NEWSLETTER 2

MAY 2021

assistance

Adapted Situation AwareneSS tools and taIlored training scenarios for increaSing capabiliTies and enhANcing the proteCtion of First RespondErs

Contents:

Dear Reader,

Welcome to the second issue of the ASSISTANCE Newsletter. We are pleased to present you an overview of our progress and achievements after second year of the project execution.

It was a very challenging year for the whole world as the SARS-COV-2 pandemic was the main theme for all of us throughout our daily life and affected many aspects of it. Despite the difficulties resulting from the outbreak, our project teams managed to keep all the work progressing with majority of the results delivered as planned and reorganising activities into a remote mode whenever necessary.

ASSISTANCE is at this stage at the end of its integration phase where all developed modules are being integrated in the whole ASSISTANCE Situation Awareness platform (SAP). We should already start preparations to our three large scale pilots that were planned to begin this year – first one to take place in Turkey in September (M30), followed by the second one in the Netherlands in November (M32) and the final one in Spain in January 2022 (M34).

However, the situation with the pandemic has not fully cleared yet and though the vaccination programmes are progressing in most of the countries, we are still before the final decision on the potential re-scheduling or change of the format (virtual/remote) of the demonstrations. We closely monitor the situation in all the partner countries and will be discussing the most suitable options within the next month.

Let's hope we will be able to finally meet in person and present our results in the originally planned setting.

If you are interested in getting involved in the project, please take a look at the ASSISTANCE Users Community section of this Newsletter and join the team!

ASSISTANCE Project Coordinator

✚ *Year2 summary and accomplishment of next project milestones*

ASSISTANCE has entered its second year of execution with the first Review Meeting that was held on 28th May 2020. As the SARS-COV-2 pandemic was already in the peak of its first wave, the meeting was held fully online and all the progress and achievements of the first year have been presented to the Project Officer and appointed Reviewers. The feedback from the PO and Reviewers was very positive and all project deliverables and milestones achieved until month 12 have been accepted. All the public deliverables that have been accepted are available via the ASSISTANCE website (https://assistance-project.eu/dissemination/deliverables-and-publications/) .

Despite the complications related to the pandemic the whole consortium managed to keep their works ongoing and delivering the majority of results according to the original schedule, although it required a lot of re-organisational effort to transfer into a remote mode of working in many partner institutions. Only two technical deliverables (in WP4) had to be postponed by a few months, as the pandemic affected various suppliers businesses around Europe and some hardware components for ASSISTANCE robotic subsystems had delays in delivery.

The consortium meetings were held in an online format, both as plenary sessions and on the level of work packages and tasks, in order to maintain good communication between the partners and ensure smooth coordination of all the works.

Overall, ASSISTANCE Year 2 has brought **accomplishment of five project milestones**:

- **the project SAS has been developed and it is ready for testing (MS3)**

- **all unmanned platforms have been integrated in the system and the data from their sensors is available (MS4)**

- **all the communication means for performing the project pilots demonstrations are ready for being used (MS5)**

- **the project training network has been set up and it is ready for being tested and used during the project pilots (MS6)**

- **the project advanced SA platform has been developed and it is ready for testing (MS7).**
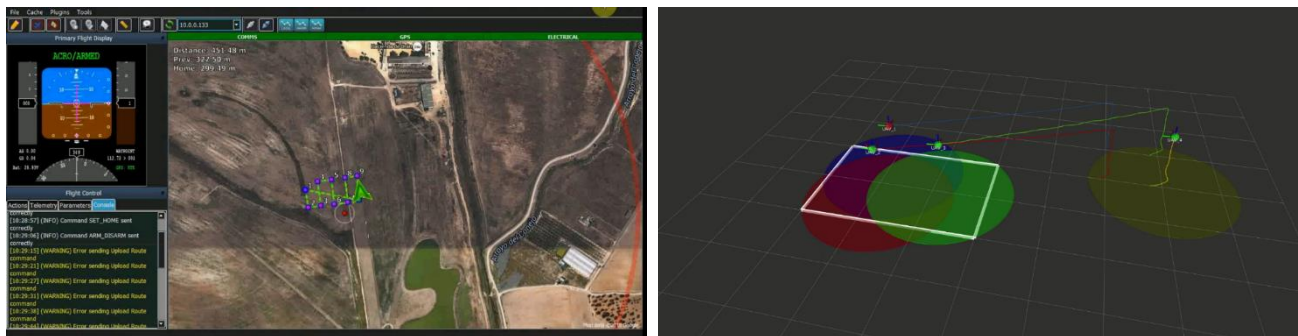
✚ *Work in progress*

