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*IMPETUS Project Deliverable: D8.4*

# Ecosystem report

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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

During the duration of the project, the Consortium undertook a series of activities to promote the technologies and the innovations of the project, convey the advantages and positive impacts that end users could reap from its results, and leverage these outputs to engage stakeholders and build an industrial ecosystem around them. This deliverable offers an overview of these activities.

Stakeholders involved during the project included potential end-users, such as SOC (Security Operations Center) operators, IT specialists, city authorities, emergency agencies, to, more in general, all organizations interested in the objectives, technologies, and results of the project. The two pilot cities, Oslo and Padova, involved, among others, local organizations in the field of security and emergency management such as local authorities, local police, public administration, media, citizens associations and private security organizations.

Some of these stakeholders mentioned are also members of COSSEC, i.e., the Community of Safe and Secure Cities. COSSEC is a group of smart city safety stakeholders from outside the project team that was established to support the involvement of external stakeholders in the IMPETUS project, with the goal of granting access to the Partners to a larger pool of expertise and know-how in order to assist, direct, and evaluate the project's work. This could help, from one side, IMPETUS Partners to understand the needs and limitations of the larger community, and, from the other side, to create "ambassadors" who would help disseminate project results and possibly become early adopters.

Stakeholders were engaged from Partners through different channels depending on their nature. The two pilot cities used official and direct communication channels to contact local institutional stakeholders. Some project Partners instead leveraged their networks of contacts and relationships to engage other organizations that could potentially be interested in the project. Members from other similar research projects were also contacted, through emails and virtual meetings, to invite them to in presence and virtual events in order to gather feedback, share best practices, and potentially create synergies. Finally, webinars and in-presence meetings were held among Consortium Partners, COSSEC members and external stakeholders.

The most relevant activities reported in detail in the document were the two industry workshops conducted in the context of Oslo and Padova Live Exercises and the Final Dissemination Event. During these workshops, called "Exhibitions", IMPETUS Partners could showcase the results of the project to attending stakeholders, gather specific feedback, investigate for potential interest in future adoption, and, more generally, create and strengthen networking ties.



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# 1 About this deliverable

## 1.1 Intended readership/users

This deliverable is for the public use. The aim of this document is to get both partners and wider audience acquainted with activities conducted and results achieved in creating an industrial ecosystem around the IMPETUS solutions.

## 1.2 Why would I want to read this deliverable?

This document provides an overview of the actions taken to build an industrial ecosystem around the IMPETUS solutions and of the outcomes deriving from the industry workshops conducted after the Oslo and Padova pilots and from the Final Dissemination Event.

## 1.3 Synergy with other projects/initiatives

One of the events reported in the document (i.e., the “Final Dissemination Event” held in Rotterdam) has been organized with the support of, and in coordination with Secu4All, a project funded by the European Union’s Internal Security Fund — Police and coordinated by EFUS (European Forum for Urban Security).



## 2 Introduction

This deliverable is a report of the activities that the Consortium carried out during the project to promote the technologies and innovations of the project, convey the advantages and positive impacts that the outputs generated can have for potential users, and leverage these outputs to build an industrial ecosystem around them.

In order to do that, external stakeholders have been engaged to be involved during the development of the project to inform them about what IMPETUS is about and gather feedback and direction for the future. Organizations engaged ranged from public authorities and administrations, organizations dealing with security, researchers in other projects, technology developers and innovators, citizen organizations, ethical experts.

To accomplish these goals, defining, identifying and engaging key stakeholders becomes of fundamental importance. Stakeholders are typically defined as the individuals, groups, and/or organisations who can affect or be affected by a project. Due to the wide reach and nature of this project, performing this task is even more important.

These stakeholders were then engaged through communication (e-mail, one-on-one calls) and by sharing project material and information. Stakeholders that showed interest were then formally invited to participate at the workshops during the Live Exercises in Oslo and Padova and at the Final Dissemination Event.

The main goals of stakeholders' engagement activities were to promote networking and communication among partners and stakeholders and gathering feedback from external parties that could contribute to give insights on what has been done and direction for future activities.

### 3 Description of stakeholder clusters

To fulfil the goal of this task, that is to actively promote the project technologies and innovations to the market in order to create an industrial ecosystem around the IMPETUS solutions, stakeholders were engaged during the whole duration of the project to gather important feedback and inputs to guide the development of IMPETUS.

