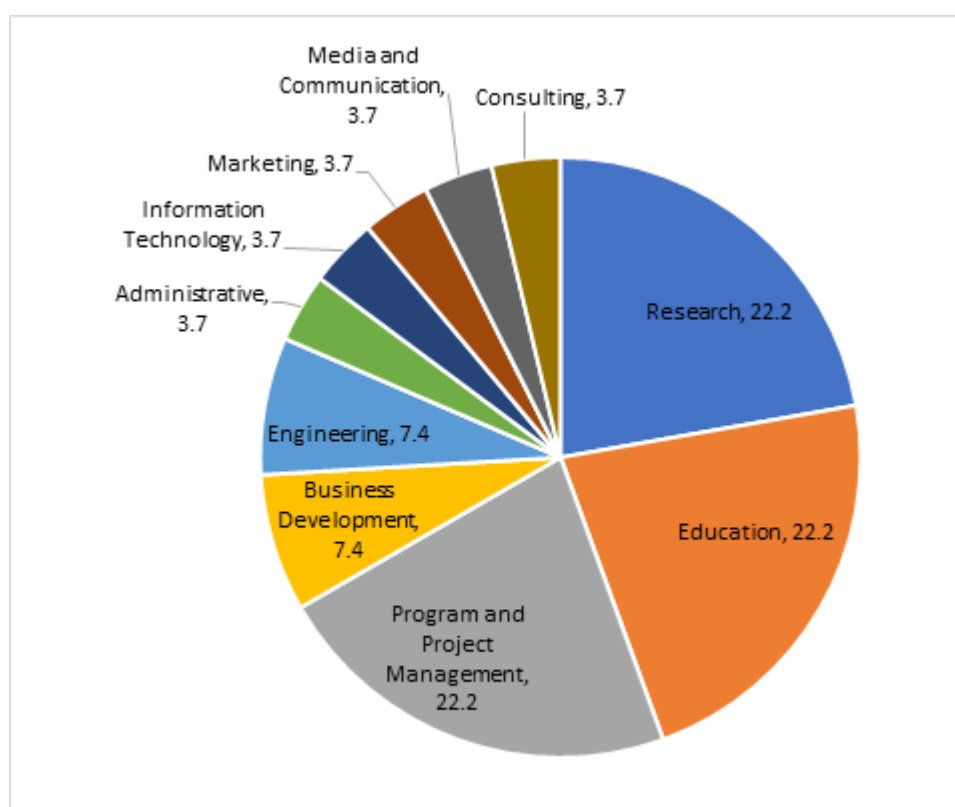


Figure 4: Job function/description (%) of IMPETUS LinkedIn followers

From the LinkedIn analytics, we are also able to see the line of industry that LinkedIn followers are in (Figure 5). Those in IT make up the largest contingent with 22.9%, which is closely followed by the next largest contingent in higher education (20%). LinkedIn members that are in research and government legislation make up the next largest contingent with 8.6% each. Of the IMPETUS LinkedIn followers, environmental services comprise 5.7%. There is one follower in each of the areas of law enforcement, management consulting, public safety, biotechnology, construction, thinktanks, and security and investigations, computer software development, political organisations, telecommunications, automotive industry and public relations and communications (2.9% each).

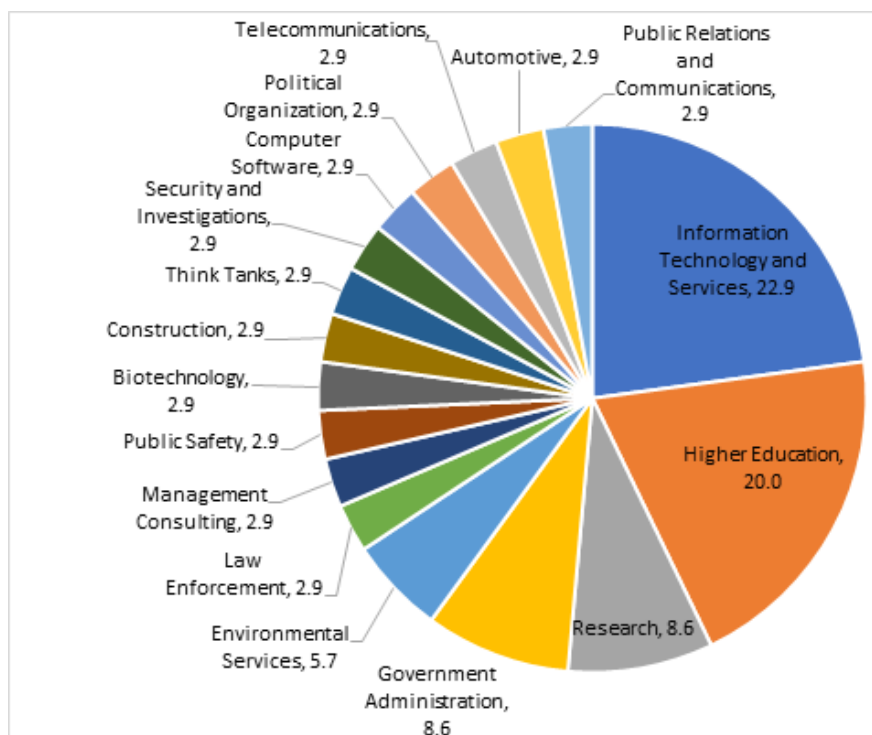


Figure 5: Area of industry of IMPETUS LinkedIn followers (%)

Followers of the LinkedIn IMPETUS page are mostly in the sectors of IT and higher/tertiary education and, to a lesser extent, government administration. Those members that are in higher education and research reflect members who are at universities and research organisations that are currently also active in the project. Those that are in IT would be LinkedIn members who are involved in cyber security frameworks (and other communication and technology service facets) within the IMPETUS project.

b) Visitors to the IMPETUS LinkedIn page

The IMPETUS LinkedIn page has had 240 total page views from 100 unique visitors. The figure below (Figure 6) shows the new followers per day over the first year of the project.