ASSISTANCE is currently at the end of its integration phase where all developed modules will be integrated in the whole ASSISTANCE Situation Awareness platform (SAP). The main modules already integrated are:

Sensors mounted on drones and robots: different kind of sensors have been integrated in the SAP, like e.g. **thermal camera** and **EMF** sensor prepared by the ŁUKASIEWICZ – PIAP team for the ground robot or the **gas sensor** integrated by FADA-CATEC on the drone.

FADA-CATEC also develops **swarm capability for ad-hoc network coverage** and **GCS adaptation** to the ASSISTANCE system.
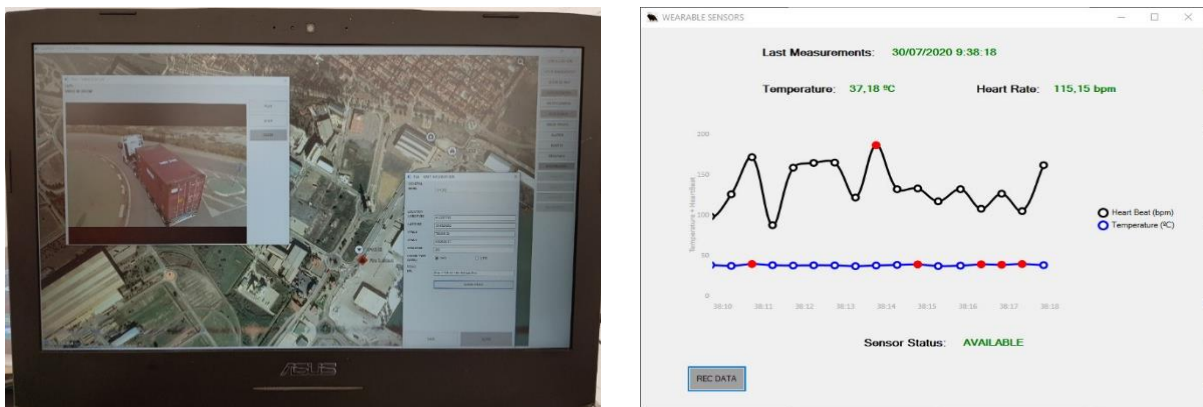
Development of the thermal camera for the ground robot subsystem

Integration and testing of the gas sensor and development of swarm capability for ad-hoc network coverage and GCS adaptation

Wearable sensors: several wearable sensors (e.g. cameras, vital signs, GPS) have also been integrated in the SAP.
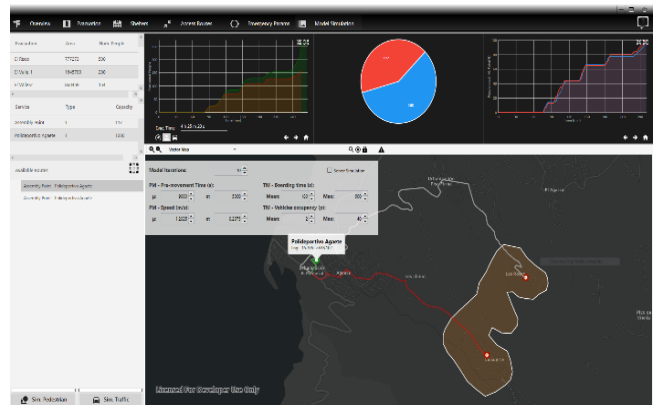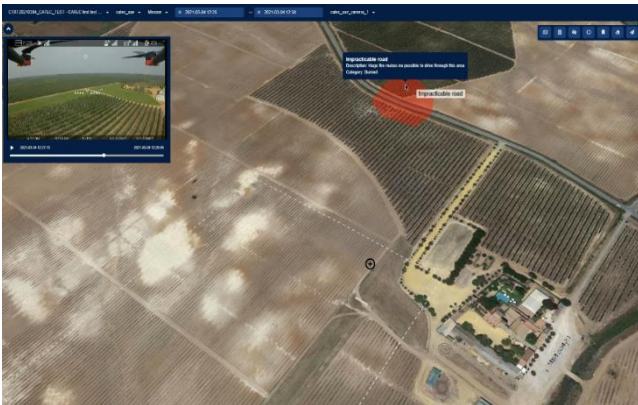
Real time video from a drone and vital signs information integrated in the SAP