Stakeholders involved during the activities of the project ranged from end-users, like city authorities, emergency agencies or other organisations that could be potentially interested in adopting IMPETUS in the long run, to more in general all organizations with an interest in the objectives, technologies, and results addressed by the project. Clearly, many stakeholders revolve around the two pilot cities Oslo and Padova, as they were engaged to participate in the Live Exercises and overall, during the whole duration of the project. End users are crucial in the evaluation of the IMPETUS platform/tools since they can offer input on the platform's and individual tools' usability that is based on their operational experience. The end-users can be identified in Security Operations Center (SOC) operators who carry out operational tasks, IT specialists who are in charge of controlling the IT infrastructure, and their relative supervisors.

Further, Oslo and Padova municipalities contacted local stakeholders in the field of security and emergency management to investigate if, and how, they were willing to be involved in the project. These stakeholders are: local authorities, local police, public administration, media, citizens, private security organizations.

Some of these stakeholders mentioned are also COSSEC members. The Community of Safe and Secure Cities (COSSEC) is a group of smart city safety stakeholders from outside the project team. Members were recruited from and include city authorities, emergency agencies and organizations potentially interested in the adoption of IMPETUS, public organizations and authorities, researchers in other projects, technology developers and innovators, citizen organizations, ethical experts. The community was established to support the involvement in the IMPETUS project of stakeholders beyond the project consortium. The goal was to grant the project access to a larger pool of expertise and know-how to assist, direct, and evaluate its work, to enable it to comprehend and account for the needs and limitations of the larger community, and to create "ambassadors" who would help disseminate project results and possibly become early adopters.

Below, the list of COSSEC members as well as the list of stakeholders attending the Live Exercises in Padova and Oslo (in the context of which also the two workshops described later in the document were held) and the Final Dissemination Event in Rotterdam are reported.

Organization	Country	Website
University of Stirling	UK	<a href="https://www.stir.ac.uk">https://www.stir.ac.uk</a>
H2020 S4AllCities	EU	<a href="https://www.s4allcities.eu/">https://www.s4allcities.eu/</a>
H2020 FASTER	EU	<a href="https://www.faster-project.eu/">https://www.faster-project.eu/</a>
SIGMA Consulting	Italy	<a href="https://www.sigmaconsulting.it/it/home/">https://www.sigmaconsulting.it/it/home/</a>
H2020 CONCORDIA	EU	<a href="https://www.concordia-h2020.eu/">https://www.concordia-h2020.eu/</a>
City of Rijeka	Croatia	<a href="https://www.rijeka.hr/en/?noredirect=en_GB">https://www.rijeka.hr/en/?noredirect=en_GB</a>
H2020 CyberSec4Europe	EU	<a href="https://cybersec4europe.eu/">https://cybersec4europe.eu/</a>
University of Murcia	Spain	<a href="https://ants.inf.um.es/en">https://ants.inf.um.es/en</a>
University of Porto	Portugal	<a href="https://sigarra.up.pt/fcup/en/">https://sigarra.up.pt/fcup/en/</a>
Padova Red Cross	Italy	<a href="https://cri.it/">https://cri.it/</a>
UIA initiative SURE Project City of Tampere	Finland	<a href="https://www.uia-initiative.eu/en/uia-cities/tampere">https://www.uia-initiative.eu/en/uia-cities/tampere</a>
H2020 ENSURESEC	EU	<a href="https://www.ensuresec.eu/">https://www.ensuresec.eu/</a>