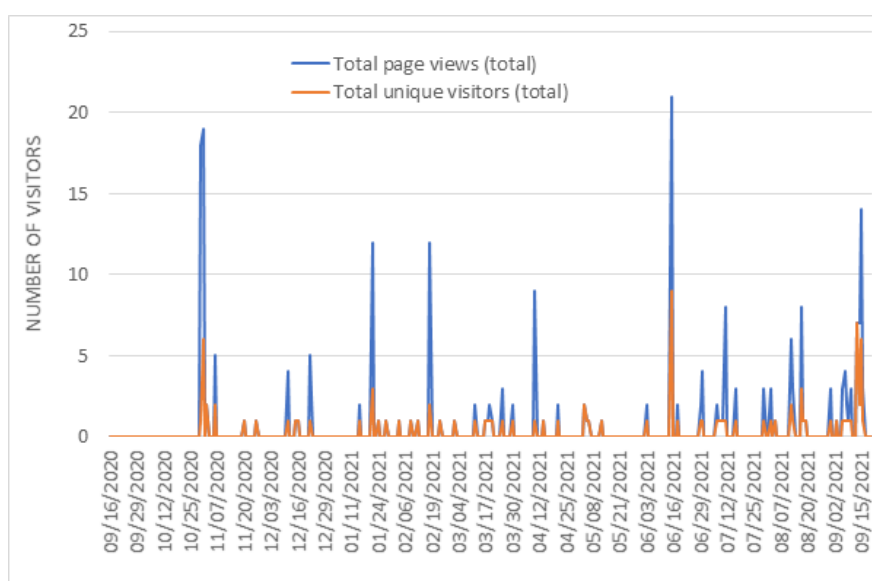


Figure 6: The number of page views and unique visitors to the IMPETUS LinkedIn page for the first year of the project (September 2020 - September 2021)

The number of visitors and page views increases when news items are posted on the social media sites and the website, most notably in November 2020 shortly after the launch of the IMPETUS project was announced and in June 2021 when the first newsletter came out and we had an IMPETUS plenary meeting.

Apart from Grahamstown (South Africa) where the administrator is located and Trondheim where the project coordinator and SINTEF are located, the greatest number of views came from LinkedIn members in the Barcelona (17.2%), Padova (13.2%) and Boston (10.9%) areas (Figure 7). Visitors were mostly based Europe, with 4.0% views from India.

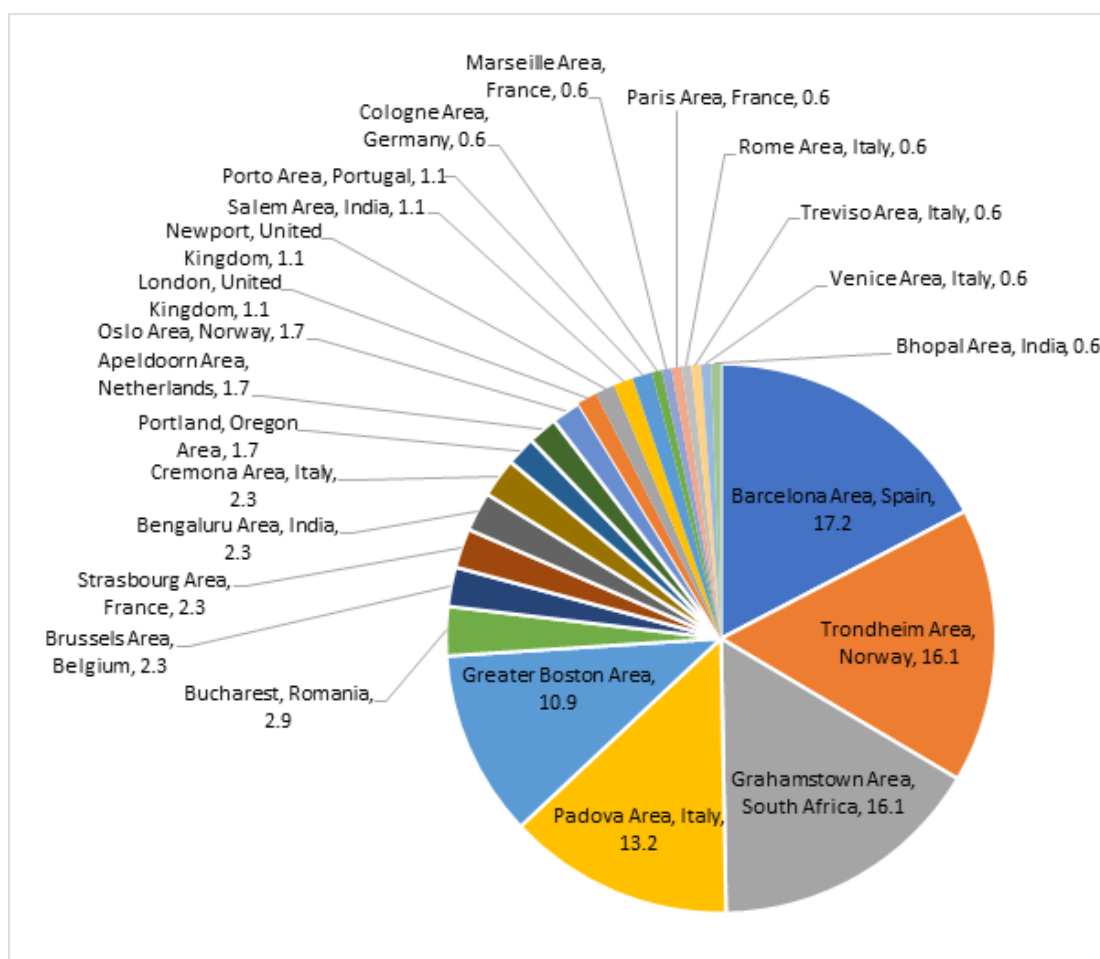


Figure 7: Geographical distribution (%) of IMPETUS LinkedIn visitors

These data from LinkedIn show us that there is interest in the IMPETUS project, but that visitors to the LinkedIn page choose not to follow updates in the project from this platform.