Additionally, other modules of the SAP are developed and integrated: **CBRN module and an advanced video fusion module**.

ETRA team develops the **Damaged Assets Location & Routing solution** – innovative software developed enabling: dynamic processing and storage of real-time video streams from UAVs and support the detection of damaged areas affecting the emergency management. Another module linked with the solution is the **Evacuation Management** – decision making support software which provides comprehensive disaster evacuation plans for First Responders – developed by Gidai group at Universidad de Cantabria.

CBRN module and advanced video fusion module

Damaged Assets Location & Routing solution and Evacuation Management software

✚ *ASSISTANCE second Review Meeting*

The second ASSISTANCE Review Meeting was held on 25th March 2021 in an online format. All the progress and achievements of the reporting period (until month 21) have been presented to the Project Officer and appointed Reviewers.

To better illustrate the results, all the partners responsible for core activities and developments have prepared videos, which will published soon via the ASSISTANCE **YouTube channel**.
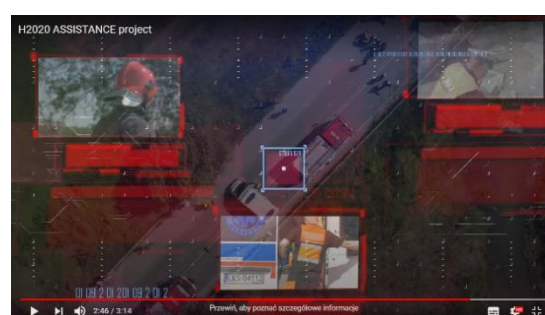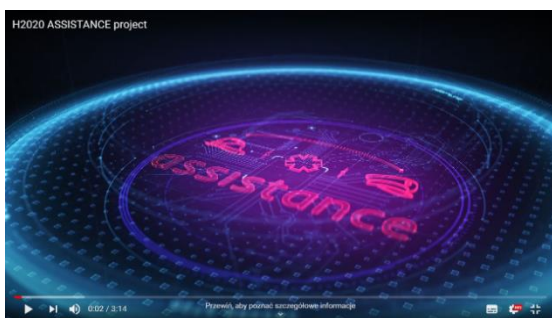
The assessment of the project execution was positive and all project deliverables and milestones achieved in the period have been accepted.

Snapshot from the ASSISTANCE 2nd Review Meeting

✚ *Dissemination and clustering activities*

Despite the fact SARS-COV-19 outbreak had heavily affected some of the already planned dissemination activities (a lot of events had been cancelled or postponed) all the ASSISTANCE partners have kept devoting efforts to continue the dissemination activities in these new circumstances, refocusing and seeking opportunities in the other types of communication and e.g. online events or preparation of research publications.

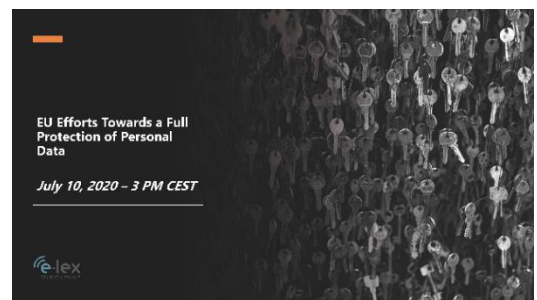Just at the beginning of the ASSISTANCE Year 2 a dissemination video explaining project objectives and goals has been produced by ŁUKASIEWICZ-PIAP, as the dissemination task leader. The dissemination video has been published via the project **YouTube channel** and since its publication at the beginning of July 2020 it has reached over 670 views.