Organization	Country	Website
Italian Data Protection Authority	Italy	<a href="https://www.gdpd.it/web/garante-privacy-en/home_en">https://www.gdpd.it/web/garante-privacy-en/home_en</a>
Brown University	USA	<a href="https://www.brown.edu/brown-research">https://www.brown.edu/brown-research</a>
Open & Agile Smart Cities International	Brussels	<a href="https://oascities.org/">https://oascities.org/</a>
H2020 RED-Alert	EU	<a href="https://redalertproject.eu/">https://redalertproject.eu/</a>
University of Nebraska at Omaha	USA	<a href="https://www.unomaha.edu/college-of-information-science-and-technology/about">https://www.unomaha.edu/college-of-information-science-and-technology/about</a>
UIA initiative PIRAEUS	Greece	<a href="https://www.uia-initiative.eu/en/uia-cities/piraeus">https://www.uia-initiative.eu/en/uia-cities/piraeus</a>
Jaipur Smart City Ltd	India	<a href="https://smartnet.niua.org/users/jaipur-smart-city-limited">https://smartnet.niua.org/users/jaipur-smart-city-limited</a>
Legione Carabinieri di Padova	Italy	<a href="http://www.carabinieri.it/">http://www.carabinieri.it/</a>
Questura di Padova	Italy	<a href="https://questure.poliziadistato.it/padova">https://questure.poliziadistato.it/padova</a>
UrbSecurity, an Urbact APN	EU	<a href="https://urbact.eu/urbsecurity-action-plan-network-planning-safer-cities">https://urbact.eu/urbsecurity-action-plan-network-planning-safer-cities</a>
Municipality of Pella	Greece	<a href="https://www.giannitsa.gr/">https://www.giannitsa.gr/</a>
Counter Terrorism Preparedness Network	UK	<a href="https://www.london.gov.uk/what-we-do/fire-and-resilience/counter-terrorism-preparedness-network-ctpn">https://www.london.gov.uk/what-we-do/fire-and-resilience/counter-terrorism-preparedness-network-ctpn</a>
University of Groningen	Netherlands	<a href="https://www.rug.nl/research/">https://www.rug.nl/research/</a>
Municipality of Mechelen	Belgium	<a href="https://www.mechelen.be">https://www.mechelen.be</a>
Municipality of Leiria	Portugal	<a href="https://www.visiteleiria.pt/en/home/">https://www.visiteleiria.pt/en/home/</a>
Municipality of Longford	Ireland	<a href="https://www.longfordcoco.ie">https://www.longfordcoco.ie</a>
Municipality of Michalovce	Slovakia	<a href="https://www.michalovce.sk">https://www.michalovce.sk</a>
University of Salford	UK	<a href="https://www.salford.ac.uk">https://www.salford.ac.uk</a>
Dutch Institute for Safe and Secure Spaces	Netherlands	<a href="https://www.disss.eu/">https://www.disss.eu/</a>
EU Joint Research Centre Ispra	Italy	<a href="https://joint-research-centre.ec.europa.eu/jrc-sites-across-europe/jrc-ispra-italy_en">https://joint-research-centre.ec.europa.eu/jrc-sites-across-europe/jrc-ispra-italy_en</a>
Snap4Cities Initiative	Italy	<a href="https://www.snap4city.org">https://www.snap4city.org</a>
Cities Union Romagna Faentina	Italy	<a href="https://www.romagnafaentina.it">https://www.romagnafaentina.it</a>
Comune di Parma	Italy	<a href="https://www.comune.parma.it/notizie/news/categoria/PROGETTI+EUROPEI.aspx">https://www.comune.parma.it/notizie/news/categoria/PROGETTI+EUROPEI.aspx</a>
City of Madrid	Spain	<a href="https://www.fomentoterritorial.com/">https://www.fomentoterritorial.com/</a>
Community of Szabolcs 05	Hungary	<a href="https://www.interregeurope.eu/">https://www.interregeurope.eu/</a>
ISSEL - Aristotle University of Thessaloniki	Greece	<a href="https://issel.ee.auth.gr/en/13-2/">https://issel.ee.auth.gr/en/13-2/</a>
Cittadinanzattiva	Italy	<a href="https://www.cittadinanzattiva.it">https://www.cittadinanzattiva.it</a>
Privacy International	UK	<a href="https://www.privacyinternational.org">https://www.privacyinternational.org</a>
REACT – The Integrity Company	Italy	<a href="https://www.re-act.it">https://www.re-act.it</a>

**Table 1: COSSEC Members**

Event	Dates	Attending Organizations
Padova Acceptance Pilot	1-3 Dec 2021	Padova Red Cross, Padova Legione Carabinieri, Questura of Padova, FASTER
Oslo Live Exercise	18 Aug 2022	Dutch Institute for Safe and Secure Spaces (DISSS, University of Groningen, S4AllCities, UrbSecurity City of Leira, and CTPN
Padova Live Exercise	6 Oct 2022	Cittadinanzattiva Italy; Questura of Padova; Local Carabinieri, fire-fighters, civil protection volunteers; Faenza City Council, other city police representatives, CPTN, DISSS, Privacy International UK, RE-ACT
Final Dissemination Event	30-31 Jan 2023	Camara Municipal de Setubal; City of FAENZA; City of TAMPERE; CTPN; Directora de Serveis de Prevencio Barcelona; NHRI; Oslo Politidirekt; R.O.S. Carabinieri Sezione Anticrimine di Padova; RE-ACT; ROMAGNA FAENTINA; SETUBAL Municipality; Univ. Florence; Univ. GRONINGEN; Valencia Local Police; City of Karlsruhe; City of Rotterdam; City of The Hague; City of Xabia; CRIMINA (Universidad Miguel Hernandez de Elche); DS International; DSP-groep; Dutch Institute for Safe & Secure Spaces [DISSS]; EFUS; European Organisation for Security (EOS); German European Forum for Urban Safety (DEFUS); Italian Forum For Urban Security (FISU); Riga Municipal Police; The Center for Security Studies (KEMEA); Brno City Municipality