Visitors to the LinkedIn page were more diverse in job function (Figure 8) and industry (Figure 9), compared to the actual LinkedIn followers, indicating that there were several more people who viewed the page (but didn't decide to follow the project) with a wider range of job roles from various facets of industry.

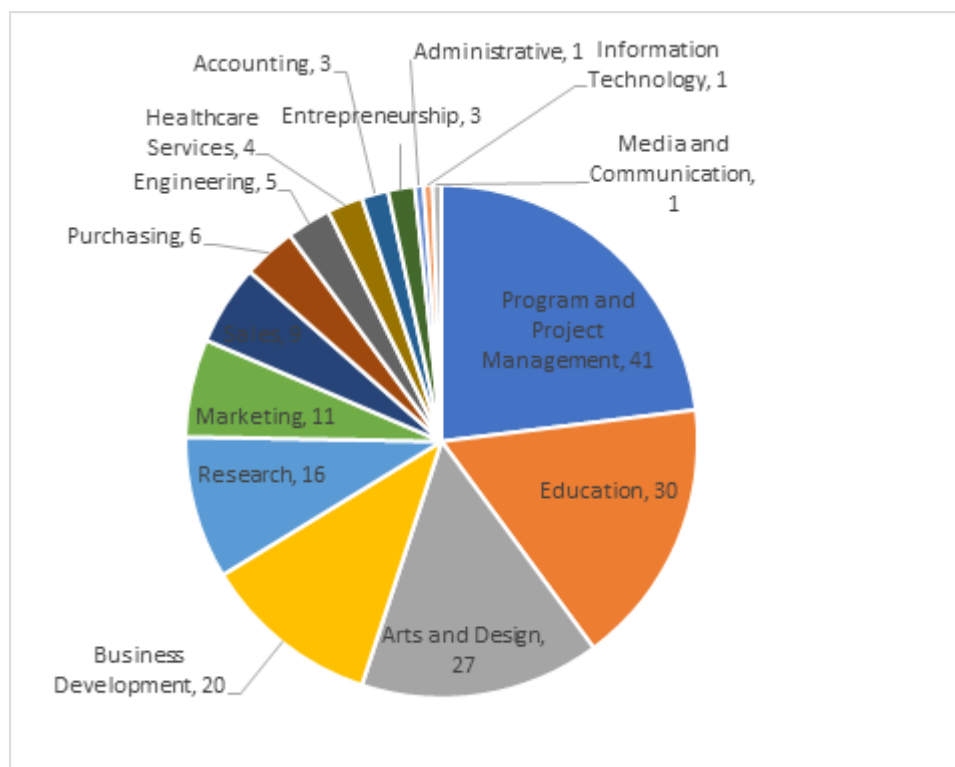


Figure 8: Job function/description (%) of IMPETUS LinkedIn visitors

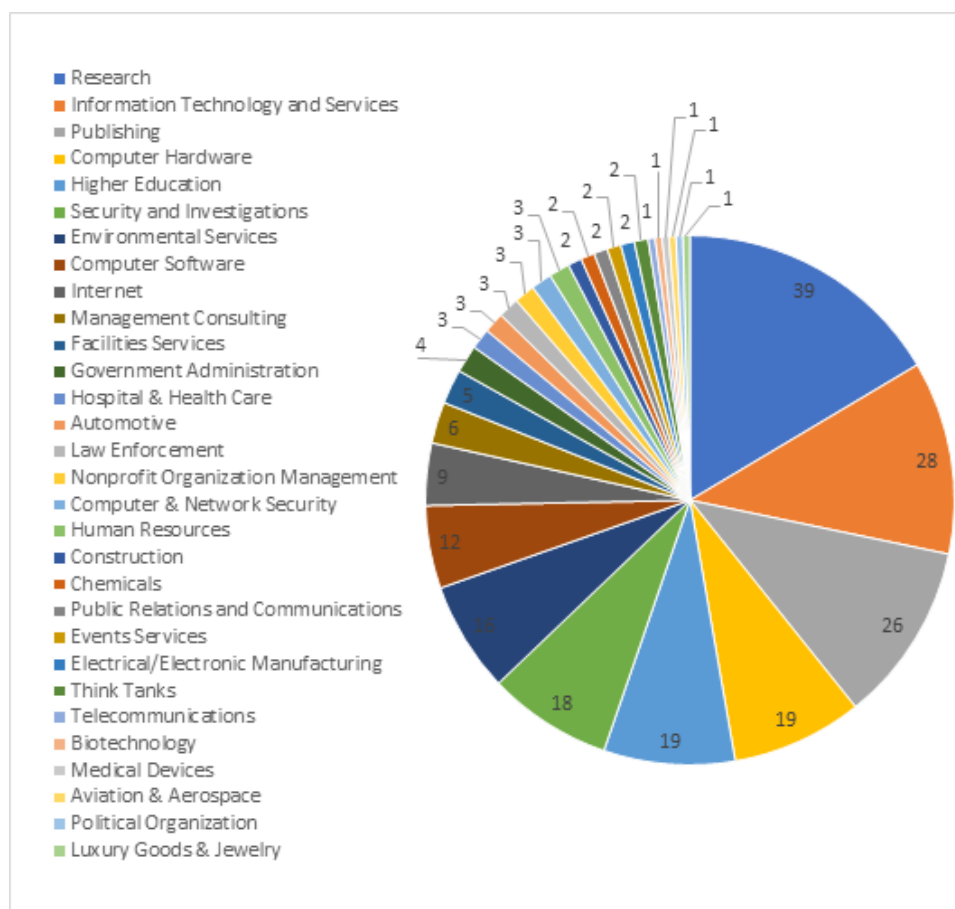


Figure 9: Area of industry of IMPETUS LinkedIn visitors (%)

This is indicative of a browsing pattern of a LinkedIn and social media user who does not actively seek out the IMPETUS project on LinkedIn.