Stills from the ASSISTANCE Dissemination movie

On the 10th July ASSISTANCE has been presented to a wide audience at the EU Efforts Towards a Full Protection of Personal Data seminar organised in an online format and led by Giovanni Maria Riccio (E-LEX).

ASSISTANCE has been presented and discussed along with two other H2020 projects PoSeID-on (Protection and control of Secured Information by means of a privacy enhanced Dashboard) and DEFENDER (Defending the European Energy Infrastructures).

Digital invitation to the seminar

Projects solutions related to data protection were discussed with Luigi Montuori from the Italian Data Protection National Authority (Garante della Privacy) and Daniel-Mihail Sandru from the Bucarest University.

On 15-17 September 2020 ASSISTANCE has been presented in two sessions at the 15th meeting of the European Commission's Community of Users on Secure, Safe and Resilient Societies, organised in an online format– on the 15th September in the DRS – Natural Hazards session and on the 17th September at in the DRS – CBRN session.

Experiments during ERIA

Even though many events have been cancelled, postponed or transformed online, there were still a few that took place in a traditional, physical form.

On 8th September 2020 RISE has attended the Early Response Innovation Arena (ERIA) workshop (Fig. 13 and 14) organised by the Swedish Civil Contingencies Agency (MSB) and presented ASSISTANCE to a variety of stakeholders (end-users, academia, innovator and insurance company). ERIA was focused on series of in field experiments on how the rescue service can handle an electric car that is burning in a parking garage. For three days, innovative methods have been tested, new research was presented and problems around electric car fires were discussed.

At the end of September and beginning of October 2020 the 2020 edition of the S-Moving event has been held in Malaga, Spain combined with the Greencities event.
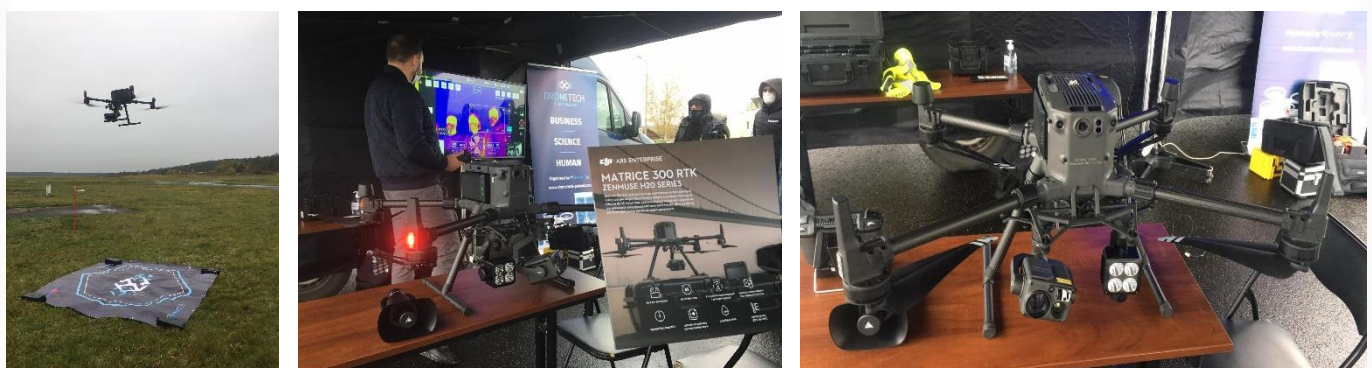
In total, the events have brought together 1,560 professional visitors around a wide range of services and tools for a more advanced management model and for the improvement of public services.

ASSISTANCE was represented by FADA-CATEC that had a stand at the event and distributed the project leaflets.