**Table 2: External organizations participating at in-presence events**

## 4 Stakeholder engagement

Stakeholders identified in the previous chapter were engaged through a number of different methods. First and foremost, the two pilot cities, as project Partners, contacted local stakeholders in the field of security and emergency management through direct communication. Other project Partners also leveraged their networks of contacts and relationships, involving other organizations that could potentially be interested in the project also via direct communication. Member from other innovative projects were contacted through emails and virtual meetings to invite them to in presence and virtual events to gather feedback, share best practices, and potentially create synergies. Finally, webinars and in-presence meetings were held among Consortium Partners, COSSEC members and external stakeholders. More specifically, three webinars were held to engage COSSEC members with IMPETUS project participants to discuss the three main pillars of IMPETUS: technology (Use of Advanced IT for the Protection of Public Spaces, May 4, 2021), ethics (Ethical and Legal Issues with the Use of Smart Cities Technologies for Public Protection, June 16, 2021), and operations (Influence of technology on operations and operational concepts in IMPETUS, March 30, 2022). Further, IMPETUS and COSSEC members participated in three collaborative workshops with UrbSecurity (IMPETUS - UrbSecurity Virtual Cooperation Meeting, October 6, 2021, UrbSecurity Action Planning Network Transnational Meeting 7, January 20, 2022, URBACT UrbSecurity Action Planning Network Transnational Meeting 8, May 31 – June 1, 2022) in which COSSEC and IMPETUS members worked with personnel from the UrbSecurity European Union initiative. UrbSecurity is an Action Plan Network (APN) whose goal is to improve safety and security in urban environments through spatial design and better use of public spaces. The UrbSecurity APN is led by the city of Leiria, Portugal in partnership with 8 other cities/regions: Madrid, Spain; Parma, Italy; Longford, Ireland; Mechelen, Belgium; Pella, Greece; Michalovce, Slovakia; and the regions of Szabolcs 05 Association of Municipalities, Hungary; and Romagna Faentina, Italy.

Finally, COSSEC and external stakeholders were invited to IMPETUS in-presence events via email and other forms of direct communication, as well as through promotion via social media posts. Main in-presence events consisted in Padova Acceptance Pilot (1-3 Dec 2021), Oslo Live Exercise (18 Aug 2022), Padova Live Exercise (6 Oct 2022), and the Final Dissemination Event (30-31 January 2023). External guests were prepared for their participation in these events through the webinars mentioned above and by information packets prepared for them in which the IMPETUS tools and platform were summarized. At the events themselves, presentations and demonstrations further informed the external audience to ensure they understood what they were seeing, allowing them to give considered feedback. During the Live Exercises and the Final Dissemination Event, industrial workshops, called Exhibitions, were held to showcase the tools, gather specific feedback, investigate for potential interest in future adoption, and overall create and strengthen networking ties.



## 5 Oslo industry workshop

<b>Title</b>	Exhibition
<b>Date</b>	18 Aug 2022
<b>Venue</b>	Oslo City Hall
<b>Organisers</b>	Oslo Kommune + IMPETUS Partners
<b>External audience (number)</b>	~ 40
<b>Duration</b>	2 hours

### Goals and objectives of the workshop

The objectives of the exhibition were to showcase to external guests the IMPETUS tools, how they devised, work, what is their final goal and who can they be useful for. The end goal was then to inform, gather feedback, criticism, ideas and suggestions for what has been done and for what could be done in the future, investigate about potential interest for future use and, more in general, create and strengthen networking ties.

### Organisation and structure of the workshop

In the context of the Live Exercise Day, the Exhibition was held in the afternoon, after the actual live exercise demonstration took place.

COSSEC members and stakeholders mentioned above were invited via direct channels and communication from IMPETUS Partners.

The workshop was set up in two different rooms in which Key Exploitable Result (KER) responsables were divided. Each KER responsible had the possibility to have its own stand with a roll up, a screen to display demo videos of tool functioning, and prototypes or physical models if available. Guests were free to walk anywhere they wanted, and linger in the stands they were the most interested in. This was done to encourage people to exchange views and feedback as much as possible, as guests could stay and enquire KERs they were the most interested in.

Guests were also given a questionnaire form (Annex A) to gather feedback and they were asked to fill it in along the way.

### Dissemination activities

The activity was promoted and disseminated via direct communication to participants. For the public, the event was promoted via the standard social media channels of the project: the project's website, which is the main channel to communicate publicly available dissemination activities and the IMPETUS LinkedIn page. Further, the workshops were included in the third IMPETUS newsletter, that was published in December 2022.

### Evaluation of the event

The most important outcome that KER responsables obtained by having conversations with different stakeholders was feedback both on a more technological level (i.e., regarding how to improve and develop KERs further) and on a more strategical level (e.g., real cases application contexts, selling points of tools, features that actual end-users deem important and features that they deem of little value, etc.)