2.2.2 Twitter

The IMPETUS Twitter page was activated on 1 October 2020 (refer to Figure 10). The profile displays the IMPETUS logo as the profile picture and the key images of the two pilot cities in the Twitter banner. The Twitter banners also includes the Oslo and Padova city logos, the IMPETUS logo and the EU logo.



Figure 10: Regularly updated Twitter page

In the last year, there have been 7 tweets and 6 retweets. The Twitter page has 20 followers and 11 following (active followers) as of 23 September 2021 (Table 3). There have been 1174 visits to the IMPETUS Twitter page, with 1646 Twitter “Impressions”. A Twitter impression is a tally of all the times the page has been seen, including hits in search results and views on a follower’s Twitter feed.

Twitter analytics shows that the news article announcing the IMPETUS webinar at the TIEMS/CBI webinar series has garnered the most interest (<https://impetus-project.eu/index.php/news-and-events/news>; published 12th August 2021). This interest is in line with the increased number of followers on Twitter and LinkedIn from March 2021 to July 2021.

**Table 3: Analytics of IMEPTUS Twitter page (as of 23 September 2021)**

	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Total
Tweets	1	1	1	0	0	2	0	0	0	0	2	0	7
Retweets	0	0	3	0	0	1	0	0	0	0	2	0	6
Tweet impressions	43	37	198	20	50	235	203	127	81	43	527	82	1646
Profile visits	11	11	10	10	17	198	11	48	86	47	250	475	1174
New followers	3	1	1	2	0	3	1	2	2	2	0	3	20
Top Tweet	Impetus announcement	Announcement of the coordinator presenting at TIEMS conf.	The coordinator presenting at TIEMS conf.		-	CERIS–FCT Virtual Workshop	-	-	-	-	Announcement on Smart Cities disaster response webinar	-	
Top follower	-	Per Håkon Meland	S4AllCities_H2020	George Suci	-	Ricerca Int. UniPd	Paolo Nesi	Paolo Nesi	GuillemGM	Bubbles Project	-	Claudio ardagna	
Top follower association	-	SINTEF	EUH2020 No: 883522	BEIA Consult International	-	UniPad	University of Florence	University of Florence	Insikt Intelligence	EUH2020 No: 893206	-	University of Milan	

3.3. Publication and press-releases

The initial Press release was launched at the beginning of the project (<https://impetus-project.eu/index.php/news-and-events/news?start=3> and <https://impetus-project.eu/IMPETUS-Press-Release.pdf>). These were also released as news posts on LinkedIn (<https://www.linkedin.com/company/h2020-impetus>) and Twitter. It presents the overview of the project objectives, technologies to be used, funding and consortium.

3.4. Newsletters

The first newsletter was released in March 2021 (download at: <https://impetus-project.eu/index.php/impetus-outputs/newsletters>; available at https://www.impetus-project.eu/images/Newsletters/IMPETUS_Newsletter_01.pdf). It brings an overview of the project and interviews with two project partners (the City of Oslo and leading security technology provider CINEDIT) about their expectations in IMPETUS. It also introduces readers to IMPETUS outreach - COSSEC.

3.5. Brochures

The first brochure of the IMPETUS Project is currently being prepared and is due for release in December 2021. A special flyer (Figure 11) was created in preparation for attendance at the 2021 Conference on Urban Security, which was held in Nice, France 20-22 October, and for use in other contexts thereafter.

3.6. Presentations

IMPETUS partners made several presentations about the project, its impact and results for various target audiences. In order to speed up the preparation of presentations, the project created a repository having slides approved by project officer which will serve partners for the future communication or dissemination of project results.

3.7. Videos

While several presentations have been made, they have not been recorded. Promotional materials developed by the IMPETUS consortium will be made available on the IMPETUS YouTube channel (https://www.youtube.com/channel/UClooUBRDw_kr-W7fy1GDW_g).

3.8. Events

TIEMS 2020 Annual Virtual Conference

The coordinator participated at TIEMS 2020 Annual Virtual Conference (December 2020) and presented the project objectives, expected impact and outcomes. The news story can be read at <https://impetus-project.eu/index.php/news-and-events/news?start=2> and viewed at https://impetus-project.eu/images/News_pdfs/Overview_on_IMPETUS.pdf.

The target audience included researchers, technology developers and urban safety specialists. The attending audience included TIEMS members and IMPETUS partners, but was mostly attended by TIEMS Society members, including those who are part of the IMPETUS project.

CERIS - FCT Workshop on the Protection of Public Spaces

On 25 February 2021, IMPETUS took part in the CERIS–FCT Virtual Workshop on Protection of Public Spaces. The focus areas in the workshop were highly relevant to the objectives of IMPETUS, so it was very useful for us to attend and have an open discussion with the other participants about how our various projects could contribute to improved urban security.

The workshop discussed how technology innovations can be used to counter attacks on urban meta-systems like public CCTV, transport systems and social media platforms. Using these three scenarios, the workshop also aimed at identifying operational issues that may leave a city vulnerable to attack. Another one of the focus areas of the workshop was identifying the counter measures that are already in place, or that can be put in place against cyber-attacks.