FADA-CATEC at S-moving 2020

Some events were organised in a hybrid format – mostly online with some accompanying physical components, like the 5th DroneTech World Meeting 2020, which was held on 6-7 November 2020. The event, co-organised by one of the ASSISTANCE project partners – CNBOP-PIB, is the largest event in Poland devoted to drones, autonomous and unmanned vehicles, cosmonautics, artificial intelligence and all new technologies related to the development of a smart metropolis of the 21st century. The last year's edition encompassed three blocks of activities:

- a scientific and business conference allowing to get to know the perspective of unmanned vehicles and systems from the perspective of various environments and organizations, from a technical, legal and social perspective,

- B2B networking activities via one online platform with the opportunity to meet representatives of companies, institutions, organizations creating, developing or seeking new technologies,

- UAV tests carried out imitating real crisis situations in various terrain conditions in cooperation with first responders and suppliers of various unmanned aerial vehicles and software.

UAV tests at the 5th DroneTech World Meeting 2020

In addition to the general dissemination and communication activities, ASSISTANCE partners have a strong focus on liaison with related research initiatives, in particular the on-going and newly launched H2020 projects.

A dedicated subpage of the project webpage has been devoted to the projects that are in continuous collaboration with ASSISTANCE towards exchange of the experiences and knowledge. These collaborations involve i.a. mutual attendance at various project meetings or workshops.

In the course of these activities, ASSISTANCE was presented along its sibling projects of the H2020-DRS-02 topic at the Clustering Webinar on New Technologies for First Responders organised by the Public Safety Communications Europe Forum (PSCE). 7 DRS-02 projects were presented in the webinar: Search&Rescue, CURSOR, ASSISTANCE, RespondDrone, SIXTHSENSE, RESPOND-A and INGENIOUS.

The objective of the webinar was to allow the projects to get to know other project better and to discuss on the topic of end-user requirements (process used/challenges encountered/preliminary findings). Around 120 partners from the involved consortia have registered to the event.

The goal of the clustering activities is to foster the collaboration among the projects to find synergies and exchange experiences, which would ultimately result in producing a White Paper on the topic. ASSISTANCE was presented by Dr. Federico Carvajal Rodrigo (UPVLC) and attended by many partners (ŁUKASIEWICZ-PIAP, CEL, CNBOP-PIB, AAHD, SBFF).

The webinar was a closed event but its results are publicly available, recording of the event can be found at: https://youtu.be/L9UkLgUUpp8

+ ASSISTANCE Users Community

One of the goals for the ASSISTANCE consortium is to establish **a broad dialogue with the end-users on the solutions proposed in the project and collect input on expectations as well as feedback on the results**. We are aiming to build a large community around the ASSISTANCE project that will encompass various end-users and stakeholders interested in **being informed on the progress of the project, its conclusions and results as well as in active engagement and support for different project activities**.

For that reason the **End User Group** has been established and is **coordinated by our end-user partner AAHD** under a dedicated project task.

The committed members of the Group may support and influence the project providing **inputs on end-user needs, gaps and existing practices, participating in workshops, field exercises and demonstrations to provide feedback** and contribution to **dissemination of the project and their results via available communication channels** to create large awareness, which is paramount to preparing the future acceptance and uptake of project results.

If you would like to join ASSISTANCE User Community and become a member of the End User Group please fill in the Letter of Intent available under this link and send to fecarrod@upvnet.upv.es.

+ Contact

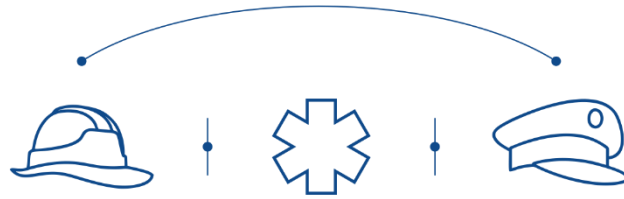You can find us at: + www.assistance-project.eu

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Contact us: + contact@assistance-project.eu

assistance

✚	H2020 call	H2020-SU-DRS02-2018-2019-2020 (Technologies for first responders)
✚	Timeline	01/05/2019 – 30/04/2022 (36 months)
✚	Budget	6 393 691.25 Euro
✚	Coordinator	Universidad Politécnica de Valencia
✚	Countries	8
✚	Partners	19

PARTNERS

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Viasat · e-lex STUDIO LEGALE · CNBOP-PIB · CyberEthicsLab.