Regarding the practical setup of the workshop, the fact that KERs were divided in two rooms limited the potential interaction and the mobility of guests between the two rooms.



In Oslo, the exhibition was held after the live demonstration of the exercises. It would have probably been better to hold it beforehand (as was done later in Padova) to provide external guests with more context on the KERs development and functioning before seeing them live in action during the exercise.

Further, having a summarizing poster in which each KER was briefly described in one page could have been useful to have for each stand (this was implemented in Padova).

Finally, the questionnaire had limited success, probably because people were more interested in having conversation and dialogue with other people while walking through the stands rather than “losing time” in filling in the questionnaire in real time.



**Figure 1: The two rooms of the Exhibition where the KERs were showcased**

## 6 Padova industry workshop

<b>Title</b>	Exhibition
<b>Date</b>	13 Oct 2022
<b>Venue</b>	Padova – Local Police Office
<b>Organisers</b>	Comune di Padova + IMPETUS Partners
<b>Audience (number and type)</b>	48
<b>Duration</b>	2 hours

### Goals and objectives of the workshop

The objectives of the exhibition were to showcase to external guests the IMPETUS tools, how they devised, work, what is their final goal and who can they be useful for. The end goal was then to inform, gather feedback, criticism, ideas and suggestions for what has been done and for what could be done in the future, investigate about potential interest for future use and, more in general, create and strengthen networking ties.

### Organisation and structure of the workshop

In the context of the Live Exercise Day, the Exhibition was held in the morning, before the actual live exercise demonstration took place.

COSSEC members and stakeholders mentioned above were invited via direct channels and communication from IMPETUS Partners.

The workshop was set up in one single room in which each Key Exploitable Result (KER) responsible had its own stand with a poster, a screen to display demo videos of tool functioning, and prototypes or physical models if available. As in Oslo, guests were free to walk anywhere they wanted, and linger in the stands they were the most interested in. This was done to encourage people to exchange views and feedback as much as possible, as guests could stay and enquire KERs they were the most interested in.

Guests were not given a questionnaire form to gather feedback as was done in Oslo, due to the poor result obtained the first time.

### Dissemination activities

The activity was promoted and disseminated via direct communication to participants. For the public, the event was promoted via the standard social media channels of the project: the project's website, which is the main channel to communicate publicly available dissemination activities and the IMPETUS LinkedIn page. Further, the workshops were included in the third IMPETUS newsletter, that was published in December 2022.

### Evaluation of the event

As for Oslo, KER responsables were able to gather feedback from external guests regarding the developments and improvement of their KERs and features of most interest to end-users. Since this workshop was held at a later stage in the project, however, and the IMPETUS solution was at a more mature level, feedback was sought more towards the aspects of functionality and application in real context, rather than the purely technical aspects.

Differently from Oslo, hosting the workshop in one single room allowed for greater interaction with all the KERs. The total floor area in the single room was less than the sum of the two rooms in Oslo, raising concerns that it might become too crowded. As things turned out, the fact that it was a little crowded turned out to be positive: it gave an impression of more “buzz” and interaction. Further, the partners who did not



have their own stand “guided” the external guests among the various stands: this also facilitated and considerably increased the interaction, without relying only on the spontaneous initiative of the guests.

The workshop was held before the live exercise demonstration took place, and this helped to provide more contexts on the tools’ functioning to external stakeholders.

One thing that could have been improved, was to present and better communicate the concept of a single solution instead of several single tools developed within the same project.



**Figure 2: The room of the Exhibition where the KERs were showcased**

## 7 Final Dissemination Event

<b>Title</b>	The future of urban security: Urban planning and adoption of advanced technological solutions
<b>Date</b>	30-31 Jan 2023
<b>Venue</b>	Rotterdam – Hilton Hotel
<b>Organisers</b>	IMPETUS Partners
<b>External Audience (number)</b>	~70
<b>Duration</b>	2 days

### Goals and objectives of the workshop

The core theme of the event revolved around improving safety in public spaces in urban environments. The three main goals that were identified were: a) networking - to bring together actors in the field (the organising projects, other projects, municipalities, law enforcement, policy makers, ...) to share results and experiences, and to establish co-operations for the future; b) increasing awareness – to help stakeholders understand the potential and challenges of adopting technological and non-technological approaches to urban security by presenting and discussing what was achieved and learned in IMPETUS, Secu4All and other projects; c) moving forward - to explore ideas on how potential barriers to adoption of new approaches (including ethical concerns) can be overcome and identify what future steps are needed before the full potential can be realized.