The three scenarios were an excellent mechanism for promoting lively and fruitful discussion. It was clear that IMPETUS tools have a role to play in addressing some (but not all) of the operational and technological gaps. It was also clear that the three IMPETUS “Practitioner’s Guides”, providing practical guidelines, training materials/services and reference information also have a major role to play here. The Practitioner’s Guide on ethics has a special role in clearly defining the ethical and data privacy considerations that must be respected when deploying advanced technological solutions.

Active participation in the workshop provided us with good insight into other projects working in the area, indicating possible paths for future co-operation and synergy.

The news item is available at <https://impetus-project.eu/index.php/news-and-events/news?start=1>.

The target audience included researchers, technology developers and urban safety specialists.

P2P kick-off seminar

IMPETUS participated in the second Secure Societies “Project-to-policy kick off seminar” which took place on 22-23 March 2021. Prior to this event, a “Policy Fiche” had been delivered to the PO in November 2021. Prior to the meeting a PowerPoint presentation was delivered and shared with the EC policy officers ahead of the event. During the seminar the coordinator delivered a 5-minute overview based on the abovementioned presentation delivered to EC policy officers. The PowerPoint presentation and speech delivered to EC policy officers during the event address the project’s contribution to two crucial European initiatives on infrastructure protection that have been recently published: CER-Directive and the NIS-2-Directive. Moreover, the presentation includes foreseen activities for future uptake of successful results like testing, their exploitation and scaling-up, as well as compliance with EC regulations and future communication with the Commission. After the event, in April, a revision of the Policy Fiche was sent to the Project Officer.

The target audience included EC staff and researchers from other projects.

Conference on Urban Security, Nice, France 20-22 October

Partners SINTEF and UNI participated in this conference. A simple “flyer” was prepared and distributed at the conference (Figure 11).



Figure 11: IMPETUS flyer distributed at Nice conference

Participants at the event included researchers, technology developers, end users, service beneficiaries, city planners, city authorities and media.

A general observation from the conference, seen from an IMPETUS viewpoint, was that (based on presentations and discussions at this event) there seems to be an emphasis amongst actors involved on physical/architectural interventions and on organisational/procedural issues – but a bit less on technological solutions, with concerns about use of AI perhaps acting as a barrier.

Matthieu Branlat of SINTEF, technical coordinator of IMPETUS, was invited to be one of three panellists at a workshop session entitled “*For a fair and transparent use of AI technologies in urban security*”. He provided an overview of the added value of AI applications, how AI intersects with existing governance structures, and strategies to handle ethical issues. His contributions to discussions were well received, and clearly helped raise awareness of IMPETUS. Two “quotes” from participants in the session deemed worthy of citing in the minutes produced from the session were:

- “*Security actors should be better trained in technology in order to make better decisions regarding technology.*”
- “*Technology providers must understand users and the context in which they operate.*”

It was encouraging for IMPETUS that these were highlighted, as they are both issues addressed in IMPETUS.

CBI-TIEMS Webinar

TIEMS organised a webinar on 28th October 2021 dedicated to IMPETUS within the series of webinars it organises together with CBI (Capacity Building International). The series is dedicated to International Models in Emergency Management and gathers audiences with wide representation from around the World. The webinar will be used to communicate project and disseminate expected project results, surveys, as well as the platform and its components. The presentations were recorded, and presentation materials were made available to participants. The presentations were:

1. Joe Gorman, SINTEF, Norway - IMPETUS Project Overview and Expected Results
2. Jelena Radosevic, ISP, Croatia - IMPETUS Public Opinion Survey on Ethical Issues on Smart Cities Technologies

3. Radu Popescu, SIMAVI, Romania - IMPETUS Platform - Integration of Tools
4. Joe Levy, CINEDIT, Switzerland - IMPETUS Weapon Detection Tool
5. Joaquin Luzon Tuells, INSIKT, Spain - IMPETUS Social Media Threats Detection Tool
6. Osman Mohammad Ibrahim, City of Oslo, Norway - IMPETUS Solutions Implementation in City of Oslo
7. Sandro Bologna, TIEMS, Belgium - IMPETUS - COSSEC Network

The target audience included researchers, emergency management practitioners, technology developers, urban safety specialists and disaster risk and mitigation practitioners and planners.

Moreover, IMPETUS was mentioned by CINEDIT when Wired Magazine published their story in February 2021, and also this week in the Khaleej Time which is the largest English speaking News Paper in the GCC region. Here is the link: <https://www.khaleejtimes.com/videos/nation/1720ai-ai-video-platform-that-detects-weapons-in-real-time>.

The target audience included technology developers.

3.9. Networking and cooperation including COSSEC

The central networking group for IMPETUS is COSSEC (Community of Safe and Secure Cities). The main cooperation outside the project has been done through its activities. IMPETUS partners jointly put an effort to finding individuals representing organisations or projects that have an interest in or might be affected by the work being done by the IMPETUS project.

Recruitment of COSSEC members has started immediately after the project began. Firstly, the analysis of potential network members was performed. The analysis encompassed organisations and individuals who provided endorsement letters during the project preparation phase, as well as other entities who might be interested to join the network and could contribute to the project. The invitation letter, together with information about the project and the role of COSSEC members, was sent to the potential individuals, organisations and on-going projects.

As of September 2021, COSSEC has 24 members having the following structure: 6 cities (Rijeka - Croatia, Tampere – Finland, Piraeus – Greece, Jaipur – India, Leiria – Portugal, Pella - Greece) 1 citizen group (Padova Red Cross), 5 organisations/initiatives (Snap4City, SIGMA Consulting, Open & Agile Smart Cities, Questura di Padova, Carabinieri di Padova), 6 EU projects (H2020 S4AllCities, H2020 FASTER, H2020 CONCORDIA, H2020 CyberSec4Europe, H2020 ENSURESEC, H2020 RED-Alert), and 6 individuals, from a total of 13 countries. Comparing current COSSEC status with the expectations raised in the DoA, it is clear that additional effort should be put into recruiting more cities and citizen groups into the network.