### Organisation and structure of the workshop

This event was organised by IMPETUS with the support of the Secu4All project. Secu4All is coordinated by Efus (European Forum for Urban Security) and their members, and funded by the European Union's Internal Security Fund — Police. Some 70 participants from IMPETUS, COSSEC and Secu4All gathered to discuss the future of urban security, how to adopt advanced technological solutions in the urban planning and city daily life.

As indicated in the agenda of the event (in Annex B), the two days started with a meet-and-greet at the Rotterdam Hilton Hotel, followed by a "walk-and-talk" around the Rotterdam City Centre for selected invited guests. The walk-and-talk session allowed guests to take a look at the mitigation strategies aimed at preventing insecurity in public spaces. In the evening, guests gathered for a project poster session at the hotel to converse and network among them.

The second day started with introductions and welcomes with presentations by both Joe Gorman (SINTEF, IMPETUS Project Coordinator) and Pilar De La Torre (Efus, Secu4All Project Coordinator). A series of panel discussions followed during the day around the main topics of the event. More specifically, the sessions started with presentations and videos about the work carried out in different projects dealing with urban security (IMPETUS, Secu4All, SURE, S4AllCities, PRoTECT) as well as open discussions in which experiences and views were shared on the benefits and challenges faced in introducing technologies in pilot cities in the context of EU projects. The discussions continued around societal, ethical, data privacy, legal and civil rights challenges that can arise when adopting hi-tech solutions for security in the context of IMPETUS and Secu4All (and beyond that, in the larger context of smart technologies applied for urban safety), and addressing how these can be tackled considering how public perceptions and future technologies are evolving. An IMPETUS tools Exhibition followed after lunch, in the same format of the other two Exhibitions presented above. These one-on-one informal discussions gave attendees the chance to engage with both the project participants and the tools that were presented, confronting on the successes and the obstacles encountered in developing them. The day concluded with discussions on the factors that could stand in the way of successful adoption of new approaches to urban security for resilient cities and what can be done to make things easier. Finally, in an open panel discussion, guests tried to imagine and foresee what the future may hold for these types of technologies, as well as for IMPETUS, Secu4All, and COSSEC.



## Dissemination activities

The activity was promoted and disseminated via direct communication to participants. For the public, the event was promoted via the standard social media channels of the different actors involved, especially the two projects involved in the organization of the event: IMPETUS and Secu4All, through the projects' websites, and the LinkedIn pages. Further, a full report of the event would be included in the fourth and final IMPETUS newsletter, in February 2023.

## Evaluation of the event

The event was overall very successful. It allowed members of the research teams, representatives of interested organizations and representatives of the management of cities and municipal organizations to discuss the progress and results of the research projects, by also addressing the problems that the adoption of new technologies and solutions inherently brings, and ways to overcome them. Besides innovative and technological solutions, IMPETUS presented the Practitioner Guides (training methodologies), and discussed how these can be suitable tools for further exploitation of the project results. Starting from results achieved during the course of the projects, guests could also take a look at the future, well aware that new solutions and innovations will surely emerge.

Inputs provided by attendees at the end, highlighted their interest to continue the discussion on the topics of ethical, societal and data privacy, since a lively and fruitful debate sparked off during the session. And surely, the topics were of high interest among the community of participants in the room, underlining the importance of keeping these issues at the top of the list. Two other points raised at the end, that were taken as starting points for further discussions and developments, were: how to overcome the resistance of the operators and end-users that may be using the same standardised procedures for many years and make them open to the implementation of new, innovative technologies; what is needed from Consortia's side to make the further step and convince municipalities to buy in on these technologies and have them implement such solutions.





**Figure 3: Pictures from the Final Dissemination Event held in Rotterdam**



## 8 Annex A – Oslo questionnaire

Please indicate your role in your organization: .....	
Please rate the following criteria based on your opinion (1 = Not at all, 5 = Very much):	
Is the IMPETUS platform/tools easy to use for the SOC operators?	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Is the information provided easily understandable?	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Do the IMPETUS platform/tools overload the SOC operators with too much information?	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Do the IMPETUS platform/tools show the right information? In case, what is missing?	
IMPETUS platform <i>What is missing (if any):</i>	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Physical Threat Intelligence (PTI) <i>What is missing (if any):</i>	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Cyber Threat Intelligence (CTI) <i>What is missing (if any):</i>	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Cyber Threat Mapping (CTM) <i>What is missing (if any):</i>	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Social Media Detection (SMD) <i>What is missing:</i>	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Physical Threat Response Optimization (PTRO) <i>What is missing (if any):</i>	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>
Weapon Detection (WD)	<div>1 2 3 4 5</div> <div><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></div>



What is missing (if any):	<div><div></div><div></div><div></div><div></div><div></div></div>
Bacteria Detector (BRD) What is missing (if any):	<div><div>12345</div><div><div></div><div></div><div></div><div></div><div></div></div></div>
Workload Monitoring System (WMS) What is missing (if any):	<div><div>12345</div><div><div></div><div></div><div></div><div></div><div></div></div></div>
Do the IMPETUS platform/tools facilitate the cooperation between different actors?	<div><div>12345</div><div><div></div><div></div><div></div><div></div><div></div></div></div>
Is the represented scenario useful to validate the IMPETUS platform/tools?	<div><div>12345</div><div><div></div><div></div><div></div><div></div><div></div></div></div>



## 9 Annex B – Final Dissemination Event agenda

# **The future of urban security: Urban planning and adoption of advanced technological solutions**

*An event organised by H2020 project IMPETUS supported by  
the Secu4All project*

**30-31 January 2023**  
**Rotterdam Hilton Hotel, Weena 10, Rotterdam**  
(close to central railway station)

Agenda Version: V1.3 2023-01-26



**IMPETUS**



The IMPETUS project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 883286. See: <https://www.impetus-project.eu/>

The Secu4All project is funded by the European Union's Internal Security Fund Police under grant agreement N° 952789. See: <https://efus.eu/secu4all-en/>

## Day 1: Monday 30<sup>th</sup> January 2023

1400-1700	<p><b>Field visit: Rotterdam tools and measures preventing acts of insecurity in public spaces.</b></p> <ul style="list-style-type: none"><li>• Meet at Hilton hotel for introductory presentations</li><li>• “Walk &amp; talk” in Rotterdam city centre</li><li>• Debate/panel (Hilton hotel)</li></ul> <p><i>NB: For logistical reasons, numbers are very limited for this part of the event, and participation is by invitation only.</i></p>
1800-1930	<p><b>Networking and project poster sessions: drinks and snacks</b></p> <p><i>Hilton Hotel, JAQ Private Dining Area</i></p> <p>Get to know each other and the work that we all do – the challenges we face and the solutions we are designing. Learn “the basics” of IMPETUS and Secu4All to help you get the most out of Day 2.</p>
2000-2200	<p><b>Informal dinner</b></p> <p><i>Rodizio Rotterdam Brazilian Grill</i> <i>Kruiskade 26, 3012 EH Rotterdam</i> <a href="https://www.rodizio.nl/english/home">https://www.rodizio.nl/english/home</a></p> <p>Networking continues. The restaurant offers a fixed-price Brazilian grill buffet with side salad, with options for those who don’t eat meat. Participants must each pay separately. Registration is required so that we know how many reservations to make.</p>



## Day 2: Tuesday 31<sup>st</sup> January 2023

### Meeting room “Rotterdam”

<b>0900-0930 Registration</b>	
<i>The event starts promptly at 0930. But feel free to join us before then – have a cup of coffee, chat, -- and find your seat before 0930.</i>	
<b>0930-0950 Introduction &amp; welcome</b>	
Session goals	Set context and expectations for the event.
Main topics	<ul style="list-style-type: none"> <li>Welcome from and brief presentations of the projects hosting the event.</li> <li>Goals of the meeting and structure of the agenda.</li> </ul>
Moderator	Joe Gorman, SINTEF (IMPETUS Project Coordinator)
Panellists/ presenters	Pilar De La Torre, Efus (Secu4All Project Coordinator)
<b>0950-1055 Adopting technology for urban security – how did it go and what did we learn?</b>	
Session goals	Provide insights into practical experiences and lessons learned from introducing technology in pilot cities in the context of EU projects.
Main topics	<ul style="list-style-type: none"> <li>Presentations/videos about the work carried out.</li> <li>Open discussions – including with the audience – to share experiences and views on benefits and challenges.</li> </ul>
Moderator	Bente Skattor, Oslo Police
Panellists/ presenters	<ul style="list-style-type: none"> <li>Anniina Autero, City of Tampere (SURE)</li> <li>Ivan Luis Martinez Villanueva, City of Valencia (S4AllCities)</li> <li>Peter van De Crommert, Dutch Institute for Safe &amp; Secure Spaces [DISSS] (Secu4All and PRoTECT)</li> <li>Osman Ibrahim, City of Oslo (IMPETUS)</li> <li>Bruno Bonomini, City of Padova (IMPETUS)</li> </ul>
<b>1055-1115 B R E A K</b>	
<b>1115-1215 Dilemmas arising at the intersection of Security, Technology and Society – and how to approach them</b>	
Session goals	Conduct an open discussion in panel format around the question: <i>Is adoption of hi-tech solutions for security acceptable to European citizens? Law enforcers and other security personnel? City authorities? Policy makers?</i>
Main topics	Societal, ethical, data privacy, legal and civil rights challenges that can arise when adopting hi-tech solutions for security, especially: <ul style="list-style-type: none"> <li>How these have been addressed in our projects.</li> <li>How they can be addressed in future as technology and public perceptions evolve.</li> </ul>
Moderator	Oskar J. Gstrein, Director of BSc Data Science and Society, Assistant Professor at University of Groningen
Panellists/ presenters	<ul style="list-style-type: none"> <li>Ian Simon Gjetrang, Project consultant, Oslo municipality preparedness (IMPETUS)</li> <li>Magnus Devik Borge, SOC operator, Oslo City Hall (IMPETUS)</li> <li>Alex Townsend-Drake, Head of programme, Counter Terrorism Preparedness Network (CTPN)</li> <li>Manuela Soccol, Ethics manager (IMPETUS)</li> <li>Francisco J. Castro-Toledo, CEO of Plus Ethics, ethics expert (SECU4ALL)</li> <li>Mathilde Wilhelmsen, Adviser, Norwegian National Human Rights Institution</li> </ul>
<b>1215-1315 L U N C H</b>	