In the first reporting period the project organised one virtual meeting, and two webinars with COSSEC members. On 10th March 2021 a virtual meeting among COSSEC Members, COSSEC chair and the project coordinator was held. In this meeting, COSSEC members were introduced in the project's goal, scope and expected results.

On 4th May 2021 the first, two-hour webinar was held with the main topic: “Use of advanced IT for the protection of public spaces”. The webinar was based on presentations of on-going projects and initiatives. At the beginning, the IMPETUS project was presented by the coordinator followed by presentations of two projects and one initiative of interest for IMPETUS:

- SURE - Smart Urban Security and Event Resilience (UIA Initiative), prepared by Autero Anniina (Tampere), Säpyskä Minna (Tampere),
- Snap4City - Firenze Smart City Control Room (International), prepared by Paolo Nesi (University of Florence),
- Open & Agile Smart Cities (OASC International), prepared by Davor Meersman, Ricardo Pinho, Gert De Tant (OASC International).

After the presentations, a plenary discussion was chaired by IMPETUS coordinator. The participants discussed the issues related to the following, rather challenging topics:

- Security technology application for the protection of public spaces, with contributions from IMPETUS: Joaquin Luzon (Insiktintelligence, IMPETUS partner) and Joe Levy (CINEDIT, IMPETUS partner),

- Operational impact of security technology application for the protection of public spaces with contributions from IMPETUS: Lars Ole Grottenberg (Oslo Kommune, IMPETUS partner).

The second webinar was held on 16th June 2021 for two hours discussing the topic: “Ethical and Legal Issues with the use of Smart Cities Technologies for Public Protection”. The webinar started with an introduction given by the COSSEC chairman, and continued with the following presentations:

- Survey on use of Smart Technologies in Detecting Security Threats in Public Spaces - Ethical Issues prepared by IMPETUS partner ISP;
- Ethical Issues, personal data protection and possible misuses of personal data: a European perspective given by COSSEC Member Luigi Carrozzi, an expert of personal data protection, Italy;
- Ethical Issues of perceived fairness in Machine Learning (ML), given by COSSEC Member, Deepak Khazanchi, University of Nebraska at Omaha, USA;
- Open discussion about some controversial claims, chaired by Krunoslav Katic, ISP, IMPETUS partner.

COSSEC plans to organize future meetings in conjunction with IMPETUS Plenary Meetings, unless specifically required by IMPETUS Partners about specific topics.

During the first six months of the project, the COSSEC Platform (<https://pr4gdm.giftmaru.com/>) was established. The access to the platform is restricted, so only COSSEC members and IMPETUS partners can log in. The platform provides a repository for activities, documents, data, information about COSSEC members, news, events, technologies and presentations from webinars. IMPETUS Partners may introduce discussion issues for the COSSEC Members by using the COSSEC Platform.

Besides COSSEC, IMPETUS is a member of ECSCI cluster <https://www.finsec-project.eu/ecsci>. DG HOME and CoU/CERIS have selected the ECSCI Cluster as a success story of synergy building. IMPETUS shared its dissemination and communication links with the cluster.

Moreover, an initial meeting was held between IMPETUS and PA Secure coordinators, there is a need for follow-up actions. Policy Area (PA) Secure is one of the 13 policy areas of the EU Strategy for the Baltic Sea Region (EUSBSR). PA Secure is co-coordinated by the CBSS and the Swedish Civil Contingencies Agency (MSB) and funded by Interreg Baltic Sea Region programme, <http://www.bsr-secure.eu/>.

Potential opportunity: Invitation received from <https://cyberwatching.eu/> supporting IMPETUS in communication, dissemination and user engagement. They created <https://www.cyberwatching.eu/projects> the European Project Hub <https://www.cyberwatching.eu/projects> for all projects focusing on Cybersecurity and Privacy.

A concrete outcome from contact with other projects is that IMPETUS has decided to use the platform developed by the Snap4City project as a key element in implementing our own IMPETUS platform.

3.10. Assessment of communication's key performance indicators

The status of key performance indicators defined in Communication strategy and plan have been updated and are listed in Table 4.

Table 4: Key performance indicators with planned and achieved goals

Channel	What is measured	Indicator(s)	Thresholds	Achieved
Website	Interest generated towards the value chain and other stakeholders (including the public at large)	Number of visits	> 10,000 unique visits	>2000
		Number of hits per page	> 1000 hits	~1297 (12-2033)
		Number of references of the website on other sites	> 50 references (other sites)	21
	Website update frequency	Number of days that pass without an update	< 30 days	6-77 days
Project brochure	Reach of the brochure	Number of brochures created	2,000 brochures provided	0 brochures (the first brochure is in planning)
		Request for additional project information generated by the brochure	> 200 requests for additional information	-
Pilot videos	Reach of the videos	Traffic generated on YouTube	>10,000 views on the release month	0 videos 2 subscribers
COSSEC	Community constitution and events	Number of members	> 40 members	23
		Diversity of members	> 10 cities > 5 citizen groups > 10 EU countries	6 cities 1 citizen group 11 EU countries
		Number of events	> 2 workshops and 2 webinars	2 webinars
Social Media	Twitter activity	Number of followers	> 500 followers	17
		Number of tweets	> 50 tweets	7
		Number of profile visits		699

Channel	What is measured	Indicator(s)	Thresholds	Achieved
	LinkedIn activity	Number of followers	> 500 followers	28
		Number of posts	> 50 posts	6
		Number of unique visitors		12
		Views per promoted post	> 1500 views for each promoted post	52
Newsletter	Reach of the newsletter	Number of newsletters created	4 newsletters	1
		Number of readers who received the newsletter through mail	> 1,000 email readers	3 through newsletter subscription service; more than 6000 via link sent by email to TIEMS members and followers
		Number of downloads of newsletter from web site	> 300 downloads	527
Press relations	Impact of the press relations and press related activities	Number of press releases issues	> 4 press releases	1
		Number of press clippings per press release	> 30 press clippings	0

3.11. Forthcoming communication activities

Following the communication strategy and plan, project partners have started to plan their communication activities. Table 5 shows imminent communication actions as reported by partners.