<b>1315-1425 Exhibition: Key results of the IMPETUS project</b>	
Session goals	Showcase IMPETUS results, highlighting for each: <ul style="list-style-type: none"> <li>• Capabilities &amp; innovation</li> <li>• Potential role in the wider context of urban security</li> <li>• Current level of maturity &amp; development plans</li> </ul>
Main topics	<ul style="list-style-type: none"> <li>• Short intro: Key results of IMPETUS – what they do and what they are for</li> <li>• Visits to stands (one per result) for interactive demonstrations and dialogue</li> </ul>
Moderator	Joe Gorman, SINTEF (IMPETUS Project Coordinator)
Panellists/presenters	IMPETUS partners with specialist expertise on all results.
<b>1425-1445 B R E A K</b>	
<b>1445-1545 Facilitating widespread and responsible uptake of new approaches to urban security</b>	
Session goals	Examine the factors that could stand in the way of successful adoption of new approaches to urban security for resilient cities, and consider what can be done to make things easier.
Main topics	<ul style="list-style-type: none"> <li>• What factors hinder the understanding and adoption of new technologies?</li> <li>• Can educational materials and training make a big difference?</li> <li>• Can standardisation encourage uptake by enabling interoperability?</li> </ul>
Moderator	Jaroslav Pejcoch, TIEMS Secretary (IMPETUS)
Panellists/presenters	<ul style="list-style-type: none"> <li>• Joaquin Garcia-Alfaro, Telecom SudParis (IMPETUS)</li> <li>• Lawrence Schaetzle, DEFUS (Secu4All)</li> <li>• Sachin Gaur, BMA (IMPETUS)</li> <li>• Osman Ibrahim, City of Oslo (IMPETUS)</li> </ul>
<b>1545-1615 Quo vadis – where do we go from here?</b>	
Session goals	<ul style="list-style-type: none"> <li>• Consolidate lessons learned from the day</li> <li>• Dream about the future</li> </ul>
Main topics	<ul style="list-style-type: none"> <li>• OPEN DISCUSSION, covering but not limited to: <ul style="list-style-type: none"> <li>○ Did the day bring any surprises – or revelations – for you?</li> <li>○ Do we think technological solutions are going to revolutionize urban security – sooner or later?</li> <li>○ What are the next steps – short-term? long-term?</li> </ul> </li> <li>• Final words: one person from Secu4All, one from IMPETUS and one from COSSEC uses one minute each to summarize main observations and impressions from the day.</li> </ul>
Moderator	Joe Gorman, SINTEF (IMPETUS Project Coordinator)
Panellists/presenters	YOU – the audience
<b>1615-1700 Networking coffee</b> <i>The “official” part of the programme ends at 1615. But we have allocated this informal slot for people who don’t need to rush off to make travel connections. You can use it for continuation of discussions, to visit exhibits you missed – or whatever you want.</i>	

#### After you go home – want to know more?

For IMPETUS: Contact Joe Gorman, Coordinator: [joe.gorman@sintef.no](mailto:joe.gorman@sintef.no)  
For Secu4All: Contact Pilar De La Torre, Coordinator: [delatorre@efus.eu](mailto:delatorre@efus.eu)

For any municipality who would like a deeper dialogue about the topics covered today or about adoption of technological solutions, IMPETUS is willing to arrange an on-site visit to your location in the course of February 2023. If interested, please contact Joe.



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