Table 5: A short-term communication plan reported by partners

Partner	Communication action
SINTEF	<ul style="list-style-type: none">• Sharing general information about the project on the SINTEF Digital Twitter account, SINTEF Podcast• Blueprint for change processes: feature article with the City of Oslo about results from WP6 in e.g., a Norwegian newspaper• Sharing experience in popular scientific articles: broader reflections on development processes itself, more specific challenges when developing requirements in multidisciplinary projects• Communicating action through SINTEF blog: https://norwegianscitechnews.com/
THALES	<ul style="list-style-type: none">• Liked and shared IMPETUS newsletters• Outlined the IMPETUS project (high level) at Thales Internal Group meeting to show where our HCI tool is bringing added value to the project.• Presentation at E-PAL on Human System Design 24 November 2021 – Thales internal meeting on Ethics related to HCI Tool.
SIMAVI	<ul style="list-style-type: none">• To contract advertising articles related to the IMPETUS project
BMA	<ul style="list-style-type: none">• Communication of project results in ScanBalt newsletter, reaching over 9000 mailboxes.

3 Dissemination report

This chapter provides current dissemination achievements during the project's first reporting period based on the Dissemination plan and strategy (Deliverables 8.1 and 9.2). The last sub-chapter brings partners' short-term plan for dissemination of project results at conferences and submission to journals.

3.1 Scientific and technical journals

At this stage of the project, the results have not been presented in scientific and technical journals as they are not mature enough and, in many cases, they have to be tested on pilot sites to prove their validity. Moreover, due to relatively long review process, in comparison with conference papers, we suppose that the first papers in scientific journals will emerge towards the end of the project. The dissemination timeline, put in the context of milestones and delivery of results, is presented in the Dissemination strategy (Deliverable 9.2). We expect that dissemination through journals will continue beyond project completion.

3.2 Scientific and technical conferences and events

At this stage of the project, there has been only one conference paper which considers big data management and analytics related to the research in Task 4.3. The paper was submitted to ACM MEDES 2021 by CINI-UMIL. It was accepted and presented November 1-3, 2021. We are delighted to report that the paper also received a "Best paper" award!



3.3 European Commission tools

At this stage of the project, the project has not produced results in a state of maturity sufficient to be presented to the audience through European Commission tools.

3.4 Open source repositories

At this stage of the project, the project has not produced conference or journal papers to be uploaded into open source repositories.

3.5 University master and doctoral programmes

CINI-UNIMI included IMPETUS project research goals and expected results in two courses:

- PhD course on Governance, Risk, Compliance in Distributed Systems, Università degli Studi di Milano
- Advanced course on Big Data, AI, Platforms, Università degli Studi di Milano

IMT included IMPETUS project research goals and expected results in a course:

- Securite des Systemes et des Reseaux, Master Year 2 in Cybersecurity, Institut Polytechnique de Paris

3.6 Communication channels used for dissemination

As there has not been dissemination actions so far, no channels have been used for these actions. However, the project's website will be the main channel to point to the dissemination events, for example the forthcoming "IMPETUS Day" at the TIEMS annual conference in December 2021.

3.7 Assessment of dissemination's key performance indicators

The main goal of dissemination set up in DoA is 12 published papers in scientific journals. As of September 2021, there are no submissions to scientific journals. However, we expect that project results will reach the stage of maturity and validity for publication later in the project and even after its finish.

3.8 Forthcoming dissemination actions

Herein, the upcoming dissemination activities in concrete conferences and journals are given. As project results mature more concrete plans for conferences and journals will emerge. Table 6 and Table 7 show planned forthcoming conferences and publication in journals, as reported by partners. As project results mature more concrete plans for conferences and journals will emerge.

Moreover, on 9 December 2021, TIEMS will organise a virtual workshop dedicated to IMPETUS during its annual conference called "IMPETUS day". The workshop will be used to disseminate early project results, particularly the platform and tools. Partners will present results in a form of peer-reviewed paper or practitioners talks.

Table 6: Planned forthcoming conferences

Partner	Conference name	Topic
CINEDIT	GISEC, Dubai World Trade Centre (March 2022)	Weapon detection tool
CINI	International Conference on Discovery Science	Topics related to the activities in T4.1 (CINI-UNIBA)
	IEEE Conference on Big Data	Activities related to T4.1 and T4.3 focusing on the relationship between big data analytics quality and the need of controlling access to data. (CINI-UNIBA and CINI-UMIL)
BMA	Local seminar for Tartu Smart City and other stakeholders	Potentially including virtual presence from Oslo/Padova and some companies in the IMPETUS to present the project aims and current results.
THALES	<ul style="list-style-type: none"> 13th International Conference on Applied Human Factors and Ergonomics (AHFE 2022) and the Affiliated Conferences, (New York, USA), July 24-28 2022 I-HIET-AI the 7th International Conference on Human Interaction & Emerging Technologies: Artificial Intelligence & Future Applications (Lausanne, Switzerland), April 22-23 2022 	<p>Evaluation of Real-time Assessment of Human Operator Workload during a Simulated Crisis Situation, Using EEG and PPG.</p> <p>Paper by Thomas de Groot, Johan de Heer, Rafal Hryniewicz, Tije Oortwijn, Manon Tolhuisen-Hoek (in alphabetical order).</p> <p>Abstract accepted by both conferences AHFE 2022, I-HIET AI 2022.</p>
IMT	ESCORCS conferences, European Symposium on Research in Computer Security	Cyber Threat Mapping tool
	The International Cybersecurity Forum (FIC) is the leading European event on Cybersecurity	Cyber Threat Mapping tool
INS	World Summit on Counter-Terrorism, Israel	Social Media Detection tool
	Smart cities ExpoWorld, Barcelona, Spain	Social Media Detection tool
	ISS World, Prague	Social Media Detection tool

Table 7: Short-term plan for submissions in journals

Partner	Journal	Topic
SINTEF	To be selected	Operational challenges
IMT	Internet Technology Letters (Wiley)	Cyber Threat Mapping tool

4 Conclusions and future work

4.1 Status and plans reported in release 1.0 (before project review)

This report focuses on analysis of the efficiency of communication channels and reports changes in the plan and strategy. We have shown that the social media channels have reached a large contingent of our target audience, particularly those in research, academia and project management. We have also shown that IMPETUS has reached an international audience with LinkedIn members from across the globe. So far, the communication about the project and its outcomes has worked well, although social media channels should be used more frequently to widen the scope of the target audience, broaden the following on the communication channels and raise their interest for the project's results. By reaching the target audience more efficiently, we can gain more valuable feedback about the project. Therefore, stronger partners commitment towards inclusion of communication about the project in their local networks has to be encouraged.

However, persistent uncertainties and the ongoing situational complexity with the COVID-19 pandemic prevented us from organising in-person events and meetings with target audiences. With increased virtual meetings and events in light of many imposed travel restrictions around the globe, we have organised two virtual events to boost communication with target audiences: CBI-TIEMS Webinar (Oct 2021) and an "IMPETUS Day" at the TIEMS Annual Conference (Dec 2021). We expect that next spring (April 2022), we will have the opportunity to have face-to-face meetings.

Initially faced with apparent challenges as a communication channel, the networking through COSSEC activities went well and there is a strong commitment for involvement of COSSEC members into forthcoming project activities, particularly in the evaluation of KERs. Collaborations with other projects was achieved through COSSEC with a sound collaboration established with the Snap4City project. It has been decided to use particular technological features from their platform to strengthen those in IMPETUS. Given the favourable outcome of the collaboration with the Snap4City Project, it may be in our interests to pursue similar technical cooperation and collaborations with other projects.

Tangible feedback from relevant stakeholders has not yet been achieved as results, according to the project plans, are ongoing. These results will be presented through communication and/or dissemination channels when they have been finalised. We expect that after pilot demonstrations and tool evaluations, project partners will be ready to disseminate their first results, which will then be communicated to target audiences through IMPETUS communication channels.

After 14 months of project execution, we have seen progress; but greater coordination efforts and continuity is required to improve communication activities. Communication channels can be used more efficiently to promote the action and disseminate the project results, not only in numbers but to achieve real contact and feedback from target audiences. The feedback they provide is crucial during the dissemination of results as it will produce meaningful social media metrics and, overall, improve the quality of project outputs. Therefore, we have to establish communication with technical partners and foster the collaboration to reach certain common goals. We can discuss project solutions with target audiences and partners during either scientific or technical conferences and events that are either hosted or attended by either party.

4.2 Update on communication and dissemination planning in release 1.1 (following review remarks)

To improve communication and dissemination activities in the second half of the project we have extended the existing “Project promotion team” working group with a new group specifically focusing on enhanced external contact and direct involvement. The goals of the new working group are to:

- enhance communication and dissemination of IMPETUS results to end users and service beneficiaries (target audience as defined in Deliverable 8.1);
- put considerably more emphasis on communication to citizens;
- fine-tune communication channels to reach *and interact with* target groups;
- enhance the participation of COSSEC members in validation of the IMPETUS solutions, involving them directly in project activities (e.g., plenary meetings, workshops, live exercise events).

Our overall strategy has three main components:

1. Encourage involvement of external organisations in the **live exercises** planned in Oslo and Padova. We foresee some external actors being involved mainly as “observers” (providing feedback after the event) but some having a more direct, interactive role in the planning of and during the event;
2. Arrange events aimed at **wide audiences**. As well as traditional “presentations” we will use other mechanisms such as interactive panel debates and exhibition-style walk-around events. Some events will be pure IMPETUS events, but some will be arranged in co-operation with others (e.g., our “sister” project S4AllCities, the UrbSecurity programme).
3. Arrange small-scale but **highly targeted events**, such as arranging visits to cities who might be potential adopters, taking part in meeting of specialist interest groups etc.

Some specific ideas for some specific groups:

- Smart city associations representatives and managers + critical infrastructure operators + first responders:
 - Panel debates after live exercises on effectiveness of the IMPETUS solution in general and its compliance with relevant city policies on safety and security;
 - Webinar briefings on the IMPETUS solution (in preparation for the panel)
- Citizens – the wider public:
 - Open days in pilot cities, showing posters and videos from pilots where they can be informed about project aims and benefits for society;
 - Information days before live exercises where the volunteers for exercises will be recruited and informed about IMPETUS.

Smart city associations’ representatives and managers will be recruited locally and from existing COSSEC members. Moreover, to boost the role of COSSEC and external collaboration, a core group (maximum 12 members) consisting of the most motivated COSSEC members will be established to cooperate closely with tools developers, be involved in scenario development and help the project make sure end-user requirements will be met. Communication will be achieved through regular online meetings and face-to-face discussions organised around live exercises in pilot cities and project plenary meetings.



5 References

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2. Deliverable 9.1: Exploitation plan
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4. Policy Feedback Report: Main guidelines, European Commission
5. IMPETUS Description of the Action (DoA)

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